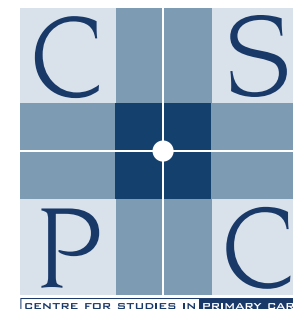




Centre for Studies in Primary Care

ANNUAL REPORT

2015 – 2016



Department of Family Medicine
Queen's University
Kingston, Ontario, Canada

OUR IMPACT: BY THE NUMBERS

194

Primary Care Research
Day Attendees

1,282,791

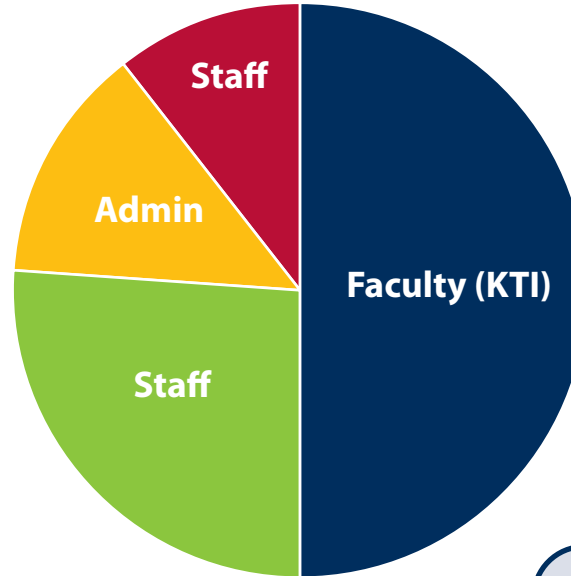
Patients in the CPCSSN database

12.5M

Dollars Raised in Matching Funds
for CPCSSN

1,031

Primary Care Physicians
Recruited to CPCSSN



Staff

Admin

Staff

Faculty (KTI)

19 Research Faculty (Kingston)

10 Research Staff

5 CSPC Administration

4 Research Faculty (Sites)

6

Ongoing Research
Portfolios

34

Peer-Reviewed
Publications

4

New Seed-Granted
Projects

48

National & International
Conference Presentations

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VISION Improve the health and well-being of people in Southeastern Ontario and beyond through research, surveillance and education in primary care.

MISSION The Centre for Studies in Primary Care (CSPC) is dedicated to the conduct of primary care research, surveillance and education that extend our understanding of health, health maintenance, disease and its treatment, and care delivery, and the assessment and dissemination of evidence.

OVERVIEW

The CSPC conducts high-quality research that is focused on the improvement of primary health care practice, delivery and education. As part of the Department of Family Medicine, the CSPC provides clinical faculty members with research support and directs the department's resident research program. Our research activities draw on a wide range of disciplines through collaborative academic partnerships, and include involvement of practising physicians who participate in our research program through our Practice-Based Research Network (PBRN). The centre's current research activities are in areas relevant to the practice of primary health care, primary care

chronic disease surveillance, population health, health promotion, family medicine education research, program evaluation and evidence assessment for clinical practice. Additionally, many of the centre's research activities respond to community needs and funding opportunities.

The CSPC's leadership is supported by an advisory council that oversees the centre's development and advises on opportunities that fall within its mission, vision and goal. Chaired by a respected community member, the advisory council comprises members from across Queen's University, community-based primary care practitioners and residents.

MESSAGE FROM THE DIRECTOR



Dr. Richard Birtwhistle, MD, MSc, FCFP
Director, Centre for Studies in Primary Care
Queen's University

The CSPC continued to grow and thrive in 2015. Faculty members have published 32 peer-reviewed papers over the last year that reflect the breadth of interests and diversity that is typical of family medicine research. I am pleased to report that the CSPC received unanimous Senate approval to operate as a Queen's centre for another five years. This is very gratifying, as it recognizes the CSPC as a mature and successful research centre with strong

departmental support and leadership. In its report, the senate highlighted the need for ongoing development and better communication of activities with the rest of the university and beyond. The recommendations are being carefully considered, and plans for developing a new strategic and communications plan are in the works.

I would like to highlight some key research initiatives that are happening through the centre:

- Dr. Lawrence Leung has joined the centre as the Assistant Director, Clinical Research. Dr. Leung's interests are in dermatology, chronic pain, complementary and alternative medicine, knowledge synthesis, First Nations health and efficacy of clinical teaching.
- Dr. Meg Gemmill and Dr. Ian Casson have been leading the development of research in adults with intellectual and developmental disabilities. They have received funding from the SEAMO Innovation Fund and CSPC seed-granting competition to carry out this important research.
- Dr. Eva Purkey, who leads the department's global health initiative, has embarked on work in neonatal immunization for hepatitis B in Myanmar. She is also part of a group funded through the SEAMO Innovation Fund to study poverty screening in family medicine and pediatrics.
- Dr. Robert Webster, director of the Belleville-Quinte site, Dr. Catherine Donnelly, an occupational therapist at the Belleville-Quinte site, and Abby Leavitt, the program manager for the Belleville-Quinte site, are doing a project to assess the development of core indicators of the care outcomes of primary care teams. This is the second project they have led in this area.
- There is growing research interest and activity from residents at all four sites of the department's residency training program. This is reflected by the superb research presentations at the annual Primary Care Research Day.

I also acknowledge the tremendous work of CSPC staff members in supporting faculty and residents in the development of their research proposals, as well as their ongoing engagement in doing the important work of data collection, analysis and publication writing of ongoing research projects.

I am confident that 2016 will be another good year.

MESSAGE FROM THE DEPARTMENT HEAD



Dr. Glenn Brown, BSc, MD, CCFP (EM), FCFP, MPH
Head, Department of Family Medicine
Queen's University

I would like to take this opportunity to express my appreciation to the Centre for Studies in Primary Care (CSPC) for its success in the past year.

The CSPC continues to evolve, with research important to all stakeholders in our health-care system. Beyond educational research critical to the ongoing development of our disciplines, this work includes clinical questions,

data analysis to gain insight into the management of chronic diseases, and issues important to promoting health equity and progressive health-care policy.

The CSPC benefits from the inspired leadership of Director Dr. Richard Birtwhistle, who has been tireless in pursuit of opportunities for the centre and supporting faculty members in addressing research questions. Other key faculty members include Dr. Michael Green, Associate Director of Research in the Department of Family Medicine and the new Clinical Teachers' Association of Queen's (CTAQ) Chair in Applied Health Economics/Health Policy as of November 1, 2014. New to the CSPC team, department faculty member Dr. Lawrence Leung has accepted the position of Assistant Director, Clinical Research. Dr. Leung brings extensive expertise and enthusiasm in this area, and will lead and develop the clinical research portfolio. Acknowledgment also goes to the ongoing commitment and vision of the centre's board of directors in advancing the centre's mandate.

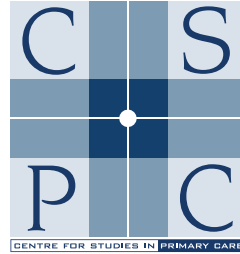
This year, the department was honoured to have the College of Family Physicians of Canada name Dr. Birtwhistle and fellow CSPC member Dr. Walter Rosser as among the Top 20 Pioneers of Family Medicine Research in Canada. In recognition of the 20 pioneers, the College published The Top 20 Pioneers in Family Medicine Research, which provides biographies of the researchers' outstanding accomplishments.

We are fortunate that the CSPC engages with the department in hosting our annual Primary Care Research Day. This is always a highly successful event and a highlight of the year. It is clear that the quality of the resident research projects continues to improve annually, and that all sites are fully engaged with and support our residents in this endeavour.

We said goodbye to Jyoti Kotecha this year in her role as the centre's assistant director, a position she held since 2007. Jyoti's contribution to the centre was significant, and we thank her for her commitment and wish her well. We also welcomed Colleen Grady to the CSPC as the new research manager, and see an exciting new chapter for the centre with Colleen's management skills.

I would like to offer my congratulations to the board, all faculty members and residents, and all staff who have contributed to the success of the CSPC over the past year.

EXECUTIVE SUMMARY



The Centre for Studies in Primary Care (CSPC) acts as the research arm of the Department of Family Medicine (DFM) at Queen's University. As such, the CSPC provides the DFM with research development and support, directs the resident research-teaching program, convenes Primary Care Research Day, and helps to build capacity in primary care research by providing an environment that supports research training and academic excellence. The CSPC's research activities are in areas relevant to the practice of primary health care, primary care chronic disease surveillance, health services research, population health, health promotion, use of electronic medical records, family medicine education research, program evaluation and evidence assessment for clinical practice. The primary research portfolios

the CSPC holds include educational research, community and program evaluation, intellectual and developmental disabilities, global health, and the Canadian Primary Care Sentinel Surveillance Network (CPCSSN).

Over the last two years, the CSPC has focused on building research capacity within the DFM. The centre oversees a peer-reviewed seed-granting competition and provides research support for DFM faculty members. Through this year's competition, the CSPC funded four new projects. Project investigators are from across the regional teaching sites and include allied health professionals within the department. Details of these projects are highlighted in the following table.

PRINCIPAL INVESTIGATOR	CO-INVESTIGATORS	PROJECT TITLE	FUNDING AMOUNT
Dr. Eva Purkey	Dr. Susan Bartels, Dr. Colleen Davison, Dr. Hugh Guan, Dr. Shruti Sebastian	Monitoring and Evaluation of Neonatal Hepatitis B Immunization Project in Karenni State, Myanmar	\$16,900
Dr. Meg Gemmill	Dr. Ian Casson, Dr. Liz Grier	Implementation and Evaluation of Health Links' Coordinated Care Plans Tailored for Adults with Intellectual and Developmental Disabilities	\$19,278
Dr. Jane Griffiths	Nancy Dalgarno, Catherine Donnelly	Competency-based medical education implementation: How are we shifting assessment culture? Part 2	\$13,103
Dr. Robert Webster	Catherine Donnelly, Abby Leavitt, Cindy Adams, Nicole Bobbette, Stephanie Lynch, Andrea DiGiovanni, Dr. Yan Cao, Ashleigh Wolfe, Judith Proulx	Multidimensional Outcomes in Primary Care: Part 2	\$12,588

In 2015, the CSPC had its third five-year review. The Senate Advisory Research Committee unanimously recommended that the senate approve the centre's renewal for a further five-year period. In its recommendation, the committee highlighted the centre's evolution over the past 15 years, during which it has enhanced its impact, funding and presence in primary care research. The committee congratulated CSPC Director Dr. Richard Birtwhistle for his outstanding leadership and long list of achievements that reflect well on the centre. Effective change management was also highlighted, as CPCSSN will transfer assets and continued leadership to Queen's University from the College of Family Physicians of Canada (CFPC). Finally, as the CSPC has helped the DFM in meeting SEAMO-related research deliverables, the committee underscored the centre's valuable role within the DFM and the Queen's Faculty of Health Sciences.



(Left to right) CSPC faculty and staff members Mary Martin, Ken Martin, Dr. Nancy Dalgarno, Rachael Morkem, Dr. Walter Rosser, Dr. David Barber, Marissa Beckles, Lorne Kinsella, Emily Pollock, Dr. Richard Birtwhistle, Dr. Han Han, Dr. John Queenan and Dr. Colleen Grady; missing Dr. Michael Green, Dr. Lawrence Leung and Fred Zeltser

HONOURS AND AWARDS



Dr. Richard Birtwhistle (left) and Dr. Walter Rosser

In honour of the 20th anniversary of the CFPC's Section of Researchers, the College has named Dr. Richard Birtwhistle and Dr. Walter Rosser as two of the Top 20 Pioneers of Family Medicine Research in Canada for their contributions to advancing health care in Canada and globally. Dr. Birtwhistle was honoured for his accomplishments in advancing technology through the development of CPCSSN. Dr. Rosser was recognized for his research with Practice-Based Research Networks, teaching evidence-based medicine and building capacity in family medicine. The CFPC also gave Dr. Birtwhistle a lifetime achievement award this year for his contribution to family medicine research.



Dr. Ruth Wilson

The CSPC is particularly proud of Dr. Ruth Wilson, who was named as a Member of the Order of Canada by His Excellency the Right Honourable David Johnston, Governor General of Canada. Dr. Wilson was honoured for her contributions to improving the primary care system in Ontario and for her leadership in family medicine.



Dr. Michael Green

Dr. Michael Green won an IMPACT Award to assess diabetes among Ontario's First Nations peoples and to help develop new programs and policies. This project has been funded for three years through the Ontario SPOR SUPPORT Unit (OSSU), and is a partnership with the Chiefs of Ontario, the Northern Ontario School of Medicine, Nipissing University and the Institute for Clinical Evaluative Studies. The project aims to produce a comprehensive assessment of diabetes, its complications and related health services for First Nations peoples across Ontario.



Dr. Katrin Dolganova

The Ontario College of Family Physicians named Dr. Katrin Dolganova winner of the Resident Research Competition at the Family Medicine Forum. Dr. Dolganova was nominated for her postgraduate year-two resident research project, "Interpretation of Urine Drug Screens in Patients on Opioids for Chronic Non-Malignant Pain: Practical Tools," for which she also won best academic project at Primary Care Research Day in 2015.



New Additions



(Left to right) Dr. Lawrence Leung, Dr. Colleen Grady, Dr. Nancy Dalgarno

The CSpC is thrilled to announce the addition of three new faces. Department of Family Medicine faculty member Dr. Lawrence Leung has joined the centre as the assistant director of clinical research. In this new position, Dr. Leung will facilitate the resident research training program and help build capacity for research among community preceptors at the DFM's three distributed training sites: Oshawa, Peterborough and Belleville. Specifically, Dr. Leung plans to support learners and colleagues from the stage of initial research idea to proposal development and grant application completion, where applicable. Additionally, he will facilitate the process of applying for conference presentations and preparation of manuscripts for publication. Dr. Leung has a broad scope of personal research interests including dermatology, chronic pain, First Nations health and efficacy of clinical teaching.

Dr. Colleen Grady has joined the CSpC as the new research manager. She comes to Queen's from the Loyalist Family Health Team in Amherstview, where she was executive director. With a doctorate in business administration, Dr. Grady brings with her significant leadership and management experience.

Dr. Nancy Dalgarno joins the CSpC as a part-time education researcher and consultant. With a PhD in education, she brings with her significant experience in program evaluation, curriculum development and research. Dr. Dalgarno splits her time between the CSpC and Queen's Office of Health Sciences Education.

To learn more about the CSpC's research activities and project highlights, consult the CSpC's website at www.queensu.ca/cspc/ and follow along on Twitter @CSPC_QueensU.

PRIMARY CARE RESEARCH DAY 2016

Primary Care Research Day is an annual event that brings together faculty, staff and residents from all four sites of the Queen's Department of Family Medicine. The day's objectives are to learn from and discuss current research and scholarly projects conducted by family medicine residents, and to enhance understanding of topics relevant to family medicine practice through two keynote addresses from distinguished academics in the field of primary care research.



Dr. Richard Birtwhistle, CSPC Director, provided the morning greetings.



Dr. Richard Reznick, Dean of Health Sciences at Queen's University, provided the opening remarks.

A total 194 guests attended Primary Care Research Day, held at Kingston's Four Points by Sheraton. Guests included Queen's Department of Family Medicine and Department of Public Health and Preventive Medicine faculty and residents, Queen's Family Health Team staff, faculty from across Queen's University, community health-care providers, and family physicians from across the South East Local Health Integration Network.

Researchers Dr. Fred Burge and Dr. Ian Janssen presented the keynote addresses. Dr. Burge is a Professor of Family Medicine and Community Health and Epidemiology at Dalhousie University in Halifax. His research interests lie in health services research in primary health care. He recently led a large provincial mortality follow-back study to examine unmet health-care needs among the dying. Dr. Janssen is an Associate Professor in the Department of Community Health & Epidemiology at Queen's University, with a joint appointment in the School of Kinesiology & Health Studies. He is the Canada Research Chair in Physical Activity and Obesity. His research program focuses on the surveillance, causes and health consequences of physical inactivity and obesity.



Dr. Fred Burge, “One of the biggest challenges: The end. A population-based lens on caring for the dying”



Dr. Ian Janssen, “The importance of active play for health in children”

Postgraduate year-two family medicine residents presented their research as either a poster or oral presentation. This year, 21 oral presentations were completed concurrently and 42 posters were displayed.



Dr. Marie-Pier Marleau presenting her poster to Dr. Geoff Hodgetts on “Opinions of the prenatal population on childhood immunization education”



Dr. Heidi Wells demonstrating her Rourke Baby Record mobile application.



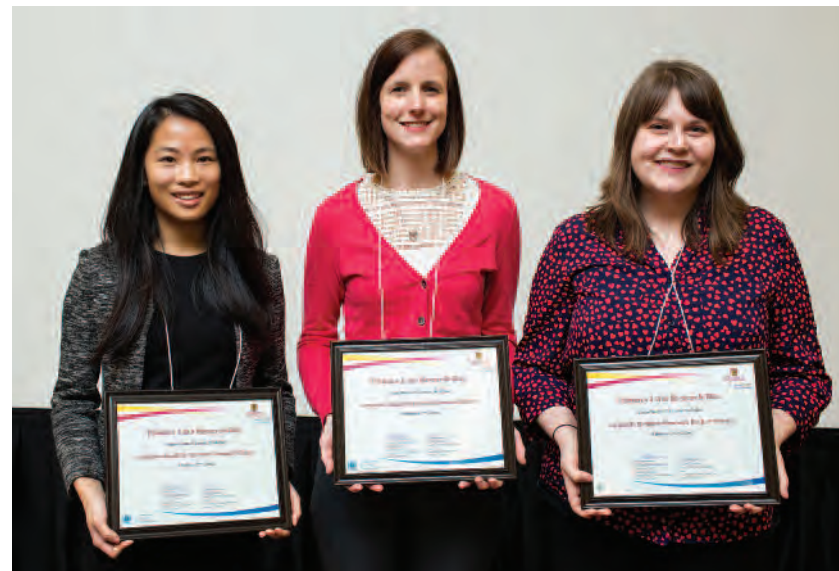
Dr. Johnny Nguyen presenting his research project “Anti-virals and macrolides in the treatment of Pityriasis Rosae”

Each resident project was evaluated by two judges. Projects were assessed based on topic relevance, quality of presentation, and integration of new knowledge. The four “Best Academic Research Projects” were awarded to:

Dr. Iris Chin (Kingston): “Evidence for Probiotics in Constipation”

Dr. Johnny Nguyen (Oshawa-Bowmanville-Lakeridge): “Anti-Virals and Macrolides in the Treatment of Pityriasis Rosea”

Dr. Jaclyn Oldham (Kingston): “Mom Guilt: Ensuring a Nourished Body and Mind during Pregnancy”



(Left to right) **Dr. Iris Chin**, **Dr. Theresa Robertson**, **Dr. Jaclyn Oldham**.
Missing: **Dr. Johnny Nguyen**.

Dr. Theresa Robertson (Peterborough-Kawartha): “An Exploration of Physician and Resident Attitudes toward Performing Pap Tests in the Emergency Department on High Risk Women Undergoing Pelvic Examinations”

Thank you to all speakers, judges, moderators and participants for making the day such a success. Our next Primary Care Research Day is tentatively scheduled for Thursday, February 23, 2017. We hope you can join us!

CURRENT PROJECTS

ORGANIZATION	FUNDING	CSPC RESEARCH LEAD	PROJECT
Canadian Institute of Health Research	\$80,213	Dr. Michael Green	Educating for Equity
Canadian Institute of Health Research	\$49,993	Dr. Richard Birtwhistle, Jyoti Kotecha, John Queenan	CIHR SPOR Network in Chronic Disease Application: ePRISM (electronic Patient-centred Research and Innovations in Multimorbidity Network)
Canadian Institute of Health Research	\$3,750	Dr. Richard Birtwhistle	Program for the Identification of Actionable Atrial Fibrillation in the Family Practice setting (PIAAF-FP)
Public Health Agency of Canada	\$646,241	Dr. Richard Birtwhistle, Dr. David Barber, Dr. Walter Rosser	Canadian Primary Care Sentinel Surveillance Network (CPCSSN)
Public Health Agency of Canada	\$1,077,163	Dr. Richard Birtwhistle, Dr. David Barber, John Queenan	Enhanced Surveillance for Chronic Disease Program (PHAC-DPT)
Ministry of Health and Long Term Care	\$36,132	Dr. Richard Birtwhistle, Dr. Michael Green	Linking Canadian Primary Care Sentinel Surveillance System (CPCSSN) Data with Administrative Data from ICES for Complex Patients to Better Understand Utilization Patterns and Care Requirements
Ministry of Health and Long Term Care	\$40,075	Jyoti Kotecha, Dr. Susan Phillips	A Review of Home Services Offered by Seniors Associations Across Ontario to Support Healthy Aging in the Home and How These Services Can Be Leveraged by Primary Care

CURRENT PROJECTS

ORGANIZATION	FUNDING	CSPC RESEARCH LEAD	PROJECT
Frontenac Paramedic Services	\$81,055	Jyoti Kotecha, Dr. Richard Birtwhistle	Environmental Scan and a Needs Assessment to Support the Development of a Paramedic Wellness Program for Frail Older Adults
TVN Impact Grant	\$85,120	Jyoti Kotecha, Dr. Richard Birtwhistle	Enhancing the Primary Healthcare System's Ability to Identify and Plan with Seriously Ill Frail Elderly
Health Canada	\$69,000	Dr. Richard Birtwhistle, Dr. Tyler Williamson, Dr. Linda Levesque	Health Canada AR Surveillance using CPCSSN data-Phase I
Health Canada	\$49,856	Dr. Richard Birtwhistle, Dr. Linda Levesque	Evaluation of Depersonalized Adverse Reaction Data Collected in National, Primary Care Electronic Medical Records for its use in Pharmacovigilance Activities-Phase II.
Queen's University Endowed Chair	\$53,000 (Interest only part year)	Dr. Michael Green	Clinical Teachers' Association of Queen's Chair in Applied Health Economics/Health Policy
Queen's University Undergraduate Medical Education	\$10,000	Dr. Lawrence Leung	UGME Diversity Panel Project Grant
Bruyère Research Institute	\$50,000	Dr. David Barber, Dr. Richard Birtwhistle, Jyoti Kotecha	Testing CPCSSN's Ability to Support the Development of Data Reports Designed to Test the Impact of the Cardiovascular Health Awareness Program Health Promotion Intervention Across Participating Community Health Centres in Ottawa

CURRENT PROJECTS

ORGANIZATION	FUNDING	CSPC RESEARCH LEAD	PROJECT
SEAMO Education	\$13,000	Dr. Geoffrey Hodgetts, Dr. Jane Griffiths, Dr. Elaine Van Melle, Dr. Karen Schultz	Preparedness for Practice as a Critical Transition in Residency Education
SEAMO Education	\$14,945	Dr. Shayna Watson	Mapping Reflective Practice - Thematic Analysis of Family Medicine Clerkship Case Reflections
Merck	\$123,500	Dr. Richard Birtwhistle, John Queenan	Exploring the Prevalence of Zoster Amongst Patients with Diabetes in a Canadian Primary Care Dataset in Comparisons to Other High-risk and Low-risk Patients
Phoenix Project (AMS)	\$11,817	Dr. Elaine Van Melle, Dr. Karen Schultz, Dr. Jane Griffiths	Developing a Call to Care: Understanding How Family Medicine Residents' Values Shape Their Practice of Patient-Centred Care
CSPC Research Initiation Grant	\$20,000	Dr. Brent Wolfrom, Dr. Eric Sauerbrei, Dr. David MacPherson, Jyoti Kotecha	Diagnostic Ultrasound in Family Medicine (Pilot Project)
CSPC Research Initiation Grant	\$17,812	Dr. Meg Gemmill, Dr. Liz Grier, Dr. Ian Casson, Nicole Bobbette	Primary Care Physician and Allied Health Care Provider Attitudes and Perceptions of the Identification of Adults with Suspected Mild Intellectual Disability
CSPC Research Initiation Grant	\$16,999	Dr. Eva Purkey, Dr. Rupa Patel, Tracey Beckett, Francoise Mathieu	Women's Experience of Trauma-informed Care in the Context of Chronic Disease Management in Family Medicine

CURRENT PROJECTS

ORGANIZATION	FUNDING	CSPC RESEARCH LEAD	PROJECT
CSPC Research Initiation Grant	\$16,000	Dr. Michael Green, Colleen Savage, Dr. Richard Birtwhistle, Heather Stuart, Evelyn Bowring, Dr. David Barber	Validity of CPCSSN Depression Diagnostic Algorithm Incorporating Patient Reports
CSPC Research Initiation Grant	\$8,200	Dr. Susan Phillips, Diane Batchelor	Assessing resilience among children and youth in primary care
CSPC Research Initiation Grant	\$4,600	Dr. Robert Webster, Catherine Donnelly, Abby Leavitt, Cindy Adams, Nicole Bobbette, Stephanie Lyn, Dr. Yan Cao, Judith Proulx, Katrina Levasseur, Andrea DiGiovanni	Multidimensional Outcomes in Primary Care
CSPC Research Initiation Grant	\$12,588	Dr. Robert Webster, Catherine Donnelly, Abby Leavitt, Cindy Adams, Nicole Bobbette, Stephanie Lyn, Dr. Yan Cao, Judith Proulx, Katrina Levasseur, Andrea DiGiovanni	Multidimensional Outcomes in Primary care: Part 2
CSPC Research Initiation Grant	\$13,103	Dr. Jane Griffiths, Nancy Dalgarno, Catherine Donnelly	Competency-based Medical Education Implementation: How are We Shifting Assessment Culture? Part 2
CSPC Research Initiation Grant	\$19,278	Dr. Meg Gemmill, Dr. Ian Casson, Dr. Liz Grier	Implementation and Evaluation of Health Links' Coordinated Care Plans Tailored for Adults with Intellectual and Developmental Disabilities
CSPC Research Initiation Grant	\$16,900	Dr. Eva Purkey, Dr. Susan Bartels, Dr. Colleen Davison, Dr. T. Hugh Guan, Shruti Sebastian	Monitoring and Evaluation of Neonatal Hepatitis B Immunization Project in Karenni State, Myanmar

CANADIAN PRIMARY CARE SENTINEL SURVEILLANCE NETWORK (CPCSSN)

CPCSSN National



Dr. Richard Birtwhistle

The CSPC continues to be home to the central office of the Canadian Primary Care Sentinel Surveillance Network (CPCSSN). The network extracts patient health data from the electronic medical records (EMRs) of participating physicians (sentinels) across Canada. This anonymized data is used to conduct public-health surveillance and research focused on (but not limited to) eight key chronic conditions: diabetes, high blood pressure, depression, arthritis, COPD, dementia, epilepsy and Parkinson's disease.

Since its inception in 2008, the network has recruited 1,031 primary care physicians and is extracting and processing EMR data at 182 practice sites that span seven provinces and one territory. As of January 1, 2016, CPCSSN contained the detailed health information of 1,282,791 patients.

The last year has seen the publication of 15 papers, 23 presentations and 14 posters. Highlighting this output, in CMAJ Open, were two publications: "Prevalence and Management of Osteoarthritis in Primary Care: An Epidemiologic Cohort Study from the Canadian Primary Care Sentinel Surveillance Network" and "Representativeness of Patients and Providers in the Canadian Primary Care Sentinel Surveillance Network: A Cross-Sectional Study." Publication of these two papers, along with four previous papers on the primary care prevalence of chronic disease, was the culmination of CPCSSN's original five-year mandate. Funded by the Public Health Agency of Canada (PHAC), CPCCN's mandate was to create a synoptic national database of electronic medical records, create validated case definitions of five chronic diseases and describe their epidemiology, and report their prevalence in Canadian primary care.

Over the last six years, CPCSSN has become an award-winning leader in the extraction and use of EMR data in Canada. The network continues to provide all participating physicians with feedback reports, comparing information about their patient population and key health indicators with their colleagues at the site and at regional, provincial and national levels. CPCSSN also demonstrated the feasibility of integrating multiple EMRs and a predictive analytics tool with its own data processing, for the potential benefit of clinicians and patients. CPCSSN will continue to improve the quality of primary care data, expand its overall data holdings and develop new tools. Canada Health Infoway has recognized the network as a leader in innovation related to the re-use of primary care data in Canada.

After the main funding for CPCSSN's original five-year mission came to an end, the PHAC funded the network for another two years (2015-2017) to further develop, implement and evaluate the CPCSSN Data Presentation Tool (CPCSSN DPT) across Canada. The CPCSSN DPT provides users with ready access to their data (for querying and reporting) after it has undergone processing and cleaning. The DPT has already proved useful to

CANADIAN PRIMARY CARE SENTINEL SURVEILLANCE NETWORK (CPCSSN)



182 practice sites across Canada

practices for quality improvement and population-health management. The current iteration of the CPCSSN DPT is web-based and offers useful new additions such as GIS mapping capability. This funding will be partially used to perform a major upgrade to CPCSSN's information technology infrastructure.

The CPCSSN project has placed priority in finding sustainable long-term funding. A substantial amount of effort was placed in applying for a Canadian Institutes of Health Research SPOR Networks in Chronic Disease grant with a proposal centred on research on

multimorbidity and eHealth solutions to improving care. Although the proposal was not funded, we were successful in raising the \$12.5 million in matching funds and some of this funding will be used to maintain and extend CPCSSN research.

CMAJ OPEN

Research

Representativeness of patients and providers in the Canadian Primary Care Sentinel Surveillance Network: a cross-sectional study

John A. Queenan PhD, Tyler Williamson PhD, Shalinee Khan MSc, Neil Drummond PhD, Stephanie Gies MPH, Richard Morken MSc, Richard Brevierville MD

Abstract

Background: The Canadian Primary Care Sentinel Surveillance Network (CPCSSN) has established a national repository of primary care patient health data that is used for both surveillance and research. Our main objective was to determine how representative this data for patients and primary care practitioners in the CPCSSN are when compared with the Canadian population.

Methods: In this cross-sectional study, we compared the 2013 CPCSSN patient sample with age and sex information from the 2011 census. The CPCSSN provider sample in 2013 was compared with the 2010 National Physician Survey. Results were stratified by 5 clinically relevant age categories and sex, and male-to-female ratios were calculated.

Results: Patients who were 45 years of age and older represented 20.4% of the CPCSSN sample but only represented 14.8% of the Canadian population (2011 census). Among primary care (20–79 yrs), 28.2% were over 65 years versus 14.8% for primary care practitioners within 5 years. CPCSSN practitioners were a primary care (20–79 yrs) sample. CPCSSN sample practitioners were more likely to be under 45 years of age, more likely to be female and more likely to be in an academic practice.

Interpretation: It is important to consider adjusting for age and sex when using CPCSSN data. CPCSSN practitioners are likely not representative of family physicians. Therefore, CPCSSN needs to recruit more nonacademic practices, community clinics and practices that have a larger proportion of male providers.

The clinical data contained within electronic medical records (EMRs) are a valuable source of information for surveillance, research and practice quality improvement. Issues of generalizability are a primary concern for observational studies that rely on data obtained from databases containing population-based general health information. A recent systematic review of the literature published from data held by the General Practice Research Database in the United Kingdom underscored the importance of generalizability and its relevance to the validity of research results.¹ The Canadian Primary Care Sentinel Surveillance Network (CPCSSN) is a network of 13 practice-based primary care research networks in British Columbia, Alberta, Manitoba, Ontario, Quebec, Nova Scotia, Newfoundland and Labrador, and the Northwest Territories. The CPCSSN established a process to extract, clean and merge EMR data from 12 different EMR databases into a single structured database of available, quality primary care data.² Family physicians and some practitioners who contribute de-identified patient data to CPCSSN participate on a voluntary basis.

The scope of the data collected is comprehensive and robust, and has the potential to become a large, available data source for Canadian health research, similar to well-established general practice databases in other countries. Yet research and surveillance findings to be generalizable in a provincial or national context, it is important to consider how representative the data are to the Canadian base populations of primary care patients and practitioners.

The main objective of this study was to determine how representative the data of the patients and primary care practitioners in the CPCSSN are when compared with the Canadian population.

Competing Interests: None declared.

This article has been peer reviewed.

Correspondence to: Richard Brevierville, rickb@cpscn.org

CMAJ Open 2016; DOI:10.5777/cjopen.201601028

CANADIAN PRIMARY CARE SENTINEL SURVEILLANCE NETWORK (CPCSSN)

CPCSSN Regional

It's been a busy year for the Eastern Ontario Network (EON), the Department of Family Medicine's Practice Based Research Network (PBRN). The EON spent a good portion of 2015 writing grants and papers to support its research initiatives. While originally founded as one of 11 networks across Canada that comprise the CPCSSN project, the EON has since developed into an independent PBRN with a goal to leverage electronic medical record data to transform primary care through cutting-

edge research that impacts patient care and management. We submitted our first large grant application last spring, and although unsuccessful, it received very positive reviews and we hope to continue this momentum into future applications.

Alongside several grant applications, the EON published a local research project on data discipline in the December 2015 issue of the Canadian Family Physician as well as research on antidepressant prescribing in the December 2015 issue of the Canadian Journal of Psychiatry. The network also presented several projects at the 2015 North American Primary Care Group conference in Cancun, Mexico, including research on trending HbA1c to predict diabetes and antidepressant prescribing to children in primary care.

The EON collects data on almost 200,000 patients in the Eastern Ontario region, and using this data for research and quality improvement is integral to improving the efficiency of Ontario's health-care system and increasing the quality of care to its residents.



Principal Investigator: Dr. David Barber, MD, CCFP



COMMUNITY AND PROGRAM EVALUATION



In response to health-care reform and increasing pressure on the health-care system, the CSPC has developed a research arm dedicated to improving the health and wellness of communities across the South East LHIN. Through collaboration with various community stakeholders, research initiatives target vulnerable populations such as frail seniors, palliative care patients and those with multiple and complex conditions. Our Community Projects research arm aims to bridge knowledge gaps; inform provincial and national policy development; and design, implement and evaluate innovative health-care programs that deliver patient-centred, high-quality care to vulnerable populations.

Principal Investigator:

Jyoti Kotecha, MPA, MRSC, CChem

Co-Investigators: Dr. Richard Birtwhistle, MD, MSc, FCFP

Connecting seniors and the frail elderly in Frontenac County and the city of Kingston with primary care: An environmental scan to support the development of the paramedic referral and wellness program

Community Paramedicine (CP) programs expand on the traditional emergency response role of paramedics, focusing instead on the organization and delivery of preventative health and social services in the community and in the patient's own home. Often making use of existing services in a region, CP can maximize efficiency of resources while providing vital connections between seniors, community care, primary care and hospitals. This year, the CSPC completed an environmental scan to support the development of a potential CP program in the County of Frontenac and the City of Kingston. Through a review of relevant literature,

conversations with representatives from established CP programs across Ontario and input from community, social and health-care stakeholders in the Kingston region, a framework was developed and presented to Frontenac Paramedic Services.

The overall goal of the proposed program was to improve delivery and co-ordination of services and to promote healthy aging in the home for seniors and other patients in the community with unmet needs. Target populations were identified as heavy users of 911 and emergency services, frail elderly and palliative care patients, individuals with complex health conditions and geographically isolated adults. In the first phase, the framework focuses on developing strong referral pathways to ensure front-line paramedics are able to quickly connect patients to CCAC, mental health services,

primary care and seniors' association services across the region. Next, it was recommended that the existing wellness clinics be expanded to additional locations in order to provide monitoring and prevention of chronic conditions in isolated communities. Home visits to high users of emergency services were also recommended, followed by a possible introduction of electronic patient monitoring for the most high-risk populations. The final report CSPC prepared, including a logic model and detailed referral pathways, will support the Frontenac Paramedic Services in obtaining funding to implement CP programs in our region.

COMMUNITY AND PROGRAM EVALUATION



Principal Investigator: Jyoti Kotecha, MPA, MRSC, CChem
Co-investigator: Richard Birtwhistle, MD, MSc, FCFP



Enhancing the primary healthcare system's ability to identify and plan with seriously ill frail elderly

Advanced Care Planning (ACP) is the process by which a patient, in consultation with health-care providers and family members, considers their options regarding future health-care decisions. In general, ACP is associated with facilitating less aggressive or intrusive care for patients nearing the end-of-life (EOL). This process includes clarifying illness trajectory and treatment options, exploring patient values, and helping them to identify and plan their wishes based on their goals for future care. Though evidence shows that ACP is vital to providing high-quality care for those with life-limiting illness, those who would benefit from ACP are often identified too late for proactive needs identification and desired care plans to be facilitated. The aim of this study is to increase the capacity to support primary health-care providers and systems in early identification of elderly patients who are frail and/or living with advanced life-limiting chronic illness and inform best practices for the ACP process.

Funded by the Canadian Frailty Network (Formerly the Technology Evaluation in the Elderly Network, TVN) Strategic Impact Program, this study is being conducted in partnership with researchers at Dalhousie Department of Family Medicine and the Nova Scotia Health Authority. Using health information contained in electronic medical records, CSPEC researchers will assist in developing and validating an algorithm to identify senior adults at most risk of declining health and dying. Additionally, we will conduct in-depth interviews with patients and caregivers to explore their views and perceptions about the use of electronic medical records for early identification; their opinions on and need for ACP; and whom they feel should initiate ACP discussions, where they should occur and at what time in the illness they should take place. We will also hold a focus group to explore the views and perceptions of family physicians regarding their role in ACP as well as organizational, clinical and social implications of primary care practice-level identification strategies for providers, patients and their families.

EDUCATION RESEARCH

An important activity for the CSPC is to support educational research. The centre supports evaluation and research that leads to improvements in the quality of family medicine resident training and education curriculum. We currently have a number of projects, including an evaluation of the Triple C Curriculum within the postgraduate distributed medical education program at Queen's University and an evaluation of competency-based medical education assessment culture.



Principal Investigator: Dr. Jane Griffiths, MD, CCFP, FCFP
Co-Investigators: Dr. Nancy Dalgarno, PhD;
Dr. Catherine Donnelly, B.Sc. (OT), MSc, PhD

Competency-Based Medical Education Implementation: How are we Shifting Assessment Culture? Part 2

The Department of Family Medicine (DFM) is an early adopter of competency-based medical education (CBME). It is an approach that represents a paradigm shift from traditional training to one that is fundamentally oriented to outcomes and grounded by relevant competencies. CBME required us to think about assessment in both holistic and longitudinal ways. Given this, the DFM began to implement the Portfolio Assessment and Support System in 2011 and a preliminary study was conducted to determine if there was an initial change in the way we assessed our residents. Now that the portfolio system has been fully embedded into the DFM for the past five years, it is important to determine if and how there has been a change in our assessment culture—one that supports the CBME curriculum.

This phenomenological study involves a qualitative design. Semi-structured interviews with nine academic advisors and two focus groups with residents ($n = 10$) will be conducted to gather evidence documenting perspectives of, and approaches to, the competency-based portfolio system. An inductive, emergent design will be used to analyze the data. Locally, findings from this study will allow us to examine the extent to which our approach represents a cultural shift in how assessment is viewed and implemented. The findings will also inform and shape ongoing improvements to the portfolio system, and act as a guide for faculty development at all DFM distributed sites. Globally, our findings may assist other programs with the development and implementation of competency-based assessment tools in their residency training programs.

EDUCATION RESEARCH



Principal Investigator: Dr. Kelly Howse, MD, CCFP

Medical Student Career Advising: National Recommendations

Career planning, specialty decision-making and preparation for residency matching are significant sources of stress for medical students. The Future of Medical Education in Canada Postgraduate (FMEC PG) Implementation Project, funded by Health Canada and a consortium partnership of the Association of Faculties of Medicine of Canada, Collège des Médecins du Québec, College of Family Physicians of Canada, and Royal College of Physicians and Surgeons of Canada, included a specific recommendation to “ensure effective integration and transitions along the educational continuum,” and further noted that this “requires development through the increase of responsibility across the medical education continuum and effective transitions from UGME into PGME.” Under the “integration and transitions” umbrella, the Career Planning and Residency Matching Process Working Group identified a clear need for a sub-working group to examine career advising processes across Canada and the development of guidelines and recommendations that could be published and shared. The sub-working group has been led by Dr. Kelly Howse (Queen’s), with collaboration from colleagues across the country.

The final document, completed in November 2015, provides an overview of the resulting recommendations regarding the guiding principles and essential elements of medical student career advising. The goal is to encourage standardization of career advising content across all Canadian medical schools in order to better assist medical students in making informed career decisions. It is the sub-working group’s hope that this will help guide the exploration and sharing of relevant resources, and promote discussion regarding the requirements and processes for implementing the recommendations nationally. Project evaluation will include determining if these recommendations help the offices of student affairs and career advisors better assist medical students in their career decision-making.

The document is posted on various national and provincial websites and can be accessed at: <http://cou.on.ca/papers/the-future-of-medical-education-in-canada-postgraduate-project/>. It will be presented at CCME 2016 and submitted for publication later this year.

GLOBAL HEALTH

The Global Health research portfolio examines issues related to the health care and well-being of vulnerable populations or persons struggling with health inequities such as those linked to poverty, migration status or aboriginal status. Included in this portfolio is research that focuses on preventive medicine and screening. The following are new projects being undertaken.



Principal Investigator: Dr. Eva Purkey, MD, CCFP

Monitoring and evaluation of neonatal hepatitis B immunization project in Karenni State, Myanmar

A team of researchers from the Faculty of Health Sciences is looking at the impact and quality of an intervention to decrease vertical transmission of hepatitis B in a rural area of Karenni State, Myanmar. Hepatitis B is endemic in Myanmar, and mother to child is a common mode of transmission. In partnership with a local Karenni health agency and an international non-governmental organization (NGO) that is seeking to implement neonatal immunization with hepatitis B vaccine to prevent mother-to-child transmission of the virus, Queen's researchers travelled to Myanmar in January 2015 to run a training session in monitoring and evaluation. Researchers will follow the project over the next 18 months to assess implementation of the intervention, as well as impact on mother-to-child transmission of the hepatitis B virus. If this

project is successful, the goal is to roll out implementation throughout Karenni State. The Centre for Studies in Primary Care funded this project.

Implementation evaluation of a poverty screening tool

This project is aligned with various provincial initiatives looking at the implementation and impact of screening patients for poverty, and interventions aimed at reducing the effects of poverty, in primary-care settings in Ontario. In partnership with colleagues from the Department of Pediatrics and Kingston Community Health Centres, researchers will train Kingston physicians from a variety of settings in the use of the poverty screening tools promoted by the Ontario College of Family Physicians. These physicians will then be followed over three months to assess the implementation of poverty screening in their various practice settings. Using physician questionnaires, patient questionnaires and focus groups, barriers to implementation – as well as characteristics that improve implementation – will be assessed. Following this study, the next logical step would be to look at the impact of screening for poverty in terms of access to services and overall health outcomes.

GLOBAL HEALTH



Principal Investigator: Dr. Susan Phillips, MD, MSc (Epid), CCFP, MD(HC)

The influence of social determinants of health on research

The majority of randomized controlled trials (RCTs) cannot be reproduced, and when their original data are reanalyzed, one-third of the findings change. My research on social determinants of health – whether gender, adversity in childhood, or individual strengths and assets – suggests that considering human participants to be interchangeable subjects devoid of social traits explains some of these errors in RCT results. Clinical trials assume all subjects with a specific diagnosis are like lab rats and that their individual and social characteristics can be removed from study by randomization. The reality is that those characteristics are strong determinants of health and interact with, for example, the treatment being studied, even if they are ignored. Here are a few examples of the research I do that speaks to this.

In a review of 500 recent RCTs (co-author: Katarina Hamberg), we uncovered significant biases in recruitment, retention and analyses of findings, particularly with respect to gender. A separate systematic review demonstrated that

men's greater susceptibility to health harm from material deprivation may be an artifact of gender-bias in research methods. Analysis of data from an ongoing prospective cohort study on which I am the principal investigator has revealed that life experiences and realities have unexpected and long-lasting effects on health. Across four study countries, early parental loss had a lifelong impact on self-rated health, particularly among men. This is novel research on what turns out to be a major adversity in childhood not previously examined. Other analyses using this same International Mobility in Aging (IMIAS) data show the correlates of elder abuse, the importance of social support, and the nature and benefits of resilience among the elderly. And because resilience is known to predict health, I am also completing several studies of how doctors can assess this strength among young people.

There's more to tell – about examining successful aging, empathy and professionalism among medical trainees, sexual harassment of medical students, and teaching about reproductive choice. If you are curious, please ask me!

susan.phillips@dfm.queensu.ca



Principal Investigator: Dr. Michael Green, MD, MPH, CCFP, FRCP

Educating for Equity (E4E): Exploring How Health Professional Education Can Reduce Disparities in Chronic Disease Care and Improve Outcomes for Aboriginal Populations

Educating for Equity (E4E) is an international collaborative research project aimed at developing Indigenous health professional education capacity as a vehicle for improving care and health outcomes. The Canadian Team, composed of researchers from Queen's University, the University of Calgary, North Ontario School of Medicine, and the University of British Columbia, is focused on improving diabetes care in Aboriginal populations through a research and evidence informed Aboriginal health continuing medical education (CME) intervention. In Phase 1, focus groups and interviews were conducted with Aboriginal patients and healthcare providers to understand needs and gaps in health services. This knowledge was used to generate a care framework which was translated into an E4E CME workshop. In Phase 2, a one-day CME workshop, with a pre-workshop needs assessment and post workshop reflection, was developed and delivered to northern healthcare providers. To date, five workshops have been

delivered in three communities in Northern Ontario to a total of 32 healthcare providers. The workshop focused on (a) key social factors that affect Aboriginal diabetes outcomes, (b) culturally attuned approaches to building therapeutic relationships with Aboriginal diabetic patients, (c) methods to address discord in the doctor-patient relationship, and (d) culturally informed ways to support Aboriginal people in health care and society.

A mixed-method, multi-measure, controlled design was used to evaluate the E4E CME intervention. Data collection included physician practice chart audits and patient experience survey 3-month post and 12 month post workshop, respectively. Co-primary outcomes include HbA1C and a summary patient experience score. Chart audits prior to and post intervention indicate impact of physicians' participation on clinical outcomes. Patient surveys reflect any changes perceived by patients in physician care delivery.

Data collection is nearly complete and analysis is ongoing. This project is expected to close in March of 2017.

INTELLECTUAL AND DEVELOPMENTAL DISABILITIES



Principal Investigator: Dr. Meg Gemmill, MD, CCFP
Co-Investigators: Dr. Ian Casson, MD, CCFP(EM), FCFP;
Dr. Liz Grier, MD, CCFP

The Queen's University Intellectual and Developmental Disabilities (QUIDD) Collaborative is an initiative of Queen's Department of Family Medicine and the Centre for Studies in Primary Care. The collaborative is composed of physicians, health-care providers, researchers and stakeholders who are committed to advancing research and education in intellectual and developmental disabilities (IDD) and to delivering quality health care to IDD patients and their families. This year, data collection was completed for our study exploring the experiences of physicians, allied health and social service agency workers in supporting adults with an undiagnosed but sus-

pected mild IDD, including an exploration of their experience obtaining formal diagnoses for this population. Additionally, the DFM continues to work toward implementing the Primary Care Guidelines to ensure faculty and residents work together to provide annual health checks to each of their IDD patients. Most recently, QUIDD celebrated a major achievement after being awarded a 2015/2016 SEAMO Innovation Fund grant to conduct a pilot study that will evaluate the implementation of HealthLinks Coordinated Care Plans for adults with IDD and complex needs in the Kingston region.

INTELLECTUAL AND DEVELOPMENTAL DISABILITIES

Implementation and evaluation of Health Links' Coordinated Care Plans tailored for adults with intellectual and developmental disabilities

Adults with intellectual and developmental disabilities (IDD) have poorer health status and experience more barriers to accessing health care compared to the general population. Multiple factors contribute to this, including communication difficulties, health literacy, difficulty navigating the system and lack of coordination among health care providers as well as across social and health services. Recently, the Ontario Ministry of Health and Long-Term Care (MOHLTC) introduced The Health Links Complex Patient Coordinated Care Planning (CCP) program to help alleviate such barriers for complex patients. The process involves the completion of a CCP by a HealthLinks nurse in order to aid the patient's family doctor in connecting with specialists and other health/social care providers. The goal of the program is to provide coordinated care across health and social care systems, leading to improved quality and continuity of care, as well as reduced burden on healthcare resources. Though IDD is recognized as a risk factor by the Community Health Links in the South-East Local

Health Integration Network (SELHIN), CCPs have not yet been completed for adults with IDD in this region.

This pilot study, which was awarded a 2015-2016 SEAMO Innovation Fund grant, is a collaborative effort joining the SELHIN HealthLinks CCP process with the Ministry of Community and Social Services (MCSS) and researchers at QFHT and the CSPC. MCSS will aid in the identification of patient participants who have IDD and complex needs, who will in turn meet with a HealthLinks nurse to identify goals, document health information and develop a CCP tailored to fit their unique need for health and social support. Using a mixed method approach combining participant surveys, interviews and chart reviews, researchers will evaluate the implementation of this pilot project. They will explore whether bringing together these cross-sector programs to develop CCPs for adults with IDD and complex needs will increase the capacity of patients, families, social services workers and the health care providers to provide and coordinate health care, as well as compare health and health/social service usage outcomes before and after the intervention. It is their hope that this pilot project can be used as a framework for expansion across Ontario's LHINs.

QUALITY IMPROVEMENT



Principal Investigator: Dr. Robert Webster, MD, CCFP, FRCP

Co-investigators: Dr. Catherine Donnelly, BSc(OT), MSc, PhD; Abby Leavitt, BBA

Multidimensional Outcomes in Primary Care

Responding to demographic changes, advances in health care, disease-management strategies, and mounting evidence that strong primary care systems are associated with better and more equitable health outcomes, interprofessional primary care teams across Canada have undergone major reforms in the past decade. Performance measurement and feedback in primary care seeks to provide a summary of the clinical performance of health care provider(s) over a specified period of time. Both public and private performance reporting at the practice level have been shown to drive practice improvement in primary care. Nonetheless, very few studies have explored the effect of performance measurement and feedback on interprofessional teams, despite their growing role in providing primary care and the growing international focus on performance measurement in primary care. This leaves interprofessional primary care teams at a great disadvantage in trying to improve the care they deliver, even though performance data sources from electronic medical records (EMRs) to provincial screening registries are proliferating. In parallel with the need to identify outcomes and indicators reflective of the interprofessional team is the importance of leveraging the EMR to systematically capture this data in order to a) extract data for continuous quality improvement (CQI) and b) support research on team-based primary care.

Phase 1 of the project focused on the development of a family health team (FHT) program logic model with the goal of identifying specific program outcomes and performance indicators. This was done in collaboration with allied health professionals and the physician lead in Belleville. This collaborative process had multiple benefits. First, developing a common vision among the team members supported a commitment to building a culture of quality from which to move forward. Second, the process allowed the team to develop outputs, which could then be used to track and gather information that will inform results-based programming and quality improvement.

Phase 2 of the project involved the creation of EMR measurement strategies to efficiently capture the outcomes and indicators identified in Phase 1. The team identified the World Health Organization Quality of Life (WHOQOL) assessment as the global outcome measure for the FHT. Currently, all patients the FHT see complete the WHOQOL assessment, which will provide a profile of patients receiving services from the interprofessional team.

The project has highlighted the importance of identifying non-physician outcomes and indicators. It is the FHT's first step in creating meaningful non-medical indicators for quality improvement, and the only known example within the province.

ADVISORY COUNCIL 2015 – 2016



Margaret Alden, Chair

The CSpC has an advisory council that meets regularly to advise and steer the centre's research activities. The board members currently include:

Margaret Alden	Chair, CSpC Advisory Council
Dr. Richard Birtwhistle	Director, CSpC
Dr. Michael Green	Associate Director, CSpC
Dr. Lawrence Leung	Assistant Director, CSpC
Dr. Colleen Grady	Research Manager, CSpC
Dr. Glenn Brown	Head, Department of Family Medicine
Dr. Karen Schultz	Postgraduate Education Program Director, Department of Family Medicine
Dr. Walter Rosser	Department of Family Medicine Representative
Dr. Susan Phillips	Department of Family Medicine Representative
Dr. Joan Tranmer	Queen's Faculty Member, School of Nursing
Dr. Dana S. Edge	Queen's Faculty Member, School of Nursing
Dr. Pattie Groome	Queen's Faculty Member, Community & Epidemiology
Dr. Catherine Donnelly	Queen's Faculty Member, School of Rehabilitation Therapy
Dr. Jeffrey Sloan	Community Physician
Carolyn Hamilton Kuby	Community Representative
Judith Mackenzie	Community Representative
Dr. Vikram Gill	Family Medicine Resident
Marissa Beckles	Administrative Assistant, CSpC

CENTRE ADMINISTRATION



Dr. Richard Birtwhistle, MD, MSc, FCFP
 Director, Centre for Studies
 in Primary Care
 Professor
 Department of Family Medicine,
 Department of Community Health
 and Epidemiology
richard.birtwhistle@dfm.queensu.ca



Dr. Michael Green, MD, MPH, CCFP, FCFP
 Associate Director, Centre for
 Studies in Primary Care
 Associate Professor
 Department of Family Medicine,
 Department of Community
 Health and Epidemiology
michael.green@dfm.queensu.ca



Laurence Leung
 Assistant Director, Centre for
 Studies in Primary Care
 Associate Professor
laurence.leung@dfm.queensu.ca



Colleen Grady, MBA, DBA
 Research Manager, Centre for
 Studies in Primary Care
 Department of Family Medicine
Colleen.grady@cspc.queensu.ca



Marissa Beckles
 Administrative Assistant, Centre
 for Studies in Primary Care
marissa.beckles@cspc.queensu.ca

CENTRE FACULTY AND STAFF



Glenn Brown, Head, Department of Family Medicine , Associate Professor
glenn.brown@dfm.queensu.ca



David Barber, CPCSSN Regional Network Director, Assistant Professor
david.barber@dfm.queensu.ca



Ian Casson, Associate Professor
ian.casson@dfm.queensu.ca



Nancy Dalgarno, Education Researcher and Consultant
nancy.dalgarno@dfm.queensu.ca



Patrick Esperanzate, Assistant Professor
patrick.esperanzate@dfm.queensu.ca



Meg Gemmill, Assistant Professor
meg.gemmill@dfm.queensu.ca



Liz Grier, Assistant Professor
liz.grier@dfm.queensu.ca



Jane Griffiths, Assistant Professor
jane.griffiths@dfm.queensu.ca

CSPC ANNUAL REPORT 2015/2016

CENTRE FACULTY AND STAFF



Karen Hall Barber, Associate Professor
karen.hallbarber@dfm.queensu.ca



Han Han, Research Associate
han.han@cspc.queensu.ca



Geoff Hodgetts, Professor
geoffrey.hodgetts@dfm.queensu.ca



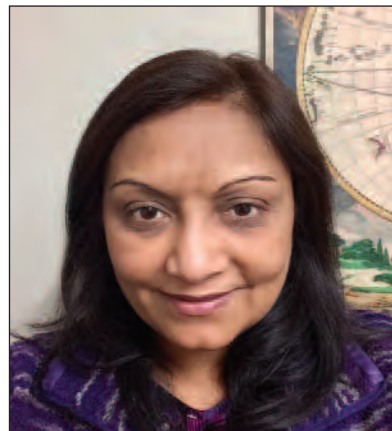
Kelly Howse, Assistant Professor
kelly.howse@dfm.queensu.ca



Shahriar Khan, Senior Data Analyst
shahriar.khan@cspc.queensu.ca



Lorne Kinsella, Local Data Manager
lorne.kinsella@cspc.queensu.ca



Jyoti Kotecha, Adjunct Professor
kotechaj@queensu.ca



Susan MacDonald, Associate Professor
susan.macdonald@dfm.queensu.ca

CENTRE FACULTY AND STAFF



David MacPherson, Assistant Professor
david.macpherson@dfm.queensu.ca



**Ken Martin, Information Technology
and Data Manager**
ken.martin@cspc.queensu.ca



Mary Martin, Research Associate
mary.martin@cspc.queensu.ca



Rachael Morkem, Research Associate
rachael.morkem@cspc.queensu.ca



Susan Phillips, Professor
susan.phillips@dfm.queensu.ca



Emily Pollock, Research Associate
emily.pollock@cspc.queensu.ca



Eva Purkey, Assistant Professor
eva.purkey@dfm.queensu.ca



John Queenan, Epidemiologist
john.queenan@cspc.queensu.ca

CENTRE FACULTY AND STAFF



Walter Rosser, Professor Emeritus
walter.rosser@dfm.queensu.ca



Karen Schultz, Associate Professor
karen.schultz@dfm.queensu.ca

Missing:
Benedict Chan,
 Assistant Professor
benedict.chan@dfm.queensu.ca



Cathy Vakil, Assistant Professor
cathy.vakil@dfm.queensu.ca

Shayna Watson
 Assistant Professor
shayna.watson@dfm.queensu.ca



Michael Ward, Assistant Professor
michael.ward@dfm.queensu.ca



Robert Webster, Assistant Professor
robert.webster@dfm.queensu.ca



Ruth Wilson, Professor
ruth.wilson@dfm.queensu.ca



Brent Wolfrom, Assistant Professor
brent.wolfrom@dfm.queensu.ca



Fred Zeltser, Research Associate
fred.zeltser@dfm.queensu.ca

PUBLICATIONS AND PRESENTATIONS

This has been a busy year for publications and conference presentations. Thirty-four peer-reviewed articles were published through the work of the CSPC, including three resident publications. Forty-eight oral or poster presentations were presented at national and international research conferences. Details of these publications and presentation can be found below.

Publications:

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- 16 Leung LK, Harding J. A chemical mixer with dark-green nails. *BMJ Case Rep* 2015 June; 2015. doi:10.1136/bcr-2014-209203.
- 17 McColl MA, Aiken A, Smith K, McColl A, Green M, Godwin M, Birtwhistle R, Norman K, Brankston G, Schaub M. Actionable Nuggests: Knowledge translation tool for the needs of patients with spinal cord injury. *Can Fam Physician* 2015;61:e240-e248.
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PUBLICATIONS AND PRESENTATIONS

- anticoagulants in treatment of acute deep vein thrombosis for primary care physicians. *J Family Med Community Health* 2015;2(2):1032.
- 28** Sacks J, Valin S, Casson RI, Wilson CR. Are 2 heads better than 1? Perspectives on job sharing in academic family medicine. *Can Fam Physician* 2015;61(1):11-13.
- 29** Schultz K, Griffiths J. Implementing competency-based medical education in a postgraduate family medicine residency training program: a stepwise approach, facilitating factors and processes or steps that would have been helpful. *Acad Med* 2015. Epub ahead of print.
- 30** Schultz K, Griffiths J, Lacasse M. A practical application of entrustable professional activities to inform competency decisions in a family medicine training program. *Acad Med* 2015; 90(7):888-97.
- 31** Schultz K, Griffiths J, McEwen L. Applying Kolb's Learning Cycle to competency-based residency education. *Acad Med* 2016; 91(2):284.
- 32** Sethi A, Hughes P. Celiac disease and attention deficit hyperactivity disorder: a systematic review of the literature. *J Fam Med Community Health* 2015;2(8): 1069.
- 33** Squissato V, Brown G, Baxter S. Get out of scrape! An approach to corneal foreign bodies and abrasions for the primary care physician. *Occup Med Health Aff* 2015;3:3.
- 34** Wolfrom B, Hodgetts G, Kotecha J, Pollock E, Han H, Martin M, Morrisette P. (Accepted). Satisfaction with civilian family medicine residency training: Perspectives from serving General Duty Medical Officers in the Canadian Armed Forces. *Can Fam Physician*.

Presentations:

- 1** Barber D, Morkem R, Queenan J, Zeltser F. Using trends in HbA1c test results to predict diabetes onset. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 2** Barber D, Morkem R, Queenan J, Janssen I, Kotecha J, Zeltser F. The Role of antibiotic administration on childhood weight. Paper presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 3** Birtwhistle R, Glazier R, Green M, Dahrouge S, Martin K, Barber D, Terry A, Greiver M, Frymire E. Lessons learned in linking an EMR with health administration data: The case of ICES and CPCSSN. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 4** Birtwhistle R, Green M, Dahrouge S, Frymire E, Terry A, Barber D, Greiver M, Glazier R. Linking electronic medical records with administrative data: Diabetic control and hospital and emergency

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- room utilization. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 5** Birtwhistle R, Green ME, Glazier RH, Dahrouge S, Greiver M, Barber D, Martin K, Terry A, Chiarella L, Frymire E. Lessons learned in linking an EMR with health administration data: the case of ICES and CPCSSN. Poster session presented at: NAPCRG Annual meeting; 2015 Oct 24-28; Cancun, Mexico.
 - 6** Birtwhistle R, Green ME, Glazier RH, Dahrouge S, Greiver M, Barber D, Martin K, Terry A, Frymire E. Linking Electronic Medical records with administrative data: diabetic control and hospital and emergency room utilization. Poster session presented at: NAPCRG Annual meeting; 2015 Oct 24-28; Cancun, Mexico
 - 7** Birtwhistle R, Green ME, Glazier RH, Dahrouge S, Greiver M, Barber D, Martin K, Terry A, Frymire E. Linking electronic medical records with administrative data: diabetic control and hospital and emergency room utilization. Poster session presented at: Trillium Annual Conference; 2015 Jun 20; Toronto, Ontario.
 - 8** Brown G, Laughlin B, Blaney B, Smythe J, Zeltser F. Assessing the impact of incorporating self-compassion training into cognitive-behavioral therapy groups for adolescents with anxiety disorders. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
 - 9** Casson I, Gemmill M, Grier E, Green L. Using EMR tools to improve the primary care of adults with developmental disabilities. Paper presented at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
 - 10** Craig, W., Cummings, J., & Dalgarno, N. Scaffolding, social architecture, and classroom management to address bullying and victimization. Full day workshop presented at: Promoting Relationships and Eliminating Violence (PrevNET); 2015 Nov; Toronto, Ontario, CA.
 - 11** Dahrouge S, Rolfe D, Muldoon L, Kotecha J, Birtwhistle R, Barber D, Dolovich L, Liddy C, Kaczorowski J. Using automated, regularly extracted electronic medical record (EMR) data for intervention research. Presented at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
 - 12** Dahrouge S, Muldoon L, Heale R, Green M, Tranmer J, Howard M, Mark A, Taljaard M, Brown J, Johnston S, Agarwal G. Creating meaningful composite scores for primary care. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
 - 13** Dahrouge S, Rolfe D, Muldoon L, Kaczorowski J, Dolovich L, Liddy C, Kotecha J, Barber D. Optimizing the reach of population-based cardiovascular awareness interventions. Poster session presented

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- at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 14** Donnelly C, Boudreau ML, Garand I, Mitchell B, Letts L. Falls screening in primary care: The missing link. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 15** Donnelly C, Watson S, Brander R, O’Riordan A, Murphy S, Chapman C. Compassionate collaborative primary care. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 16** Gemmill M, Grier E, Bobbette N, Martin M, Casson I. Family physician and allied health provider attitudes and perceptions of the identification of adults with suspected mild intellectual disability. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 17** Gozdya P, Glazier R, Dahrouge S, Green M, Frymire E, Muldoon L, Tranmer J. Geographic availability, proximity and accessibility to primary care (PC) doctors - review and application of methods. Workshop at: NAPCRG Annual Meeting; 2015 Oct 24-58; Cancun, Mexico.
- 18** Guedes D, Alvarado B, Phillips SP, CL Curcio, Zunzunegui MV, Guerra RO. Socioeconomic status, social support and domestic violence against elderly people in Canada, Albania, Colombia and Brazil. Workshop at: American Gerontological Society Annual Conference; 2015 Nov 18-22; Orlando, FL.
- 19** Han H, Martin M, Van-Melle E, Schultz K, Griffiths J, Hodgetts G. From family medicine residency to independent practice: How are transitions experienced? Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 20** Kotecha J, Lévesque L, Martin M, Viaznikova T. Patient perspectives of the importance of physical activity counselling in primary care settings. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 21** Kotecha J, Martin M, Han H, MacLaren S, Christie E, Green M, Birtwhistle R. Cost to provide allied healthcare to patients in a rural Hospital-at-Home demonstration program in Prince Edward County, Ontario, Canada. Poster session presented at: NAPCRG Annual Meeting; 2015 October 24-28; Cancun, Mexico.
- 22** Kotecha J, Phillips S, Kukkar R, Martin M, Han H, Pollock E. Connecting seniors to care: Strengthening links through primary care. A scoping review. Poster session presented at: Trillium Primary Health Care Research Day; 2015 June 4; Toronto, Ontario.
- 23** Leung L. Red and Itchy: How to approach and manage common skin conditions and avoid pitfalls. Presentation at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.

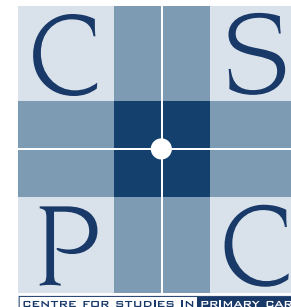
- 24** Leung L. Fire over ice: In the face of recalcitrant non-genital warts. Presentation at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
- 25** Leung L. Odd and scary: How to approach and manage unusual skin conditions and avoid pitfalls. Presentation at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
- 26** Martin M, Kotecha J, Han H, MacLaren S, Christie E, Green M, Birtwhistle R. Cost to provide allied healthcare to patients in a rural Hospital-at-Home demonstration program in Prince Edward County, Ontario, Canada. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 27** Morkem R, Barber D, Williamson T, Patten S. Antidepressant prescribing to children and adolescence in Canadian primary care. Paper presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 28** Morkem R, Barber D, Queenan J, Janssen I, Kotecha J, Zeltser F. The role of antibiotic administration on childhood weight. Paper presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 29** Morkem R, Barber D, Queenan J, Zeltser F. Using Trends in HbA1c Test Results to Predict Diabetes Onset. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 30** Phillips S. Can we correct inequalities via medical practice? Workshop at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario. .
- 31** Phillips S, Byrnes M. Continuity of care and hospital utilization – a new report from CIHI. Paper presented at: Trillium Primary Health Care Research Day; 2015 June 4; Toronto, Ontario.
- 32** Phillips S. Death of a parent in childhood and health in old age. Presented at: Association for Medical Education in Europe; 2015 Sept 5-9; Glasgow, UK.
- 33** Phillips S. Workshop for teachers of IMGs. Workshop at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
- 34** Phillips S. Psychometric properties and confirmatory analysis of BEM sex role inventory in an international sample of older adults. Poster session presented at: American Gerontological Society Annual Conference; 2015 Nov 18-22; Orlando, FL.
- 35** Perez Zepeda MU, Zunzunegui MV, Phillips SP, Ylli A, Guralnik J. Self-rated health maintains a consistent relationship with physical performance across countries. Workshop at: American Gerontological Society Annual Conference; 2015 Nov 18-22; Orlando, FL.
- 36** Purkey E, Patel R, Beckett T, Mathieu F. Trauma-informed care: why it matters for you and your patients. Paper presented at: Family

- Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
- 37** Schultz K, Griffiths J. Implementing competency based medical education. Workshop at: Association for Medical Education in Europe; 2015 Sept 5-9; Glasgow, UK.
- 38** Schultz K., Griffiths J. Transforming your program to be competency-based: An interactive workshop to explore strategies and solutions. Workshop at: Association for Medical Education in Europe; 2015 Sept 5-9; Glasgow, UK.
- 39** Schultz K., Griffiths J. Transforming your program to be competency-based: An interactive workshop to explore strategies and solutions. Workshop at: International Conference on Residency Education. 2015 Oct 22-24; Vancouver, British Columbia.
- 40** Sousa ACP, Guerra RO, Tu MT, Phillips SP, Guralnik J, Zunzunegui MV. Lifecourse adversity and physical performance across countries among men and women aged 65-74. Workshop at: American Gerontological Society Annual Conference; 2015 Nov 18-22; Orlando, FL.
- 41** Sousa ACP, Zunzunegui MV, Li A, Phillips SP, Gomez JF, Guralnik J, Guerra RO. C reactive protein and physical performance in elderly populations: Results from the IMIAS Study. Workshop at: American Gerontological Society Annual Conference; 2015 Nov 18-22; Orlando, FL.
- 42** Vakil C. Radiation and health. Paper presented at: World Uranium Symposium; 2015 Apr 14-16; Quebec City, Quebec.
- 43** Vance L, Howse K. Personal healthcare practices in residency: A cross-sectional survey. Poster session presented at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario.
- 44** Van Melle, E., & Dalgarno, N. Family medicine residents' perceptions of patient-centred care: Is it time to make the implicit explicit? Workshop presented at: Family Medicine Forum; 2015 Nov 11-14; Toronto, Ontario, CA.
- 45** Webster R, Chapman C. The implementation and impact of Health Links. Paper presented at: Health Quality Transformation; 2015 Oct 14; Toronto, Ontario.
- 46** Webster R, Chapman C, Page-Brown J. The Collective implementation an impact of Health Links: A formative evaluation of the South East Local Health Integration Network Health Links. Poster session presented at: South East LHIN Primary Health Care Forum; 2015 Sept 22; Kingston, Ontario.
- 47** Wolfrom B, Hodgetts G, Pollock E, Martin M, Han H, Kotecha J. Satisfaction of military family medicine practitioners with family medicine residency training. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.
- 48** Wolfrom B, Pollock E, MacPherson D, Sauerbrei E, Kotecha J. Introducing diagnostic ultrasound in an academic family health team. Poster session presented at: NAPCRG Annual Meeting; 2015 Oct 24-28; Cancun, Mexico.



Centre for Studies in Primary Care

Department of Family Medicine
Queen's University
220 Bagot Street
Kingston, Ontario
K7L 5E9
613.533.6000 x 73934



queensu.ca/cspc