

Resident Project Day Abstract Collection

DEPARTMENT OF FAMILY MEDICINE

JUNE 8, 2016

The Western Centre
for Public Health
& Family Medicine

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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 program meets the accreditation criteria of The College of Family Physicians of Canada and has been accredited by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University, for up to 4.5 Mainpro-M1 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.

Agenda

8:00 a.m.	Registration, coffee and light refreshments – Foyer, 1st Floor, WCPHFM
8:30 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
9:00 a.m. - 10:00 a.m.	Concurrent sessions – oral presentations
10:00 a.m. - 10:30 a.m.	Poster presentations 1-15 / poster judging
10:30 a.m. - 11:30 a.m.	Concurrent sessions – oral presentations
11:30 a.m. - 12:00 p.m.	Poster presentations 16-31 / poster judging
12:00 p.m. - 1:00 p.m.	BBQ Lunch / poster judging
1:00 p.m. - 2:00 p.m.	Concurrent sessions – oral presentations
2:00 p.m. - 2:30 p.m.	Closing remarks / evaluations / award presentations

25% of this program is dedicated to participant interaction.

Session A: Oral Presentations – Room 1150, WCPHFM

Time	Presenter	Presentation
8:00 a.m.	Registration, coffee, light refreshments – Foyer, 1st Floor, WCPHFM	
8:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore	Opening remarks
9:00 a.m.	Dr. Blake Dr. Chen Dr. Hons	Stratifying risk for cardiovascular disease: Are we correctly assessing risk? A QI project looking at patients from the Victoria Family Medical Centre
9:15 a.m.	Dr. Branton Dr. Kennedy Dr. Serio	Appropriate Counseling and Documentation of Vitamin D3 in the EMR
9:30 a.m.	Dr. Church	Anticoagulation Therapy in Family Practice; How Often Are Our Patients in INR Therapeutic Range?
9:45 a.m.	Dr. Rittenhouse	Brain Natriuretic Peptide in the Rural Emergency Room – A Retrospective Study
10:00 a.m.	Poster presentations 1-15 / poster judging	
10:30 a.m.	Session C	
11:30 a.m.	Poster presentations 16-31 / poster judging	
12:00 p.m.	BBQ lunch / poster judging	
1:00 p.m.	Session E	
2:00 p.m.	Closing remarks / evaluations / award presentations	

Drs. Amy Blake, Richard Chen and Ian Hons – Victoria Family Medicine Centre
Stratifying risk for cardiovascular disease: Are we correctly assessing risk? A QI project looking at patients from the Victoria Family Medical Centre

Faculty Project Lead: Drs. Hammond, Pawelec and Wickett

Project Type: Quality Improvement (QI)

The recent 2012 Canadian Cardiovascular Society Guidelines for statin therapy indicated using the modified Framingham Risk Score (FRS) to evaluate cardiovascular risk factors, which now includes family history of early heart disease. An initial evaluation of 30 randomly selected patient charts at the Victoria Family Medicine Centre (VFMC) demonstrated that only 26.7% of patients who indicated a positive family history of cardiovascular disease had the age of first CVD event (MI or stroke) in first degree relatives indicated in the chart. Because the impact of family history in the FRS is dependent on age of first event, this omission in documentation makes it impossible to confirm FRS and ensure correct decision-making regarding statin therapy. Our goal is to increase the rate of correct documentation of family history in patient charts at the VFMC to 50%.

Through the combined use of oral presentations to residents, written material in the clinic, and email reminders to residents and supervisors we were able to increase correct documentation from 30% to 45% in 60 randomly selected patient charts followed prospectively through the course of the study. This led to an increase in time documenting family history during patient visits of two minutes.

Accurate documentation is an expectation for all physicians within the CANMEDS framework. Accurate documentation of family history of cardiovascular disease will ensure correct risk estimation and statin use according to the FRS. Our project identified a serious deficiency in documentation. We subsequently developed and successfully tested a strategy to correct this deficiency.

Drs. Heather Branton, Matthew Kennedy and Danny Serio – Victoria Family Medical Centre
Appropriate Counseling and Documentation of Vitamin D3 in the EMR

Faculty Project Lead: Drs. Hammond, Pawelec and Wickett

Project Type: Quality Improvement (QI)

Osteoporosis Canada recommends that adults over the age of 50, or those with osteoporosis or at risk of poor Vitamin D absorption, receive between 800 and 2000IU of Vitamin D3 supplementation daily. Appropriate levels of Vitamin D3 may reduce all-cause mortality, as well as reduce the risk of falls and fractures in those over 50 years of age. Therefore, it is imperative that physicians appropriately counsel their patients on supplementation in an attempt to mitigate these risks. This is most likely to be achieved during a periodic health examination (PHE). The Resident researchers at Victoria Family Medical Centre (VFMC) have found that there is a gap between physician (staff and resident) knowledge regarding Vitamin D3 supplementation and the proportion of instances that they counsel and appropriately record supplementation in the electronic medical record (EMR). The overall goals of this quality improvement (QI) project were to increase the knowledge of the physicians regarding Vitamin D3 supplementation, increase the frequency of which patients over the age of 50 were appropriately counseled on supplementation, and increase the frequency of which the supplementation was properly recorded in the EMR. By providing other physicians at VFMC with a brief educational session on important outcomes and associated recommendations from the Canadian Vitamin D3 guidelines, as well as placing posters in exam rooms, resident rooms and staff physician workspaces, the Resident researchers were able to achieve a relative increase in the proportion of patients who had their Vitamin D3 intake recorded during a PHE in the VFMC EMR by an average 65%, well above our 20% goal.

Dr. Kristen Church – Southwest Middlesex Health Centre, Mt. Brydges

Anticoagulation Therapy in Family Practice; How Often Are Our Patients in INR Therapeutic Range?

Faculty Project Lead: Dr. Vikram Dalal

Project Type: Research

Objective: This manuscript aims at determining the effectiveness of physicians at manually adjusting warfarin dosing based on how often International Normalized Ratio (INR) values were within therapeutic range for patients on warfarin. Design: A retrospective chart review.

Setting: An academic family medicine clinic in a rural community in Southwestern Ontario in Canada.

Patients: Patients taking warfarin for multiple medical conditions during a one-year period from July 1, 2014 to July 1, 2015. A total of 64 charts were initially reviewed and after the exclusion criteria, 45 charts remained for analysis.

Main Outcome Measures: Time in therapeutic range was defined as INR values between 2-3 for all medical conditions except for a mechanical valve replacement where the range was defined as INR values between 2.5 and 3.5. Time in supratherapeutic and subtherapeutic range were also measured.

Results: Patient INR values were in therapeutic range 64.95% of the time. Furthermore, 16.45% of the time patient INR values were supratherapeutic and 18.60 % of the time they were subtherapeutic.

Conclusion: Overall the patient INR values at the clinic were in therapeutic range 64.95% of the time in keeping with the target set by Thrombosis Canada, however one team had a time in therapeutic range of 48.1%. As a whole the clinic tended to have more INR values that were subtherapeutic as opposed to supratherapeutic. These results fair well compared to most of the literature review on manual warfarin dosing. However, there is perhaps a role for implementing an algorithm for warfarin dosing based on the literature review demonstrating the superiority of an algorithm versus manual warfarin dosing.

Dr Neil Rittenhouse – Goderich

Brain Natriuretic Peptide in the Rural Emergency Room – A Retrospective Study

Faculty Project Lead: Dr. Donald Neal

Project Type: Research

Background: Heart failure (HF) is associated with significant morbidity and mortality. Gold standard of diagnosis is a cardiologist consultation plus echocardiogram which are not readily available in a rural setting. BNP is a serum test with well established parameters for assisting in the diagnosis of HF. We conducted a pilot study to assess the utility of BNP in a rural emergency department (ED).

Methods: Patients presenting to the ED with non-traumatic dyspnea had a BNP prospectively drawn but not clinically available. The patients' charts were then retrospectively reviewed to determine situations where BNP may have changed the diagnosis.

Results: Preliminary results. Nine total samples were considered. No patients were inappropriately diagnoses with HF. One patient was clinically diagnosed with HF, discharged from ED, and returned within 14 days. One patient was admitted with an alternative diagnosis but a scoring system predicted a high probability of comorbid HF.

Conclusion: From a small sample size, BNP as part of a validated scoring system may be beneficial in the rural ED. Further research is required for a definitive answer.

Session B: Oral Presentations – Room 1120, WCPHFM

Time	Presenter	Presentation
8:00 a.m.	Registration, coffee, light refreshments – Foyer, 1st Floor, WCPHFM	
8:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore	Opening remarks
9:00 a.m.	Dr. Briscoe	Does a Four-Week Sport Medicine Rotation Improve Resident Knowledge and Confidence in the Assessment of Musculoskeletal Conditions?
9:15 a.m.	Dr. Chan	An analysis of Major Acute Cardiac Events for emergency department patients with high sensitivity troponin levels of 3 to 13
9:30 a.m.	Dr. Dhaliwal	Emergency Department Utilization of Point-of-Care Ultrasound (POCUS) in the Assessment and Management of Shock
9:45 a.m.	Dr. Glass Dr. Marshall	The implications of Zika virus disease in pregnancy
10:00 a.m.	Poster presentations 1-15 / poster judging	
10:30 a.m.	Session D	
11:30 a.m.	Poster presentations 16-31 / poster judging	
12:00 p.m.	BBQ lunch / poster judging	
1:00 p.m.	Session F	
2:00 p.m.	Closing remarks / evaluations / award presentations	

Dr. Graham Briscoe – Sport and Exercise Medicine – Fowler Kennedy Sport Medicine Clinic
Does a Four-Week Sport Medicine Rotation Improve Resident Knowledge and Confidence in the Assessment of Musculoskeletal Conditions?

Faculty Project Lead: Dr. Lisa Fischer

Project Type: Research

Although musculoskeletal (MSK) injuries occupy nearly one quarter of presentations at family medicine clinics, family physicians and residents report a lack of training and confidence in MSK assessments and management. This study evaluated if a four-week rotation in primary care sports medicine improved family medicine resident's skills at performing physical exams of the knee, ankle and shoulder joints. This was accomplished by comparing mock objective standardized clinical exams (OSCE) in the first and last weeks of family medicine residents' rotations at Fowler Kennedy Sport Medicine Clinic, in addition to completing pre- and post-rotation questionnaires. Family medicine residents demonstrated significant improvements in post-rotation physical examination test scores of the ankle, knee, and shoulder examinations compared to baseline. The findings support integrating a core sports/MSK rotation into family medicine residency, as a means of improving family physicians' ability to manage MSK conditions.

Dr. Caroline Chan – EM, London

An analysis of Major Acute Cardiac Events for emergency department patients with high sensitivity troponin levels of 3 to 13

Faculty Project Lead: Drs. Karl Theakston and Eugene Seong

Project Type: Retrospective Chart Review

Introduction: High sensitivity troponin (hs-TnT) is used as a diagnostic marker for myocardial infarction. This retrospective chart review evaluated the rate of major acute cardiac event (MACE) with an initial hs-TnT in the normal (3-13) range.

Methods: All LHSC emergency department patients (March 2012 – June 2015) with an initial hs-TnT value of 3 to 13 were collected. 100 patients were randomly selected from 4 categories with higher probability of MACE and were tracked for 30 days.

Results: In 69,853 ED visits, hs-TnT was drawn of which 30,737 (44%) had an initial hs-TnT of 3 to 13. There was a subsequent rise of $\geq 10\text{ng/L}$ in 272 (< 1%) patients of which 28% had MACE. Another 2,333 (8%) patients were consulted to cardiology without a troponin rise. 18% had MACE. There were 92 patients who returned to the hospital within 30 days with a troponin rise of $> 10\text{ng/L}$ or troponin level $> 50\text{ng/L}$. 47% had MACE. There were 321 patients who returned to the hospital within 30 days without a troponin rise but were consulted to cardiology. 11% had MACE. The overall incidence of MACE was 1.9% (95% CI of 1.2%-2.5%).

Conclusions: The rate of MACE is low (< 2%) for an initial hs-TnT of 3-13. A minimal number of patients has significant sequential troponin rise. As well, with lack of correlation between MACE and serial troponin rise, the prediction of MACE is limited with repeated troponin levels. Additional risk stratification methods must be employed.

Dr. Bharbhoor Dhaliwal – FM/EM, London Urban

Emergency Department Utilization of Point-of-Care Ultrasound (POCUS) in the Assessment and Management of Shock

Faculty Project Lead: Dr. Behzad Hassani

Project Type: Survey and Retrospective Chart Review

Introduction: The purpose of this study was to characterize current attitudes and practice patterns for the use of POCUS in shock management at London Health Sciences Centre (LHSC) and peripheral community hospitals.

Methods: In part one of our study, emergency physicians (EPs) attitudes towards the use of POCUS in undifferentiated shock at LHSC and seven surrounding community hospitals was examined through anonymous online survey. In part two of our study, a retrospective chart review of adult patients seen in the ED at LHSC during January 2015 was conducted to determine the current incorporation of POCUS in shock cases (sBP<90) admitted from the ER to the ICU. Results: Seventy three EPs completed the survey. 100% of respondents indicated POCUS had a role in shock assessment. Lack of knowledge/training (77%) and time (70%) were identified as the greatest barriers to use. EPs felt the highest utility for POCUS in shock is for determination of pericardial effusion (PCE) (70%), abdominal aortic aneurysm (AAA) (68%), and free fluid (FF) (71%). EPs in tertiary hospitals reported more frequent incorporation of POCUS in shock than community counterparts ($p<0.05$).

In part two of our study, 17 patients presented with shock to the ED. Of those patients, 10 (59%) had a POCUS exam documented on the medical record and/or QPATH and 7 (41%) had no POCUS exam documented.

Conclusion: Attitudes towards POCUS use in shock were positive, with EPs in tertiary centres reportedly more likely to incorporate POCUS in their assessments.

Drs. Erin Glass and Nuala Marshall – Enhanced Skills in Obstetrics, London

The implications of Zika virus disease in pregnancy

Faculty Project Lead: Dr. Kirk Hamilton

Project Type: Review of guidelines, recommendations, and literature

Over the past year, Zika virus has transformed from a little known virus contained within the Pacific islands to making headlines worldwide causing global concern. While the symptoms and prognosis for the general population are quite minor, the implications in pregnancy are much more alarming. The association with microcephaly, and other possible congenital abnormalities of the infected fetus, are some of the primary concerns. This presentation will aim to give an overview of the history, the disease, prevention strategies, screening measures, and management options as per the most recent Canadian guidelines.

Session C: Oral Presentations – Room 1150, WCPHFM

Time	Presenter	Presentation
8:00 a.m.	Registration, coffee, light refreshments – Foyer, 1st Floor, WCPHFM	
8:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore	Opening remarks
9:00 a.m.	Session A	
10:00 a.m.	Poster presentations 1-15 / poster judging	
10:30 a.m.	Dr. Arnott	Changes in Field Note Global Impressions through Family Medicine Training at Western University
10:45 a.m.	Dr. Arooj	Perceptions and Experiences of Family Medicine Residents Regarding Prenatal Screening (PNS) and Related Ethical Issues
11:00 a.m.	Dr. Cunningham-Dunlop Dr. Li Dr. Lin Dr. Singh	End of Life Discussions in Primary Care Part 2
11:15 a.m.	Dr. Pandit	Non-Mydriatic Retinal Photography in Primary Care
11:30 a.m.	Poster presentations 16-31 / poster judging	
12:00 p.m.	BBQ lunch / poster judging	
1:00 p.m.	Session E	
2:00 p.m.	Closing remarks / evaluations / award presentations	

Dr. David Arnott – St. Joseph's Family Medical Centre

Changes in Field Note Global Impressions through Family Medicine Training at Western University

Faculty Project Lead: Dr. Eric Wong

Project Type: Research

Background: A field note is a competency-based assessment tool that intends to provide frequent feedback and assessment. Each field note also represents a piece of data that contributes to the overall summative assessment of a trainee. This study examines utilization of field notes at Western University and changes in global impression scores over the course of family medicine training.

Methods: Field notes were collected during residents' core family medicine training blocks between the dates of July 1, 2014 and February 8, 2016 within the London Urban residency training program. Main outcome measure was global impression scores. Descriptive analyses were also performed.

Results: A total of 43 residents received 2,808 field notes within the study period. Residents received an average of 2.05 field notes per week. Significant differences in global impression scores were found between resident's first and second year family medicine rotations ($P < 0.01$). Differences between individual rotation blocks were not consistent.

Conclusion: Field notes provided multiple data points for consideration in a summative assessment. The significant difference in global impression scores between the first and second year of residency suggests that field notes as an assessment tool are sensitive to level of training.

Dr. Adeela Arooj – St. Joseph's Family Medical Centre

Perceptions and Experiences of Family Medicine Residents Regarding Prenatal Screening (PNS) and Related Ethical Issues

Faculty Project Lead: Dr Saadia Hameed

Project Type: Qualitative study using indepth interviews

Objective: To explore the experiences and perceptions of FM residents around ethical challenges related to prenatal screening in different Canadian religious and cultural groups.

Design: Qualitative study using indepth interviews

Setting: Western University, London, Canada

Participants: Nine Family Medicine Residents(FMR) from Postgraduate year one, two and three at St. Joseph Family Medicine Centre, London. Out of nine, seven of the participants were females and two were males.

Methods: Using a qualitative approach, indepth interviews were conducted. Perception and experiences with respect to several aspects to prenatal screening were examined.

Study data was audiotaped and transcribed verbatim. Independent and team analysis was performed in an iterative and interpretive manner.

Results: The study findings revealed two prominent themes which impacted the knowledge and perception of family medicine residents at the university; (1)physician factors and (2)patients factors. Physician factors included general understanding around PNS tests, confidence in counseling patients, moral distress, communication challenges, gender of physicians, patient-physician relationship and need for more training. Patient factors comprised of age, invasiveness of tests, socioeconomic status and educational level of the patient, cultural background, religious background and non judgmental approach of counseling. Moreover, participants showed keen interest in further learning different aspect of prenatal screening.

Conclusion: Despite describing poor confidence, gaps in knowledge and having challenges during counseling, the participants identified positive experiences around PNS counselling and were well aware of having a strong patient-physician relationship by offering open discussion. Supporting these new learners and educating them on this sensitive topic will encourage family medicine residents to improve their confidence by increasing their competency in counseling patients and appropriately following patients with positive PNS in their practices.

Drs. Stephen Cunningham-Dunlop, Sherman Li, Cassandra Lin and Deanna Singh –

St. Joseph's Family Medical and Dental Centre

End of Life Discussions in Primary Care Part 2

Faculty Project Lead: Drs. Chan, Hameed, Lyons, McNair and Patel

Project Type: Quality Improvement (QI)

Background: Despite the evidence that early advance care planning is known to improve patient and family satisfaction near the time of death, end-of-life (EOL) discussions rarely take place with elderly patients in primary care. We hypothesize that this is because of a lack of guidance and standardization around how to initiate these difficult discussions. This quality improvement project is a continuation of one started by our senior residents last year with the goal of increasing the rate of EOL discussions with elderly patients in primary care.

Methods: We identified patients ages 75 and older in our weekly schedules and flagged them as appropriate for EOL discussions. We created templates to guide these discussions. With each PDSA cycle, we made adjustments to the flagging process and template design.

Results: Over three week-long PDSA cycles, we increased the rate of documented EOL discussions in elderly patients from 0% to 33%.

Conclusion: EOL discussions are important parts of preventative care for elderly patients. While they are inherently difficult to initiate, the process is made easier for primary care providers by having standardized methods for identifying eligible patients and guiding the discussions.

Dr. Mohan Pandit – St. Joseph's Family Medical and Dental Centre

Non-Mydriatic Retinal Photography in Primary Care

Faculty Project Lead:

Project Type: Research

As few as 1 in 2 patients with diabetes undergo regular eye examinations. Retinal photography has the potential to improve screening and reduce the burden of preventable vision loss in the primary care setting. Retinal cameras have become an affordable tool making their use in primary care possible, enabling clearer visualization of the retina than the existing handheld fundoscope. This study aims to assess health care provider perceptions and behaviours as they relate to eye disease screening and retinal cameras.

Session D: Oral Presentations – Room 1120, WCPHFM

Time	Presenter	Presentation
8:00 a.m.	Registration, coffee, light refreshments – Foyer, 1st Floor, WCPHFM	
8:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore	Opening remarks
9:00 a.m.	Session B	
10:00 a.m.	Poster presentations 1-15 / poster judging	
10:30 a.m.	Dr. Annisette Dr. Hendy	Padding your wallet; improving medication list-carrying adherence
10:45 a.m.	Dr. Felder Dr. Kellam	Palliative Care Approach in Primary Care
11:00 a.m.	Dr. Laba	DoubleCheck Your Screening Reminders?
11:15 a.m.	Dr. Price	Exercise Prescription in Type 2 Diabetic Patients
11:30 a.m.	Poster presentations 16-31 / poster judging	
12:00 p.m.	BBQ lunch / poster judging	
1:00 p.m.	Session F	
2:00 p.m.	Closing remarks / evaluations / award presentations	

Drs. Spencer Annisette and Braedon Hendy – Windsor

Padding your wallet; improving medication list-carrying adherence

Faculty Project Lead: Drs. Geoff Butler and David Paterson

Project Type: Quality Improvement (QI)

The average senior citizen is prescribed six different daily medications, doubled when residing in a long term care facility. Increased knowledge of medications helps minimize drug interactions and educates patients about their disease processes. Medication cards are provided by most major pharmacies and are updated with each refill. Unfortunately, a survey showed only 27% of elderly patients carry a list of their medications.

To help promote adherence, elderly patients without a medication list were assessed. A stamp stating “Please carry your Medication List” was designed and utilized on each prescription with a verbal reminder to carry their pharmacy-derived medication list. Card-carrying adherence increased by 61% when contacted for follow-up. This approach can help lessen the burden for both the patient and medical professional that have to deal with polypharmacy and its complexities.

Drs. Sarah Felder and Ashley Kellam – Windsor

Palliative Care Approach in Primary Care

Faculty Project Lead: Dr. John Day

Project Type: Quality Improvement (QI)

As the population ages, more Canadians will require care at the end of life. Given the limited number of palliative care specialists, the role of family physicians in identifying patients who would benefit from a palliative approach will become more important. This quality improvement project (QI) sought to identify patients with incurable illnesses, particularly non-malignant illnesses, using the Gold Standards Framework Surprise Question: “Would you be surprised if this patient were to pass away in the next year?” During the initial QI cycle, the supervising physician identified patients using this question. These patients were identified as palliative and received symptom assessment using the Edmonton Symptom Assessment System. During the second QI cycle, electronic medical records were systematically searched for patients over 60 with potentially life-limiting non-malignant diagnoses to ensure identification of all patients who would benefit from a palliative approach. All patients also then had their symptom burden assessed using ESAS. With regards to a counter measure, no patients had recurrent admission due to poor symptom control during the project. The duration of our project unfortunately did not permit determination of whether there were sustained improvements in symptom control when using a palliative approach with these patients. In conclusion, the GSF surprise question permits the identification of patients, especially those with non-malignant diagnoses, who would benefit from a palliative approach. The question allows easy implementation of small changes in family practice with potentially high yield in terms of quality of life and healthcare burden.

Dr. Jennifer Laba – Windsor

DoubleCheck Your Screening Reminders?

Faculty Project Lead: Dr Albert Schumacher

Project type: Quality Improvement (QI)

The importance of appropriate screening cannot be over-stated in the primary care setting. While most electronic medical records (EMRs) have a built-in function that prompts the provider to consider screening, these prompts can often be overlooked and are not patient-specific. It may indicate that Fecal Occult Blood Testing should be done every 2 years, but it will not necessarily prompt when that 2-year mark arrives. Furthermore, it does not necessarily allow for customization in patients whose personal or family history results in a deviation from standard screening guidelines. This project will assess currently charted “reminders” to assess the efficacy of the current system.

Dr. Jeffrey Price – Middlesex Centre Regional Medical Clinic, Ilderton

Exercise Prescription in Type 2 Diabetic Patients

Faculty Project Lead: Dr. Daniel Leger

Project Type: Quality Improvement (QI)

Exercise prescription is touted as easy intervention to encourage patients to exercise more. One of the more difficult populations that would benefit from more exercise are the type 2 diabetics. They tend to be more resistant to exercise therefore worsening their disease state and response to medical therapies. Does exercise prescription work in this population? During this QI it does seem that exercise prescription improves activity levels in this population. It is quick and an easy addition to a regular diabetic visit. As a starting point for patients trying to improve their physical condition this may be a good way to get the ball rolling.

Session E: Oral Presentations – Room 1150, WCPHFM

Time	Presenter	Presentation
8:00 a.m.	Registration, coffee, light refreshments – Foyer, 1st Floor, WCPHFM	
8:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore	Opening remarks
9:00 a.m.	Session A	
10:00 a.m.	Poster presentations 1-15 / poster judging	
11:00 a.m.	Session C	
11:30 a.m.	Poster presentations 16-31 / poster judging	
12:00 p.m.	BBQ lunch / poster judging	
1:00 p.m.	Dr. Kennette	Attitudes toward advance care planning in an adult population
1:15 p.m.	Dr. Malone	Initiating and Documenting Conversations about Advance Care Planning in the Family Doctor's Office: A Quality Improvement Project
1:30 p.m.	Dr. Mills	Osteoporosis Screening in Men
1:45 p.m.	Dr. Youssef	Promoting the Reduction or Discontinuation of Benzodiazepine Use in Patients over 65 years old in Windsor Family Health Group
2:00 p.m.	Closing remarks / evaluations / award presentations	

Dr. Wendy Kennette – Windsor

Attitudes toward advance care planning in an adult population

Faculty Project Lead: Dr. Dale Ziter

Project Type: Research

Objective: The purpose of this study is to investigate patients' attitudes toward advance care planning (ACP), their family physician's role in initiating discussions about ACP as well as assess the prevalence of patients with ACPs and power of attorney (POA) for personal care.

Results: Of the 400 questionnaires distributed, 388 were completed and included in the analysis (97% response rate). Of the participants, 44.8% had prepared an advance statement of their wishes and preferences and 61.5% have assigned someone as their POA for personal care. The majority of patients agreed that it would comfort them knowing that they left guidance about their wishes for their family. Even though 50.3% of participants would be interested in talking about ACP with their family physician at their routine check-up appointment, only 12% of patients have approached health care professionals to do so. Overall, 56% of patients were interested in discussing ACP at any time with their family physician and there was no significant preference as to who should initiate these conversations.

Conclusion: This study shows that most respondents consider ACP discussions important and the majority would appreciate including their family physician in these conversations at a routine visit. Patients expressed no strong preference as to who should initiate these conversations but most felt ACP was appropriate to discuss at any routine clinic visit with their family physician.

Dr. Steve Malone – Windsor

Initiating and Documenting Conversations about Advance Care Planning in the Family Doctor's Office: A Quality Improvement Project

Faculty Project Lead: Dr. Frank DeMarco

Project Type: Quality Improvement (QI)

A quality improvement project was conducted which aimed to introduce and document preliminary advance care planning (ACP) discussions with fifty patients in a family practice office in Windsor, Ontario between November 1, 2015 and February 8, 2016. The initial target population was patients over age 65 presenting for an annual health review, but later expanded to include patients over 55 presenting for any reason. The objective was not to document specific advance care plans, but to introduce/create awareness of ACP and encourage patients to begin the process of ACP with loved ones.

The outcome that I ultimately wish to impact is the number of patients admitted to hospital or diagnosed with a serious illness who report, either personally or through a substitute decision maker, having participated in meaningful advance care planning. However, because this longitudinal goal could not be reasonably accomplished in the specified time frame, surrogate outcome measures were chosen instead: the number of preliminary discussions about ACP and the number of "Speak Up" workbooks distributed. Over the course of three PDSA cycles, there were a total of forty discussions and forty workbooks distributed, which represents 80% of the target. All patients approached for the project agreed to participate. As a process measure, the name and contact information of the substitute decision maker (SDM) for forty patients (80% of target) was also recorded in each patient's EMR chart. The balance measure (breast, colorectal, and cervical cancer screening rates) was not adversely affected by introducing ACP discussions. Although it fell short of its original goal, the project was well-received and gestures toward a viable approach to implementing preliminary ACP discussions in a family practice office. In the future, when participating patients return in follow-up for various health concerns, it would be valuable to assess whether they actively read the distributed literature and engaged in discussions with family members. Future research should also be aimed at identifying optimal protocols and inclusion criteria (e.g., age) for ACP discussions. A significant limiting factor remains the time burden that ACP discussions impose, which is exacerbated by the fact that there is no specific remuneration in Ontario for family doctors who choose to hold these conversations.

Dr. Ryan Mills – Windsor

Osteoporosis Screening in Men

Faculty Project Lead: Dr. Paul Ziter

Project Type: Quality Improvement (QI)

This project addressed the significant bias that exists regarding screening for osteoporosis in men. Osteoporosis is a disease that has often been thought of as a disease affecting post-menopausal women (1). The Osteoporosis Guidelines, however, recommend screening all men and women over the age of 65 for osteoporosis (5), and it is suggested that approximately 28% of hip fractures in Canada from 2001-2005 occurred in men (2). Men who do experience fragility fractures are affected with increased morbidity and mortality (3). Through the addition of “special notes” into the charts of male patients between the ages of 65 and 80 and a reminder posted on the monitors of each examination room, we have been able to increase the number of men screened for osteoporosis by 50%; from 18 to 27 patients. Because there were observed surges in the first month after each change was implemented, it was suspected that the educational reminder emails to the physician and residents played a greater role than the special notes in the charts and posted reminders. If the screening for osteoporosis in men continues to improve in this practice, hopefully the problem of underdiagnoses and undertreatment of men with osteoporosis (4) – at least in this practice – can be improved.

Dr. Margarette Youssef – Windsor

Promoting the Reduction or Discontinuation of Benzodiazepine Use in Patients over 65 years old in Windsor Family Health Group

Faculty Project Lead: Dr. Dale Ziter

Project Type: Quality Improvement (QI)

First available in the 1960s, benzodiazepines (BZDs) are a class of medications that stimulate the GABAA receptor yielding a sedative, hypnotic, anxiolytic, anticonvulsant, amnesic-dissociative, and muscle relaxing effect. Therefore they are commonly prescribed in treating anxiety, insomnia, agitation, seizures, muscle spasms, alcohol withdrawal, procedural sedation, and in end-of-life care. Since the 1980s, research has emphasized how benzodiazepines have negatively impacted elderly patients who regularly use them in multiple domains. Yet, they are still frequently prescribed likely on the basis of quick effect, low cost, and insistence by patients. Through this Quality Improvement task, the medication lists of patients that are part of a practice in Southwestern Ontario and greater than 65 years have been reviewed. The baseline value of patients that met these criteria was 6%. Patients who are regularly utilizing benzodiazepines had their chart flagged. Based on these flags, the patients physician counseled them on their next visit to reduce the dose, frequency of use, or discontinue the medication completely. Twelve months later, I reviewed patient medication lists again and assess whether a personalized flag in the patient's chart has impacted the total number of patients using benzodiazepines. Furthermore, I completed an education session with primary advisor and advocated for more intense counseling. Through these two intervention cycles, 36% of patients stopped or reduced BZD use, suggesting that flags and counseling were effective at reducing possible side effects in our target population.

Session F: Oral Presentations – Room 1120, WCPHFM

Time	Presenter	Presentation
8:00 a.m.	Registration, coffee, light refreshments – Foyer, 1st Floor, WCPHFM	
8:30 a.m.	Dr. Jamie Wickett Dr. Stephen Wetmore	Opening remarks
9:00 a.m.	Session B	
10:00 a.m.	Poster presentations 1-15 / poster judging	
10:30 a.m.	Session D	
11:30 a.m.	Poster presentations 16-31 / poster judging	
12:00 p.m.	BBQ lunch / poster judging	
1:00 p.m.	Dr. Burgess	A Standardized Patient program using Ariadne Lab's Serious Illness Conversation Guide to improve Advanced Care Planning
1:15 p.m.	Dr. Hizo-Abes	The impact of palliative care on attitudes toward physician-assisted death in patients with life-limiting illnesses: A prospective cohort study
1:30 p.m.	Dr. Pawliszyn Dr. Soong	OneHandout: An electronic patient handout system
1:45 p.m.	Dr. Sultan	The Use of Thrombolysis in Pulmonary Embolism: A Retrospective Chart Review
2:00 p.m.	Closing remarks / evaluations / award presentations	

Dr. Thomas Burgess – Palliative Care – London

A Standardized Patient program using Ariadne Lab's Serious Illness Conversation Guide to improve Advanced Care Planning

Faculty Project Lead: Dr. Darren Cargill

Project Type: Research: Education

Advanced care planning (ACP) is an important aspect of care for patients that have been diagnosed with a life-limiting illness. For a variety of reasons, ACPs are typically not discussed adequately or in a timely manner. This can result in decision-making that does not reflect the patient's wishes, and can be a source of significant caregiver conflict.

Ariadne Labs has developed the Serious Illness Care Program. This program includes the Serious Illness Conversation Guide (SICG) that they have developed to help healthcare providers improve their skills and comfort with ACP conversations by providing a quick, easy-to-use framework for these conversations. To strengthen use of the SICG, we developed a Standardized Patient program that introduces healthcare professionals to the Guide, and provides an opportunity to practice its use.

This short, simple program begins with a short presentation introducing the SICG, and is then followed by opportunities for healthcare professionals to practice its use with Standardized Patients. We developed clinical situations and patient descriptions from those used in the Serious Illness Care Program for use by Standardized Patients. A short de-brief is then held with participants to discuss their comfort with the SICG.

The SICG is currently freely available to all healthcare professionals through Ariadne Labs. We hope our program will augment the tool developed by Ariadne Labs and will help healthcare professionals have meaningful ACP conversations and improve outcomes for patients with life-limiting disease.

Dr. Patricia Hizo-Abes – Palliative Care, London/Windsor/Sarnia

The impact of palliative care on attitudes toward physician-assisted death in patients with life-limiting illnesses: A prospective cohort study

Faculty Project Lead: Dr. Gil Schreier

Project Type: Original research

Background: On February 6, 2015, The Supreme Court of Canada ruled that competent adults suffering intolerably from a grievous and irremediable medical condition have the right to the assistance of a physician in ending their own lives, an act known as physician-assisted death. This will be legal across Canada on June 6, 2016. Some experts believe legalization is premature in the absence of universally accessible palliative care, advocating that high quality symptom management would decrease the demand for physician-assisted death. However, previous evidence suggests that symptom management does not influence patient desires for hastened death.

Objective: To determine whether patients with palliative care services influences desire for physician-assisted death.

Methods: We surveyed three groups of patients with life-limiting diagnoses: one with new referrals to palliative care, surveyed before and after palliative care consultation; one with no palliative care involvement; and one previously and currently managed by a palliative care team. Respondents rated their general and personal attitudes toward physician-assisted death on a five-point Likert scale, at baseline and follow-up approximately two weeks apart.

Results: We surveyed 102 participants, 70 of whom completed both surveys. We found no statistically significant differences in general support for physician-assisted death between groups or within groups between baseline and follow-up. There was also no statistically significant difference in personal desire for physician-assisted death between groups, or within groups between baseline and follow-up.

Conclusion: Involvement with palliative care services does not appear to significantly influence attitudes toward physician-assisted death in patients with life-limiting illnesses.

Drs. Richard Pawliszyn and Daniel Soong – Byron Family Medical Centre

An electronic patient handout system

Faculty Project Lead: Drs. Sonny Cejic and George Kim

Project Type: Quality Improvement (QI)

Background: Handouts can be useful teaching and informational tools used during patient encounters. With the widespread use of the internet there is increasing high-quality electronic handouts as well as an increased ability to share these with others. Despite these benefits the adoption and incorporation of new technology can be challenging in busy clinical practice.

Methods: A website for collecting, storing, printing and electronically sharing handouts to patients was developed. This was introduced to the staff at the Byron Family Medical Centre in a variety of ways and the uptake and use of this was monitored.

Results: We had a total of 9 providers (45% of available) sign up for the website. Use peaked in the first week with an average of 5 handouts used per day, but settled down to about 1 use per day. An average of 2 providers logged in and use the system each day.

Conclusion: Despite early enthusiasm, use of this new technology settled down to be used by a core group of early adopters who used the technology regularly. Engaging the larger group of providers to use the technology regularly turned out to be more challenging.

Dr. Muhammad Saad Sultan – Emergency Medicine – London

The Use of Thrombolysis in Pulmonary Embolism: A Retrospective Chart Review

Faculty Project Lead: Dr. Amit Shah

Project Type: Retrospective Chart Review

Background: Pulmonary embolism (PE) has significant variability in severity and prognosis, and can be classified into low-risk, submassive, and massive PE. Current guidelines recommend thrombolysis only in the setting of massive PE, defined by a systolic blood pressure of less than 90 mm Hg for at least 15 minutes. However, multiple recent studies suggest that in patients with submassive PE and evidence of cardiopulmonary compromise, thrombolysis improves long-term sequelae. In this study, we aim to identify the incidence of submassive PE with cardiopulmonary compromise, and the usage of thrombolysis in this high-risk group.

Methods: We conducted a retrospective chart review of all patients who presented to the Emergency Department at Victoria Hospital with PE between October 2014 and September 2015.

Results: 100 unique cases of PE were identified. 18% of patients had cardiopulmonary compromise due to their PE, defined as loss of consciousness, desaturation, hypotension, elevated lactate, or heart rate > systolic blood pressure. Only one patient out of 18 received thrombolysis in the Emergency Department. The remaining 17 patients were treated with anticoagulation alone, out of which two patients died within 24 hours.

Conclusions: Our study suggests that thrombolysis is infrequently utilized by emergency physicians in patients with submassive PE and hemodynamic compromise. This may be attributable to lack of support from published guidelines, under-recognition of this group as being high-risk, and unclear risk-benefit profile. Further research and an institution-wide protocol would aid in effective and consistent management of high-risk cases.

Poster Presentations – Room 1150, WCPHFM

Poster	Presenter	Presentation
1	Dr. Adatia	Quality Assessment of Resident Charting in the Emergency Department: A Pilot Study
2	Dr. Al-Azem Dr. Blanchard Dr. Chau Dr. Malo Dr. Stewart	Increasing Tdap Immunization Rates in Adults in Primary care
3	Dr. Allen Dr. Hammond Dr. Leung	Increasing Zostavax Immunization at Southwest Middlesex Health Centre
4	Dr. Austin Dr. Mosey	Attempts to Reduce the Cost of Unnecessary Laboratory Testing
5	Dr. Bali Dr. Rextin Dr. Rubab Dr. Sweiden	Interventions to improve Pap smear outcome in BFMC
6	Dr. Bhattacharyya	Standardize long-term opioid prescription monitoring
7	Dr. Bhanji Dr. Wilson	Improvement of Prenatal Care in the Primary Care Setting
8	Dr. Boyd Dr. Herrera	Advance Care Planning Discussions in the Primary Care Setting
9	Dr. Chavez-Johnston Dr. Singh	Increasing preventative mammography screening at VFMC
10	Dr. Chippin Dr. Ross	Implementation of New National Guidelines Regarding Pneumococcal Vaccination in Adult Patients with Asthma – a Community-based Chart Review
11	Dr. Cosby Dr. Gerson	Palliative Care Assessment in a Rural Community
12	Dr. Coulter	A literature review of non drug approaches for behaviours associated with confusion in hospitalized older adults
13	Dr. Enriquez	Deprescribing Antipsychotics for BPSD in the LTC Setting
14	Dr. Fouladi-Nashta Dr. Shewfelt	Expanding Awareness: VFMC After Hours Care
15	Dr. Gill	Effectiveness of integration of the PHQ-2 depression screening tool as “emotional vitals” with routine vitals

Poster	Presenter	Presentation
16	Dr. Huszarik	Effect of increased availability of pre-authorized radiological test ordering on CT scan utilization in the emergency department
17	Dr. Iqbal Dr. Sacco Dr. Sedykh	Standardizing Pediatric Fever Discharge Instructions
18	Dr. Lam Dr. Williams	Interventions To Increase Alcohol Use Screening In Primary Health Care
19	Dr. Lau Dr. Wilhelm	Improving the Quality of the Hanover Family Medicine Residency Practice by Improving Patient Understanding and Satisfaction
20	Dr. Lee	Improving Use of Screening Baseline ECGs in Diabetic Patients
21	Dr. Lemmex	Tick bite prophylaxis: a review of practice patterns and survey of emergency department physicians in South Western Ontario
22	Dr. Maeng Dr. Mahngar	Choosing Wisely: The role of screening CBC in an academic practice
23	Dr. Mahmoud Dr. Pererra	Improving Consistency and Efficiency of Measuring Patients' Weight, Height and recording Body Mass Index (BMI)
24	Dr. McCuaig	Effect of Exercise on Anxiety in Adolescents suffering from Sport-Related Concussion
25	Dr. McCulloch Dr. Ricketts Dr. Pearce	Does Having a Primary Care Provider Influence Non-Urgent Emergency Department Visits?
26	Dr. Nhan	Primary care advanced care plan discussions in advanced COPD
27	Dr. Scott	Shared Goal Setting and Accountability as an Intervention for Frequent Presentation to Primary Care: A Quality Improvement Project
28	Dr. Spudic	Improving Nursing Home to Emergency Department Transfers
29	Dr. Taylor	Evaluation of physician experiences and clinical utility of automated drug-drug interaction alerts in primary care
30	Dr. Walus	Does sending a letter to parents increase the influenza vaccination rate of high risk children aged 6 months to 5 years of age?
31	Dr. Zajac	Implementing falls screening in annual health exams at the Ilderton Medical Clinic

Dr. Aleem Adatia – Victoria Family Medical Centre

Quality Assessment of Resident Charting in the Emergency Department: A Pilot Study

Faculty Project Lead: Dr. Daniel Grushka

Project Type: Research

Background: There is a paucity of literature regarding quality improvement in Emergency Department (ED) charting, specifically among residents working in the ED. Completeness of ED documentation is essential for continuity of patient care and flow of information to care providers. It is during residency that good charting practices can be imbibed. Our study seeks to detect deficiencies in documentation of ED encounters by residents and suggest recommendations for improvement.

Methods: Charts were examined from both an academic and a community ED. Data was extracted from charts using an Excel spreadsheet with established fields, based on areas of documentation considered important. The data was qualitatively analyzed to assess adequacy of charting and identify areas of deficiency. Ethics approval was obtained for the study.

Results: A total of 500 charts were reviewed. Most charts were deemed legible (97%). Time of assessment, adequate history and physical examination were documented 100% of the time and a review of vitals signs was charted 69% of the time. Reassessment time with a note was only documented in 57% of charts where reassessment was expected. Also, 22% of charts lacked a record of past medical history, and 36% of charts lacked documentation of the patient's medications being reviewed. Allergies were documented as being reviewed 41% of the time. While discharge instructions were provided 89% of the time, a clear impression and plan was only documented 70% of the time. A communication with the primary care provider was documented 41% of the time when the patient was discharged. Signoff and review by the attending physician was documented 35% and 28% of the time respectively. Discharge diagnosis was present in 91% of charts reviewed.

Conclusions: Clear improvements are necessary in ED resident documentation of reassessments, patient medications and allergies, primary care follow-up, and review by the attending physician. Based on the deficiency in charting practices identified, we can now implement an approach to improve resident documentation skills. Future endeavours will involve creation of a tool that EDs can use to audit their residents' charting practices. Our exercise is an initial step towards efforts in improving charting in ED encounters.

Drs. Omar Al-Azem, Andre Blanchard, Vivian Chau, Alison Malo and Chad Stewart –
St. Joseph's Family Medical Centre

Increasing Tdap Immunization Rates in Adults in Primary care

Faculty Project Lead: Dr. Saadia Hameed

Project Type: Quality Improvement (QI)

Booster doses of tetanus diphtheria (Td) are recommended every 10 years. It is estimated that only 58.5% of Canadian Healthcare Providers (HCPs) routinely offer the tetanus, diphtheria, and acellular pertussis vaccine (Tdap) to their adult patients (5). Some of the key barriers to compliance are thought to be workload/time required to deliver the vaccine and lack of patient awareness/education. Consequently, we took a closer look at a population of patients that were not up-to-date with their Tdap immunizations to see if there is room for improvement. More specifically, our goal was to see a 20% increase in the vaccination rate of 50 selected patients who were not up-to-date on their Tdap within 2 months. We identified 10 patients from each team at SJFMC that fit the criteria and sent out letters with information on the Tdap vaccination and recommended they receive it. We conducted two 1-month PDSA cycles. Since we did not meet our goal on the first cycle, we modified our approach by conducting phone calls discussing the same information. In the first PDSA cycle, we received an 18% response rate and in the second PDSA cycle, we received a 15% response rate. Although neither individual cycle met our goal of 20%, our overall percentage of patients that received the Tdap vaccine due to our notice was 30%. Ultimately, we concluded that it is likely impractical on a large scale to use letters/ phone calls for the sole purpose of increasing Tdap immunization rates.

Drs. Elizabeth Allen, Paul Hammond and Martin Leung – Southwest Middlesex Health Centre

Increasing Zostavax Immunization at Southwest Middlesex Health Centre

Faculty Project Lead: Dr. Julie Copeland

Project Type: Quality Improvement (QI)

It is recommended in Canada that all patients older than 60 be vaccinated with Zostavax. An audit on March 5, 2015 revealed that 5% of eligible patients were vaccinated for Zostavax at our clinic. We attempted to improve the vaccine rate for Zostavax in patients older than 60 at Southwest Middlesex Health Centre (SWMHC) through a continuous quality improvement model. Interventions included adding a stem to prompt discussion about the vaccine in the periodic health exam, as well as presentation on current guidelines to centre staff. We observed an increase in the vaccination rate from 6.01% to 6.31% after our cycles, without a perceived lengthening of time spent on periodic health exams. We did fall short of our goal of 10% vaccination rate, however our final uptake rate in June 2015 was similar to that seen in large Canadian population studies.

Drs. Stephanie Austin and Garrett Mosey – Ilderton

Attempts to Reduce the Cost of Unnecessary Laboratory Testing

Faculty Project Lead: Drs. Michael Craig and Jessica Howard

Project Type: Quality Improvement (QI)

Objective: Implement a quality improvement (QI) project targeted at reducing the burden of unnecessary laboratory testing in an academic family medicine clinic.

Study Design: The QI project took place over 8 weeks at the Middlesex Centre Regional Medicine Clinic in the winter of 2016. Interventions were targeted at reducing unnecessary laboratory tests at periodic health exam visits. The interventions included posting of laboratory costs at workstations and an in-service educational presentation on the merit of selective screening. A comparison was made between the burden of lab tests ordered at periodic health visits both pre and post-intervention. We also examined the rate of ordering of TSH, ferritin, vitamin B12, HbA1C, and cholesterol per client encounter pre and post project.

Results: The QI initiatives were able to demonstrate a decrease in lab tests ordered at the time of the periodic health exam from 8.05 tests per visit to 7.54 tests per visit (-6.34%). This did not translate to a decrease in total laboratory exams over the QI project period. The rate of TSH, and ferritin orders climbed slightly post-intervention. The rate of cholesterol orders decreased, and the rate of HbA1C and B12 were unchanged.

Conclusion: Targeted interventions aimed at reducing the burden of unnecessary lab tests at the time of periodic health exams can effect change. It remains unclear whether targeted interventions can reduce the overall burden of lab tests in a family medicine clinic. Educating residents about unnecessary lab testing and associated costs, remains an important yet under-recognized area of study.

Drs. Jagpreet Bali, Gulrukh Rextin, Faria Rubab and Maher Sweiden – Byron Family Medical Centre

Interventions to improve Pap smear outcome in BFMC

Faculty Project Lead: Dr. Scott McKay

Project Type: Quality Improvement (QI)

Appropriate screening may reduce the mortality and morbidity of cervical cancer. However effective implementation strategies are warranted if the full benefit of screening are to be realized.

We conducted literature review and we examined our current rate in Byron which was around 44% which is much less than the the targets or goal numbers in Ontario which is around 80%.

As a conclusion we decided as a group to implement the most effective strategies from our point of view which are

1: patient reminder through customized call

2: provider counselling/initiation of pap smear screening and see the intervention over a period of 3 months in 2 PDSA cycles.

Our primary outcome is an improvement in pap smear booking appointments.

Dr. Siddhartha Bhattacharyya – Byron Family Medical Centre

Standardize long-term opioid prescription monitoring

Faculty Project Lead: Dr. John Jordan

Project Type: Quality Improvement (QI)

Long-term treatment of chronic non-cancer pain with opioids is fraught with challenges in appropriately managing dosing, efficacy, and discontinuation. Emerging guidelines suggest that opioids have limited evidence in the treatment of most chronic non-cancer pain syndromes and should be avoided or used at the lowest possible dose for the shortest possible time. There are no clear guidelines on how to use opioid contracts, whether they are indicated for certain medications, patients or for certain duration of treatment. We identified patients within one provider's roster who are on long-term opioid therapy and aimed to identify current patterns in prescription and monitoring to develop a clinic consensus to managing this challenging patient population. Through notifications in the EMR, we flagged patients who were on inappropriate doses of opioids, those who should be on opioid contracts and those who are due for urine drug testing. Repeat chart review revealed improvements in opioid contract use, minimal improvement in urine drug screening and overall improvement in safe opioid dosing, although the study was not long enough to improve dosing to meet new stringent opioid guidelines.

Drs. Tania Bhanji and Emily Wilson – Ilderton

Improvement of Prenatal Care in the Primary Care Setting

Faculty Project Lead: Drs. Jessica Howard and Darren Van Dam

Project Type: Quality Improvement (QI)

Provision of prenatal care in the primary care setting is a core competency for all family physicians. Unfortunately, the proportion of family physicians providing obstetric care has steadily declined in the last decade from 20% in 1997 to 11.1% in 2007. In an attempt to improve the quality of prenatal care visits and facilitate prenatal visits for medical students and residents, we effected a quality improvement project. Our goal was to improve and facilitate prenatal care visits through the creation of a point of care tool that had pre-checked investigations to be completed during the initial prenatal visit. Our data showed that errors of omission diminished from 75% to 0% with our interventions. Furthermore, all visits adhered to our point of care template. Although prenatal care investigations were more appropriately ordered and care was standardized through our interventions, our study cannot conclude that this necessarily led to improvement in prenatal care outcomes or patient/physician satisfaction. Future studies could include surveys for both healthcare providers and patients to assess satisfaction with our interventions. Nonetheless, this study highlights how even a small intervention can have a large impact on a patient population, and hopefully through facilitating the care of prenatal patients, both medical students and residents will be more likely to provide patients with comprehensive care in their future practice.

Drs. Brendan Boyd and Christine Herrera – Mount Brydges

Advance Care Planning Discussions in the Primary Care Setting

Faculty Project Lead: Drs. Julie Copeland and Lauren Kopechanski

Project Type: Quality Improvement (QI)

Although the importance of advanced care planning (ACP) is recognized by both physicians and patients alike, conversation surrounding the topic is not consistently broached in primary care settings. Numerous barriers to these discussions have been identified, relating to both the providers as well as the health care system. Some of these include: lack of skills, difficulty with timing of conversation, and limited resources. With the advent of EMR, opportunities are available to remind physicians to consider ACP. This projects aims to improve the rate of ACP discussion during annual health exams for patients over 65 years old in a regional family medicine clinic, which also serves as a Western University family medicine teaching site. Changes were made to existing annual health exam forms, adding a reminder for physicians to broach the topic of ACP. In addition, an information session was completed to increase physician comfort and knowledge related to ACP discussions. After executing these interventions, the completion rate of ACP discussions during annual health exams for patients over 65 years old, increased from a baseline of 0.54% to 62%. In addition, physician comfort level either remained constant or increased after the information session. Differing rates of ACP discussion were found between staff (0%) and residents (100%). Barriers to ACP discussion were likely related to time constraints, and lack of financial incentive. The results of the project are quite promising; however, further research is needed to find more creative ways to encourage physicians to complete these crucial conversations.

Drs. Noemi Chavez-Johnston and Cameila Singh – Victoria Family Medical Centre

Increasing preventative mammography screening at VFMC

Faculty Project Lead: Dr. Jo-Anne Hammond

Project Type: Quality Improvement (QI)

Background: In Ontario, the preventative care target is to screen 75% of eligible women for breast cancer using mammography. This is to facilitate early detection of breast cancer. At VFMC, only 62% of eligible women had completed their screening mammogram for 2013-2014. This CQI project aimed to increase the percentage of women screened to 75%.

Methods: A CQI project was designed and three PDSA cycles were conducted. In the first cycle eligible women were contacted via telephone and reminded to schedule a mammogram. In the second PDSA cycle women eligible for screening were sent letters with requisitions for mammogram attached. In the third PDSA cycle physicians were asked to accompany their recommendation for screening mammograms with pre-printed mammography requisitions that were placed in examination rooms.

Results: The telephone reminders did not increase the number of women who scheduled a mammogram. The letters with requisitions for mammogram attached increased the percentage of women screened by 1%. A physician recommendation accompanied by the dispensing of pre-printed mammography requisitions did not result in an increase in the number of women screened at VFMC.

Interpretation: None of the methods tested were shown to significantly increase the rate of breast cancer screening rate using mammograms. This indicates that the factors that affect breast cancer screening are likely complex and require further trials to produce a method that works for both women and physicians.

Drs. Sam Chippin and Bradley Ross – Strathroy FHO

Implementation of New National Guidelines Regarding Pneumococcal Vaccination in Adult Patients with Asthma – a Community-based Chart Review

Faculty Project Lead: Drs. John Marcou and Philip Vandewalle

Project Type: Retrospective Chart Review

Objective: To assess the awareness and implementation of new guidelines regarding pneumococcal vaccination in adult patients with asthma at a family medicine teaching site in Strathroy, ON.

Design: Retrospective chart review

Setting: Canada

Participants: Rostered patients meeting the National Advisory Committee on Immunization (NACI) criteria for Polysaccharide pneumococcal immunization under existing recommendations (N = 692) and Asthmatic patients (N = 736) between the ages of 18 and 65.

Intervention: Immunization with polysaccharide pneumococcal for individuals identified as at risk by the NACI.

Main outcome measure: Immunization against pneumococcus in asthmatics under the new NACI recommendations

Results: Approximately 17% (16/91) of Asthmatics were immunized with polysaccharide pneumococcal vaccine prior to the updated guidelines and 17% (17/99) were immunized in the year following the updated recommendation.

A slightly higher percentage 18.5% (111/601) and 17.3% (110/637) were immunized under the existing guidelines in the first and second year studied.

Conclusion: At the one community teaching family medicine clinic studied, there has been immunization of adults with asthma at a similar rate to those recommended to be immunized under past guidelines. However, the overall rate of pneumococcal immunization in adults for whom it is indicated remains low.

Drs. Jonathan Cosby and Bridgette Gerson – Petrolia

Palliative Care Assessment in a Rural Community

Faculty Project Lead: Dr. Firas Al-Dhaher

Project Type: Quality Improvement (QI)

With the aging population, there has been identified a growing need to approach advance care planning from a primary care perspective. At times these questions can be difficult and raise hidden issues within a family. Approaching these issues before a crisis situation however, is ideal for both families and care providers.

Four family medicine practice rosters are to be reviewed using the Accuro system as a mining source for information. All totaled, this accounts for approximately 7,200 patients. Patients with severe COPD will be identified based on most recent FEV1 values from spirometry.

Identified patients will then be reviewed for immunization status and optimization of treatment and advanced care planning status. By starting with a small group size we will plan to have discussions with team and family to organize care or see how they are coping. An advanced care form (ACF) will also be created for the EMR to be used for these discussions and a copy could be given to the patient to carry with them or to give to their family.

Dr. Corinne Coulter – Care of the Elderly

A literature review of non drug approaches for behaviours associated with confusion in hospitalized older adults

Faculty Project Lead: Dr. Monidipa Dasgupta

Project Type: Literature Review

More than 40% of hospitalized older adults experience disorders causing confusion. This is associated with increased length of stay, cost, institutionalization and death. Non drug approaches are recommended as first line therapy for these behaviours however there is little guidance on how to apply these in acute care. Medications are often used as an alternative despite variable effectiveness and significant side effects. The purpose of this literature review is to summarize various non drug approaches for behaviours in dementia and delirium in acute care based on the unmet needs model in dementia.

Dr. Karen Enriquez – Care of the Elderly, London

Deprescribing Antipsychotics for BPSD in the LTC Setting

Faculty Project Lead: Dr. Scott McKay

Project Type: (Research or QI): Quality Improvement (QI)

The use of antipsychotics in the setting of Behavioral and Psychological Symptoms of Dementia (BPSD) can be effective in controlling aggressive symptoms that pose a risk of harm to the patient and to others. However, the use of antipsychotics is also associated with an increased mortality risk. This is why the use of antipsychotics is one of the quality improvement scores for Long-Term Care (LTC) homes. This project was aimed at reviewing the use of antipsychotics for BPSD in a Southwestern Ontario LTC facility.

Drs. Negar Fouladi-Nashta and Devon Shewfelt – Victoria Family Medical Centre

Expanding Awareness: VFMC After Hours Care

Faculty Project Lead: Dr. Daniel Grushka

Project Type: Quality Improvement (QI)

Background: As we know many patients who have family doctors are still seen in walk-in clinics or Emergency Departments with long waiting hours. A substantial number of these patients are self-referrals who do not need hospital emergency care however, do not have access to their own primary physicians. We believe that many factors such as patients' occupation, chronic disease, availability of family doctors, patient-physician relationship, difficult access to in-hours care, and last but not least patients' awareness of after-hour clinics are contributing to this problem. **Method:** Through a convenience sample of patients at VFMC we collected questionnaires assessing their awareness of after-hour clinics as a baseline, and after each PDSA cycle. PDSA cycle 1 consisted of 4 weeks with posters advertising our AHC in both waiting room and exam rooms. PDSA cycle 2 continued over 4 weeks with posters but included an available handout for patients to take home.

Results: Patients' awareness of AHC increased from 32.9% to 60.5% after having posters up for 4 weeks. PDSA2 further increased patient awareness to 72.5%.

Conclusion: Lack of awareness of AHCs is an important contributing factors to unnecessary visits to walk-in clinics and Emergency Departments. Exposing patients to information about AHC by simple methods can make significant improvement in their awareness and hopefully use of AHC services, and thus patient satisfaction.

Dr. J. Gill – St. Joseph's Family Medical Centre

Effectiveness of integration of the PHQ-2 depression screening tool as “emotional vitals” with routine vitals

Faculty Project Lead: Dr. Saadia Hameed

Project Type: Quality Improvement (QI)

Background: Depression is projected to become the leading cause of disability and the second leading contributor to the global burden of disease by 2020. Major depression is a treatable cause of pain, suffering, disability and death, yet primary care clinicians detect major depression in less than one-half of their patients with major depression.

Objective: To increase the rate of depression screening in a primary care setting.

Methods: A new template was designed that integrated the PHQ-2 depression screening questions as “emotional vitals” as part of the routine vitals template that is available during all patient encounters. All team members integrated this new template in their future clinical encounters and were aware to address the questions in pertinent patients going forward.

Results: The rate of depression screening after implementation of the intervention increased from a baseline rate of 30% (n=30) to 40% (n=30).

Conclusion: Integrating the PHQ-2 depression screening questions as “emotional vitals” on the routine vitals template was effective in increasing the rate of depression screening in the primary care setting.

Dr. Katrina Huszarik – Emergency Medicine – Regional program

Effect of increased availability of pre-authorized radiological test ordering on CT scan utilization in the emergency department

Faculty Project Lead: Dr. Adam Dukelow

Project Type: Retrospective chart review

Computed tomography (CT) scan utilization has increased over the past 25 years which has sparked concern for potential overuse leading to unnecessary radiation exposure for patients. In order to improve workflow through the Emergency Department (ED) at our institution, an existing pre-authorization policy allows emergency physicians to order CT scans directly without the need for radiologist approval. This policy was recently extended in September 2015 to allow pre-authorized ordering during weekday evening hours. The objective of our study was to evaluate the impact this intervention has on CT scan utilization and patient flow through the ED. We compared monthly CT scan utilization rates and patient length of stay parameters in the pre-intervention period from October 2014 to February 2015, to the post-intervention period from October 2015 to February 2016. We found a significant increase in average monthly CT scan utilization from 12.46% ffl 0.54% to 15.68% ffl 2.05% (mean ffl SD) in the post- compared to the pre-intervention group overall (p<0.001). Specifically, there was a significant increase in utilization during daytime (p=0.021), evening (p=0.013) and overnight (p=0.010) hours. We conclude that although overall CT scan utilization in the ED increased during the study period, this was not likely due to extended pre-authorized CT scan ordering hours in the evening. Further investigation is needed to determine the factors that have contributed to increased CT scan utilization and if there has been any improvement in patient outcomes as a result.

Drs. Umair Iqbal, Raffaele Sacco and Olena Sedykh – Byron Family Medical Centre
Standardizing Pediatric Fever Discharge Instructions

Faculty Project Lead: Dr. S. Cejic

Project Type: Quality Improvement (QI)

Febrile illnesses account for a large percentage of pediatric presentations to the family doctor's office. In addition to other system-specific symptoms, patients commonly present with either a subjective history of fever, or are objectively febrile during the clinical examination. The mainstay of therapy for these illnesses include rest, hydration and fever management. Lack of understanding of the diagnosis, disease process and management goals of these patients produces a major course of confusion among caregivers. These misunderstandings of discharge instructions can lead to unnecessary return visits and health disparities amongst demographics. The Canadian Pediatric Society identifies several key educational components of fever management that should be discussed with caregivers during discharge planning. This quality improvement project sought to increase the discussion of these three components (outcome measure) by 50% in 16 weeks. Documentation of these criteria was used as an indirect measurement of their discussion. Four PDSA cycles produced the change ideas of physician education, physician prompting, time management and standardization. By the conclusion of the project, the production of a fever handout during the final PDSA cycle produced a 20% increase in the outcome measure. Despite not reaching our target, we believe that given further PDSA cycles aimed at increasing provider uptake of this handout, the outcome measure would continue to increase.

Drs. Lincoln Lam and Nicholas Williams – Southwest Middlesex Health Centre, Mt. Brydges
Interventions To Increase Alcohol Use Screening In Primary Health Care

Faculty Project Lead: Dr. Kyle Carter

Project Type: Quality Improvement (QI)

Screening and documentation of alcohol use in primary care is typically found in only about 20% of patient electronic medical records (EMRs). This is despite the significant economic and direct health care costs of alcohol abuse that is almost on par with that of tobacco. A random two-week audit of annual health exams at the Southwest Middlesex Health Centre showed a baseline alcohol screening rate of 24%. We aimed for an improvement of alcohol screening by staff physicians, residents, and medical students through a continuous quality improvement model. Our interventions included an oral presentation, placing Canada's low-risk alcohol consumption guidelines posters in clinic offices, and a message through the clinic EMR regarding the importance of alcohol screening. We observed an initial increase in our screening rates to 41.7%, but then subsequent declines to 22.2% and 8.3% after each Plan, Do, Study, Act cycle. Although we fell short of our goal, our project suggests that much more is needed in future directions to encourage screening for alcohol use among physicians. Instead of focusing on screening itself, we may have had more success by educating around the interventions available for alcohol dependence.

Drs. Justin Lau and Amanda Wilhelm – Hanover

Improving the Quality of the Hanover Family Medicine Residency Practice by Improving Patient Understanding and Satisfaction

Faculty Project Lead: Dr. Rochelle Dworkin

Project Type: Quality Improvement (QI)

Background: The Hanover Resident Practice has existed for six years. To enhance their training, residents are given the responsibility of running a small practice under the supervision of staff physicians. Due to annual resident turnover, there is the perception of patient dissatisfaction as there is poor understanding regarding the setup of the practice. The objective of this study is to develop resident identifiers to enable patient understanding of the practice.

Methods: Over a six-week period, patients of the residency practice were surveyed using a 5 point numerical scale to assess their level of understanding, of the practice, their satisfaction with the care they receive, and their overall satisfaction with being in the resident's practice. This was again completed in two subsequent cycles, following picture identification of the residents in the waiting room, as well as a descriptive letter to patients explaining the nature of the practice.

Results: Over the course of three cycles, 65 surveys were collected, and 62 (95.3%) patients could correctly identify their team and resident physician. Mean patient satisfaction was 4.41 on a 5 point scale; understanding of the resident practice was 3.70, and overall perception of level of care was 4.55. However, the changes in these scores between cycles when actions were implemented were statistically insignificant.

Conclusion: Overall, patient satisfaction and understanding of the residents' practice remains high, but there were insignificant improvements following the implemented changes. There is a correlation between the level of care patients perceive they are receiving and their overall satisfaction

Dr. Wei-Zhen Lee – Strathroy

Improving Use of Screening Baseline ECGs in Diabetic Patients

Faculty Project Lead: Dr. Sara Puente

Project Type: Quality Improvement (QI)

Summary: CDA's Diabetic Guidelines from 2013 reflect the evidence for significantly increased cardiac risks in diabetic patients and recommend a screening baseline resting ECG in all diabetic patients who are >40 years of age, among other risk factors. Current practices at the Strathroy FHO are inconsistent when it comes to cardiac screening in diabetic patients. A recent acquisition of ECG capabilities in the clinic offered an opportunity to examine our screening practices and to hopefully improve them, especially in the asymptomatic but still high-risk population that is often missed. My goal was to increase the percentage of diabetic patients over the age of 40 at the Strathroy FHO who had the recommended baseline ECG from 41% to 50%.

Methods: For this QI project, I completed two 2-week PDSA cycles. The first cycle's intervention involved a clinic-wide presentation about the CDA guidelines and the reasons for screening asymptomatic diabetic patients. The second cycle involved placing reminder cards on each of the computer monitors. We then conducted searches on the EMR first to look for the number of diabetic patients over the age of 40 who were seen in each 2-week cycle and then compared that to the same search with the added criteria of an ECG on file.

Findings: The baseline percentage of diabetic patients over the age of 40 who had an ECG was 40.97%. This increased to 60.00% at the end of the first PDSA cycle and then decreased to 53.4% after the second PDSA cycle.

Dr. Alexis Lemmex – Emergency Medicine

Tick bite prophylaxis: a review of practice patterns and survey of emergency department physicians in South Western Ontario

Faculty Project Lead: Dr. Christine Richardson

Project Type: Survey

In the last decade Lyme disease (LD) has been a growing health concern. There are now seven sites in southern Ontario that are considered tick endemic. The purpose of this study is to explore current practice patterns of tick bite prophylaxis by Emergency Physicians (EPs) in London and the surrounding areas, as well as to determine if EPs are able to identify blacklegged ticks and degree of tick engorgement, as this is the foundation of the Public Health Agency of Canada (PHAC) guidelines.

Web-based, anonymous survey was distributed by email to 272 EPs and residents training in emergency medicine at the London Health Sciences Centre as well as seven regional hospitals from surrounding counties.

The survey response rate was 34% (n=91). Community EPs report seeing a greater number of tick bites than tertiary EPs ($p < 0.05$). 53% (49/91) of participants were aware of the PHAC recommendations for prophylaxis. 45% (41/91) of participants correctly identified the tick with potential of carrying LD. Tick engorgement was correctly identified by 2.2% (2/91) of participants. Reasons for the prescribing of tick bite prophylaxis included: tick bite acquired in endemic area (49.5%), to prevent LD (61.5%) and patient request (27.5%).

EPs practice patterns for tick bite prophylaxis varies widely despite the published PHAC recommendations. This survey highlights the need for treatment recommendations to be clinically driven with less emphasis on entomology.

Drs. Andrew Maeng and Kevinjeet Mahngar – Southwest Middlesex Health Centre, Mt. Brydges **Choosing Wisely: The role of screening CBC in an academic practice**

Faculty Project Lead: Dr. Kyle Carter

Project Type: Quality Improvement (QI)

We attempted to apply the Choosing Wisely Canada recommendations on preventing annual screening bloodwork, specifically, CBC testing at the Southwest Middlesex Health Centre through a Continuous Quality Improvement (CQI) model.

Our baseline audit estimated that during annual physical exams, screening CBCs were ordered in 64.4% of patients, of which 86.2% were deemed unnecessary. Interventions included an educational handout to all physicians in the study, a survey to determine physician's knowledge on the subject, and eliminating the CBC from the "annual bloodwork" form built into the EMR were analyzed in this study. Overall from the results of these interventions using a chart audit, screening CBCs ordered in annual physical exams was decreased to 52.3%, of this 77.3% were deemed unnecessary, leading to a 10.6% relative reduction in unnecessary tests.

Our findings suggest that a systematic process to reduce ordering of CBCs could have a potential impact without detrimental effects on patient satisfaction, resident workload, and patient care. However, provider interventions (education, surveys) would be difficult to sustain given resident turnover.

Drs. Shireen Mahmoud and Anusha Perera – St. Joseph's Family Medical Centre
Improving Consistency and Efficiency of Measuring Patients' Weight, Height and recording Body Mass Index (BMI)

Faculty Project Lead: Dr. Saadia Hameed

Project Type: Quality Improvement (QI)

One in four adult Canadians and one in ten children have clinical obesity, meaning six million Canadians living with obesity may require immediate support in managing and controlling their weight (Canadian Obesity Network). As health care providers, the measurement of height, weight and BMI and recording these data in the patients' charts is important to understand the patients' health and as well as the indicators of obesity, with relevance to time. Also, most imaging requisitions, insurance forms, and lawsuits require the patient's vitals. So there are many reasons to have this information on the charts. In this project, it was attempted to increase the percentage of measurement and recording of height, weight and BMI in the patients' charts. A chart audit of 62 charts estimated the likelihood of having a documented BMI at 47% for overall patient population at St. Joseph's Family Medical Centre. Our target was to improve this percentage to 80% in the facility through a Continuous Quality Improvement (CQI) model. Methodologies were developed such as placing informative guidelines, posters, staff awareness and feedback meetings, software amendment feasibilities, workflow changes, etc. Chart audits were conducted after implementing above changes. A total of 117 charts were audited during the three cycles. The overall improvement in measuring at least one parameter and recording in the charts was increased from 47% baseline to 62% in the final cycle. The recording of all three parameters was increased from 47% to 55%. The major barrier identified by staff for lack of recording heights, weight and BMI was the "time limitation" of the staff. Although the overall improvement was far below the project target of 80%, the upward trend in each cycle proved the viability of the project.

Dr. John McCuaig – Sport & Exercise Medicine

Effect of Exercise on Anxiety in Adolescents suffering from Sport-Related Concussion

Faculty Project Lead: Dr Lisa Fischer

Project Type: Research

Objective: Concussion is an increasingly important issue within the both the worlds of sport and health care. Particularly, it continues to make up a significant proportion of the visits within the primary care sports medicine clinic. Emotional symptoms, such as anxiety, have been identified as a risk factor for prolonged symptom duration. Using various scales, this pilot investigation was completed to assess whether early exercise impacts anxiety levels within the adolescent patient with concussion. A secondary goal was assessing the usefulness of a visual analog scale specifically as a measurement tool.

Methods: Patients were recruited after initial presentation for concussion to the Fowler Kennedy Sport Medicine Clinic. This investigation was a small aspect of a much larger ongoing pilot exploratory study looking at many variables for any differences over the course of concussion while employing various therapies. Visits for assessment were attempted to be made weekly or biweekly from the time of presentation through to the resolution of symptoms. At each visit, patients would complete a SCAT-3 symptom list (22 questions graded 0-6), a GAD-7 scale (7 questions graded 0-3), a VAS (10cm scale) and global estimation to baseline (100% being at baseline). The exercise intervention was part of the larger study, and involved progressive exertion on a treadmill either for 10 minutes or until aggravation of concussion symptoms, whichever occurred first. Patients completed the VAS both immediately before and after exercise.

Results: 14 patients (8F, 6M) were recruited, attending between 2 and 7 total visits for study purposes. Ages ranged from 14 to 18, with the earliest initial on 4 days post-injury, and latest day of study to 94 days post-injury. Unfortunately, 52% of potential VAS pre- and post-exercise measures were not completed by patients. The average change in VAS score from pre- to post-exercise was zero (0%, SD 10.7%). Regarding baseline anxiety measures, all scales overlapped and with large variability, with the SCAT-Anx and VAS scales approximating one another the closest (average difference 3.5%, SD 19.2%).

Conclusion: Exercise does not appear to show any changes to anxiety levels in patients suffering from concussion. Also, based on this data the VAS scale cannot be deemed to have any added value beyond that provided by the SCAT and GAD-7.

Drs. Kristin McCulloch, Aislinn Pearce and Paul Ricketts – Chatham-Kent

Does Having a Primary Care Provider Influence Non-Urgent Emergency Department Visits?

Faculty Project Lead: Dr. D. Huffman

Project Type: Research

Background: With a significant amount of Canadian Emergency Department (ED) visits being non-urgent, determining if access to a primary care provider (PCP) makes a difference is essential to targeting future directions in emergency care.

Methods: A retrospective chart review of 500 randomly selected ED records between January 1 and December 31, 2014 was conducted. Patients were 18 years or older and classified as CTAS 4 or 5 at triage. The primary outcome was any statistically significant difference in key patient and non-urgent ED visit characteristics between patients with a PCP and patients without a PCP. Secondary outcomes included a difference in the proportion of patients without a PCP in the ED with non-urgent medical problems compared to those without a PCP in the community and a descriptive analysis of all patients presenting to the ED for low acuity medical care.

Results: Patients with a PCP were significantly older than those without a PCP by an average of 6.6 years ($p=0.002$). Individuals without a PCP in the ED for low acuity medical care represented a significantly higher proportion than those without a PCP in the general community ($p=0.00$).

Interpretation: Patients with a PCP who are accessing the ED for low acuity medical care are older, indicating that greater access to primary care for the aging population may be a future priority. Having a PCP may also reduce non-urgent ED visits as patients without a PCP in the ED for low acuity medical care are over-represented.

Dr. Brian Nhan – Windsor

Primary care advanced care plan discussions in advanced COPD

Faculty Project Lead: Dr. Dale Ziter

Project Type: Quality Improvement (QI)

Advance care planning is often not discussed between patients and their physicians. Without advance care planning discussions and clear documentation in their records, patient preferences are often not carried out leading to worse care at end of life and increased stress, anxiety and depression in surviving relatives. Barriers to these discussions are more numerous in severe non-malignant illnesses like COPD in which the disease course fluctuates significantly. This quality improvement project was designed to utilize the Gold Standards Framework Prognostic Indicator Guidance tool as an objective and reproducible way to identify patients with advanced COPD and high risk of dying so that advance care planning can be initiated. The goal was to provide a means to consistently identify patients with more imminent need for advance care planning discussions and to initiate and document those discussions in the primary care setting.

Dr. Bethany Scott – Stratford

Shared Goal Setting and Accountability as an Intervention for Frequent Presentation to Primary Care: A Quality Improvement Project

Faculty Project Lead: Dr. Erin Heisz

Project Type: Quality Improvement (QI)

Frequent users of health care services have often been studied in the literature, and they are generally noted to have multiple comorbidities. Previous studies have shown that holistic interventions which take these comorbidities into account are effective in reducing re-presentation for care in emergency rooms and on discharge from hospital. This project attempts to decrease the rate of primary care presentation in two high attenders at the Avon Family Medicine Centre by providing an opportunity for these patients to use shared goal setting and accountability as tools for positive lifestyle changes. Three cycles of change are undertaken in an attempt to help the patients to develop effective goals and encourage them to achieve them. Frequency of visits per month is the primary outcome, survey responses regarding the patients' perceived health status, self-efficacy, and plans to make positive lifestyle changes are the process measures, and time spent by the physician investigator is the balance measure. One patient is found to achieve the primary outcome and to have positive changes on process measures; the other becomes ill and is unavailable for the conclusion of the study but generally does not show these positive trends. Conclusions are limited by the size and scope of the project but show promise for further study. Changes in strategy for any further study are recommended.

Dr. Marina Spudic – St. Joseph's Family Medical Centre

Improving Nursing Home to Emergency Department Transfers

Faculty Project Lead: Dr. Saadia Hameed

Project Type: Quality Improvement (QI)

The emergency department is an important source of care for nursing homes. Evidence shows that 1 in 4 nursing home residents in Ontario visit the emergency department within a 6-month period each year. Given this considerable amount of care transitions, it is unfortunate that poor communication exists between nursing homes and emergency departments. Specifically, nursing homes have notoriously been shown to be lacking in the information they provide about the patients they send to hospital, which in turn can cause negative patient and institutional outcomes. This project aims to improve quality of information, and in turn successful transfers, provided by one Ontario nursing home to the emergency department in the transition of care. We implemented the utilization of a concise transfer form containing essential information that healthcare professionals have deemed as necessary in providing safe and adequate care. Over the course of the project, we were able to increase the amount of essential information provided during transfers from a baseline of 53% to 100%.

Dr. Jay Taylor – Southwest Middlesex Health Centre, Mt. Brydges

Evaluation of physician experiences and clinical utility of automated drug-drug interaction alerts in primary care

Faculty Project Lead: Dr. Ted Osmun

Project Type: Research

Electronic Medical Records (EMRs) are becoming standard of care and offer numerous advantages over their paper-based predecessors, including automation of drug prescription entry. Many EMRs offer alerts to warn prescribers of drug-drug interactions (DDI), however it is not known if these alerts improve patient outcomes, and indeed, there have been reports of harm attributed to physician alert fatigue. Few studies have characterized the impact of DDI alerts in the primary care setting, with most focused on inpatient environments. Here we show, through a survey of resident and attending physicians, that DDI alerts continue to be overly sensitive with poor specificity. Several metrics of alert fatigue, including perceived time taken and influence on workflow were negatively affected. Overall, DDI alerts in primary care appear to represent a significant burden on prescribers given the low probability of preventing serious harm. Further study is needed to clearly delineate an optimal risk versus benefit strategy with respect to patient-centered outcomes.

Dr. Katarzyna Walus – Tavistock Community Health Group, Tavistock

Does sending a letter to parents increase the influenza vaccination rate of high risk children aged 6 months to 5 years of age?

Faculty Project Lead: Dr. Ken Hook

Project Type: Quality Improvement (QI)

A review of the literature states that the vaccination of children for influenza is safe after 6 months of age, and that this should be routinely recommended and practiced to prevent severe cases and their sequelae in communities. This is especially important in a number of children who qualify as high risk for influenza infection as outlined by the Canadian Paediatric Society. A Quality Improvement project was completed at the Tavistock Community Health Group, and assessed specifically whether the vaccination rate of high risk children would increase if parents received a letter in the mail informing them of this recommendation. The letter informed parents that their child qualified as especially high risk for influenza, and encouraged them to come to the clinic to obtain the vaccine. It was found that the influenza vaccination rate of high risk children between 6 months and 5 years of age at baseline at the clinic was 2.8%. After the letters were sent out, the vaccination rate increased to 11.1%. It was determined that some children had in fact been vaccinated elsewhere, and had not updated the clinic with that information. No additional children actually reported to the clinic to obtain a flu shot as a result of receiving the letter. In summary, the influenza vaccination rate did increase after letters were sent, however, it was found to increase mainly via increased reporting of vaccinations rather than due to an actual increase in the number of vaccines received at the clinic.

Dr. Mateusz Zajac – Middlesex Centre Regional Medical Clinic, Ilderton

Implementing falls screening in annual health exams at the Ilderton Medical Clinic

Faculty Project Lead: Dr. Michael Craig

Project Type: Quality Improvement (QI)

Falling is a serious health concern in the elderly. Between 30-50% of individuals after the age of 65 will have a fall, resulting in minor injuries in approximately 44% and major injuries in 5%. Effective and efficient screening for falls has the potential to decrease morbidity and mortality. GPs routinely under-detect falls in the elderly, missing opportunities to engage in potentially life-saving interventions. In order to incorporate screening at the Ilderton Medical Clinic, the annual health exam template was edited to include a question regarding a history of falls in the past year. PDSA cycle 1 showed 90% of patients over 65 years of age attending the clinic for their annual health exam were screened for falls. Prior to the initiation of the PDSA cycle, 0% were screened. PDSA 2 attempted to further incorporate preventive assessments into the EMR, and asked staff to evaluate postural blood pressure, gait, balance, feet and footwear, lower limb strength and sensation, and any concerning medications. PDSA 2 screened 75% of patients for falls, and 50% had a completed physical exam and medication assessment. The time necessary to complete this component was between 1 and 5 minutes, with a mode of 5 minutes. Incorporating screening for falls into the annual health exam is a rapid and simple intervention which should be continued.



Thank you for attending the 2016
Resident Project Day

We look forward to seeing you next year

SAVE THE DATE
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