

Department of **Family Medicine**

2018 - 2019 Annual Report



UNIVERSITY OF ALBERTA
FACULTY OF MEDICINE & DENTISTRY
Department of Family Medicine

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Chair's Message

There are so many strong contributions, accomplishments, and awards in this year's report that it's challenging to write this message. I'll let them speak for themselves for the most part, though I can't resist highlighting Dr. Michel Donoff's Ian McWhinney award. The combination of intellect and humanism for which Dr. McWhinney was revered worldwide is well reflected in Dr. Donoff's career.

For the most part though I want to call out a common theme that runs through the many notable entries in this year's report: engagement. Our department is and has from its beginning been closely engaged with the community of practice and the community of patients. Not only are many of the awards received for work done in partnership with the communities we serve, but some of the most notable were given by those communities.

Our research programs are almost all community-academic partnerships, and in some cases (for examples, the Seniors Hub and CHANGE) indistinguishable from service to the community. Our teaching programs are deeply intertwined with the community, and that is a major source of their strength.

We put our efforts into something larger than ourselves. That is what makes us what we are, and is why we do what we do.



Department Vision

“Alberta has a well-integrated, primary-care-based health care system in which all have access to a family physician who provides timely, proactive, individualized, comprehensive and continuity care through an interdisciplinary team of healthcare professionals led by that family physician. That team practices evidence-based, patient-centred care, and uses its own data, dialog with its stakeholders, and published research to continuously improve its service, quality, and safety.”

Department Mission

“The Department of Family Medicine at the University of Alberta exists to teach the discipline of family medicine for the future of practice, and the needs of society, and to produce scholarly work that improves the practices of family medicine and primary health care.” We will achieve this outcome by developing and demonstrating excellence in:

- (1) Training residents for team-based, systems-based, socially accountable patient care and leadership.
- (2) Providing medical students with high-quality education, and serving as role models of academically excellent, quality-and-safety-driven, socially accountable generalists;
- (3) Conducting and disseminating clinical, educational, epidemiological, and health services research that improves the teaching and practice of family medicine and primary health care.

In The Community & The News

In the Community

Good Sports in Learning and Community Support

Sports and exercise medicine plays an important role in community-based sporting events, and when the opportunity presents itself, DoFM faculty members Teresa De Freitas and Connie Lebrun get involved. Not only do they provide medical services at large-scale sporting events, often bringing medical residents with them for an invaluable on-site learning experience in sport and exercise medicine.

In the 2018-2019 academic year, both Lebrun and De Freitas, along with their Glen Sather Sports Medicine Clinic colleagues Olesia Markevych and Erika Persson, provided support to the Alberta Summer Games in Grande Prairie in July of 2018 and the Canada Winter Games in Red Deer in February of 2019.

Festival of Health 2019

Department of Family Medicine were involved in the following sessions as part of the in the Faculty of Medicine & Dentistry's Festival of Health, which was held on May 25, 2019.

- Dr. Lesley Charles joined colleagues from the Division of Geriatric Medicine to present Health & Aging - Dare to Age Well. Dr. Ginetta Salvalaggio presented alongside colleagues from the Inner City Health and Wellness Program for the Caring for People Who Use Drugs session
- Dr. Connie Lebrun and colleagues from The Neuroscience and Mental Health Institute presented Concussions: the Hard-Hitting Truth.
- The BedMed High Blood Pressure Study and the CHANGE Program hosted information booths for attendees to learn about their research programs.

Indigenous Health Academic Day

On Wednesday, August 8, family medicine residents gathered at Poundmaker's Lodge Treatment Centres in Sturgeon County for the second Indigenous Health Academic Day. This valuable educational opportunity provided residents with insight into culturally appropriate and sensitive healthcare for Indigenous people, as well as insight into the historic events in the land now known as Canada that altered their way of life.

CHANGE Adventure Camp and the CHANGE Clinic

The Canadian Health Advanced by Nutrition and Exercise (CHANGE) Alberta program has expanded. The [CHANGE Adventure Camp](#), initiated by Doug Klein in 2017, has now expanded the number of summer camps available in Edmonton and area.

Klein has also worked with community members to start the [CHANGE Clinic at Memorial Composite High School](#) in Stony Plain, AB. The CHANGE Clinic provides proactive health care programming focusing on nutrition, physical activity and fitness, mental health and well-being and strong relationships and community connections.

Seniors Community Hub

The Seniors Community Hub is a community-based program using a teamwork approach to identify older adults at risk of frailty, and then working with those individuals to help them be proactive in maintaining their health and leading an active lifestyle. The Hub was developed by Drs Shenay Khera and Marjan Abassi, who have been recognized locally and nationally for the creation of this innovative program.

In the News

Dr. Terry DeFreitas appeared on Global News Edmonton to discuss the impact of a rare, but serious, torn achilles tendon injury. <https://globalnews.ca/video/4390666/oilers-defencemans-injury-has-edmontonians-talking>

Andrea Gruneir was interviewed by Global News on September 24, 2018 regarding the published study titled [Care setting and 30-day hospital readmissions among older adults: a population-based cohort study](#). Dr. Brian Goldman also noted the study on his CBC blog in a post titled The Trouble with Hospitalized Seniors.

Folio did a piece about a study published by the Division of Care of the Elderly about [older adults being overprescribed sedatives](#).

Bonnie Dobbs, MARD Director, was mentioned in a CBC article about the [need for improvements to Disabled Adult Transit Service \(DATS\)](#).

[VUE Magazine interviewed Jean Triscott, Bonnie Dobbs and other U of A researchers regarding the overprescribing of benzodiazepines.](#)

Folio spoke with Andrea Gruneir about the [published study](#) suggesting the rates of [older adults being readmitted to hospital shortly following discharge are too high](#).

Mike Allan is quoted in the Folio article [CBD in Cannabis no panacea for what ails us, say U of A experts](#)

Neil Bell was quoted in Your Health Questions [article about annual checkups](#) in [Good Times](#), a Canadian magazine for retirees.

Dr. Lillian Au, director of the department's undergraduate education program, [was featured in April 2019's Spotlight on Clinical Education on the Faculty of Medicine & Dentistry's website](#).

Dr. Andrew Cave and research partner Chandu Sadasivan's study on soccer coach's awareness of asthma has been covered by [Folio](#) as well as [Global News Edmonton's Health Matters](#).

Family Medicine graduate Stephanie Liu unveiled her evidence-based medicine blog for mothers, [Life of Dr. Mom](#). [Folio interviewed her about the blog](#). Lui's article [Breastfeeding struggles linked to postpartum depression in mothers](#) was published by The Conversation.

The work of Dr. Jasneet Parmar and Lesley Charles in the development of the Decision-Making Capacity Toolkit was featured in the Folio article [New Toolkit Guides Health-care Professionals to Assess Dementia in a New Way](#).

Dr. Guy Blais, Clinical Professor with DoFM, [visited the Ryan Jespersen Show along with some of his colleagues to talk about what World Family Doctor Day means to him](#) and the evolution of family medicine to team-based practice, continuity of care and the value and importance of a collaborative environment to provide the best healthcare.

[Canadian Family Physician was nominated for a 2019 National Magazine Award for the article series 'Prevention in Practice'](#). Faculty members Neil Bell and Olga Szafran contributed to some of the articles in this series.

If you would like to stay up-to-date on Department of Family Medicine news throughout the year, please visit our news page at ualberta.ca/family-medicine

Community Support, Awards & Recognition

Scott McLeod Fund

The Dr. Scott H. McLeod Family Medicine Memorial Fund is an endowment held by the University Hospital Foundation. A graduate of University of Alberta and McGill University, Dr. Scott McLeod practiced in Nova Scotia, Saskatchewan and Alberta. Interest from the fund is used by Department of Family Medicine primarily for, but not limited to, initiatives contributing to “effective communication in medical practice”.

During the 2018-2019 academic year, this fund supported physician learning opportunities for residents, faculty and clinic preceptors.

The Frederick Brown Fund

The Frederick Brown Fund is used in the area of education in palliative care. With the support of this fund, the department has been able to create the Care of the Elderly Education and Palliative Care Coordinator position. This position provides administration of education at the Glenrose Rehabilitation Hospital and coordinates palliative care medicine within the Department of Family Medicine.

The Department of Family Medicine would like to acknowledge and thank the following individuals and organizations for their continued support of the department.

Patricia Anne Peat Award

The 2018-2019 recipient was Tanya Schuman

The Patricia Ann Peat Residency & Student Family Medicine Enhancement Fund in the University of Alberta, Faculty of Medicine and Dentistry, was established to assist the department in providing exciting and personally enriching experiences in the discipline of family medicine and primary care family medicine research, and all residents registered in the first two years of the Family Medicine Residency Program of the Department of Family Medicine, Faculty of Medicine and Dentistry, University of Alberta are eligible to apply.

Lionel A. Ramsey Memorial Award

The 2018-2019 recipients were MacKenzie Crawford from Grande Prairie and Kristin Burles from Red Deer.

The Lionel A. Ramsey Memorial Award honours the memory of Dr. Lionel Ramsey, a U of A graduate and a rural physician. Through the fund, an annual award of \$500 is provided to two first-year residents chosen by the residents in the Rural Alberta North (RAN) program who have made the greatest contributions to helping other residents in the RAN program.

Dr. Joe Tilley & Allin Clinic Award

The 2018-2019 recipient was Derek Chan

This award is given to a resident in the second year of the Family Medicine Postgraduate Medical Education (PGME) program. Selection is based on demonstrated scholarly excellence, mentorship abilities and passion for family medicine.

The Westview Physician Collaborative Awards

The Westview Physicians Collaborative offers five awards annually, as follows:

The WPC FM Resident Research Award recognizes a resident who embraces the principles of evidence-based practice, contributes to clinical knowledge base through research, and had developed a research proposal or has completed a research study that shows validity, innovation, and originality.

The WPC FM Resident Clinical Excellence Award recognizes a resident who has demonstrated dedication to and excellence in the practice of family medicine, evidence-based clinical knowledge, excellence in teaching, professionalism and integrity.

The WPC FM Resident Leadership Award recognizes a resident who has played a significant leadership role in both clinical and extracurricular activities and in so

doing has had a demonstrable impact on improving the quality of resident experience within and beyond the residency program, furthering the Family Medicine Residency Program (FMRP) education mission, and advocating on behalf of the specialty of family medicine. Such work could include, but is not limited to, organizing social events, educational forums, workshops and lectures and participation in leadership and mentoring programs led by the FMRP and/or the residents' association. The resident must be shown as a role model and contribute to the well-being of fellow residents.

The WPC Award recipients in 2018-2019 were:

Clinical Excellence: Kristina Quan (PGY1): and Norah McKay (PGY2)

Resident Leadership: Avery Wynick (PGY1) and Vanessa Rogers (PGY2)

Resident Research: **Derek Chan**

Northern Alberta Academic Family Physicians (NAAFP)

The Northern Alberta Academic Family Physicians Fund was established by the Northern Alberta Academic Family Physicians group to support initiatives promoting the advancement of family medicine. This fund supports smaller-scale research and projects that often establish the foundation for large and impactful initiatives that have the potential to significantly contribute to the transformation of primary care.

NAAFP has also established the Academic Enhancement Fund (AEF) to support academic enhancement initiatives such as research and personnel development activities, educational infrastructure, awarding prizes or any other educational, research and/or administrative activities which the NAAFP Fund Committee deems advisable for the general educational and/or research purposes of the department.

Bollozos Family Award in Medicine

The Bollozos Family award in Medicine is awarded annually to a resident physician who is registered with the Alberta International Medical Graduate program with satisfactory academic standing in the program of public health or family medicine. Selection is based on academic standing. Preference given to a resident physician with demonstrated volunteer experience in an underserved community.

2019 Recipients: David Pinzon & Renata Mishra

A number of department faculty and residents received recognition for their contributions to family medicine and medical education.

DEPARTMENT AWARDS

The 2018 Family Medicine Award recipients

Department of Family Medicine Resident Leadership Award: **Kristen Timm**

Department of Family Medicine Resident Peer Award: **Chelsea Smithbower & Vanessa DeMelo**

Department of Family Medicine Research Award: **Derek Chan**

Teaching Excellence Awards

Doug Klein (MacEwan University Health Centre)

Eric Tredget (MacEwan University Health Centre)

Kimberly Anderson-Hill (Synergy Women's Wellness Centre)

Kimberly Loeffler (Grey Nuns Family Medicine Centre)

Matt Unger (Lacombe Hospital and Care Centre)

Robert Perlau (Red Deer Regional Hospital)

FACULTY & UNIVERSITY AWARDS

Excellence in Teaching Award for Undergraduate Medical Education – Geriatrics

Hubert Kammerer received the Excellence in Teaching Award for Undergraduate Medical Education – Geriatrics. This award recognizes outstanding teaching and mentoring, as selected by undergraduate medical students from the University of Alberta.

MEDICAL STUDENT ASSOCIATION AWARDS

Four Department of Family Medicine preceptors were recognized with Teaching Awards from the university's Medical Student Association (MSA):

Roshan Abraham was recognized as Year 1 Physical Exam Preceptor of the Year award

Lillian Au was recognized with the Year 2 Physical Exam Preceptor Excellence award

Trevor Day and Andries Esterhuizen were both recognized with Year 3 Preceptor Excellence awards

PROVINCIAL AWARDS

Mike Allan Named Alberta's Family Physician of the Year

Dr. Mike Allan received Reg L. Perkins Family Physician of the Year Award for Alberta in recognition of excellent patient care and contributions to their community's health and well-being.

Kristen Timm and Vanessa Rogers Named Resident Physicians of the Month

Kristen Timm and Vanessa Rogers were named as Resident Physicians of the Month by the Professional Association of Resident Physicians of Alberta (PARA). This recognition is a result of their advocacy for funding to offer an Advances in Labour and Risk Management (ALARM) course to residents, resulting in the course being organized for all future residents in the University of Alberta family Medicine program.

Chris Koo and Lucy Wang Recognized by ACFP

Dr. Chris Koo received the Alberta College of Family Physicians (ACFP) Family Medicine Resident Leadership Award
Lucy Wang, medical student, received the ACFP Rising Star Student Leadership Award.

NATIONAL AWARDS

College of Family Physicians of Canada Medical Student Awards

Medical Student Leadership: **Finola Hackett**

Medical Student Scholar: **Sharon Liu**

College of Family Physicians of Canada Family Medicine Resident Awards

Resident Leadership: **Derek Chan**

Scholarly Achievement: **Derek Chan**

Resident Research: **Derek Chan**

Seniors Community Hub inamed Canada's Frailty Innovation of the Year

Drs Marjan Abassi and Sheny Kherra, co-creators of the Seniors Community Hub, received the first ever Frailty Innovation of the Year Award from the Canadian Frailty Network (CFN).

Michel Donoff Receives Ian McWhinney Award

Michel Donoff received the 2018 Ian McWhinney Award Family Medicine Education Award from the College of Family Physicians of Canada. Dr. Donoff is the second recipient from this department to receive this award, which recognizes contributions to family medicine education that positively impact family medicine education in Canada. Dr. Ian McWhinney was the first professor and chair of a department of family medicine in Canada, and is recognized as the intellectual force that made family medicine what it is in Canada today. Our department is very proud to have had two faculty members from this department, Dr. Donoff as well as 2016 recipient Dr. Paul Humphries, receive this award.

INTERNATIONAL AWARDS

North American Primary Care Research Group (NAPCRG) Student Family Medicine Research Award

Sharon Liu was the recipient for the 2018-2019 academic year.

AAAPC/NAPCRG Travel Prize

Scott Garrison received the 2018 North American Primary Care Research Group (NAPCRG) Conference outstanding oral presentation (describing the INRange RCT) award for repeat oral plenary awards presentation at the Australasian Association for Academic Primary Care's (AAAPC) summer 2019 meeting in Adelaide, Australia.

COMMUNITY RECOGNITION

Grey Nuns Medical Staff Association Recognition for Faculty and Residents

The annual Grey Nuns Medical Staff Association 2019 Spring Banquet was held Friday, May 24, 2019. The department was well-represented by presenters as well as recipients. Congratulations to the following award recipients from the Department of Family Medicine:

Cardiology Resident of the Year: **Dr. Eniola Salami**

Family Medicine & PCHT Residents of the Year Awards (presented by Lillian Au and T. Tran): **Jillian Rogers** (family medicine); **Eniola Salami** (PCHT team); **Amanda Randolph** (PCHT team); **Brock Randolph** (PCHT team).

T.R. Clarke Award: **Jillian Rogers**, Obstetrics & Gynecology

Palliative Care Resident of the Year Award: **Kamal Touisse**

Palliative Care Geriatric Resident and Student of the Year Awards (presented by Karenn Chan): **Vanessa DeMelo**

Resident of the Year Excellence in Teaching Award (presented by J Wismark): **Selma Murji**

Misericordia Community Hospital Medical Staff Association Award

Dr. Kendra Houston was chosen as Trainee of the Year by the Misericordia Community Hospital, Department of Emergency Medicine.



(L-R) Grey Nuns faculty, staff and residents: Mary Wittenberg, Denise Campbell-Scherer, Karenn Chan, Vanessa DeMelo, Eniola Salami, Lillian Au, Kamal Touisse, Irene Colliton, Jillian Rogers, Selma Murji, Tanya Tran, Amanda Randolph, Brock Randolph, Bijan Pezeshki



Edmonton Zone Medical Staff Association (EZMSA) Innovator of the Year Award

Sheny Khera (third from left) and Marjan Abbasi (third from right) received the Innovators of the Year Award from the Edmonton Zone Medical Staff Association (EZMSA) for the Seniors Community Hub project.

Research

The Department of Family Medicine Research Program experienced considerable growth, and implemented a number of new initiatives in the 2018-2019 academic year.

In June of 2018, the first monthly Research Newsletter was published. The newsletter contains content of specific interest to the department's research faculty and staff. Since its launch, the newsletter has had consistently good readership. The Research Scholarship Stream (RSS) option was introduced during the CaRMs interview process in January of 2019. The RSS will be available to incoming family medicine residents beginning with the 2019-2020 resident academic year and will provide residents the opportunity to develop research and scholarship skills in family medicine and will be integrated into the family medicine curriculum over the two years of the residency program.

In early July 2018, the Canadian Partnership Against Cancer announced \$2.98 million in funding to scale and spread an effective approach to prevention and screening in primary care through the BETTER Prevention Practitioner Training Institute. The department's research director Donna Manca will serve as the medical director for the Western branch of this institute.

SPIDER-NET, a Structured Process Informed by Data, Evidence and Research-Network, is a national CIHR funded research and quality improvement project to support primary care practices in optimizing the management of patients with complex needs through practice improvement and learning collaboratives.

[BedMed, the High Blood Pressure Study](#) continued recruiting, and also expanded its geographic reach, becoming active in British Columbia and Manitoba.

Faculty members Neil Drummond, PhD and Dr. Donna Manca are both working with [Diabetes Action Canada \(DAC\)](#), a pan-Canadian research organization dedicated to improving the lives of people living with diabetes. Drummond and Manca are providing support in data collection and expertise to develop a DAC National diabetes repository.

The research program initiated Research Development Rounds, a series of informal sessions for researchers to present their ideas for research studies that are in the planning and/or proposal stages, including grant applications. The goal is to solicit input from other researchers in order to refine or further develop any aspect of the research study, including the research question, study design and methods, and/or dissemination strategies. Research topics discussed have included resident motivation in clinical settings and exams, cardiovascular risk factors for dementia and exercise records in Canadian family physician EMRs. These development rounds are being very well-received.

More CHANGE came about for Doug Klein's research team. The [CHANGE Adventure Camp](#) expanded locations within Edmonton and neighboring communities, and the [CHANGE Clinic](#) opened in Memorial Composite High School in Stony Plain.

[Female Doctors in Canada: Experience and Culture](#) was published in February of 2019. This book gives insight into the history and experiences of female medical practitioners in Canada, and was co-edited by faculty members Earle Waugh, Shelley Ross and Shirley Schipper.

The [Decision-Making Capacity Assessment Toolkit](#), developed by the Covenant Health's Network of Excellence in Seniors' Health and Wellness, was launched in February of 2018. Faculty members Jasneet Parmar and Lesley Charles had significant involvement in the research and resource identification used in the development of this toolkit.

The [Seniors Community Hub](#), a community-based program to help older adult patients live healthy lives and avoid frailty, is now being offered through the Edmonton Oliver PCN and is receiving positive response. This award-winning endeavor began as a research project led by faculty members Marjan Abassi and Sheny Khera.

[Asthma and youth soccer: an investigation into the level of asthma awareness and training among youth soccer coaches](#), a study by faculty member Andrew Cave and summer research student Chandu Sadasivan, was published. The second stage of this research project, the development of the world's first Asthma Management Guide for Soccer Coaches, is now available to all Edmonton Minor Soccer Association coaches.

Research Areas

There are several distinct areas of research in the Department of Family Medicine Research Program. These areas are:

Care of the Elderly Research

The research areas of the faculty members include the following:

1. Health Service Delivery for Seniors
 - Seniors Community Hub (Seniors care in primary care)
 - Geriatric Evaluation and Management in the Emergency Department
 - Geriatric Home Assessments and Interventions
2. Transportation Mobility of Seniors
3. Stigma and Dementia; Identification of Mental Health Disorders in Seniors
4. Core Competencies in the Care of the Elderly
5. Decision-Making Capacity Assessment
6. Support for caregivers
7. Large Data-Set Research on Dementia and Acute Care

The Division of Care of the Elderly provides research support to its residents. Residents perform chart reviews, quality improvement projects, and systematic reviews on a variety of clinical interests including polypharmacy, hospital-acquired pneumonia, inappropriate urinary catheterization, and dementia management.

Centre for Health and Culture

The Centre for Health and Culture (CHC) is a nonprofit organization established at the University of Alberta in 1984 to study multicultural health issues.

The Centre's goals are:

- to research the relationship between culture and medicine,
- to explore cultural diversity as it engages the Canadian health care system, and
- to provide training for professionals in cultural competence and intercultural understanding.

Clinical Research

Many researchers in the department have a clinical research focus. Clinical research in family medicine is typically focused on new treatment regimens, prevention techniques, or diagnosis of diseases. A few examples of clinical research being conducted in the department are:

- Pragmatic Trials Collaborative
- BETTER Program
- EnACt



Epidemiology and Population Health Research

Population health research looks at health outcomes of a group of individuals. Research in this area examines the effectiveness of primary health care and primary health care interventions and its impact on the health of individuals or populations as well as impacts on health systems.



Evidence-based Medicine

EBM education supported by PEER focuses on providing residents with the understanding and skills to formulate clinical questions, determine the best resources to answer questions, access resources, quickly appraise evidence available and put evidence into practice. As part of their learning, all residents take part in a 2-day Family Medicine Evidence Based Workshop and a Brief Evidence-based Assessment of Research (BEARS) activity.

Medically at-Risk Drivers Centre

The vision of the Medically At-risk Driver (MARD) Centre is transportation safety and mobility for all Albertans. The mission of the MARD Centre is to enhance the safety and mobility of medically at-risk drivers. The centre is committed to continue to conduct leading edge research that will enhance the safety and mobility of individuals who no longer drive due to illness, disability, or age-related changes and to disseminate the findings from research to government and community-based partners.



Medical Education

The department strives to improve the educational process of medical students and family medicine residents by undertaking scholarly inquiry related to education and by promoting the dissemination and practical application of research results.

Research on Distinct Populations

Currently, research activities on distinct populations are in the areas of:

- Medically At-Risk Drivers
- Centre for Health and Culture
- Cultural/Ethnic Groups

Translational Health Research

Translational health research involves research that moves from benchside to bedside and community. Translational health research has a focus on improving both health outcomes, as well as health system outcomes.

Tools Developed from Research

Decision-Making Capacity Assessment Toolkit

[The Decision-Making Capacity Assessment Model \(DMCA\) Toolkit](#), spearheaded by DoFM faculty member Jasneet Parmar, was launched on February 25, 2019. The Toolkit is a practical and evidence-informed resource developed based on 12 years of work within Alberta's healthcare system. The initiative was a partnership between Covenant Health, Alberta Health Services and the University of Alberta. The Toolkit aims to offer information and resources related to Decision-Making Capacity Assessment (DMCA), best practices, capacity-building process and the implementation of the DMCA Model.

Publication of Female Doctors in Canada

[Female Doctors in Canada: Experience and Culture](#), co-edited by DoFM faculty members Shelley Ross, Shirley Schipper and Earle Waugh, was published by the University of Toronto Press. The book offers perspectives on the many facets and experiences of women working in medicine.

The Electronic Medical Procedure Reporting Systems (EMPRSS)

Dr. Michael Kolber and Nicole Olivier have received a Spinoff Award from TEC Edmonton for the creation of [EMPRSS: the Electronic Medical Procedure Reporting Systems](#). Empress provides a data collection system as well as services for physicians to receive quality metric reports for medical procedures.

Pharmaceutical Price Document

[The 2019 Price Comparison of Commonly Prescribed Pharmaceuticals in Alberta](#) is available annually from the Alberta College of Family Physicians. The document is co-edited by Michael Kolber, a member of the evidence-based medicine research team.

Education

The 2018-2019 academic year began with a number of staffing changes for the undergraduate program, resulting in the re-building of a strong team. Drs. Kiran Dhillon, Kelly MacGregor, Sanja Kostov, and Louanne Keenan, PhD, joined the team, along with new Program Coordinator Bora Kim and Program Administrator Deepika Jadhav.

Undergraduate faculty played a key role in the creation and implementation of integrative lectures in the foundations block at Undergraduate Medical Education (UME) in a blended learning format. Family medicine electives were revamped by assigning preceptors to student requests (to increase the chances of students being successful with getting family medicine electives) with the intention of showcasing our excellent program.

The academic year for the postgraduate program began with the 2nd Indigenous Health Academic Day for residents. Indigenous Health Day offers family medicine residents that opportunity to learn about the Indigenous culture and history, and the importance of considering cultural and spiritual practices when treating Indigenous patients. The event, which was spearheaded and co-organized by DoFM clinical lecturer Cara Bablitz, is held every two years in order for all family medicine residents to have the opportunity to participate in one of their two years of residency. The August 2018 session was held at Poundmaker's Lodge Treatment Centre and was partnership between the Lodge, Alberta Health Services Indigenous Wellness Program, the University of Alberta Indigenous Wellness Program and the Department of Family Medicine.

Development of the Behavioural Medicine (BMED) course was completed to be implemented into the curriculum in fall 2019. The course was based on the previously-offered Doctor-Patient Relationship course using feedback from residents, family medicine physicians and recent family medicine graduates. The BMED course teaches communication skills for dealing with patients as well as skills to support physician and resident wellness.

The annual Wilderness Medicine Retreat continued to be in high demand, with 45 residents in attendance.

The Family Medicine Residents Association was very active in the 2018-2019 academic year, with members being instrumental in introducing a mandatory Advances in Labour and Risk Management (ALARM) course, organizing a Learning Essential Approaches to Palliative Care (LEAP) course and initiating a resident wellness group specific to family medicine residents. Residents in Red Deer and Grande Prairie shared their experiences in working in rural medicine for the September 2018 Family Medicine Grand Rounds, prompting great discussion and appreciation of the additional challenges experienced by family physicians in rural practice.

The annual FREzER event was held March 22 & 23, 2019. This annual retreat for faculty and residents provides a forum for learning and networking while respecting the unique educational needs of both faculty and residents. *Engaging People in Quality Improvement and Strategies for the Best Conference Experience* were presented by Mirella Chiodo and Sudha Koppula and Oksana Babenko respectively. The conference's joint faculty-resident workshop was *Sexual Boundaries in Medical Practice – Do's and Don'ts*, presented by lawyer Rose Carter and Dr. John Ritchie from the College of Physicians and Surgeons of Alberta. The session offered an important and eye-opening discussion about boundary breaches, their consequences and the effect they can have on a physician's practice.

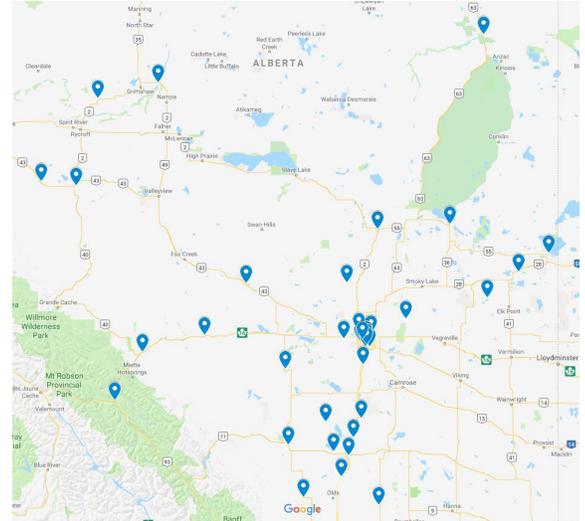
The department's Enhanced Skills Programs - family medicine anesthesiology, care of the elderly, sport and exercise medicine, palliative care, occupational medicine and family medicine-emergency medicine - continued to be very popular. Dr. Angela Naismith announced her departure from the position as family medicine-emergency medicine program coordinator, and her fellow instructor Dr. Navdeep Dhaliwal prepared to assume the role of FM-EM program coordinator. Thank you to Angela for her years of leadership in this role, and welcome to Navdeep.

2018-2019 Learning Sites

There are hundreds of medical professionals throughout Alberta who open their clinic doors to family medicine residents in rotations and medical students in family medicine clerkship clinical education opportunities so they can learn about the provision of high-quality patient care for patients. Our thanks to the following learning sites and communities for their support of medical education in Alberta:

EDMONTON AREA SITES

Boyle McCauley Health Centre
Ermineskin
Glenora
Grandin Clinic
Justik Medical Clinic
Kaye Family Medicine Clinic
LA Medical
Lynnwood Family Physicians
MacEwan University Health Centre
Misericordia Family Medicine Clinic
Northeast Community Health Centre, Family Medicine Clinic
Royal Alexandra Family Medicine Centre
Shifa Medical Clinic
Westview Physicians Collaborative



RURAL COMMUNITIES WITH LEARNING SITES

Athabasca, Banff, Barrhead, Beaverlodge, Blairmore, Bonnyville, Camrose, Canmore, Cold Lake, Drayton Valley, Edson, Fairview, Grand Cache, High Level, High Prairie, Hinton, Innisfail, Jasper, Lac La Biche, Lacombe, Lamont, Lethbridge, Northern Lights Regional Health Centre (Fort McMurray), Peace River, Ponoka, Provost, Rimbey, Rocky Mountain House, Slave Lake, St. Paul, Sylvan Lake, Sundre, Swan Hills, Taber, Three Hills, Queen Elizabeth II Hospital (Grande Prairie), Red Deer Regional Hospital Centre, Vermillion, Viking, Wainwright, Westlock, Wetaskiwin, Whitecourt, and Whitehorse in the Yukon Territory.

Preceptor Recognition



LCE-FM preceptor of the year Maria Marcu (l) with David Pickle (r), family medicine LCE coordinator.

Every year, the department recognizes preceptors and teaching sites that offer an exceptional family medicine clerkship experience for medical students. The preceptors and site recognized for the 2017-2018 academic year are:

The Year 1 Longitudinal Clinical Experience in Family Medicine (LCE-FM)
Preceptor of the Year Award for Teaching Excellence: **Dr. Jason Coughlin**

The Year 2 Longitudinal Clinical Experience in Family Medicine (LCE-FM)
Preceptor of the Year Award for Teaching Excellence: **Dr. Maria Marcu**

Health Services

On July 3, 2018 the MacEwan University Health Centre (MUHC) opened its doors.

A collaboration between the Department of Family Medicine University of Alberta and MacEwan University has resulted in this leading-edge facility. MUHC provides comprehensive health services with a focus on access. Its practice population is derived from over 6,000 people who attended the Royal Alexandra Family Medicine Centre (RAFMC) and the new practice population of students and staff of MacEwan University.

The grand opening was held on Thursday September 27 and was attended by representatives from the University of Alberta, MacEwan University and the City of Edmonton. The MacEwan University Health Centre was built as a result of consultations with the Edmonton Oliver Primary Care Network (EOPCN) and an interest in changing the conventional approach to university-based student health services. MacEwan contacted the Royal Alexandra Family Medicine Center to initiate discussions as to how to make this happen. The RAFMC was established in 1975 as the University of Alberta's primary academic teaching site. It was housed in the nurses' residence of the Community Services Building at the Royal Alexandra campus. The Royal Alexandra Family Medicine Centre has had a long history of innovation in medical education and training for all health professionals at both the undergraduate and post graduate levels.

The MacEwan University Health Center was built specifically to function both physically as well as operationally as a patient-centered medical home. The Patient's Centred Medical Home (PCMH) concept was developed by the American academy of Pediatrics. Canadian refinements to the concept have been supported provincially and nationally by the College of Family Physicians of Canada.

Planners investigated some of the premier patient-centered medical homes in North America and as a result the physical layout of the MacEwan University Health Center is what you see today. It is designed with both patient-centeredness in mind plus maximizing the workflow, efficiencies and satisfaction of health professionals by co-locating staff and providers. The centre serves as an exemplary education, training and service centre for all primary care team members the public. Plans to incorporate the MacEwan University Nursing Program and the Medical Office Assistant Administration program are proceeding.

MUHC has become a designated Rainbow Clinic, providing health services to a significant portion of the LGBTQ community. Respect and understanding is key to other marginalized communities within Edmonton.

Our first year has been characterized by enthusiasm and commitment to changing the way a conventional health services practice functions. Same-day access, telephone visits, nurse run clinics, electronic prescription renewal are just part of the processes. Team huddles at the beginning of a clinical session documents patient expectations of the visit as well as pro-actively anticipating health promotion and prevention initiatives that can be pulled into the visit. Respect of patient time is of paramount importance: doing as much as can be done at the visit rather than putting off to another time lessens the likelihood of having people come back again and again and again.

The first major evaluation will be occurring soon. Guided by our board, the facility has adopted a quality improvement and significant event analysis ethic.

Quality Improvement and Patient Safety in Primary care continues to be a priority with four workshops held for first year residents, urban and rural, on Quality and Safety in Family Practice as well as two case-based Grand Rounds on Quality and Safety. The team also had the opportunity to hold a workshop in Seoul Korea at the 2018 WONCA conference on Quality and Safety in Family Practice; The Essentials of Significant Events and Their Analysis, which was well received.

The opportunity to learn from our Royal College colleagues by attending the ASPIRE (Advancing Safety for Patients in Residency Education) presented and was completed by Mirella Chiodo. The course offered valuable insight into not only teaching Quality Improvement and Patient Safety but also the importance of direct observations and other methods of evaluating resident competency in quality improvement and patient safety.

Faculty & Staff Listing

Professor and Chair

Lee Green

Administrative Officer

Mark Perreault

Staff

Karen Adam

Carolina Aguilar

Iptisam Alexanders

Tanya Barber

Kaylin Bechard

Leslie Bortolotto

Charlene Carver

Mirella Chiodo

Teresa Chiodo

Karen Crawford

Jeff Cheng

Kim Duerkson

Danica Erickson

Lisa Felicitas

Caitlin Findley

Brian Forst

Chun Yan Goh

Briana Gomes

Judy Grace

Kerri Hample

Karianne Hanak

Bernadette Harvey

Melanie Heatherington

Serena Humphries

Bora Kim

Joanne Lafrance

Leslie Lefebvre

Peggy Lewis

Cliff Lindeman

Kari Rockall

Jane Schotz

Erika Siroski

Karen Moniz

Grace Moe

Madiha Mueen

Nicole Olivier

Dawn Osland

Carry Perrier

Danielle Perry

Ann Pham

Jamil Ramji

Nicolette Sopcak

Amy Swearingen

Matt Taylor

Peter Tian

Joey Ton

Jaqueline Torti

Mary Wittenberg

Professors

Michael Allan

Neil Bell

Denise Campbell-Scherer

Andrew Cave

Bonnie Dobbs

Michel Donoff

Neil Drummond

Paul Humphries

Michael Kolber

Jill Konkin

Constance Lebrun

Donna Manca

David Moores

Jean Triscott

Associate Professors

Hoan Linh Banh

Fraser Brenneis

Lesley Charles

Scott Garrison

Fred Janke

Louanne Keenan

Doug Klein

Sudha Koppula

Christina Korownyk

Darren Nichols

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Shelley Ross

Ginetta Salvalaggio

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Lisa Steblecki

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Karenn Chan

John Chmelicek

Terry DeFreitas

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William Flexer

Samantha Horvey

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David Pickle

Clinic & Community Site Directors

Marco Mannarino

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Samuel Lou

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DIVISION of CARE of the ELDERLY

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Professor

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Karenn Chan

Andrea Gruneir

Associate Professor

Jasneet Parmar

Clinical Professor

Harry Zirk

Associate Clinical Professors

Marjan Abbasi

Paul Kivi

Lai M Ma

Martin B Moran

The Stories of Us

Every year is a unique year for the Department of Family Medicine. The following stories capture just a few of the many activities that took place in the 2018-2019 academic year involving faculty, staff, preceptors, residents and students from the department.



Researchers Use Data to Identify Service Gaps for Older Adults with Dementia

Researchers are linking health care data to understand the health care needs of older adults with dementia

It is well known that Alberta's aging population is creating challenges for the health care system. People living with dementia often face special challenges to receiving the care they need within the communities where they live. Dr. Andrea Gruneir is working with a team of researchers to use health care data in order to understand health care challenges facing this population.

Gruneir, an epidemiologist and faculty member with the Department of Family Medicine, researches older adults with vulnerabilities and their interactions within the health-care system. She is interested in examining strategies to prepare the health system, particularly community-based and long-term care services, for the aging population. Much of her work focuses on potentially avoidable acute care use, and finding ways to minimize this use. "This is not about people making an inappropriate choice to go to the emergency department." Gruneir stresses "It's about the system being able to provide the services they need outside of that setting.

Gruneir is leading a study in collaboration with researchers from the Canadian Primary Care Sentinel Surveillance Network (CPCSSN) and Alberta Health Services (AHS) that will identify healthcare transition patterns of people in the community living with dementia. "We are interested in dementia because it is a particular challenge to the health care system and to the informal care system. As people's needs change they require a lot more supportive services which can be kind of patchy for most people so they rely quite heavily on friends and family for care. However, that is not a great solution without supports for those individuals." Gruneir explains.

The study began a little over two years ago, with considerable time and attention given to gaining approval to link the two sets of data required for this research: administrative data from AHS and CPCSSN data. The AHS administrative data allows the researchers to identify each time an individual comes into contact with the provincially funded health care system, whether it be the emergency room or the hospital, how long they were in the hospital and what happened. The data from CPSCCN will provide information about each person's chronic conditions, especially dementia, which can be more challenging to identify in administrative data alone. This project was one of the initial efforts in the province to link CPSSCN and AHS data for research purposes, contributing to refining the process for future research endeavors.

With permission to link the data received, the team will now begin to examine the movements, known as transitions, of a 550-person cohort over a two-year period. They will

do this by reconstructing the movements of the individuals in the cohort in chronological order, including various risk factors. The linked data will also shed light on when these same individuals access the continuing care system. Transitions are stressful, for those undergoing the change as well as their family members. This is often where people fall through the cracks, so fewer transitions are better for patients. Gruneir wants to understand how frequently these transitions occur and what precipitates them. This is especially important because people with dementia who end up in hospital often have poor outcomes.

Working with secondary data means a lot of work in managing the analysis of the data, which will include tracing how many times each individual in the cohort visits an emergency department and what occurred after that, including hospital admissions, the duration they spent in hospital, and why they were there. Another potentially useful piece of information that could be uncovered through analysis of the data is whether any of the individuals in the cohort were designated as an alternative level of care patient. Alternative level of care (ALC) patients are people who end up in hospital although they no longer require acute care but they can't be discharged because an appropriate place to send them is not available or does not exist. So they end up in the hospital beds, not getting the level of care they would get as an acute care patient. The vast majority of people with the ALC designation are people with dementia waiting for some kind of continuing care service. This is a big problem for those individuals as well as for the system.

This use of data will not only make a difference to older adults with dementia, but will also set an example of how data from two very different organizations can be combined to improve health care for Albertans.

The research team members are Andrea Gruneir, PhD (PI); Neil Drummond, PhD; Bonnie Dobbs, PhD; Dr. Donna Manca; Dr. Adrian Wagg, Tyler Williamson (University of Calgary and CPSCCN), AHS statistician Jeff Backal and AHS analyst Erik Younsen.

Facing Obesity: Adapting the Collaborative Deliberation Model to Deal with a Complex Long-term Problem

Researchers enhance a shared decision making theoretical model based on personalization.

Clinical interventions for individuals living with obesity have traditionally focused on scientific measurements: numbers on a scale, inches on a tape and calories in and out. However, a team of researchers in the Department of Family Medicine at the University of Alberta, under Dr. Denise Campbell-Scherer, are investigating the potential of a communication model for managing obesity that shifts the focus from numbers on scale to supporting people's whole-person health. Central to the approach is listening to and working with the patient's story: "The stories we tell ourselves about ourselves move us to act. Changing the story actually opens up possibilities to act differently. It opens up options for people" explains researcher Thea Luig, a medical anthropologist with the 5As Team program "and having options and a direction makes it possible to imagine a future."

Over the past three years Luig has been driving a project to enhance the Collaborative Deliberation model for primary care conversation about obesity. Co-developed by Dr. Glyn Elwyn, director of the Dartmouth Institute for Health Quality and Clinical Practice, Patient Engagement Program, the Collaborative Deliberation model focuses on the interpersonal aspects that affect decision making to improve clinical communication and help providers and patients make decisions collaboratively. Because of this focus the team thought it may be useful to guide conversations on complex diseases, such as obesity, where life context and emotional aspects play an important role in management. They elected to see how the model compared to what patients identified as impactful in clinical visits around assessing obesity and planning care. The research used an explorative and inductive methodology, which allows insights into pathways between communication and impacts and into what was most helpful to the patients in their everyday lives.

There are many misconceptions about obesity that lead to unrealistic expectations and stigma which contribute to a negative self-image for many. One of the more common misconceptions is that "eat less, move more" is a solution in every circumstance, says Melanie Heatherington, the study's coordinator. Other misconceptions include believing all you need to lose weight is discipline and people living with obesity are automatically unhealthy. However, obesity is a chronic disease with complex biopsychosocial drivers and weight is not an indicator of overall health; in fact, weight fluctuation can lead to worsening health status. Despite growing evidence, stigmatizing messages in the media and society as a whole perpetuates blame and shame about eating habits and failed weight loss attempts leading lack of motivation and

hope for improving health in the future.

The original collaborative deliberation model begins with a process of recognizing alternative courses of action. Based on the data, the researchers propose expanding the model, beginning with patients sharing the story of their journey with weight. "We realized that recognizing alternatives is only possible after a conversation that makes sense of the patient's specific situation and individual constellation of challenges and strengths. A lot more comes into play before you can decide on alternatives. A patient's everyday life, their values, their resources, and how they imagine themselves in the world needs to be part of this conversation because this is where those daily decisions about health behaviors happen", Luig explains. After sharing their stories, providers and patients together can identify root causes as well as reframe misconceptions and negative self-views in order to build a new story that makes sense medically and personally. Part of the approach is to highlight strengths and accomplishments in the patient's life to validate the person and support confidence and hope. Having made sense of the past, the conversation can turn to prioritizing ongoing challenges, such as sleep apnea, mental health issues, or medications, and thinking about options for action in the context of the patient's life. From this, patients were able to set goals that align with their priorities and are manageable within their context.

Sometimes the changes the participants made had very little to do with eating and weight loss; they were efforts to improve the health of the whole person. The enriched model for collaborative deliberation for the obesity context was recently published together with Dr. Glyn Elwyn in Patient Education and Counseling.

Bi-directional knowledge transfer was an integral part of the project from the beginning. Providers at the Edmonton Southside Primary Care Network (ESPCN) have been very involved throughout the different stages of the project. Luig presented emerging themes from the study at the ESPCN team meeting for nurses, dietitians, behavioural health



consultants to get feedback. Much of the findings and the proposed approach resonated with these healthcare providers as what they feel is needed in their work with patients. The 5AsT team has also worked with Dr. Guillermina Noël, Human-centred Design Lead with the Physician Learning Program in the Faculty of Medicine & Dentistry, who has co-created tools to assist patients and providers through this process. Once completed, these tools will be published on the website of Obesity Canada. The team has also been in touch with the Multicultural Health Brokers of Edmonton to partner on better understanding the healthcare needs of diverse ethno-cultural and vulnerable populations with obesity and multi-orbidity. The team continues to work on training modules for different kinds of learners, including undergraduate medical students, family medicine residents, practicing physicians, and interdisciplinary healthcare providers. Over the past summer, Heatherington, together with summer students, has developed training materials such as standardized patient cases, a video demonstrating the approach and tools, and a patient experience video. The team has been providing training workshops, which are free for residents, for interdisciplinary providers on the collaborative approach on obesity prevention and management. Please contact mnoakes@ualberta.ca for more information.

Medical Education Research Q & A

On April 13, 2019, department faculty member Shelley Ross, PhD, was named President Elect of the Canadian Association for Medical Education (CAME). CAME's Mission is "to promote, and advance and recognize excellence across the continuum of medical education in Canada." We spoke to Shelley about how she became interested in medical education research, the change she has seen since joining the department, and the future of medical education research in Canada.



How long have you been with the Department?

I started on July 1, 2008 – six weeks after I completed my PhD at the University of Victoria.

How did you come to be interested in medical education research?

I have always enjoyed education – I taught at an alternative high school before I got my Master's degree in

Learning and Development. My experiences working at a self-paced high school gave me a unique perspective during my studies of how people learn. My special area of interest was motivation theories. I studied motivation more intensely during my doctoral studies, particularly the ways in which teaching environments and types of assessments can make people more or less motivated to learn. I was not even aware of medical education research as a specific focus area while I was training – but a position for a Medical Education Researcher was posted in this Department right around the time that I was looking for a faculty position. Dr. Richard Spooner created the position specifically to bring in an education specialist to improve how teaching and assessment were done in family medicine. The position was the first of its kind for family medicine in Canada, and the expectations and goals aligned very well with my training and interests. I was incredibly lucky to be in the right place at the right time, and am eternally grateful to Dr. Spooner for the opportunities that continue to come my way because of this job.

What does medical education research involve?

The short form: I study how we train physicians and work to make it better. For the last ten years, I have brought established motivation and learning theories into every aspect of residency training in our program. In addition to ensuring that our training and assessment are designed using evidence-guided approaches, I am involved in evaluating multiple aspects of our teaching and assessment to make sure that we know what works (and keep doing it), and identify what is not working (and make informed changes to address gaps). I have also done work at the undergraduate level, and I am involved in some national initiatives in continuing medical education. Finally, I am also doing some research that looks at theory development: examining specific aspects of learning in medical education, and how those aspects align or do not align with theories of learning from other areas of education.

Why is your research important to healthcare?

Medical education is crucial to healthcare – clinical knowledge and practice, and patients' needs and expectations, are constantly changing, and medical education needs to change too. The type of practice that our graduates will experience will be very different from that experienced by graduates from 10 or 15 years ago. Patients have access to information that was once available only to experts, and have very different expectations of their care providers. Patients are becoming more interested in being partners in their own healthcare, and medical education needs to prepare future physicians to practice patient-centered, flexible healthcare. Effective medical education should train physicians to be good life-long learners: to have insight into their own strengths and gaps, and to know how to address those gaps. Finally, medical education can teach and model better approaches to healthcare that are more cost-efficient at both the

individual and systems levels while providing for better patient outcomes.

What kind of changes have you seen in the way education is delivered in the time you have been with the department?

I think there has always been excellent teaching in our department. We have so many truly exceptional clinical teachers. Probably the biggest changes have been in how we assess our learners. We have moved away from traditional types of assessments that emphasized medical knowledge to assessment methods that capture all aspects of being a good doctor: communication skills, professionalism, patient-centered care and teamwork. Another change has been that when new ways of teaching or assessing are introduced, they are designed based on theory and a plan for evaluating whether they work is included from the beginning. The importance of medical education research in our department can be seen in the fact that a second medical education researcher was hired a few years ago. Dr. Oksana Babenko has been doing great work, especially her recent research on the importance of addressing physician well-being right from the start of medical school.

How do you hope to see medical education delivery evolve in future?

We are already well on our way to my hopes for the future! Perhaps my biggest hope is that medical education research will be recognized for the crucial role it plays in good clinical practice. One of the toughest parts of my job is finding funds for research projects. There is so much work that we could be doing, but there are limited options for funders who will fund medical education projects. One of my great hopes is that CIHR will create targeted opportunities to support medical education research. There are projects I would love to do that examine long-term outcomes of educational innovations – but that kind of research is expensive to do, as it requires collecting information from clinicians, staff, patients, and health care records. It would be so exciting to be able to say: “When we do this thing in medical education, patients are benefited in these ways in the long term” because that is what the data shows.

Truly, Madly, Definitely

University of Alberta partnership is using machine learning to build a heart failure case definition.

Heart failure is a chronic condition affecting millions of people. While it may not be outwardly apparent, people living with heart failure experience negative impacts to their quality of life, facing increased restrictions to their lifestyle. In an effort to improve the ability to identify heart failure

accurately and manage it effectively, Neil Drummond, PhD, professor and Alberta Health Services Chair in Primary Care Research in the Department of Family Medicine, is working in partnership with researchers from the University of Calgary and the Southern Alberta Primary Care Research Network (SAPReN), to use machine learning to develop a case definition for heart failure.

“Machine learning is an artificial intelligence tool. In the last five years it’s become much more common and in the health data world, very common. What we are doing is pretty close to the cutting edge of where health data is in terms of its development and analysis.” says Drummond. Definitions of disease (“case definitions”) are most useful when they have been validated against an objective, expert judgement as being ‘true’. Validation allows us to estimate how accurate and precise case definitions are. Once established, case definitions can be used by health care and public health researchers to determine the occurrence of a disease within the general population, assisting in the identification of individuals who may be at risk, and those who have the disease in question. Validated case definitions are also useful to study the transition of people from acute care to primary care and back, and inform health care providers and organizations about the appropriate direction of community health resources.

Using machine learning to create a case definition enables the use of many different combinations of variables to best predict ‘caseness’. The development of the heart failure case definition will use 3,000 anonymized patient records from the Canadian Primary Care Sentinel Surveillance Network (CPCSSN). A review of these records is already underway, being completed by two nurses, two family physicians (including one who is also a U of A PhD student), and an epidemiologist. Each of these individuals will be given 600 de-identified charts to review for indicators of heart failure within the billing, diagnostic or encounter codes, referrals or medication tables.

Once the records have been reviewed and the reference set of people with or without heart failure has been identified, every combination of variables in the CPCSSN record is compared using a computer to identify the combination of these variables which best differentiates the cases of heart failure from the non-cases. “The machine can do this work very rapidly and efficiently. To try to do this by hand would take a very long time, or require many people “ explains Drummond.

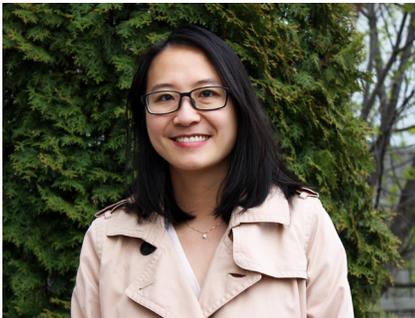
This process is called ‘machine learning’ because the records reviewed by people ‘train’ the computer to recognize a pattern of variables which collectively identify a condition, coming as close as possible to recognizing people who have the condition and those who don’t. Data processing and analysis are being undertaken at the University of Calgary, led by Tyler Williamson, a biostatistician in the Department of Community Health Sciences.

This process is called ‘machine learning’ because the records reviewed by people ‘train’ the computer to recognize a pattern of variables which collectively identify a condition, coming as close as possible to recognizing people who have the condition and those who don’t. Data processing and analysis are being undertaken at the University of Calgary, led by Tyler Williamson, a biostatistician in the Department of Community Health Sciences.

Once the entire process is complete, the heart failure case definition will join the list of existing CPCSSN case definitions, such as those for diabetes and chronic obstructive pulmonary disease (COPD) and may be used for research endeavors such as clinical trials, cohort studies and chronic disease surveillance.

An Unexpected Health-Weight Connection

Family medicine researcher uncovers a possible connection between Body Mass Index and risk of developing dementia.



As a PhD student working in the Department of Family Medicine studying risk factors for the development of dementia, Anh Pham has made an unexpected discovery: could having a high Body

Mass Index (BMI) in late middle-age be a protective factor against dementia? Pham, who is a physician with a masters degree in public health, made this discovery while researching dementia, the suspected culprit behind her late grandmother’s declining health in later life. Following her grandmother’s death, Pham had become interested in dementia, wondering how to improve the quality of life for those affected by the condition.

Pham trained as a physician in Vietnam as a traditional medicine practitioner, but after completing medical school, she realized she didn’t want to work in a hospital environment and opted to travel to the United Kingdom to earn a masters degree in public health. After completing her degree she returned to Vietnam to teach public health, epidemiology and environmental health in medical school for three years. However, throughout her studies and teaching, she never forgot about her passion in gerontology, and when she heard about studies into dementia being conducted by Neil Drummond, PhD, a

faculty member with the Department of Family Medicine and epidemiologist, she decided to contact him. “I asked if

he wanted a PhD student who knows barely anything about dementia but is really eager to learn about it.” she laughs. Drummond was looking for someone to work with data from the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), and considered Pham a good candidate based on her strong academic record, particularly with statistics.

She is now in the final year of her PhD program working with primary care data trying to determine if information available in medical records can identify either protective or risk factors for older adults still living in the community.

Pham began with a review of two different streams of literature: mid-life and later-life risk factors for dementia. The mid-life stream focused on people who have hypertension when they are forty or fifty years old. Based on the literature reviewed, there is a clear correlation between having hypertension in mid-life and an increased risk of developing dementia at a later age. The impact of diabetes in mid-life is similar, which is why it is important for people to stay healthy in their mid-life. What is not as clear in the research was whether or not developing hypertension in later life correlates with an increased risk of developing dementia, because most current research into dementia focuses on genetic links to the development of the disease rather than lifestyle or environmental factors. This is why it is Pham believed it was important to do further research into the topic to see if she could find more evidence.

Following the literature review, Pham began reviewing primary care electronic medical record (EMR) data, looking at 10 cardiovascular risk factors for dementia. She soon realized that EMR data doesn’t currently contain the information she required. Luckily there has been a lot of research on the connection between heart disease and stroke which made it easier for Pham to find data to establish a weight-dementia connection by adjusting her research focus to investigate link between dementia and specific defined diseases in CPCSSN: hypertension, diabetes, obesity and hyperlipidemia. To her surprise she did not find an association between hypertension and diabetes in the development of dementia for people in their late sixties. However, she did find some evidence suggesting people with a higher body mass index (BMI) at about 60 years of age appear to be less likely to subsequently develop dementia.

This research has proven to be challenging for Pham, particularly because BMIs recorded in individuals’ medical records are either lacking or skewed toward obese people. Twenty percent of the records Pham reviewed had only one BMI measurement while half of participants had no BMI or weight and height recorded. Primary care data for people with high BMIs was available, but the percentage of people with low BMIs in medical records did not match the

percentage of underweight people expected to exist within the general population. This suggests the BMIs of underweight people are not being well-recorded. Perhaps

this is because being overweight or obese is associated with being unhealthy, but being underweight has not been commonly seen as problematic. This might be a reason for it not being frequently captured during visits to family physicians.

The most important thing Pham wants family physicians to know and understand is the value of information entered into patient health records. Dementia tends to be diagnosed later in its progression, so she believes more accurate data about weight, height and other measurements like waist circumference in health records could support more and better research, hopefully ultimately providing doctors with additional tools to identify early onset of dementia. A better way to record data may be to always record BMI and pay attention to any fluctuation in weight, where the weight goes up or down. "It's not about the number" says Pham "It's about a change in that number over the year. I would like BMI to be measured and recorded routinely, like blood pressure. It's simple. Why don't we just check it every time?"

Setting a Standard for Exercise and Physical Activity Promotion

Family medicine researcher hopes to inform a foundation for standardized exercise documentation.

The Canadian Society for Exercise Physiology



recommends 150 minutes of moderate-to-vigorous physical activity every week to maintain good health. As well, there is overwhelming evidence to suggest that exercise is effective in preventing and treating many chronic diseases and conditions, which are often managed by family doctors. But Canadian family physicians' knowledge of exercise prescription, their notation of exercise in electronic medical records (EMR), and their

perceptions and management of this aspect of health are not well-known. Cliff Lindeman, a DoFM staff member working with the Alberta Strategy for Patient Oriented Research (SPOR) Primary and Integrated Health Care Innovation Network (PIHCN) and a PhD Student in Behavioural Medicine, is undertaking research in order to present a clearer picture of how exercise is prescribed and tracked by physicians.

Lindeman, who began his career in kinesiology, became interested in this topic when a data manager with the Canadian Primary Care Sentinel Surveillance Network

(CPCSSN) mentioned to him that family physicians' EMR exercise information is extracted by CPCSSN. Lindeman asked for an overview of the 'exercise field' and noticed that it is often grouped with other lifestyle factors such as smoking and sleep information. The exercise-related entries included both exercise and physical activity status, which Lindeman points out are two different things; exercise is a planned and deliberate physical activity to maintain or improve physical fitness while physical activity also includes basic day-to-day movement. The nature of exercise inputs in EMR were found to be primarily open-text, unstructured entries; "The most frequent entries in the risk factor exercise field in Southern Alberta, are short comments including 'no', 'yes', 'walks', and 'walking'." he says. However, these physicians' brief notations did not provide insight into the nature of the questions physicians are asking patients. In order to generate an accurate description of current practice behaviour, Lindeman's research consists of three separate but related research studies: A content analysis of a representative, random sample of inputs in the national CPCSSN dataset (~1.7 million patients) to determine the nature of information extracted from the available data. Some content, such as Subjective Objective Assessment Planning (SOAP) notes in EMRs, contain potentially identifiable information and thus is not extracted for privacy reasons. He is asking a number of questions. "In the information CPCSSN does extract, what do we know about exercise information physician's record and how often are physicians recording this information?" CPCSSN includes data from many EMR templates that differ in both structure and format, so, "Does the quality of care vary based on which EMR individual family physicians choose to use? Do only some EMR have a text box to record patient exercise?"

A scoping review he completed found that it is common for research studies to utilize unstructured or open-text exercise data from family physician EMRs, and that the notation a physician gave advice is noted, but there is often little detail about the nature of that advice and whether follow-up occurred. There was also limited information about whether or not physicians refer to exercise guidelines in related conversations with patients.

His second study will investigate Canadian medical schools' curriculum related to exercise. "A bit to my surprise, I haven't identified any articles or reviews that look at exercise training in medical schools across the country. Many of the existing exercise training interventions for physicians are based on Exercise is Medicine Canada, which is a series of programs and resources. But it appears that medical schools have not imbedded this content into course work. Rather, these programs appear to be 'extra', non-required training". Lindeman will connect with all 17 Canadian medical schools and family medicine residency programs to determine if their curriculum includes exercise guidelines and related strategies for patient communication, the importance of exercise documentation in EMR, and best practices for follow-up. It is important that physicians have the skills to approach the topic of exercise tactfully and then

seek permission from their patients to have the required conversations. Lindeman points to studies that determined physicians who took exercise prescription training reported feeling more confident and knowledgeable about having related conversations with patients; unless medical students and residents have specific interests in this subject, they may not have the required confidence and knowledge.

Lindeman's third study will be a survey of a representative sample of southern Alberta physicians who are CPCSSN sentinels, to identify via Theory of Planned Behaviour social norms, attitudes, and perceived behavioural control in exercise fields in EMR. "By surveying a random set of physicians and then comparing behavioural constructs to what they have recorded about exercise and how they have recorded it, factors that may predict what happens in practice should emerge". This exploration could identify what physicians see as valuable in their patient discussions about physical activity and how this relates to clinical practice.

Lindeman's research will support his PhD dissertation, but he also hopes the findings will start a conversation about physicians' ease in confidently addressing the subjects of exercise and physical activity with patients, with the ultimate goal of decreasing the incidence of preventable chronic illnesses. "Describing the content and location of exercise documentation in EMR as outlined in the three studies is only the first step. The next step is to pattern-match to the national CPCSSN dataset to determine if a 'physical inactivity' case definition can be validated. Ideally physicians could then easily access a report of inactive patients who are not meeting exercise guidelines in order to encourage a meaningful conversation about exercise".

Electronic Medical Procedure Reporting Systems

Successful medical innovations are the culmination of people with passion, hard work and a little bit of good luck. For Dr. Michael Kolber and Nicole Olivier, all of these things combined with a desire to improve service in health care and extensive research experience that led them to the creation of the Electronic Medical Procedure Reporting Systems (EMPRSS). On November 28, 2018 Kolber and Olivier were recognized with a TEC Edmonton Spin-off Achievement Award, joining several other individuals whose research has culminated in the successful creation of a company with the potential to improve quality of life for Albertans.

EMPRSS is a cloud-based, real-time data collection tool able to provide report cards in real time as well as at pre-specified intervals. Kolber states "This tool allows procedural physicians access to quality metrics in reasonable, understandable, meaningful fashion so that they are able to self-reflect for improvement, and

ultimately improved patient care."

The foundation of EMPRSS was actually initiated in Spring of 2015 when Kolber, a family physician and faculty member with the Department of Family Medicine, initiated the Alberta Electronic Endoscopic Reporting (AFPEE) study to measure quality data and demonstrate the proficiency of family physicians to perform endoscopies. AFPEE, which evolved from the previous Alberta Primary Care Endoscopy (APC-Endo) study, expanded on APC-Endo with an increased sample size, a longer timeframe and - arguable most importantly - an electronic data collection tool.

Kolber was able to move the project to the next level when Nicole Olivier, an experienced research assistant with family medicine-based Enhancing Alberta Primary Care Research Networks (EnAct), was assigned the AFPEE project as part of her work. Based on her extensive experience with research project management, Olivier recognized early in her involvement with AFPEE that using a cloud-based data collection tool was the best option. "Throw your data into the cloud and you can have it back right away" she explains. When other physicians began hearing about the electronic data collection tool being used for AFPEE, Kolber and Olivier began receiving inquiries about whether they might benefit from its use as well. EMPRSS is now being used in 14 hospitals by 19 clinicians for over 3000 medical procedures physicians from a variety of in order to build more robust data sets.

APC-Endo and AFPEE were both projects designed to demonstrate that family physicians to deliver safe, high-quality colonoscopies, and therefore decreasing wait times for patients in rural communities to receive this potentially life-saving procedure. The AFPEE study was recently published in Canadian Family Physician, demonstrating that Alberta endoscopists are meeting all of the requirements to provide high-quality endoscopies and meeting all the benchmarks. "EMPRSS melded a whole bunch of quality projects I have been doing for the last 20 years" explains Kolber. "I started off looking at



myself and how I performed as a non-traditional endoscopist. It grew into a thesis project looking at a collective group of Alberta endoscopists - family physician endoscopists and internists specifically - and then it went from paper to electronic and now we have this excellent electronic tool that we can use to capture quality metrics related to medical procedures like colonoscopies in real time.”

Kolber’s interest in improving patient care began during his medical training. As a family medicine resident, he noticed a lot of patients with gastrointestinal concerns waiting a very long time to be seen by a specialist. He had been considering starting a rural practice for some time, and wondered if there would be need to have rural family doctor with additional training in gastrointestinal medicine who could help improve wait time and access to care for rural and remote patients. This led him to take gastrointestinal training at the U of A in the gastroenterology department under the late Dr. Richard Fedoruk.

Nearly nine years ago, Kolber initiated an endoskills course for North American endoscopists and their teams, which is still being offered annually. The course is the result of one of the studies Kolber lead in which he and a research team toured around in different areas collecting data. Those tours identified excellent work that was not being shared. It began as a way for people to get together and share the excellent work. It is for non-traditional endoscopists including family physicians and general surgeons, and more importantly according to Kolber, their nursing team. They all bring great ideas to really improve service to patients.

“I really do think that we have raised the bar collectively with the best ideas and we are very well-supported by really understanding gastroenterologists who understand the breadth of care and geographic distance between endoscopic families and help us educate everybody else out there and collectively it’s better for Albertans” says Kolber.

What does an endoskills operating room team look like?
[Watch this video](#)

Patients. Experience. Evidence. Research.

Given the considerable amount of research being done in Canada on an annual basis, knowing what constitutes the best, most current and relevant evidence is challenging for family physicians and healthcare teams. Luckily, there is a team of people in the Department of Family Medicine working with and on behalf of primary care health providers to make sense of the sometimes overwhelming amount of information available: PEER.

The PEER team as it exists today in the Department of Family Medicine began to take shape when faculty member and former Director of Evidence-based Medicine Mike Allan

took an interest in evidence-based medicine. His interest was spurred by what he and his colleagues saw as a lack of professional development resources for family physicians that were developed by family physicians.

As the evidence-based medicine team evolved, they expanded their work and number of team members to meet the needs of family practice by increasing the team’s capacity to include on-site activities and the use of technology to share information.

The original evidence-based medicine team of Mike Allan, Tina Korownyk, Mike Kolber, Scott Garrison, Adrienne Lindblad and James McCormack were joined by Nikita McEwan, Joey Ton, Betsy Thomas and Danielle Perry in 2017. Supported by the Faculty of Medicine & Dentistry’s Physician Learning Program and the Alberta College of Family Physicians, the expanded team became known as PEER, which stand for Patients. Experience. Evidence. Research. “Notice the word ‘patients’ is first in the title, because patients really do come first” explains PEER Director Tina Korownyk. PEER was created in response to a shortage of reliable, non-industry-based information for primary care providers and holds the following values:

- pragmatism
- autonomy
- minimizing bias
- patient-oriented outcomes that that matter
- Patient Values and Preferences (Shared-Informed Decision Making)
- Respect for the contributions from all health care providers
- Collaboration
- Simplicity
- Fun

PEERs’s vision is to ultimately empower Primary Care through Evidence.

PEER team members work with a variety of other researchers, health care professional and organizations to provide information to primary care physicians that relates specifically to the nature of their work. Alberta College of



Family Physicians is the primary partner and long-term sponsor of the PEER group. Their interest in providing value to membership through support of knowledge translation and professional development of family physicians has been instrumental to PEER's success. Recently, the College of Family Physicians of Canada has also joined to contribute to the PEER program. PEER works collaboratively with evidence groups across the country and within Alberta. PEER has paired with Towards Optimized Practice on a number of initiatives as well as the Therapeutic Education Collaboration out of BC.

Some of the resources for primary care that PEER is actively involved in include: Tools for Practice: bi-weekly articles focused on clinical questions the team identifies based on conversations with physicians and environmental scans of current issues in primary care. Each article is distributed nationally to about 39,000 clinicians across Canada and around the world. A primary care team member is involved in the writing and research of each article written, and the articles are often co-written with students, PEER affiliates and other physicians who have expressed interest in the topic being researched. Topics covered in 2018 and 2019 included information related to opioid use disorders, the ketogenic diet, pneumonia vaccines and decreasing immunization pain in kids.

The Best Science (BS) Medicine podcast: presented by Mike Allan and James McCormack with the occasional PEER guest joining them. These podcasts are case-based approaches to encourage healthy skepticism and critical thinking, while also being entertaining for listeners. The BS Medicine podcast can be found on the Therapeutics Education Collaboration site.

Guidelines: PEER's first guideline was the Simplified Lipid Guidelines. The lipid guidelines remain the most accessed article ever in the Canadian Family Physician and was recognized by an editorial in the BMJ as an example of guidelines done right. Subsequent guidelines include the simplified guidelines for prescribing medical cannabinoids, and most recently, the Simplified guidelines for the management of Opioid Use Disorder. Guidelines are usually associated with simple one pagers with information for shared informed decision making, and sometimes other resources including online calculators (ie BS medicine CVD risk calculator and the Pain Calculator) for practicing clinicians.

Price Comparison of Commonly Prescribed Pharmaceuticals in Alberta: Led by Mike Kolber, this document provides information about the potential cost of medications to aid point of care decision making. Specifically, educating about medication costs may influence prescribers to choose lower cost alternative medications. Many medications within a drug class are therapeutically interchangeable with similar anticipated clinical outcomes.

Other opportunities offered by PEER include: Practical Evidence for Informed Practice (PEIP) conference: offers physicians and allied health professionals the chance to join the PEER team and their colleague from the Alberta College

of Family Physicians to offer information and networking focused on EBM practice. This two-day conference - which has expanded to include pre-conference workshops - is held annually in October each year. PEIP consistently sells out well before the sales deadline, and in order to improve access for healthcare providers across Canada, it is also available via live webcast. In 2018, there were over 500 attendees.

Best Practice Support Visits, or BPSVs, are educational sessions delivered by PEER team members to Primary Care Network (PCN) pharmacists and clinic healthcare providers. The session topics are based on a 'menu' developed by the team each year, and provides the opportunity not only to share evidence-based research, but also to discover gaps in evidence as well as the clinical questions being asked in the primary care community. The sessions with PCN pharmacists are longer and more in-depth, providing the pharmacist with information that can be taken back and presented to care providers in their clinics and other clinics within their PCNs. The shorter, in-clinic versions of BPSVs address any of the topics from the menu depending on the needs of the healthcare providers present. Session topics in 2018-2019 included Tips for New Moms, Opioid Use Disorder, Smoking Cessation, Most impactful studies of 2018 and diabetes.

Resident Evidence-based Medicine Workshop: Future physicians need tools to quickly evaluate the ever-expanding body medical literature. They also need to identify sources of medical information they can trust... and importantly, evaluate research claims that may be false. Department of Family Medicine residents are given these tools at the postgraduate medical education Evidence-based Medicine Workshop, held over two days in August on an annual basis. "This workshop teaches residents point of care resources and hallmark characteristics of studies that may help with clinical decision making" explains workshop organizer Mike Kolber.

Team members are also involved in research initiatives. The Pragmatic Trials Collaborative, led by Garrison, conducted its inaugural RCT (INRange) in partnership with 236 family physicians practicing in 54 distinct BC and Alberta communities. Their current trial (BedMed) is the largest non-industry primary care RCT ever conducted in Canada, with 270 family physicians and over 2,100 patients participating to date.

The Alberta Family Physicians Electronic Endoscopy (AFPEE) Study, a study led by Kolber resulted in the development of the Electronic Medical Procedure Reporting Systems (EMPRSS), a data collection tool currently being used by over 20 clinicians in 14 hospitals.

The PEER team is looking forward to building on their work, continually working in primary care and keeping in touch with primary care health providers to determine how they can support the best possible patient care through evidence-based practice. You can find out more about the team and their work on the ACFP PEER webpage, the PEER website or the September 2016 Canadian Family Physician article [Laughing Alongside the Best of Evidence](#).

Resident Resiliency

The Department of Family Medicine is taking steps to mitigate the stress and resulting burnout experienced by family medicine residents by helping them to recognize and manage stress and become more resilient.

Drs Samantha Horvey and Keith Huber, family physicians and academic coordinators for the residency program in the Department of Family Medicine, both happened to see the same news report about a unique initiative in which military training to cope with stressful situations was being modified to help teach medical residents coping techniques. They have since worked to make this training available to residents of the department. “We are always trying to find ways to integrate resiliency and wellness into our curriculum. We thought this would be a good opportunity to provide these skills to residents at the beginning of their training” says Horvey. “We heard that the Red Deer site director had made contact with Resident Doctors of Canada and we thought it would be a great opportunity for our residents as well”. Horvey contacted RDoC and was able to arrange for a session to be included in the 2018 Foundations Course, an annual three-day event in which family medicine residents gather to receive training in basic skills required of primary care physicians.

Resident Doctors of Canada (RDoC) is a national organization representing the interests of over 10,000 resident physicians across Canada, providing them a unified voice across the country. The Resiliency Curriculum initiative began in 2014, when the RDoC Board of Directors recognized resident burnout as a problem within medical education. A literature review of burnout during residency training indicated that up to 75% of resident physicians experience burnout at some point in their residency. Dr. Michelle Morros, Assistant Postgraduate Director with the Department of Family Medicine, believes some may even enter their family residency program in an early stage of burnout without even realizing it. “They used up all of their resiliency reserves to get into the program, and then find the rigours of residency to be overwhelming” Morros explains. Stress from personal as well as professional lives, coupled with the uncertain environments residents work in all contribute to the potential for burnout. The stress residents experience can be caused by various factors, from information overload to financial pressure to a poor working environment.

Between 2014 and 2015, RDoC researched the options for tackling the issue, and identified two resources which they felt would be suitable to adopt for the environment residents work in: the Department of National Defense Road to Mental Readiness (R2MR) as well as The Working Mind Program which the Mental Health Commission of Canada created by adapting the R2MR for non-military workplaces. In 2016, a pilot project was launched involving over 200 hundred participating residents

from Dalhousie University and the University of Calgary. Jasmin Yee joined RDoC in 2015 to coordinate resiliency workshops with various residency programs across the country and to provide support to RDoC’s Resiliency Working Group in the continued development, implementation and evaluation of the Resiliency Curriculum. “The main component of the curriculum is the Resident Module, an interactive, peer-facilitated workshop,” explains Yee. “We’re seeing an overwhelmingly positive response from the workshop participants. They’re saying this training is hugely relevant and needed in medicine. Residents really appreciate being given tools by their peers – other residents who know what they’re going through and can relate to the stressors of the job.”

Family medicine resident Emily King appreciates the use of non-clinical, non-punitive language the training uses, as well as the practical skills-focused nature of the activities taught. King is one of a handful of University of Alberta medical residents who have taken the training the deliver the curriculum to her peers. In 2018, during her first year of family medicine residency, she was selected from a pool of 100 applications as one of 12 residents to take the peer training. She attended a weekend-long training in Calgary and she led a session during Family Medicine Foundations Week in July of 2018. The training teaches practical skills that can be used daily, including how to deal with adversity, identify people you can reach out to for support and self-reflection techniques. King has used one of the techniques, tactical breathing, in her own life and has even introduced the technique to some patients. The training has also made her more aware of the work that RDoC does, and of the systemic barriers that residents experience during their medical training that contribute to burn-out and depression.

This curriculum is unique in Canadian medical training school because faculty can neither attend nor deliver the training sessions: it is a peer-to-peer initiative driven by resident volunteers. This structure allows the residents to have an added measure of comfort to have safe and open discussions about what they are experiencing. Although faculty can’t attend the peer training session, they are still able to support resident wellness within their own institution. A complementary Leadership Module is available to those working in the postgraduate medicine teaching environment so that they are able to contribute to a learning environment that is conducive to resiliency.

By the end of 2017, there were seven participating medical schools across Canada, and by October of 2018 training has been delivered to over 1,000 residents across Canada. The program continues to grow toward the long-term goal of having resident resiliency training available to every resident in Canada. RDoC hopes to achieve this having the training included in the accreditation process. The organization also hopes for the curriculum to become standardized nationally, something that was in mind from the early stages of development of the curriculum. For now, forward thinking individuals like Emily

King, Samantha Horvey and Keith Huber will continue to find ways to encourage better well-being for U of A family medicine residents so they can move on to healthy lives and fulfilling careers in medicine. Because ultimately, healthy doctors means better health care for all Canadians.

Family Medicine Resident Q & A

Dr. Dana Rich Finds Supportive Community in Whitehorse

The Department of Family Medicine benefits from the generosity of family physicians and medical staff in clinics across Alberta to share their knowledge and expertise to help train family medicine residents in their rotations. However, the northernmost partner clinic offering resident rotations is actually in Whitehorse, Yukon, the largest city in the three Canadian territories.

In this resident Q & A, second-year family medicine resident Dana Rich shares her experience working in Whitehorse, and offers some advice for current and future residents.

Tell our readers about yourself.

I grew up in Delta, BC about an hour from Vancouver. After high school, I moved to Montreal where I earned a BSc in psychology at McGill University. After falling in love with psychology, I decided to go to medical school to become a psychiatrist. However, during medical school I realized that there were so many areas of medicine I was passionate about, and I didn't want to narrow my scope to just one specialty. Now I'm completing a family medicine residency at the University of Alberta in Edmonton.

Was the rotation in Whitehorse your choice, or were you placed there? When you found out your rotation was going to be in Whitehorse, what did you think?

In our second year of residency we are required to spend at least two months in a rural location. Whitehorse was my first choice for my rural rotation because it seemed like a great adventure, and I had spoken to previous residents who had had a good experience there. I am interested in practicing rurally after residency, so I wanted to get more experience in a setting like Whitehorse with higher volumes and lots of learning opportunities.

What was your experience in Whitehorse as a medical resident?

Whitehorse was a wonderful place to live and practice medicine. The healthcare community there was extremely supportive, and the larger community was so friendly and welcoming that I didn't feel like an outsider. I was definitely nervous about going to Whitehorse in the middle of winter! However, the cold weather doesn't slow down the people

living there, so I tried to embrace it and experience everything the Yukon has to offer. Where else can you go dogsledding and see the Northern Lights, all in the same day?

Was the rural family medicine experience what you expected it would be?

Yes! I have found my experiences in rural family medicine, both in Whitehorse and elsewhere, to be extremely rewarding. Unlike in urban areas where resources and specialists are abundant, in rural Canada you are

challenged to broaden your scope of practice and use the resources you have available to the fullest. I find that people living in rural communities are generally very grateful to the healthcare community, because without them they would have to travel far to get medical care.



What was the most unexpected thing about your experience?

The most unexpected thing for me was talking to the doctors working in Whitehorse about their careers. Almost all of them grew up and trained in big cities elsewhere in Canada, and most of them started working in Whitehorse without the intention to stay long-term. However, many of them are now happily settled in Whitehorse permanently. I think that is a reflection of the medical community and the community at large, where it is easy to feel at home.

Have you found some common threads with delivering family medicine in Whitehorse versus less remote and urban areas? What are they?

I think that whether you're practicing rurally or in a more urban area, patients face similar challenges with regard to access to care. In rural or remote environments access issues are often based on location and resources, whereas in big cities patients can have difficulty accessing services due to finances, long wait times, and other psychosocial factors. I think part of our job as family doctors, wherever we practice, is to find common ground with our patients and do our best to fill those gaps in access to care.

What do you think is important for other family medicine residents, or any other medical resident, to know about your experience in Whitehorse?

The message I want to pass along from my experience is just that I encourage people to push themselves out of their comfort zone and seek out varied experiences during their training. Go to a different province or a different country if you can. See what it's like practicing inner city medicine and practicing remotely. It will make you a better doctor, and you might even stumble upon something unexpected that you're passionate about.

Family Docs Most Trusted Source of Flu Shot Advice

Resident's research indicates patients more likely to get influenza vaccination following recommendation from a family physician

Poulami Banerjee wanted to do at least one research project during her residency. She achieved her goal during her first year of residency, and her work earned her the 2018 College of Family Physicians of Canada (CFPC) resident Scholarly Achievement Award. Banerjee chose to investigate a topic of interests to health care professionals across the North America: influenza vaccination rates.

Banerjee focused her research on patient perceptions of the influenza vaccination: what do they think about it and how they make the decision about whether or not to be vaccinated. Increasing influenza vaccination rates has personal meaning for Banerjee. Limiting or avoiding her family's exposure to the virus is especially important to her because not only is she the mother of a two-year-old child, her father is immunosuppressed because of cancer treatment and it is especially important that his exposure to the flu virus be limited or avoided altogether.

Banerjee's research began with a literature review from the wealth of articles about vaccines. The next step in her research was a patient survey specific to people's feelings about flu vaccines. The survey was given to patients 18 years of age and older at the Royal Alexandra Family Medicine Clinic (now the MacEwan University Health Centre). Once the results were collected, she extrapolated the data to determine the causes behind individual's deciding whether or not to get the flu shot. She identified a number of factors that prevent people from being vaccinated. A general fear of the unknown was common, as was misinformation about the vaccine that made people reluctant to get it. The ease with which people are able to access the flu shot was also found to be problematic. While the number of individuals qualified to administer vaccinations has expanded to include pharmacists, and flu clinics have been made widely available, Banerjee's research found that many patients

said they would be willing to get the shot if it was easier to obtain. She also discovered that patients wanted more information about the flu shot.

Based on her research, Banerjee was able to identify what is more likely to make people receptive to getting a flu shot: being advised to get one by a trusted source such as a family physician encouraging people to get the shot is more likely to tip the scales in the favour of getting them to proceed with being vaccinated. Advice from other allied health professionals such as pharmacists or nurses does not appear to have the same positive impact. Banerjee considers getting her flu shot each year to be a part of maintaining good health, no different from getting an annual physical or going to the dentist to get her teeth cleaned regularly. However, she saw quite a variation of perceptions about personal health maintenance during her research. In clinic, she asks all of her patients about whether they get their flu shot. When she speaks with patients about the importance of the vaccination, she focuses on the number of people who become ill with the flu each year, and how much of a strain the illness puts on the healthcare system annually. Based on the results of her research, she believes there is a great deal of value in family physicians reminding people about the importance of the vaccination at their end of their appointments. She also believes public awareness of flu shots, including radio and television coverage providing specific information about where and when to get the vaccination, would be beneficial.

Banerjee presented her research findings during Family Medicine Research Day in June of 2018 and at the the North America Primary Care Research Group (NAPCRG) conference in November of 2018. She hopes to present at the Family Medicine Summit (formerly the Annual Scientific Assembly) in March 2019 as well. In fact, she is open to presenting her research as often as possible while she is still in her residency program. Although she will complete her family medicine residency in summer 2019, she will expand upon the work she has done if an opportunity comes up following the completion of her program. Starting her own practice right away after



completing her residency is her goal, but Banerjee wants to stay in touch with the academic side of medicine and still wants to be able to be involved in research initiatives, such as Choosing Wisely.

“I feel really blessed to be part of this residency program.” Banerjee says, and acknowledges her faculty advisor Sudha Koppula, the MacEwan University Health Centre Quality Coordinator Teresa Chiodo and Research Program Coordinator Kim Duerksen for their help with the project. She had no idea how to go about this research: no idea of how to go through the ethics application process or how to write a manuscript. She was excited but it was also kind of nerve-wracking for her, and they were very helpful as she learned to navigate the process. “Any resident who wants to do research should know it’s easy to do in one year. If you have an interest, approach the research department; there are lots of people available to help you” offers Duerksen.

Program Helps Seniors Stay Active and Healthy in Their Communities

Family medicine physicians and primary care network teams collaborate to help seniors avoid health crises as they age.

As a family physician with additional training in geriatric medicine, Dr. Marjan Abbasi is experienced dealing with patient crisis. Situations such as an elderly parent not coping well in their own home, the need for an enduring power of attorney to be enacted right away, a request for an immediate personal directive or a request to have a parent’s driver’s license revoked are common in her line of work. Abbasi, a faculty member with the Department of Family Medicine’s Division of Care of the Elderly, often found herself wishing she could have had the opportunity to be more proactive. She recognized that these situations are difficult for caregivers, for the patients themselves, and for the physicians challenged to help make arrangements very quickly and then manage the situation.

“Many times when I see my patient they come with a crisis; something has happened. I sat down one day and thought ‘How can I prevent this crisis? What if I was actually seeing this patient ten years earlier? Would it change the trajectory of their functional decline or cognitive decline? Would it change things?’”

Abbasi’s question resulted in the Seniors’ Community Hub (SCH) pilot project with the Edmonton Oliver Primary Care Network (EOPCN), a patient-oriented model of care to promote healthy aging and independence for seniors in the community and provides support to their caregivers. The SCH employs a team-based approach to care involving not only family physicians, but also Primary Care Network (PCN) allied health professionals such as pharmacists,

dietitians, kinesiologists, chronic disease managers and mental health professionals.

The foundation of the Hub was started when Abbasi, who works in the geriatric program at Misericordia Hospital, believed family medicine was likely the best place to begin being proactive with patients. “That is the gatekeeper for the patient. That’s where the patient starts when they are younger and they get older in primary care and they know their family doctors”. She approached her professional neighbor Dr. Sheny Khera, fellow faculty member with the Department of Family Medicine and family physician at the Misericordia Family Medicine Centre. Khera agreed there would be value in identifying people at risk of frailty so they could intervene before a crisis occurred. “Primary care has the unique position of seeing people when that are well and helping them to maintaining that wellness.” says Khera.

Both Abbasi and Khera recognized an endeavor like this one would probably require a team of healthcare providers to achieve their goal, so they carefully designed the SCH and reached out to the EOPCN. Clinic management with EOPCN, knew from Health Quality Council of Alberta (HQCA) numbers that Edmonton’s Oliver neighborhood has the most elderly population in the Edmonton Zone. Seeing the potential benefit for patients in their community, she agreed to the PCN’s involvement. Following a series of discussions about possible approaches to the issue, they agreed on a pilot project. “This wasn’t about another referral system; we already have a geriatric referral system in place.” Abbasi emphasizes. “This was to be about creating capacity within primary care so that every team member is able to recognize and identify people who could be in decline and start assessment and intervention.” Any team member from the PCN can be accessed, so they can all work together, exemplifying the patient-centred medical home model for the senior population.

A pilot began at the Misericordia Hospital with the support of a grant from the Network of Excellence for Seniors Health and Wellness from Covenant Health. They began to look at tools to be able to identify people at risk of frailty, including a literature review of assessment tools and frailty scoring index tools. There were number to choose from, but it was important that the tool ultimately selected would be acceptable to primary care physicians, and also feasible to implement in a primary care setting. They also determined the most appropriate measures for a program for seniors with frailty used in primary care setting, and then piloted it using a development evaluation framework.

Time was taken to look at their practice management as well, even having observers watch the team determine the best way for the members to work with one another. The importance of team dynamics became clear early on, and had individuals external to the department observe the teams to determine how they work together. “We learned a lot.” Khera notes. “We learned that peer-to-peer mentorship was better received.” The practice management changes also involved working with senior patients to identify and implement more human-centred language to support a positive view of aging. For instance, the use of the term frailty is avoided and discussions about the future involve wellness models rather than care planning. This positive messaging makes it easier and more comfortable to begin engaging the patients directly in a conversation about healthy aging while they are still living independently.

Now that it has been implemented in the EOPCN, the Seniors’ Community Hub has been receiving an increasing number of self-referrals. Khera and Abbasi credit this to the number of older seniors living longer and younger seniors aging actively behind them, creating a sort of double-cohort of seniors in the population. The younger seniors, many of whom are also caregivers to older seniors, are thinking about what they can do to be proactive in maintaining their health and aging well. Abbasi and Khera’s long-term goal is to have every family practice be a Seniors’ Community Hub, and progress is being made on that goal. Along with the initial involvement of the EOPCN, the St. Albert and Sturgeon PCN has incorporated some of their work with chronic disease management nurses through several clinics and some clinics in Edmonton’s South side have expressed interest.

The Seniors Hub team is looking at leveraging technologies to bridge the lack of specific team members in the PCNs so services can be shared virtually so that the concept can scale and spread when teams don’t have all of people required. They are also collaborating with the Seniors Association of Greater Edmonton (SAGE) and working with computer sciences team to develop a frailty index from the Canadian Primary Care Electronic Medical Record. Both Khera and Abbasi enjoy being asked about services for seniors available through the PCN, so they are able to help people remain independent as long as possible and making decisions about their own health rather than someone else making that decision for them when it is too late.

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