

Resident Project Day Abstract Collection

DEPARTMENT OF
FAMILY MEDICINE

June 13, 2018

The Western Centre for
Public Health
and Family Medicine



Leadership
Education



Learning Objectives:

Learning objectives for Family Medicine Resident Project Day include:

- Encourage and foster research and scholarly work in family medicine
- Increase primary-care knowledge through research
- Provide public recognition of the resident projects
- Provide feedback to the residents through evaluation
- Provide an opportunity for 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 the Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University for up to six (6) 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.

Resident Project Day

Western Centre for Public Health and Family Medicine

Wednesday, June 13, 2018

9:00 a.m.	Registration, coffee and tea – 1st floor foyer
9:30 a.m.	Opening remarks: Dr. Jamie Wickett, postgraduate director, Department of Family Medicine, Schulich School of Medicine & Dentistry Dr. Stephen Wetmore, chair, Department of Family Medicine, Schulich School of Medicine & Dentistry Dr. Scott McKay, associate chair, Department of Family Medicine, Schulich School of Medicine & Dentistry
10:00 - 11:15 a.m.	Concurrent oral presentation sessions (A in Room 1150, B in Room 1120)
11:15 a.m. - 12:30 p.m.	Poster presentations 1-14 / poster judging
12:30 - 1:00 p.m.	Lunch
1:00 - 2:15 p.m.	Concurrent oral presentation sessions (C in Room 1150, D in Room 1120)
2:15 - 3:30 p.m.	Poster presentations 15-27 / poster judging
3:30 - 3:35 p.m.	Award presentations
3:35 - 4:05 p.m.	Closing remarks / evaluations

25% of this program is dedicated to participant interaction.

Session A: Oral Presentations – Room 1150

Time	Presenter	Presentation
9:00 a.m.	Registration, coffee and tea – 1st floor foyer, WCPHFM	
9:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore Dr. Scott McKay	Opening remarks
10:00 a.m.	Dr. Monisha Harricharan	Disseminated Intravascular Coagulation Following Incomplete Evacuation of a Missed Abortion
10:15 a.m.	Dr. Wendy Cui, Elizabeth Ross, Zeshan Siddiqui, Chevy Priyadamkol	Discussing Advanced Directives in a Family Physician Practice
10:30 a.m.	Dr. Dominique Bonin	Door-to-triage time in a Canadian tertiary-care centre
10:45 a.m.	Dr. Paul Howatt	Quality Improvement Project – increasing enrolment in the Telehomecare Program for Congestive Heart Failure
11:00 a.m.	Dr. Nathan Lansdell	Evaluating the utility of chest radiography for pediatric chest pain in the emergency department
11:15 a.m.	Poster presentations 1-14 / poster judging	
12:30 p.m.	Lunch	
1:00 p.m.	Concurrent oral presentaiton sessions (C in Room 1150, D in Room 1120)	
2:15 p.m.	Poster presentations 15-27 / poster judging	
3:30 p.m.	Award presentations	
3:35 p.m.	Closing remarks / evaluations	

Dr. Monisha Harricharan – PGY3 – Obstetrics and Women’s Health – Chatham and London
Disseminated Intravascular Coagulation Following Incomplete Evacuation of a Missed Abortion

Faculty Lead: Dr. Neerja Sharma

Project Type: Case Report

This is a case report of a 34-year-old lady who presented to the emergency department with heavy vaginal bleeding following dilation and evacuation of a missed abortion at nine weeks gestation. Her transvaginal ultrasound revealed an enlarged uterus with significant hematometra concerning for retained products of conception. She was initially unstable and her lab results provided a clinical picture of early disseminated intravascular coagulation. She was resuscitated with packed red blood cells and fresh frozen plasma before a repeat dilation and evacuation was performed. She remained stable during her recovery period and pathology results further confirmed retained products of conception.

Disseminated intravascular coagulation is a rare complication of some obstetrical conditions with a prevalence of 12.5 in 10000 delivery hospitalizations between 1980 and 2009. It is the second most common severe maternal morbidity associated with nearly 25% of maternal deaths during this time period. Early identification and administration of blood products can help to reduce fatalities, but ultimately the underlying primary etiology must be addressed. In the cases of early pregnancy losses, the most common cause of DIC is tissue factor release due to prolonged uteroplacental fetal necrosis. Prompt management of missed abortions is thought to reduce the likelihood of developing DIC and therefore lead to better maternal outcomes.

Drs. Wendy Cui, Elizabeth Ross, Zeshan Siddiqui, Chevy Priyadamkol – Victoria Family Medical Centre, London

Discussing Advanced Directives in a Family Physician Practice

Faculty Lead: Dr. Anna Pawelec-Brzychczy

Project Type: Quality Improvement

Advance care planning involves preparation of a patient and/or substitute decision maker for goals-of-care planning should their health status deteriorate. Outcomes of advance care planning may include documentation of the patient’s values and views, ‘advance directive’ or living will, and/or appointment of a substitute decision maker should the patient become incapable of making their own decisions. Within Canada, less than half of Canadian adults have engaged in discussions with family about preferences for care surrounding end-of-life, and even fewer have had these discussions with healthcare providers. In spite of the low uptake among Canadians, advance care planning has benefits which may extend to the patient, patient’s family members, healthcare providers, and the health care system inclusively. Our quality improvement project aimed to increase uptake of advance care planning within a family practice setting, through provider-initiated discussions and informative brochures. Overall, half of patients declined with the option of further discussion at a later date, a third completed discussions in the office, and seventeen percent declined as they had previously discussed wishes with family members. Time constraints due to differing patient-healthcare provider agendas were a major limitation to completion of our goal. Moving forward, addressing these barriers through initiation of discussion at appointments with more allotted time, such as period health exams, or with dedicated office visits, may allow for more discussions to be completed.

Dr. Rosamond E. Lougheed Simpson – PGY3 – Sport and Exercise Medicine

Exertional Rhabdomyolysis: Pearls for the Primary Care Physician

A review of current literature with case-based lessons from two athletes

Project Type: Case Study and Literature Review

Faculty Lead: Dr. Lisa Fischer

Objectives & Project Summary: Rhabdomyolysis has numerous causes. With the increasing popularity of ultra marathons, adventure racing, and Cross-Fit type training regimens, exertional rhabdomyolysis (ER) is an important condition for the primary care physician to consider, whether caring for patients in the field at sporting events, in the emergency room, or in the office setting. Given the frequently subtle nature of the early clinical findings associated with ER, and the potential for the advent of serious and possibly fatal cardiovascular, renal, and musculoskeletal complications, we carried out a comprehensive critical review of current evidence-based articles regarding the recognition, diagnosis, and management of ER. The cases of two young athletes known to us and previously treated for ER are used to further illustrate the clinical presentation and management of the ER disease spectrum. Our overarching objectives include increasing awareness of this condition among primary care providers, and assisting in enabling them to feel more comfortable with subsequent management.

Dr. Paul Howatt – Strathroy Family Health Organization, Strathroy

Quality Improvement Project – increasing enrolment in the Telehomecare Program for Congestive Heart Failure

Faculty Lead: Dr. John Marcou

Project Type: Quality Improvement

Across Canada, 1% of people suffer from heart failure and although it is a complex cardiovascular disease, a large proportion of the medical management rests on the shoulders of family physicians (1,2). The goal of this quality improvement project was to utilize community resources to improve the care of patients suffering from heart failure. Specifically, the intention was to increase enrolment of patients with HF from a small family health organization in Strathroy into the Telehomecare program for congestive heart failure. This is a CCAC/LHIN orchestrated program that focuses on patient education and self-care with weight measurements and blood pressure management. The Plan-Do-Study-Act model of QI was used and 5 cycles were completed. At the conclusion of the project, no patients were successfully enrolled.

Dr. Nathan Lansdell – PGY3 – Emergency Medicine

Evaluating the utility of chest radiography for pediatric chest pain in the emergency department

Project Type: Research

Co-authors: David McIlwraith, Eman Loubani

Objectives: Chest radiographs are often ordered in the work-up of pediatric patients with chest pain. However, the utility of these radiographs is not well-established. The objective of this study was to determine the rate of positive findings in chest radiographs done in previously healthy pediatric patients presenting to an Emergency Department with chest pain.

Methods: A retrospective study was conducted of pediatric patients, less than 18 years old, presenting with chest pain to a tertiary care pediatric Emergency Department in London, Ontario, Canada in 2017. Patients with a history of trauma or cardiac disease were excluded. Patients with abnormal findings on chest radiograph were identified and the clinical characteristics of these patients were recorded.

Results: After excluding 35 patient visits with preceding trauma or cardiac disease, there were 222 eligible visits to the Pediatric Emergency Department during the study period. Chest radiographs were ordered for 119 (53.6%) patients and of these, ten (8.4%) patients had significant findings. five (4.2%) had pneumothoraces, three (2.5%) had pneumonia, one (0.8%) had pneumomediastinum and one (0.8%) had an enlarged cardiac silhouette. Seven of the 10 patients with positive radiographic findings had at least one of tachypnea, shortness of breath or an abnormal respiratory exam.

Conclusion: This study demonstrates a low rate of positive findings (8.4%) on chest radiographs ordered in pediatric patients presenting to the Emergency Department with chest pain. A clinical decision rule may be beneficial for reducing the number of radiographs ordered in this population, but the pre-defined clinical characteristics chosen in this study did not identify all patients with positive findings.

Session B: Oral Presentations – Room 1120

Time	Presenter	Presentation
9:00 a.m.	Registration, coffee and tea – 1st floor foyer, WCPHFM	
9:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore Dr. Scott McKay	Opening remarks
10:00 a.m.	Drs. Kyra Harris, Sanja Knezevic, Nir Pecchioli, Sung Um	Creating and Validating an Interview Guide to Explore Clinician Experiences with Shared Decision-Making in Multimorbidity
10:15 a.m.	Dr. Melissa Snyder	How do paramedics perceive their role in the Emergency Department?
10:30 a.m.	Drs. Cody Jackson, Melissa Li, Krystyn Popowycz, Allison Rosen, Andrew Sripalan, and Saif Zahir	Resident Quality Improvement Project: the impact of electronic medical record templates on documentation quality and workflow
10:45 a.m.	Drs. Baraa Achtar and Pratik Kalani	Improve the rate of screening for falls in all elderly patients over the age of 65 at Byron Family Medical Center
11:00 a.m.	Dr. Ayesha Malik	Effect of Palliative Performance Scale level at time of inpatient palliative consultation on number of interventions by the palliative care team
11:15 a.m.	Poster presentations 1-14 / poster judging	
12:30 p.m.	Lunch	
1:00 p.m.	Concurrent oral presentaiton sessions (C in Room 1150, D in Room 1120)	
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Drs. Kyra Harris, Sanja Knezevic, Nir Pecchioli, Sung Um – Byron Family Medical Centre, London

Creating and Validating an Interview Guide to Explore Clinician Experiences with Shared Decision-Making in Multimorbidity

Faculty Lead: Dr. George Kim

Project Type: Research

Background: A key element in patient centered care (PCC) is shared decision-making (ShDM), which involves incorporating patient preferences, values, and priorities when developed a management plan. It is particularly important in the context of patients with multimorbidity, defined as those with multiple medical conditions.

Aim: To develop and validate an interview guide and collect preliminary data on medical professionals' perceived experience with ShDM in the context of multimorbidity.

Design of Study: Prospective qualitative grounded theory

Setting: The study participants were nine physicians, medical residents, and medical students selected through convenient purposive sampling at an academic family health team in London, Ontario, Canada.

Methods: In-person, structured, 15-20 minute interviews were conducted and recorded by four interviewers. The interview guide was created by the research team, and underwent three iterations. Recordings were transcribed verbatim then analyzed using basic content analysis.

Results: Almost all participants were correctly able to define "multimorbidity" (9/9) and "ShDM" (8/9). Most participants (6/9) used ShDM regularly, ranging from daily to every patient encounter. Most commonly used terms when describing positive ShDM experiences included "agreed", "understands", "happy", and "health improvement". In challenging encounters, the majority of participants reported the patient was the primary reason (7/8). This was most commonly due to patient values being incongruent with treatment options.

Conclusion: All participants shared the common theme that ShDM is the ideal approach when interacting with patients with multimorbidity. This theme and additional themes were validated against current literature.

Dr. Melissa Snyder – PGY3 – Emergency Medicine

How do paramedics perceive their role in the Emergency Department?

Faculty Lead: Dr. Don Eby

Project Type: Research

Introduction: In the Emergency Department inter-disciplinary interactions are critical to patient care. The voice of paramedics regarding their experience in the Emergency Department has not been well described in previous literature. This project will describe Paramedics' perceptions regarding their role in Emergency Department.

Methods: Qualitative thematic framework analysis of one-on-one, digitally recorded, semi-structured, telephone interviews of 11 paramedics from 2 Paramedic Services (one primarily urban; one rural) in southern Ontario. Recordings and field notes were repeatedly reviewed and discussed by two researchers. A conceptual framework was constructed from themes emerging from the data during analysis.

Results: Results are extracted from all 11 participating Paramedic interviews. Paramedics interviewed are from backgrounds including primary care, advanced care and ORNGE, have urban and rural experience, and have career durations between 7 and 33 years. Three major themes emerged from interviews: (1) Patient advocacy – patient's social and medical factors. (2) Communication – concern is not listened to in handover, value professional feedback from ED. (3) Respect – impacts team dynamic, improves when familiar to ED staff.

Conclusion: Paramedics' interviewed identify three major themes of their ED role including: Patient Advocacy, Communication and Respect. These findings may change practice by encouraging reflection of practicing ED clinicians on their own interactions with Paramedics. Some areas for practice change suggested in this study include: time for un-interrupted communication during handover, formal feedback model, and increased opportunities for interdisciplinary interactions.

Drs. Melissa Li, Cody Jackson, Krystyn Popowycz, Allison Rosen, Andrew Sripalan, and Saif Zahir – St. Joseph's Family Medical Centre, London

Resident Quality Improvement Project: the impact of electronic medical record templates on documentation quality and workflow

Faculty Lead: Dr. Eric Wong

Project Type: Quality Improvement

Electronic charting has transformed medication documentation. Many of the tools integrated into EMRs remain underutilized. Documentation templates can provide desired features such as prompting the writer to ask key clinical questions, improving documentation structure and readability and, and improving documentation workflow. Electronic template use is a new area of study and there is little data on its effect as a new clinical tool.

Utilizing the PDQI-9 (Physician Documentation Quality Instrument-9), a CPSO self-evaluation template, documentation time recordings and a self-reported user survey, we sought to identify improvements in the quality and efficiency of the resident documentation using a variety of parameters.

In the first PDSA cycle, it was discovered that the CPSO evaluation tool and time recordings were impractical and unrepresentative measures of charting quality and workflow efficiency. As a result, these measurements were excluded from the second cycle.

During the second PDSA cycle, staff-evaluated PDQI-9 scores pre-intervention demonstrated a baseline score of 39.8 out of total score of 45. There was an absolute score improvement of 0.2 to 4, representing an average relative improvement of 0.5 to 10%. While score improvements were modest, templates closed this gap from a perfect score by 42% on average. The pre- and post-intervention user surveys demonstrated templates were an acceptable workflow alteration used in more than 50% of encounters, and led to improvements in documentation system satisfaction, note organization and uniformity.

Given the rising prevalence of EMRs in community family medicine, template use will likely become ubiquitous. Like any tool, how templates are used will dictate their impact.

Drs. Baraa Ahtar and Pratik Kalani – PGY3 – Care of the Elderly

Improve the rate of screening for falls in all elderly patients over the age of 65 at Byron Family Medical Center

Faculty Lead: Dr. Scott McKay

Project Type: Quality Improvement

Half of persons 65 years of age or older fall each year. In Canada, falls are the most common cause of injury-related hospital admissions among seniors. Falls are multifactorial in origin and are associated with high morbidity/mortality. If the physician does not specifically screen for falls, there is a missed opportunity to prevent future incidents. American Geriatrics Society recommends family physicians screen their patients yearly. At baseline, only 10% of seniors at BFMC had been screened for falls in the past year. Our goal was increasing the rate of screening for falls in senior patients at BFMC through resident education, poster reminders and finally email reminders. Our goal was to achieve an increase of 25% in fall screening post-intervention by April 30th, 2018. The first PDSA cycle resulted in a minor increase of 2% in fall screening. PDSA 2 generated an increase to 22%. PDSA 3 nearly achieved our goal, reaching 30%. Our project demonstrated that it is possible to improve fall screening in a family practice, but continued concerns from learners about the complexity involved with senior visits and finding the time to screen for falls remain barriers to optimal falls screening.

Dr. Ayesha Malik – Byron Family Medical Centre, London

Effect of Palliative Performance Scale level at time of inpatient palliative consultation on number of interventions by the palliative care team

Faculty Lead: Dr. Gil Schreier

Project Type: Research

Statement of Purpose: Studies have shown a higher rate of satisfaction associated with referral to Palliative Care (PC) services earlier in the course of incurable diseases. We studied whether the number of interventions suggested by the PC team at the time of initial consult at Victoria Hospital in London, Ontario for inpatients differed for patients with a Palliative Performance Scale (PPS) of 30 or less (i.e., advanced disease) compared to 40 and greater (i.e., earlier in disease process).

Methods: We conducted a retrospective cohort study of all palliative care consults in the year 2016. Variables of interest included age, gender, admitting service, palliative or curative treatment prior to consult, diagnosis, ESAS symptoms, and time from date of consult to discharge or death. Outcome variables included number of medication changes, a discussion around end of life (EOL) preferences, miscellaneous interventions, and a composite score of a sum of all interventions.

Results: A preliminary analysis of 123 of 400 charts was performed. T-tests revealed that more composite interventions were conducted for PPS 30 or less compared to higher PPS (3.44 vs. 2.79; t 2.00, p = 0.048). As well, EOL discussions were more common for PPS 30 or less (t 2.696, p = 0.008). A linear regression was performed for all variables and revealed no obvious confounders.

Conclusions: The retrospective review of initial PC consultations suggests that the number of palliative interventions is greater for patients with a PPS of 30 or less. Whether this suggests the need for earlier referral to palliative requires additional investigation.

Session C: Oral Presentations – Room 1150

Time	Presenter	Presentation
9:00 a.m.	Registration, coffee and tea – 1st floor foyer, WCPHFM	
9:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore Dr. Scott McKay	Opening remarks
10:00 a.m.	Concurrent oral presentaiton sessions (A in Room 1150, B in Room 1120)	
11:15 a.m.	Poster presentations 1-14 / poster judging	
12:30 p.m.	Lunch	
1:00 p.m.	Drs. Philip Brierley, Cassandra Schulz, Caleb Van de Kleut	Quality improvement project to decrease emergency room visits for patients rostered to Byron Family Medicine Clinic
1:15 p.m.	Dr. David Wonnacott	Perceptions surrounding paediatric procedural sedation using intranasal ketamine administration: a qualitative study of emergency nurses
1:30 p.m.	Drs Daphne Southcott and Rebecca Swartz	The Application of a Quality Improvement Framework to Enhance Windsor Family Medicine Academic Half-Days
1:45 p.m.	Dr. Henry Becker	Long Term Treatment Outcomes in a First Nations High School Population with Opioid Use Disorder
2:00 p.m.	Drs. Daniel Pepe and Cassandra Lin-Pepe	Postgraduate Online Western Education Resource (POWER) tool for Family Medicine
2:15 p.m.	Poster presentations 15-27 / poster judging	
3:30 p.m.	Award presentations	
3:35 p.m.	Closing remarks / evaluations	

Drs. Philip Brierley, Cassandra Schulz, Caleb Van de Kleut – Byron Family Medical Centre, London

Quality improvement project to decrease emergency room visits for patients rostered to Byron Family Medicine Clinic

Faculty Lead: Dr. Scott McKay

Project Type: Quality Improvement

Co-authors: Brooke Edwards, Jeff Gustafson, Katie Hynes, Alex Nedeljkovic, Scott McKay

The Byron Family Medical Centre offers a 24/7 on call service for their patients. Despite offering these services, some patients that continue to go to the emergency room for conditions that have been shown to be best managed in the outpatient setting. The goal of this project was to reduce the number of visits to the emergency room by patients for this subset of conditions. We first aimed to identify potential reasons for patients going to the emergency room by contacting Byron patients who had visited the ED for one of the defined conditions. We thereby attempted to identify correctable factors for underutilization of the on call service. We designed 3 PDSA cycles using these identified factors while considering feasibility, yield, and stakeholder buy-in. Our baseline data was established by identifying how many BFMC patients visited the ED for our subset of conditions in the 7 months prior to our PDSA cycle initiation. We then continued to monitor this data set while implementing our PDSA cycles. We found that our PDSA cycles improved BFMC patient utilization of the on call service for our subset of conditions, with an average of 0.32 patient visits/1000 rostered patients/day for our baseline data, and values of 0.18, 0.24, 0.23 during PDSA 1, 2, and 3, respectively. We anticipate that our project can be used to improve utilization of the on call service at BFMC in the future.

Dr. David Wonnacott – PGY3 – Emergency Medicine

Perceptions surrounding paediatric procedural sedation using intranasal ketamine administration: a qualitative study of emergency nurses

Faculty Lead: Dr. Naveen Poonai

Co-Authors: Shannon Scott, Rachel Flynn, Samina Ali, Naveen Poonai

Background: Procedural sedation and analgesia (PSA) is being increasingly performed in the emergency department (ED) for children undergoing painful procedures. Intravenous (IV) ketamine is the most commonly used agent. However, IV placement is distressing for patients and health care professionals. Ketamine can also be administered intranasally (IN). The efficacy and safety of IN ketamine is the subject of a multicentred clinical trial. Translating the results of this trial into practice rests on the endorsement of all frontline ED providers, including bedside nurses. Our objectives were to explore nursing attitudes towards IN ketamine and to explore potential barriers to the use widespread adoption of IN ketamine for PSA in children.

Methods: Focus groups were conducted with groups of 3-5 bedside nurses recruited from the paediatric ED of London Health Sciences Centre. A total of 2 focus groups were held with a total of 8 nurses participating. Participants had a mean of 8.9 years (range: 2.5-26) of nursing experience in the paediatric ED. Transcripts were analyzed in a mixed inductive and deductive qualitative approach. Data analysis was managed using the 'NVIVO' software package.

Results: Perceived unpredictability of depth and duration of sedation, lack of IV access and associated pain and discomfort, and institutional resistance to change were significant themes affecting nursing attitudes towards intranasal ketamine.

Drs. Daphne Southcott and Rebecca Swartz – Windsor

The Application of a Quality Improvement Framework to Enhance Windsor Family Medicine Academic Half-Days

Faculty Lead: Dr. Dale Ziter

Project Type: Quality Improvement

Formal ongoing education of residents is a mandated component of accredited family medicine training programs in Ontario. The family medicine program at Western's Windsor site has taken a unique approach to resident learning by fulfilling this teaching requirement by having a fully resident-led academic half day. While innovative and open to feedback, a formal process of Quality Improvement has never been applied to the Windsor program academic half days (AHDs). This project aimed to utilize a QI framework grounded in adult educational principles and resident involvement to further enhance the Windsor AHD sessions. Research was conducted to determine which learning principles are relevant to learners at this stage of medical training and both formal and informal feedback from residents was collected. Multiple PDSA cycles allowed for the creation and implementation of new AHD guidelines, as well as re-structuring of half day sessions to increase case-based/interactive learning as well as ensure that material covered was Canadian and guideline-based. Analysis of resident presentations from before and after the QI project showed a large improvement in the number of presentations including cases, and the goal of 75% was met. The project was less successful in increasing the percentage of presentations including a formal "guideline slide," but still showed improvement from the previous year. In addition, both formal and informal resident feedback indicated that the changes to the AHD curriculum were well received and positivity impacted learning. Overall, the application of the QI framework was a good starting point in enhancing Windsor AHDs, and the model has the potential to continue to be useful in future curriculum planning.

Dr. Henry Becker – St. Joseph's Family Medical Centre, London

Long Term Treatment Outcomes in a First Nations High School Population with Opioid Use Disorder

Faculty Lead: Dr. Anita Srivastava (University of Toronto) and Dr. Susan McNair

Project Type: Research

Objective: To describe and evaluate outcomes for a cohort of First Nations youth with opioid use disorders who were initiated on opioid agonist treatment while in high school.

Methodology: This was a retrospective cohort study: we administered a survey to all students with an opioid use disorder who were initiated on opioid agonist treatment while enrolled in a high school during the period from 2011-2015. Out of a possible 38 students, 32 students responded to a survey on questions regarding their past experience with treatment (duration, number of treatment episodes), current educational status, employment, mental health, substance use and health care utilization. We analyzed health care indicators by those participants who were still on opioid agonist treatment versus those who had discontinued treatment.

Results: 32 out of a potential 38 students consented to participate in the survey: the mean participant age was 24, 21/32 were female (65.6%), and 20/32 (62.5%) had completed high school. Nineteen students (59.4%) had at least one child and 37.5% were employed full time. Twenty-five participants (78.1%) had not used opioids in the past 30 days but 15 (46.9%) described regular alcohol use and 9 (28.1%) described regular cannabis use in the last month.

19 participants stated they were still on opioid agonist therapy: there was a trend for a greater percentage of participants on treatment to be employed (42.1% versus 21.1% for those not on treatment), and to be abstinent from alcohol (63.2% versus 33.3% for those not still on treatment).

Conclusions: Our survey of First Nations adolescents with an opioid use disorder who were initiated on opioid agonist treatment while in high school showed that there is a trend for those who remained on treatment after they left high school to be employed and abstinent from alcohol relative to those who discontinued treatment.

Drs. Daniel Pepe and Cassandra Lin-Pepe

Postgraduate Online Western Education Resource (POWER) tool for Family Medicine

Faculty Leads: Drs. George Kim, Darren Van Dam, and Saadia Hameed

Project Type: Program evaluation

Introduction: Google classroom is a blended learning method that combines traditional pedagogical approaches through a unique asynchronous platform. The classroom allows teaching to be delivered to each learner in a unique way that enables them to progress through and revisit material at their own pace and according to their own schedule.

Methods: The authors undertook a pilot project using Google classroom that enrolled 42 second year Western FM residents on a voluntary basis. Of the study participants, 86% completed the pre-course survey. Of the enrolled participants, 13.9% (5/36) were from a rural program, 25% (9/36) were from regional programs, and the remainder were from Windsor and London. Of the enrolled participants, 47% did not feel supported by their current program (Figure 1).

The Google classroom provided weekly case-based discussion that addressed the 99 key topics for the SAMPS portion of the CFPC exam from November 2017 until February 2018. Using this asynchronous platform and a case-based approach developed according to the needs assessment in the initial survey, students were able to build upon previously acquired knowledge and allowed for knowledge associations between topics to be formed.

Results: The POWERtool was found to be subjectively impactful by students in improving three key domains: initiation of preparation, structured approach to questions, and early ongoing dialogue among peers and mentors.

Session D: Oral Presentations – Room 1120

Time	Presenter	Presentation
9:00 a.m.	Registration, coffee and tea – 1st floor foyer, WCPHFM	
9:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore Dr. Scott McKay	Opening remarks
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11:15 a.m.	Poster presentations 1-14 / poster judging	
12:30 p.m.	Lunch	
1:00 p.m.	Drs. Hina Jhawer, Shawn Segeren, Travis Trudeau	Increasing Physician Awareness and Utilization of the Confusion Assessment Method (CAM) at the Chatham-Kent Health Alliance
1:15 p.m.	Dr. Carolyn Adams	Women's Perceptions of Breast Cancer Screening in Primary Care: A Cross-sectional Survey in a Community-based Academic Family Medicine Teaching Practice
1:30 p.m.	Dr. Josiah Fan	Decreasing the average wait times in high acuity patients in a family physician-run rural emergency department
1:45 p.m.	Drs. Aditi Kane, Gloria Lin, Hao Liu, Adrian Matthews, and Francie Si	Quality improvement measures to increase the percentage of calls with clinically adequate patient information from the nursing staff at Chelsey Park Nursing Home
2:00 p.m.		
2:15 p.m.	Poster presentations 15-27 / poster judging	
3:30 p.m.	Award presentations	
3:35 p.m.	Closing remarks / evaluations	

Drs. Hina Jhaver, Shawn Segeren, Travis Trudeau – Chatham

Increasing Physician Awareness and Utilization of the Confusion Assessment Method (CAM) at the Chatham-Kent Health Alliance

Faculty Lead: Dr. David Huffman

Project Type: Quality Improvement

Increasing Physician Awareness and Utilization of the Confusion Assessment Method (CAM) at the Chatham-Kent Health Alliance

The Confusion Assessment Method (CAM) is a well-validated method of screening for delirium in hospitalized patients. Missing cases of delirium can result in serious health consequences for patients. At the Chatham-Kent Health Alliance, nursing staff measure and record CAM scores for elderly patients daily. However, preliminary research suggests that 50% of physicians are aware of this clinical tool, and 0% use it in clinical practice. Our goal was to increase physician awareness and utilization of CAM scores at the CKHA. Through a structured program of physician education, we were able to increase utilization of the CAM to nearly 30%.

Dr. Carolyn Adams – Windsor

Women's Perceptions of Breast Cancer Screening in Primary Care: A Cross-sectional Survey in a Community-based Academic Family Medicine Teaching Practice

Faculty Lead: Dr. Dale Ziter

Project Type: Research

Background: Breast cancer screening is controversial. The number needed to screen to save one life is large and there are many poorly recognized harms of undergoing screening.

Methods: We administered a cross-sectional survey of women's breast cancer screening perceptions in an academic community-based primary care setting. Women aged 30-80 years were included in the survey using 10 closed ended questions to examine the understanding of benefits, limitations, and risks of various breast cancer screening modalities.

Results: 152 surveys were administered to patients of Dr. Ziter. 123 (81%) met inclusion criteria for analysis. Of all surveys administered, 2.21/10 was the average score of correctly answered questions. The majority of those surveyed thought that self and doctor conducted breast exams save many lives, 71% and 76%, respectively. The majority significantly overestimated the benefit of mammography in detecting breast cancers. Underestimated was the frequency of false negative results obtained in mammography. Most women surveyed felt that mammograms were equally effective in detecting cancers at all ages (68%). Only 20% of women surveyed identified all of the stated harms of mammography. Furthermore, the majority of women did not appreciate the requirements of screening programs. 93% did not appreciate why screening in Ontario ends at age 74 years.

Conclusion: In our primary care setting, a high proportion of women significantly overestimated the benefits of breast cancer screening modalities, underestimated the limitations of breast cancer screening modalities, and the majority failed to appreciate all of the harms of breast cancer screening.

Dr. Josiah Fan – Maitland Valley Medical Centre, Goderich

Decreasing the average wait times in high acuity patients in a family physician-run rural emergency department

Faculty Lead: Dr. Don Neal

Project Type: Quality Improvement

Emergency department wait times remain an ongoing issue in healthcare. Much work has been done trying to improve the wait times in the emergency department. However, the use of the strategies to improve wait times has not been investigated much in many rural emergency departments. The emergency department in Goderich sees approximately 15000 patients annually. Patients categorized to the Canadian Triage and Acuity Scale (CTAS) level of 3 and 4 make up the majority of the visits. However, the majority of the wait time issue is with patients in the CTAS 2 and 3 group. This project will attempt to investigate and implement strategies in order to improve the wait times. The study will focus mainly on the CTAS 2 and 3 patient groups. Charts were reviewed in order to determine the wait times, which is calculated to be the time between triage and initial physician assessment, and the percentage of times that patients were seen within the ideal time frames suggested by CTAS. Three separate strategies were implemented over the course of three months in order to decrease the wait times by 15% in those two groups. Over the course of three months, both the CTAS 2 and 3 group average waiting times were decreased by 10 minutes. This represents 27.8% and 14.9% decreases, respectively. Although short, the strategies implemented were able to improve the emergency department wait times. Future studies will be helpful in investigating more strategies to further improve the emergency department wait times in Goderich.

Drs. Aditi Kane, Gloria Lin, Hao Liu, Adrian Matthews, and Francie Si – St. Joseph's Family Medical Centre, London

Quality improvement measures to increase the percentage of calls with clinically adequate patient information from the nursing staff at Chelsey Park Nursing Home

Faculty Lead: Dr. Saadia Hameed

Project Type: Quality Improvement

Physicians that provide on-call coverage to nursing homes are sometimes given inadequate patient information via telephone by nursing staff. This can negatively affect the quality of care provided to patients. In this Quality Improvement (QI) project, we identified four categories of information relevant to making patient care decisions: demographic information, vital signs, relevant medications/medical history, and goals of care. We enlisted a variety of methods to make Chelsey Park Nursing Home staff aware of these categories. Baseline outcome measures were obtained in February 2017, demonstrating 20% of calls with clinically adequate information given. From August 2017 to February 2018, a number of changes were implemented to improve the completeness of patient information provided by the nursing home staff at Chelsey Park. These included placing information checklists by nursing telephones and utilizing centralized information delivery methods to communicate study requirements to the nursing staff. While we initially had unexpected worsening of outcome measure and process measure, we implemented several changes in our approach that resulted in overall improvements. The outcome measure, the percentage of calls with clinically adequate information, increased from 20% at baseline to 45% by PDSA 5. The process measure, the number of missing items per call, decreased from 1.9 to 0.54. The balance measure, the average duration of calls in minutes, decreased from 9.6 to 8.9 in the first two PDSA cycles. It was later changed to resident satisfaction which showed improvement from 3.75/5 to 4.36/5.

Dr. Dominique Bonin – PGY3 – Emergency Medicine
Door-to-triage time in a Canadian tertiary-care centre

Faculty Lead: Dr. Jonathan Dreyer

Co-authors: Kristine Van Aarsen, Melanie Columbus, Jonathan Dreyer

Project Type: Research

Introduction: Time from patient arrival to triage is arguably the most dangerous time a patient spends in the emergency department (ED) as they have sought care but have yet to have contact with a healthcare professional. Door-to-triage time (DTT) is an important factor in patient safety that has not yet been quantified in Canada.

Methods: Data was collected from all ambulatory patients presenting to a single-sited tertiary care ED over a consecutive 7-day period. Demographic information, department entry time (door time), triage time, and Canadian Triage and Acuity Score (CTAS) were collected. DTT was compared across variables using Kruskal–Wallis one-way analysis of variance.

Results: A total of 774 patients were included in the study representing 82.8% of ambulatory patients. Patients were excluded from the study largely due to lack of recorded triage time or CTAS. The distribution of acuity was CTAS 1, n=5 ; CTAS 2, n=208; CTAS 3, n=373; CTAS 4, n=184; CTAS 5, n=5. DTT was variable (1-86 minutes) with a median [IQR] time of 12 minutes (6-21). Patients in the 5%ile with the longest DTT waited a median [IQR] of 54 [48-63] minutes. DTT varied across days of the week ($p < 0.01$), the longest on Monday of the study period (median 22 [IQR 11-43] minutes) and the shortest on Sunday (median 8 [IQR 5-12] minutes). DTT was also significantly different across hours of the day ($p < 0.01$). There was no relationship between DTT and CTAS ($p = 0.12$).

Conclusion: DTT is an important variable affecting patient safety. Given site-specific factors, replication across additional centres is necessary. Further research evaluating factors affecting DTT, different triage paradigms and quality improvement interventions should be undertaken.

Poster Presentations – Room 1150

Poster	Presenter	Presentation
1	Dr. Kangrui Lin	Asynchronous Education Module for Ocular Point of Care Ultrasound
2	Drs. Branden Deschambault, John Cheng, Faegheh Golbafian, and Catherine (Kasia) Wegrzyn	Improving Documentation and Standardization of Work-Up for Asymptomatic Microscopic Hematuria in Adults at Victoria Family Medicine Clinic
3	Drs. Ian Cameron, Shaan Dhindsa, and Amanda Spadafora	Deprescribing SSRI/SNRI Therapy in Patients with Uncomplicated First Presentation Depression
4	Dr. Lexie Smith-Rubenzahl	Characterizing Volunteer Emergency Medical Response on a Canadian University Campus
5	Dr. Momal Mazhar	Integrating the HEADSS Tool in the Adolescent Family Medicine Clinic Encounter
6	Drs. Alex Jiang, Tarun Nanda, and Kamaljeet Sahota	Implementing “Single Leg stance” (SLS) test in at least 30% of patients aged 70 and above as a measure for fall risk
7	Dr. Phillip Tremblay	Evaluation of a simulation-based paracentesis training program for physicians of the Huron Perth Palliative Care Outreach Team
8	Dr. David Bastien	New guidelines for AAA screening and implementation in a family medicine practice
9	Dr. Aric Sudicky	A Novel Objective Structured Clinical Examination Assessing Lifestyle Medicine Prescriptions in Canadian Undergraduate Medical Education
10	Dr. Kimberly Milestone	Improving Sleep Hygiene
11	Drs. Rachel Beretta, David Liu, Craig Kung, and Adam Zhu	A Model for a Medical-Legal Referral Program
12	Dr. Muhammad Dulymamode	The Utility of having type 2 diabetic patients on Insulin perform the Clock Drawing Test: a case series
13	Drs. Matt Galati, Lauren Gurland, Sara Neely, and Rachel Rollings	Increasing the documentation and use of growth curves in the primary care office
14	Dr. Steven Sato	Evaluating the Impact Of An Emergency Medicine Point-of-Care Ultrasonography Training Program On Resident Confidence Performing Bedside Scans

Poster	Presenter	Presentation
15	Drs. Matthew Brockman and Jessica Davie	Approach to improve smoking cessation in the primary care setting
16	Dr. Laura Clademenos	Post exposure prophylaxis practice patterns at LHSC – a retrospective review
17	Drs. Janina Mailloux and Matthew Steffler	Improving Screening Rates for Abdominal Aortic Aneurysm (AAA) at the Southwest Middlesex Health Clinic
18	Drs. Jennifer Mutrie, Erica Thompson, Juliet Veens, and Nadim Walji	The use of telephone and mail reminders to decrease rate of “loss to follow up” in the type 2 diabetic population of a rural family medicine practice.
19	Dr. Vaso Globarevic	Improving Wait Times at Windsor Southwest Detention Center
20	Dr. Christopher Foerster	Characteristics of patients who present to the emergency department with low acuity complaints while enrolled with an accessible family practice
21	Drs. Rory Peca and Ryan Wilson	Improving the Application and Adherence of the Canadian CT Head Rules in a Community Emergency Department: A Quality Improvement Study
22	Drs. Lindsey Chapman, Marc Labelle, and Andrzej Walus	Improving Frequency of Advanced Care Planning in Patients with COPD and CHF in a Primary Care Outpatient Setting: A Quality Improvement Initiative
23	Dr. Nisarg Patel	Review of Local Emergency Department Practises in Empirical treatment of Community Acquired Bacterial Meningitis
24	Drs. Trevor Harrison and Scott Whynot	Evaluating the effectiveness of home exercises for muscular shoulder pain
25	Dr. Matthew DiBartolomeo	Improving compliance with 3 month diabetic visits in patients with type 2 diabetes
26	Dr. Sarah Al-Obaidi	A survey of Canadian emergency physician practices regarding initiation of smoking cessation interventions in the emergency department
27	Dr. Daria Zajac	Have you had the The Talk? Introducing abdominal aortic aneurysm screening discussions into primary care

Dr. Kangrui Lin – PGY3 – Emergency Medicine

Asynchronous Education Module for Ocular Point of Care Ultrasound

Faculty Lead: Dr. Frank Myslik

Project Type: Research

Introduction: Point of care ultrasound (POCUS) is increasingly recognized as a core tool for emergency physicians. Typical POCUS curricula consist of a reversed classroom pre-course work is completed prior to an in-person session. The emergency department at the London Health Sciences has developed interactive modules for various applications of POCUS including cardiac, respiratory, gallbladder, renal, obstetric and gynecological. The purpose of this resident research project is to introduce an ocular POCUS curriculum and evaluate its implementation.

Methods: Current emergency residents were invited to participate in this curriculum development project by serially completing an online pre-test, watching an online screencast, completing an online post-test, and then participating in a hands-on evaluation. The pre-test and post-test consisted of questions designed with local-expert feedback to test Ocular POCUS theory and image interpretation, and the hands-on skills evaluated by Dr. Kangrui Lin using a standardized checkbox developed in conjunction with local experts.

Results: Seven participants, six from the CCFP-EM cohort, and one from the FRCP cohort, participated in the pilot project. Pre-test aggregated to a mean of 49% with a standard deviation of 18%. Post-test scores averaged to 84% with a standard deviation of 19%. Practical demonstration scores were 92% with a standard deviation of 13%. Qualitatively, several errors were easily correctable, such as clipping after the eye has come to rest during eye-static scans, identifying relevant structures, and remembering to scan dynamically.

Drs. Branden Deschambault, John Cheng, Faegheh Golbafian, Catherine (Kasia) Wegrzyn – Victoria Family Medical Centre, London

Improving Documentation and Standardization of Work-Up for Asymptomatic Microscopic Hematuria in Adults at Victoria Family Medicine Clinic

Faculty Lead: Dr. Anna Pawelec-Brzychczy

Project Type: Quality Improvement

Asymptomatic microscopic hematuria has been found to occur in approximately 9-18% of the population. The baseline annual incidence of microscopic hematuria at the Victoria Family Medical Centre (VFMC) was found to be 0.2%. This discordant result was thought to be explained by a complex constellation of factors, including assumptions about the often benign nature of asymptomatic microscopic hematuria, lack of resident familiarity with guidelines, and the invasive nature of the associated work-up, with emphasis on cystoscopy. By providing incoming residents at our academic center an educational session describing the Canadian Urological Association Guidelines for management of asymptomatic microscopic hematuria in adults, we were able to improve resident confidence in managing this ambiguous clinical presentation (Baseline = 2.4/5, Post-Educational Session = 3.9/5) and increase the estimated annual incidence to 0.36%. Subsequently, we sought to reinforce the importance of standardization in our approach to the diagnostic work-up by securing BD Vacutainer® Plus Urinalysis Preservative Tubes for general use in the clinic, so as to facilitate collection of urine microscopy samples. This change idea led to a further increase in the estimated annual incidence of microscopic hematuria in our clinic, up to 0.48%, almost eclipsing our goal of 0.5%. Further, a greater proportion of patients in the second PDSA cycle underwent the complete diagnostic work-up described above. Antibiotics were prescribed for 3 patients with microscopic hematuria, to definitively rule out an infectious cause, potentially compromising principles of antibiotic stewardship.

Drs. Ian Cameron, Shaan Dhindsa, and Amanda Spadafora – Southwest Middlesex Health Centre, Mount Brydges

Deprescribing SSRI/SNRI Therapy in Patients with Uncomplicated First Presentation Depression

Faculty Lead: Dr. Kyle Carter

Project Type: Quality Improvement

Depression is a common condition for which patients see their family physician. Nearly 85% of patients that are diagnosed with depression are started on an SSRI or SNRI with current guidelines suggesting treatment duration of 6-12 months. Most patients, however, are subsequently maintained on these regimes for time frames that far exceed the current recommended guidelines. New evidence is emerging that suggests that long-term use of SSRI/SNRIs is associated with increased rates of falls causing fractures, hospitalization, and development of hyponatremia and type 2 diabetes. Residents and physicians at the Southwest Middlesex Health Centre were asked to document discussions about medication management in depression and consider tapering low-risk patients. During our study period physician discussion and documentation regarding side effects of SSRI/SNRIs increased and we were able to trial SSRI/SNRI tapers for patients exceeding guidelines from a baseline of 31% to 50% of eligible patients. Ongoing follow up and management, including both pharmacologic and non-pharmacologic modalities provide the best means for patients to relieve symptoms of depression while reducing their future risks related to ongoing medication exposure.

Dr. Lexie Smith-Rubenzahl – Southwest Middlesex Health Centre, Mount Brydges **Characterizing Volunteer Emergency Medical Response on a Canadian University Campus**

Faculty Lead: Dr. Julie Copeland and Lauren Cipriano, PhD (Richard Ivey School of Business)

Project Type: Research

Objective:

1. Provide an introduction to the range of community first aid and pre-hospital care provided by volunteer campus emergency response teams in Canada.
2. Provide a detailed summary of the operations of Western University's Student Emergency Response Team (SERT) over the past five years.
3. Estimate the potential cost savings associated with organizations such as SERT.

Methods: A retrospective chart review was conducted for patient records from 2012-2017 using SERT's confidential Patient Care Forms. Data was abstracted using an Excel abstraction form. Following validation and error correction, data was analyzed using R software and reported as descriptive statistics.

Results: 3983 charts were reviewed for thirty variables, averaging 796 calls per year. Average response time was 5.5 minutes. Average patient age was 21.7. The most common call was substance use, closely followed by orthopedic and cardiovascular complaints. 2.2% of calls involved symptom relief medications. 26.7% of patients were transported by ambulance. Of the remaining 69.7% of calls, patients were distributed amongst various other primary care settings. Annual cost savings were estimated at \$332,000.

Conclusions: Volunteer campus emergency response teams are a valued and skilled resource for campus communities. SERT is equipped to handle and discharge minor complaints as well as initiate life prolonging treatment and assist emergency services in more complex presentations. Organizations such as SERT have the potential to positively impact health care accessibility, better distribute patients across primary care settings and save emergency departments and paramedic services a significant amount of physical and human resources.

Dr. Momal Mazhar – Central Lambton Family Health Team, Petrolia

Integrating the HEADSS Tool in the Adolescent Family Medicine Clinic Encounter

Faculty Lead: Dr. Angela Wang

Project Type: Quality Improvement

Adolescence is an important stage in social, physical, and psychological development. Risk behaviors learned in adolescence can not only increase short-term morbidity and mortality, but also affect health status across the lifespan. The use of the HEADSS tool has been recommended for adolescent preventative services in the form of regular, comprehensive psychosocial screening. We aimed to introduce the HEADSS tool into our family medicine clinical practice for adolescent visits. As seen with our results, the HEADSS tool can be used effectively in the clinical setting and does not result in significant increases in time duration of patient encounters. It can be incorporated into the electronic medical record (EMR) and saved as part of the patient's social history. The HEADSS tool is a useful identifier of stressors and wellbeing in mental health or school/sports physicals visits. Visits for acute physical health illnesses, however, appear to demonstrate less exploration of the psychosocial factors. The challenge, appears to lie in creating meaningful relevance of this psychosocial screening to the clinical encounter for the physician, but also – as some physician's note in their self-reported feedback – to the adolescent patient.

Drs. Alex Jiang, Tarun Nanda, and Kamaljeet Sahota – St. Joseph's Family Medical Centre, London

Implementing “Single Leg stance” (SLS) test in at least 30% of patients aged 70 and above as a measure for fall risk

Faculty lead: Dr. Nelson Chan

Project Type: Quality Improvement

Background: Incidence of fall increases with age. Fall screening is recommended for all community patients aged 70 and above on annual basis. At SJFMC fall screening was not done prior to our project.

Objective: Implementing SLS test in 30% of patients aged 70 and above at SJFMC to assess for risk of falls.

Methods: Individuals aged 70 and above were screened for fall risk using Single Leg Stand in clinic. Our first PDSA was done in this patient population but we did not meet our goal of at least 30%. We missed screening at times as it was done at end of patient visit. During second PDSA our screening percentage improved as we set reminders on our calendars the day before and performed screening at beginning of patient visit. We did a third PDSA to check the sustainability of changes made in PDSA 2.

Results: 106 eligible patients attended clinic over 8 weeks' time period. Out of 106 patients, 41 were screened bringing percentage of screened to 38.6%. 27 (65.8%) had normal test, 14 (34.1%) patients had abnormal test. 10 patients referred for detailed OT assessment. 1 patient refused, 2 were undergoing physiotherapist's assessment and 1 patient was scheduled for knee arthroplasty surgery, so postponed referral.

Conclusion: Screening goals were met in PDSA 2 and 3 with rate of 45.2% and 60% respectively.

Implementation of SLS can be increased by making it a part of periodic health exam and recording results in cumulative patient profile for easy retrieval and comparison.

Dr. Phillip Tremblay – PGY3 – Palliative Care

Evaluation of a simulation-based paracentesis training program for physicians of the Huron Perth Palliative Care Outreach Team

Faculty Lead: Dr. Darren Cargill

Project Type: Program Evaluation

Context: Ascites is a common problem among patients with advanced cirrhosis, malignancy and heart failure and is a cause of suffering. At the end of life, it is difficult for patients to leave home to undergo therapeutic paracentesis and many cannot receive paracentesis at home because of a lack of trained clinicians.

Objectives: Evaluate a training program for practicing physicians for its ability to change knowledge, skill and confidence in performing bedside paracentesis in order to facilitate more paracenteses for patients at home.

Methods: Pre-training, immediate post-training and three-month post-training surveys of participants of the 1.5-hour training session asking about demographic information, confidence, perceived skill and knowledge in performing paracentesis were conducted.

Results: Nine physicians participated in the training program. There were significant improvements in both knowledge and perceived knowledge about the procedure post-training ($p = 0.007$) and three months following the training session ($p = 0.012$). Perceived skill also improved. Confidence in performing paracentesis independently improved after the training session ($p = 0.016$) but waned after three months ($p = 0.059$). Afterwards, most participants still wanted more training. Only one participant performed paracentesis in the home in the three months following the training session.

Conclusion: This program evaluation showed that knowledge and perceived skill in performing paracentesis among participants in the training program improved after the session. Confidence was also improved, but this was not maintained. More study is needed to determine what an ideal training program would look like.

Dr. David Bastien – Windsor

New guidelines for AAA screening and implementation in a family medicine practice.

Faculty Lead: Dr. Dale Ziter

Project Type: Quality Improvement

The Canadian Society for Vascular Surgery (CSVS) reports that in Canada abdominal aortic aneurysm (AAA) is a significant cause of death. Every year around, 20,000 Canadians are diagnosed with AAA, most commonly in men over 65 years. AAA is often asymptomatic and rupture is frequently the first sign with an 80% mortality rate. Without treatment, approximately 10% of the Canadians diagnosed each year in Canada have a severe AAA that may become fatal. In September 2017, the CTFPHC issued a statement on AAA screening that recommends all male patients between 65-80 be screened. Dedicated AAA screening in family practice is varied depending on patient population and previous imaging. Physicians discussed and ordered AAA screening on eligible patients, while balancing the patient's primary office visit and other patient concerns. I aim to raise the screening percentage of men age 65-80 from around a 14% baseline to 90% in a 3-month timeframe. The first PDSA cycle involved speaking to the physicians and residents about the new guidelines around AAA screening; the second PDSA cycle incorporated posters placed in waiting rooms and exam rooms; and the third PDSA cycle added an electronic reminder to one physicians practice. In the first PDSA cycle, Dr. Ziter screened 4.2% of eligible patients and Dr. Hamdan screened 9% of eligible patients; in the second PDSA Dr. Ziter screened 11.1% of eligible patients and Dr. Hamdan screened 14.2% of eligible patients; in the third PDSA cycle Dr. Ziter screened 4.1% of eligible patients and Dr. Hamdan screened 6.3% of eligible patients. Posters informing patients about AAA screening had the biggest impact on screening percentages but decreased over time.

Dr. Aric Sudicky – Southwest Middlesex Health Centre, Mount Brydges

A Novel Objective Structured Clinical Examination Assessing Lifestyle Medicine Prescriptions in Canadian Undergraduate Medical Education

Faculty Lead: Drs. Vikram Dalal and Kevin Busche

Project Type: Research

Objectives: Obtain quantitative outcome data assessing the application of student preventive medicine knowledge and counselling skills in an OSCE. Collect qualitative data assessing student perceptions of lifestyle medicine curricula and existing barriers to development within a Canadian Faculty of Medicine.

Design: Each cohort completed a lifestyle OSCE simulating a primary care patient encounter. OSCE assessment followed pre-existing faculty templates quantifying sub-topic performance with satisfactory/unsatisfactory determined by station preceptor general assessment. The control group class of 2017 (N=88) completed the standard UME curriculum. The intervention group class of 2018 (n=152) had modules 1, 2, 3, and 4 of the Wellness Rx curriculum integrated longitudinally into their medical education. Survey data collected assessed satisfaction with the lifestyle curriculum offered and confidence with counselling.

Setting: University of Calgary, Faculty of Medicine

Participants: Undergraduate medical students

Main outcome measures: OSCE performance and student survey data.

Results: In total, 88 control group learners (Class of 2017) participated in the OSCE.

Preceptors rated 80 students (90.9%) as satisfactory based on their overall assessment of station performance. A total of 8 students (9.1%) received unsatisfactory ratings. Within the intervention group (class of 2018), 152 students participated with 117 (77%) receiving satisfactory assessments and 35 (23%) rated as unsatisfactory.

Conclusion: Lack of intervention penetrance makes it difficult to draw firm conclusions. Further research is required to determine the efficacy of lifestyle medical education for improving simulated preventive medicine skills assessed by OSCE.

Dr. Kimberly Milestone – Strathroy Family Health Organization, Strathroy

Improving Sleep Hygiene

Faculty Lead: Dr. John Marcou

Project Type: Quality Improvement

Chronic insomnia is a large problem with widespread effects. The aim of this project is to offer patients struggling with sleep, using sleep aids >4 times/week sleep hygiene and lifestyle modification tools to improve both their sleep and daytime function and reduce reliance on medication. Primary outcomes will be measured by daily sleep diary reporting and patient subjective description of sleep/fatigue as well as number of doses of sleep medication used per week.

Drs. Rachel Beretta, David Liu, Craig Kung, Adam Zhu – Victoria Family Medical Centre, London
A Quality Improvement Project Examining a Model for a Medical-Legal Referral Program to Improve Access to Legal Services for Patients in Need

Faculty Lead: Dr. Daniel Grushka

Project Type: Quality Improvement

There are a multitude of health determinants, including socioeconomic factors such as legal problems. Medico-legal partnerships are newly emerging programs that attempt to help those patients who have legal issues that are affecting their health. Given the low socioeconomic status of the population that our clinic primarily serves we used a questionnaire inspired by a similar Quality Improvement project in Windsor to attempt to identify those patients who may have potential legal issues, and therefore potentially poorer health outcomes. A total of 67 screens were given to patients and from those we identified 22 patients with potential legal issues for referral to a not-for-profit legal service in London. The most commonly identified legal issue was with regards to paying living expenses; this was followed by issues related to violent crime, personal or family stability issues, and issues regarding work. One patient initially screened negative but was subsequently identified as positive upon direct questioning of any perceived legal issues. An issue of this project was obtaining a number of false positive results, given the potential to loosely interpret the survey questions. Issues related to being able to efficiently screen and discuss the objective of our project to patients while also addressing their chief complaints was also a problem, as was the occasional difficulty in ensuring the front-end staff provided surveys to patients. Regardless, our project successfully identified patients who might benefit from further legal counsel, and shows the potential of implementing this project as a component of a regular patient exam.

Dr. Muhammad Dulymamode – PGY3 – Chronic Disease Management

The Utility of having type 2 diabetic patients on Insulin perform the Clock Drawing Test: a case series

Faculty Lead: Dr. Stewart Harris

Project Type: Case series

Insulin is often added to the medication regimens of patients with type 2 diabetes, in the later stages of disease, particularly once Beta-cell function declines. The use of Insulin however necessitates that a patient be able to successfully perform several steps, as well as have a proper grasp of what the medication entails, including risks such as hypoglycemia. This becomes an issue for patients for whom cognition is an issue, which is more prevalent in the elderly. The inability to perform safe insulin injections is worrisome for patients and health care professionals alike, with the latter being wary of prescribing it for fear of causing complications such as hypoglycemia or DKA. As such, the 2018 Diabetes Canada guidelines recommend administering a Clock Drawing Test (CDT) for all patients for whom safe Insulin injection is a concern. The CDT taps into a patient's cognitive ability which relates to executive functioning, and is needed to perform the steps required to safely use Insulin. In this case series looking at the utility of the CDT, we examine three different cases of patients attending a primary care diabetes clinic in south-west Ontario who were made to perform a CDT, with varying results. This will allow for an understanding of why the CDT can be performed and how various test scores can result in different management plans based on each individual patient, thereby providing an overview of its applicability in this type of clinical setting.

Drs. Matt Galati, Lauren Gurland, Sara Neely, Rachel Rollings – Byron Family Medical Centre, London

Increasing the documentation and use of growth curves in the primary care office

Faculty Lead: Dr. Scott McKay

Project Type: Quality Improvement

Use of growth curves recommended by the Canadian Pediatric Society and the World Health Organization. This quality improvement project aims to increase the use of standardized WHO growth curves for weight at all well child checks at the Byron clinic. In our academic practice, with regular resident turnover, it was noticed that at baseline, growth curves were being completed for weight on children 0-24 months at a rate of 34%. PDSA cycles were designed to involve clinic nurses, reorganize paper charts, and make announcements/reminders to staff. With these PDSA cycles, we were able to achieve a rate of 100% for documented weight on WHO growth charts for children age 0-24 months.

Dr. Steven Sato – PGY3 – Emergency Medicine

Evaluating the Impact Of An Emergency Medicine Point-of-Care Ultrasonography Training Program On Resident Confidence Performing Bedside Scans

Co-authors: Kristine VanAarsen, Waseem El Halabi

Project Type: Research

Faculty Lead: Dr. Waseem El Halabi

Background: Emergency medicine (EM) point-of-care ultrasonography (POCUS) has become a core competency for residents in Emergency Medicine training programs.

Objective: We aimed to determine the impact of Western's novel EM POCUS program on resident self-assessments of confidence in core POCUS applications.

Methods: We conducted pre and post-course surveys (using a 5-point Likert scale) on confidence in obtaining adequate views for core applications. Trainees also provided open-ended feedback about their training experiences. Descriptive statistics were calculated for the overall Pre and Post surveys.

Results: A total of 13 residents participated. In an overall comparison, resident confidence improved over all modalities. For AAA scans and assessing for free fluid in the pericardium, hepatorenal space and splenorenal space, 100% of residents felt 'confident' to 'very confident' in obtaining adequate views after the POCUS rotation, a slight increase from pre-course. Despite a small improvement in confidence with DVT and gallbladder scanning, post-course confidence remained low. This may correlate with reduced exposure / opportunities in these applications (median of 5 DVT scans and 17 gallbladder scans completed respectively). Comparison of the 6 matched pre and post surveys showed a statistically significant improvement in pre versus post-course resident confidence in all applications (with the exception of lung sliding).

Conclusion: Although our study was limited by sample size, we demonstrated that a novel EM POCUS course largely improves confidence in core ultrasound applications among EM residents. We hope our findings and continued evaluation of POCUS training serves to improve POCUS training and guide curriculum development

Drs. Matthew Brockman and Jessica Davie – Windsor

Approach to improve smoking cessation in the primary care setting.

Faculty Lead: Dr. Helena Hamdan

Project Type: Quality Improvement

Approximately 1 in 5 Canadians aged 12 to 79 years continues to use tobacco despite the negative effects it has on overall health. It is a major contributor of preventable causes of death including cancer, cardiovascular disease, COPD, etc. Using tobacco is a highly addictive behaviour, and physicians can help double or triple their patients chances of quitting with counselling. However, smokers typically do not actively seek assistance for smoking cessation from their family physicians unless they are ready to quit. Subsequently, family physicians often do not breach the subject unless they feel the patient is ready. This quality improvement project will implement new strategies to encourage patients to actively seek counselling for smoking cessation from their family physician. The strategies employed in this QI project are a poster advertisement and a tobacco use survey. The results of our QI project show that patients do not typically make appointments specifically for smoking cessation. Through the use of Shewhart charts, our data reflects that the use of a poster and tobacco survey did not significantly change the frequency of initial smoking cessation counselling. However, distribution of the tobacco survey did appear to eliminate special cause variation and subsequently introduced stability into an otherwise unstable process. This intervention was relatively simple to implement, but was somewhat time-consuming for the staff involved. In light of both these pieces of evidence, one could conclude that intermittent tobacco survey use could ensure regular, predictable, effective smoking cessation counselling in the primary care setting.

Dr. Laura Clademenos – PGY3 – Emergency Medicine

Post exposure prophylaxis practice patterns at LHSC – a retrospective review

Faculty Lead: Dr. Lisa Shepherd

Project Type: Research

Introduction: The decision to initiate post exposure prophylaxis (PEP) for HIV is often made by emergency department (ED) physicians. The CDC published updated guidelines for PEP in April 2016. This study determined what proportion of patients presenting to London Health Sciences Centre (LHSC) with an exposure to bodily fluids were treated in accordance with CDC guidelines.

Methods: A retrospective chart review of patients presenting to LHSC EDs with exposure to bodily fluid from January to June 2017. Charts were selected using ICD10 codes. Patients were excluded if: age less than 18, HIV positive, not for concern of blood borne illness, chart was illegible or unavailable, or sexual assault. The primary outcome was to determine the proportion of patients receiving PEP appropriately and the proportion of patients who were ineligible for PEP that were correctly deemed inappropriate for PEP initiation.

Results: 137 patients had a discharge code of interest. 72 (52.6%) were excluded. Of the remaining 65 patients, the median [IQR] age was 28 [24.5-38.5] and the majority were female (53.7%). 50 (76.5%) were CTAS 2 and the majority 43 (67.2%) were occupational exposures. PEP was indicated in 13 (15.8%) cases and appropriately prescribed in 12 (92.3%). PEP was not indicated in 52 (84.2%) cases and appropriately withheld in 47 (90.4%). Overall, PEP was prescribed appropriately in 59 (92.5%) of cases.

Conclusion: PEP was prescribed when indicated and withheld when indicated in the majority of cases.

Limited physician documentation was a significant obstacle to data collection and analysis.

Drs. Janina Mailloux and Matthew Steffler – Southwest Middlesex Health Centre,
Mount Brydges

Improving Screening Rates for Abdominal Aortic Aneurysm (AAA) at the Southwest Middlesex Health Clinic

Faculty Lead: Dr. Jennifer Parr

Project Type: Quality Improvement

Abdominal aortic aneurysm (AAA) rates are highest in men aged 65-75. The reason why we screen for AAAs is to detect them early, as many times they are a silent killer and don't present with symptoms until it's too late. The Canadian Society for Vascular Surgery has determined that screening abdominal ultrasounds for AAAs helps in decreasing mortality by nearly half. However, there is no formal screening program in place, leading to low rates of AAA screening. The current screening rates for SWMHC is low at 20%, which we aimed to improve. During our 2 PDSAs at SWMHC, the rate of males aged 65-75 appropriately screened for AAA at DM visits or physicals was 25% for PDSA 1, 24% for PDSA 2, and 24.3% overall. Our rates may have been even higher if the reminder to screen was included in the online periodic health exam template.

Drs. Jennifer Mutrie, Erica Thompson, Juliet Veens, Nadim Walji – Middlesex Centre Family
Medicine Clinic, Ilderton

The use of telephone and mail reminders to decrease rate of “loss to follow up” in the type 2 diabetic population of a rural family medicine practice

Faculty Lead: Dr. Daniel Leger

Project Type: Quality Improvement

Current guidelines suggest that type 2 diabetic patients should be seen up to four times per year in order to ensure they reach their hemoglobin A1c targets and prevention of micro- and macrovascular complications. In our clinic, a search of OHIP billing codes within our EMR was used to determine the number of diabetic patients who had not been seen for a diabetic visit for at least 12 months. Our baseline measurement revealed 56 of 267 diabetic patients had not been seen in 1 year, revealing a loss to follow up rate of 20.22%. A chart review of these patients was then performed, which in turn found that in fact only 15 patients (5.62% of diabetics) were truly lost to follow up. The remainder had actually been seen recently, were being followed by the DEC, were deceased or palliative, or had moved away or found a new physician. Over 3 PDSA cycles, these 15 patients were contacted using either a phone call or letter. This resulted in 6 of them making an appointment for a diabetic visit. This led to an improvement in our loss to follow up rate of 40%. Although we reached our ultimate goal of improving the rate by one third, this study revealed the larger issue of inappropriate billing of diabetic visits, which resulted in difficulty obtaining valid data, as well as loss of potential income.

Dr. Vaso Globarevic – Windsor

Improving Wait Times at Windsor Southwest Detention Center

Faculty Lead: Dr. Ryan Carlini

Project Type: Quality Improvement

Access to healthcare in jails and prisons represents a serious public health issue not only in Canada but globally. Inmates often have to wait days to be seen for what can sometimes be a life threatening medical issue. This project aims to assess improvements in wait times at the Windsor Southwest Detention Center (SWDC). Our process of being seen by a physician involves an inmate making a formal medical request for any given reason (poor sleep, dry skin, methadone request, etc.). This is documented by either the nursing staff or a request form filled out by inmates. The average wait time to be seen was discovered to be 10 days. In an effort to improve wait times, a standardized medical form for triaging all complaints was introduced successfully for health care staff utilization. The form included a triage tool in which the severity of the complaint is ranked in hopes of proper triaging and improving overall wait times. A methadone clinic was also implemented to allow for systematic assessment of all methadone patients as part of PDSA cycle 2. These changes led to an improvement in access to healthcare at SWDC, with the overall wait time decreasing from an average of 10 to 2.5 days. Additionally, an improvement was observed in patient satisfaction with access to healthcare, with subjective ratings improving from 7/10 to 8/10. We also observed an improvement in nurse perceptions on healthcare efficiency from 4/10 to 6/10, suggesting an improvement in overall efficiency.

Dr. Christopher Foerster – Southwest Middlesex Health Centre, Mount Brydges

Characteristics of patients who present to the emergency department with low acuity complaints while enrolled with an accessible family practice

Faculty Lead: Dr. Julie Copeland

Project Type: Research

Introduction: Reduction of unnecessary emergency department use would benefit both the health system and individual patients. The objective of this study was to describe the characteristics of patients of a family practice that can usually offer same or next day appointments who present to the local emergency department with low acuity complaints.

Methods: This study was a retrospective review of local emergency department presentations of patients from a single family practice from January 1, 2017 to March 31, 2017 of patients who were triaged as level 4 or 5 on the Canadian Triage and Acuity Scale (CTAS) and who were not admitted to hospital.

Results: Ninety-seven presentations by 93 patients met the inclusion criteria. They had a mean age of 44 years. Fifty three (55%) were male. Ninety-one (94%) were triaged as CTAS 4. The most common type of complaint category was musculoskeletal with 27 (28%) patients having complaints or diagnoses of this nature. Fourteen (14%) patients received an intervention. Seven (7%) had specialist referral made as an outpatient or consultation while in the emergency department.

Conclusions: Patients from this accessible family practice presented to the local emergency department with low acuity complaints in relatively small numbers and with few having multiple low acuity presentations over the three month study period. Musculoskeletal complaints were the single most common complaint type. Further research to better understand the decision making of patients in their decision to present to the emergency department despite having an accessible family physician.

Drs. Rory Peca and Ryan Wilson – Southwest Middlesex Health Centre, Mount Brydges
Improving the Application and Adherence of the Canadian CT Head Rules in a Community Emergency Department: A Quality Improvement Study

Faculty Lead: Dr. Julie Copeland

Project Type: Quality Improvement

Objective: To identify whether the use of simple interventions such as oral presentations, email reminders, visual aids at workstations, could help reduce the ordering of CT heads that could have been avoided with proper application of the CT Head Rule.

Phase 1: We will query the registry of CT Heads in patients under 65 ordered from the Strathroy ED in the last three months. The ED charts for these scans will then be reviewed, and those that ordered in the setting of head injury or trauma will be selected. The ED documentation for the encounter will then be reviewed. The physician documentation will be examined to determine if the scan could have been avoided with proper application of the rules. The total number of unnecessary scans will then establish a baseline (Number of Unnecessary CT Heads/Number of CT Heads).

Phase 2: Once the baseline has been established, we will implement targeted interventions to ED providers over the following months. This would include oral presentations, email reminders, teachings sessions with residents, and visual aids. Each month we will repeat a query of the diagnostic department and review the number of CT Heads ordered. The same review process will take place, in the hopes that the interventions will reduce the number of unnecessary scans.

Phase 3: After four months of the interventions, the results will have been tabulated. A poster presentation outlining our project and results will be presented at the Western Family Medicine Research Day.

Drs. Lindsey Chapman, Marc Labelle, and Andrzej Walus – Hanover Medical Clinic, Hanover
Improving Frequency of Advanced Care Planning in Patients with COPD and CHF in a Primary Care Outpatient Setting: A Quality Improvement Initiative

Faculty Lead: Dr. Susan Batten

Project Type: Quality Improvement

Background: Advanced care planning (ACP) conversations are not occurring often enough in the outpatient setting for patients with COPD and CHF. In our resident family medicine practice none of the 91 patients with documented COPD or CHF had goals of care or advanced care planning conversations recorded in the EMR.

Design: We implemented a quality improvement (QI) initiative using the PDSA approach to increase the rates of ACP in patients with COPD and CHF in our clinic and to develop a conversation guide that would facilitate these discussions. We offered ACP conversations to patients during regularly scheduled clinic visits. Our goal was to achieve a rate of 10% of COPD or CHF patients with ACP documented in the EMR. Results: We completed four PDSA cycles, offered ACP discussions to 17 patients and completed 9 ACP conversations. Changes implemented were increased time for appointments, holding conversations over multiple office visits, offering a handout of information for patients to review prior to follow-up appointments and tailoring the conversation guide to patient's disease severity.

Through these changes we increased the percent of COPD or CHF patients in our resident practice with documented ACP from 0% to 9.9%.

Conclusions: Advanced care planning in COPD and CHF patients in the outpatient primary care setting is challenging and many barriers exist that result in the low rates of these conversations. This QI initiative identified barriers and implemented changes to increase rates of ACP in COPD and CHF patients in our rural Ontario setting.

Dr. Nisarg Patel – PGY3 – Emergency Medicine

Review of Local Emergency Department Practises in Empirical treatment of Community Acquired Bacterial Meningitis

Co-authors: Kristine Van Aarsen, Lisa Fischer

Project Type: Research

Faculty Lead: Dr. Lisa Shepherd

Bacterial meningitis is a life-threatening disease and timing of appropriate antibiotics remains crucial. Multiple international guidelines are in agreement and recommend specific antibiotic regiment for treatment of community acquired bacterial meningitis. Existing evidence indicates an increase of in-hospital mortality with each hour of delay in administration of antibiotics. Additionally, administration of steroid is recommended in all adult patients with suspected bacterial meningitis.

The objective of the study was to evaluate local ED practices in treatment of suspected bacterial meningitis. We conducted a retrospective health record review of adult patients presenting to two tertiary care hospital EDs in London between 2014 and 2017 with suspected bacterial meningitis. We used all ICD codes for meningitis for health record search. We recorded type, dose and timing of antibiotic administration as well as steroid administration and outcome at discharge.

10 patients were included in our final analysis. 8 patients received antibiotics in the ED. No patient received steroids. Out of the 8 patients that received antibiotics, only four received the guideline recommended choice and dose. Average time from MD assessment to antibiotic administration was 51 minutes.

2 patients who did not receive any antibiotics in ED died during their hospital stay.

Bacterial meningitis is an uncommon and life-threatening disease. Given its rarity and specific recommendations for management that differ from sepsis management, guideline adherence appears to be poor in our small sample size. We propose EMR based protocol for management of suspected bacterial meningitis that would incorporate current recommended investigations and management.

Dr. Trevor Harrison and Scott Whynot – Strathroy Family Health Organization, Strathroy **Evaluating the effectiveness of home exercises for muscular shoulder pain**

Faculty Lead: Dr. Phil Vandewalle

Project Type: Quality Improvement

Muscular shoulder sprain and strain injuries are common in Family Practice settings. Some patients do not have the means to access private physiotherapy due to financial constraints, and OHIP wait times for physiotherapy can take months to years. By designing a home physiotherapy regimen that was physiotherapist approved, we strived to improve accessibility to rehabilitation and create positive outcomes for patient recovery. Using the SPADI scale to monitor pain and function, we assessed patients at initial presentation and at a four week follow up appointment to see the effect home physiotherapy had on their muscular shoulder injuries. Success was defined as a decrease of 20% or more in their SPADI scale total which matched a decrease in their follow up score by 30 points or more. Generally, the intervention of home physiotherapy was very successful with our goal achieved with our patient in PDSA cycle 1 and with 2/3 patients in PDSA cycle 3. PDSA cycle 2 was unsuccessful for 2/3 patients due to poor physiotherapy technique and this was corrected with further teaching and demonstration during visits. We feel that our home physiotherapy regimen for shoulder muscular injuries is a good option for patients who are motivated and willing to participate, and there is minimal cost and impact on efficiency of clinics for family physicians who are willing to get involved in this intervention.

Dr. Matthew DiBartolomeo – Windsor

Improving compliance with 3 month diabetic visits in patients with type 2 diabetes

Faculty Lead: Dr. Geoff Butler

Project Type: Quality Improvement

Diabetes mellitus is a global epidemic that has tremendous effects the morbidity and mortality of patients diagnosed with DM and on global health expenditures. Both micro and macrovascular complications are associated with T2DM when poorly controlled. While working in a community family practice, many patients with T2DM had complications associated with poor compliance of their condition. Therefore, the aim of this study is to improve compliance with 3-month diabetic checkups in patients with T2DM. By reviewing billing codes, paper charts and the limited practice EMR 98 patients were identified to have been diagnosed with T2DM. These patients were then randomized into three groups and three different PDSAs were run in parallel commencing on January 1, 2017 and ending on December 31, 2017. Specifically, PDSA 1 involved directly contacting patients every 3-months via telephone, PDSA 2 involved distributing appointment reminder cards directly to select patients and PDSA 3 simply involved the placement of posters in exam rooms and the waiting room. The target of 50% compliance was not met, however an increase in patients attending ≥ 3 diabetic visits increased from 4.6% in 2016 to 19.35% in 2017. Poor compliance occurred mainly due to physical and/or cognitive difficulties in older patients, while younger patients prioritized other commitments. Overall, the aim of the study was not met, but the findings did support current literature and reinforce the need for finding strategies to improve compliance in patients with T2DM in order to improve quality of life and decrease strains on the healthcare system.

Dr. Sarah Al-Obaidi – PGY3 – Emergency Medicine

A survey of Canadian emergency physician practices regarding initiation of smoking cessation interventions in the emergency department

Faculty Lead: Dr. Christine MacDonald

Project Type: Research

Introduction: Tobacco smoking is the leading cause of preventable disease, disability and death in Canada. Smoking cessation leads to significant health improvements—including reduced cardiovascular risk, fewer hospital admissions and shorter lengths of stay.

The uptake of systematic smoking cessation efforts in Canada remains low. Studies have shown that 40% of patients who present to the emergency department (ED) are smokers. Patients who perceive their illness to be smoking-related are more motivated to quit, providing a “teachable moment” that may make them more receptive to interventions.

We surveyed practice patterns and attitudes of Canadian Emergency Physicians towards smoking cessation interventions in the ED.

Methods: We conducted national, confidential, electronic survey distributed via email to Canadian emergency physicians and residents via the Canadian Association of Emergency Physicians (CAEP) database. It is a 14 item questionnaire. Our inclusion criteria for survey recipients are physician or resident practicing in a Canadian ED. Questions assessed physicians’ comfort level with initiating or referring patients for smoking cessation interventions, and the perceived barriers to smoking cessation interventions in Canadian EDs.

Results: We received 146 survey responses, our response rate was 12%. Majority of respondents (86.3%) believed as ED physicians, they have an important role to play in encouraging smoking cessation. Many were uncomfortable starting therapies in the ED due to lack of follow-up; the majority were also unaware of referral services in their community.

Conclusion: Canadian ED physicians would benefit from being aware of and having availability of smoking cessation referral services in the ED.

Dr. Daria Zajac – Windsor

Have you had the The Talk? Introducing abdominal aortic aneurysm screening discussions into primary care

Faculty Lead: Dr. Susan Sweet

Project Type: Quality Improvement

Analysis of data from randomized control trials has led the Canadian Task Force on Preventative Health to change its abdominal aortic aneurysm (AAA) screening guidelines. Since it has shown a reduction in aneurysm-related mortality, the recommendation is for one time screening for AAAs via abdominal ultrasound in men only, ages 65-80. While no formal nation-wide screening program has been initiated yet, using the quality improvement plan-study-do-act cycle, we sought to increase awareness of these new guidelines in our eligible men and track the subsequent decisions made. After a four month period, 30 out of a possible 187 eligible men had a formal AAA screening discussion in the office. These men were found via chance encounters and telephone calls. Each man was also provided with a standardized information pamphlet. Of these 30 men, 29 went on to have an abdominal ultrasound. 1 man was found to have a small AAA. These discussions were easy to conduct, did not encroach on patient appointment time and did not affect the other day appointments. Ultrasounds were completed in a timely fashion and results were reviewed quickly. As such, implementing AAA screening discussions into daily primary care can be easy and life-saving.

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