



# 2021 -2022 PLP Workplan Update

Annual Report

Date of submission: April 30 2021



# Table of Contents

Our Vision .....	2
Our Mission .....	2
Our Strategic Priorities.....	2
Responding to health needs of Albertans as they arise .....	3
Calgary .....	3
Edmonton .....	4
Active Projects .....	10
Calgary .....	10
Edmonton .....	25
Early-stage projects .....	50
Calgary .....	50
Edmonton .....	53
Projects under consideration or in development.....	58
Edmonton .....	58
Projects not being pursued .....	65
Appendix A: Definitions and Acronyms.....	67
Appendix B: Key Performance Indicators.....	68
Appendix C: Scholarly Product for Dissemination .....	69
Appendix D: Presentations – Audit & Feedback, Physician Engagement, and Stakeholder Presentations .....	75

## Our Vision

By 2025, all Alberta physicians will care for patients in a supportive culture, driven by evidence informed, reflective practice improvement.

## Our Mission

The PLP creates actionable clinical information and engages with physicians, teams, partners, and patients to co-create sustainable solutions to advance practice.

## Our Strategic Priorities

The PLP has identified the following strategic priorities in the 2021-24 Business Plan. In the 2021-22 workplan, we identify which priorities that each project supports.

- 1. Improving the delivery of patient care by supporting physicians and teams in data driven quality improvement.** The PLP will work with its partners to support systems thinking on projects of significant impact, using a variety of techniques to analyze data and bridge the gap between knowledge and clinical practice.
- 2. Improving and supporting health system sustainability through partnerships across the care continuum.** The PLP will work with partners on projects and collaborations that span the continuum of care, thus facilitating a comprehensive approach to address clinical gaps in both primary and specialist care.
- 3. Responding to the health needs of Albertans as they arise.** The PLP will support Alberta's health system to address emerging health needs, building on its work to support physicians and teams during and after the COVID-19 crisis.

The Physician Learning Program (PLP) is housed in two locations: The University of Calgary and the University of Alberta. Updates for the projects included in the PLP's workplan for 2021-22, as well as links to completed tools or resources, and information on new projects, are provided in the following pages.



# Responding to health needs of Albertans as they arise

This report is the year-end update to the PLP 2021-22 Annual Workplan. PCNs have experienced turnover and capacity constraints this year, and QI staff and data analysts at AHS who serve as key collaborators in PLP projects have been redeployed to address COVID-19. A number of PLP projects have been delayed due to the health systems focus on COVID-19. Physicians are also strained across the system limiting their ability to engage in QI activities.

As Alberta's health system has had to pivot and adjust priorities in the wake of successive waves of the pandemic, PLP has also adjusted its priorities and projects to address immediate system needs with the following activities during the reporting period:

## Calgary

### COVID Corner

#### April 2020 - March 2021

PLP is an ongoing co-developer of the COVID corner series of educational events providing Alberta physicians with a trusted forum for the latest advice about the pandemic, treatment developments and related topics such as adverse non-COVID-19 impacts on patients and the system (e.g. delays in screening, depression, addiction, mental wellness).

10 webinars

6,411  
Participants

598 viewings of  
recordings

As part of the COVID Corner initiative an additional series of eleven stand-alone vodcasts under the name **COVID at the cabin** were completed. Topics included current and up-to-date information regarding the disease, as well as the exploration of other medical areas affected by the pandemic (e.g., COVID & Pregnancy, Vaccine Hesitancy).

#### October 2021- March 2022

COVID Corner continues to be a strong resource for physicians across Alberta with an additional 5 sessions and 1,964 total attendees. PLP works seamlessly with the Continuing Medical Education team at the University to support the planning and delivery of this valuable series.

Current Stage: Active and Ongoing

Supports strategic priorities: 3

Physician Lead: Dr. Kelly Burak

PLP Medical Scientific Planning Committee: Dr. David Topps Dr. Heather A. Armson, Dr. Doug Woodhouse, Dr. J. A. Michelle Bailey, Dr. Selena Au, Dr. Katrina Nicholson

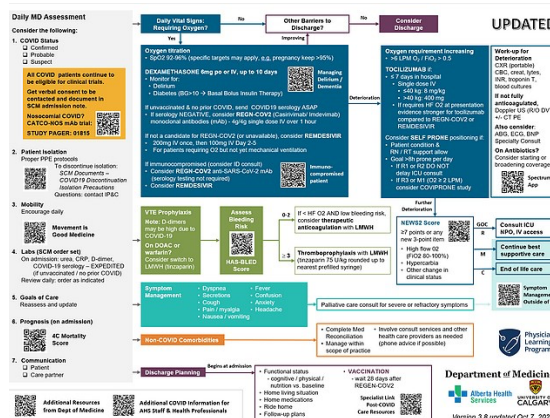
Partner(s): AHS Calgary zone, Department of Medicine, AMA, CME&PD

## COVID Care - Bedside tool inpatient

Working in concert with a team in the Calgary Zone and Department of Medicine, PLP updated a critical bedside tool for physicians caring for patients at the front line. This knowledge translation tool effectively supports physicians to employ best treatment practices as they emerge in the rapidly evolving science about COVID-19 care. This tool was designed to strengthen confidence and ease decision-making ability while managing this complex multi-faceted illness in overwhelmed hospital wards.

### Current Period (October 2021 - March 2022)

As COVID best practices evolve, our Inpatient COVID Care pathway has been adapted as they arose. Three different versions have been published in 2021-2022. This tool is widely distributed across the system for Physicians and teams engaged in inpatient COVID care and a great resource to keep their care practices current.



Current Stage: New version deployed October 2021

Supports strategic priorities: 3

Physician Lead: Dr. Douglas Woodhouse

Scientific Planning Committee: Dr. Alain Tremblay, Dr. Kerri Johansson, Dr. Tania Pannu, Dr. Anna Purdy, Dr.

Jason Weatherald, Dr. Selena Au

Partner(s): AHS, Department of Medicine

## Edmonton

### Understanding and mitigating the impacts of COVID-19: Vaccine hesitancy

The first project in this program focused on understanding the COVID-19 impact in ethnocultural communities and improving care and equity for all Albertans. That first PLP-partnered project in our COVID-19 program, which collected and analyzed 773 narratives on various domains of COVID-19 impact among ethnocultural and immigrant communities, was completed in the last grant year. Findings directly impacted the practices of the Multicultural Health Brokers cooperative (MCHB), and relevant information was shared with the Government of Alberta. To disseminate the findings, an academic manuscript was submitted to the Canadian Medical Association Journal, and was published on August 9, 2021 (<https://www.cmaj.ca/content/193/31/E1203>).

Campbell-Scherer D, Chiu Y, Ofosu NN, Luig T, Hunter KH, Jabbour B, Farooq S, Mahdi A, Gayawira A, Awasis F, Olokude F, Goa H, Syed H, Sillito J, Yip L, Belle L, Akot M, Nutter M, Farhat N, Wang Y, Jalal N, Khalif S, Chapagain S, Fernandez S, Azarcon S, Hama Z. Illuminating and mitigating the evolving impacts of COVID-19 on ethnocultural communities: a participatory action mixed-methods study. *CMAJ* Aug 2021, 193 (31) E1203-E1212; DOI: 10.1503/cmaj.210131

Building on findings from that first project, this follow-on project focuses on understanding and mitigating vaccine hesitancy and the role of cultural brokering to facilitate access to vaccines for immigrant and refugee communities. This vaccine hesitancy project will collect and analyze mass qualitative data in real-time across a large sample using a participatory approach to understand key issues in vaccine hesitancy in order to develop interventions to help improve COVID-19 vaccination rates in Alberta.

The vaccine hesitancy project in our COVID-19 program began during the current reporting period, in response to urgent requirements to improve COVID-19 vaccine uptake in Alberta. Weekly engagement with a core group of the MCHB and PLP team was carried out to understand causes of vaccine hesitancy, and to identify the most effective communication channels to reach different ethnocultural communities. Co-design and testing of the data collection tool was completed, the research ethics application was submitted and approved, and data collection began at the end of September.

In addition to the complexity science project with the MCHB, numerous engagement meetings with religious organizations were held in Edmonton, **10 short vaccine education videos in eight languages were developed and included as information resources for people attending the pop-up COVID-19 vaccination clinics in Edmonton. PLP supported 3 MCHB pop-up vaccination clinics in Edmonton in September, as well as other outreach efforts, which resulted in approximately 250 people choosing to be vaccinated against COVID-19**. Additional collaborators on this work include the Edmonton COVID-19 Rapid Response Collaborative and Alberta International Medical Graduates Association (AIMGA).

4 pop-up vaccination clinics with MCHB, AHS, and partners

10 vaccination videos in 8 languages

~ 250 people vaccinated

### October 2021 – March 2022

Data collection and sensemaking meetings ran from September to December 2021. The study collected 278 narratives, and carried out 17 weekly engagement sessions with a core group of 26 cultural brokers. Qualitative data analysis of the data is underway. Preliminary findings highlight the vital role of cultural brokers as trusted intermediaries. Intermediaries are crucial to understanding barriers to vaccine uptake in the community, mitigate barriers to access, bridge information through cultural and language interpretation, and act as a trusted conduit for information through their long-standing relationships within the different ethnocultural communities. In this work, we have been linking with the Primary Care Networks for dissemination and uptake of these lessons as well as numerous engagement meetings with community groups and religious organizations and information support at vaccination clinics (3 in Edmonton in fall 2021). We have supported the brokers in creating resources to support key messages throughout the delta and omicron phases of the pandemic, especially for dealing with misinformation, vaccination in pregnancy, and for children.

“Since start of COVID-19 2 years ago, our work as community-embedded Community Health Workers within Edmonton’s ethnocultural communities have become unprecedentedly complex and challenging.

Being the trusted intermediaries between our communities and formal systems, and companions for families in addressing their unique social economic determinants of health, we felt lost in the fast and confusing unfolding of the pandemic.

Being so context-based in our work, we felt alone in figuring out how to keep our communities well-informed and supported regarding their health & safety, while addressing the negative impact the pandemic has brought to them: deepened poverty, mental health deterioration, family relationship disintegration, higher incidents of COVID-19

Our physician/researcher/educator colleagues from PLP became our trusted companions:

- Supporting us in our learning about COVID, and gleaning the most essential, up-to-date and salient information for us to share within our communities to address deep misinformation.
- Working alongside the MCHB to support our work in the preparation & implementation of the 4 highly successful pop-up vaccination clinics specifically for the most marginalized communities in collaboration with Alberta Health Services, resulting in the success of getting over 250 individuals vaccinated (including individuals with no immigration status).
- Carrying out participatory action research to help us reveal more explicitly the realities within communities’ realities, analyze/reflect and adjust our actions and interventions using real time data.

And most importantly joining us in bridging the gap between marginalized population and the system during this critical time.”

Multicultural Health Brokers Cooperative, April, 2022

### **Planned for next period (April- September 2022)**

Data analysis will be completed, and a manuscript will be written to publish the findings in a peer-reviewed journal. Further opportunities for collaborative research in the area of pregnancy and vaccine hesitancy have been identified. We’ll recruit a postdoctoral fellow to carry out additional in-depth analyses and follow-on research.

Current stage: Data analysis

Mid-year stage: New project launched in response to emergent needs of Alberta - COVID-19 - project onboarding and design

Supports strategic priorities: 3

PLP Medical Director: Dr. Denise Campbell-Scherer

Pillar: COVID-19

Partner: Multicultural Health Brokers of Edmonton and the Illuminate Lab

### **Understanding and mitigating the effects of COVID-19: Vaccine hesitancy webinar**

A need for physician education on COVID vaccination in pregnancy was identified during community engagement and interventions as part of the PLP-partnered project on COVID-19 Vaccine Hesitancy. In lieu of other work that was delayed by the pandemic, we launched a fast-response project to develop a webinar on COVID-vaccination and pregnancy, featuring PLP Physician Liaison Dr. Eliana Castillo and Dr.

Cora Constantinescu, scheduled for October 19, 2021.

### October 2021 – March 2022

This physician education webinar addressed the need for vaccination during pregnancy, reviewed the safety and effectiveness of vaccines, and provided physicians with actionable information for discussing vaccine hesitancy with their patients. The learning objectives for the webinar were the following:

1. Summarize effectiveness and safety data supporting COVID-19 vaccination prior, during, and after pregnancy
2. Apply a framework to effectively promote COVID-19 vaccination in pregnancy in your practice
3. Demonstrate basic communication principles to engage in COVID-19 vaccination dialogue online (e.g., social media)

A total of 130 physicians and team members attended the webinar (167 registrants) and [the recording](#) has been downloaded 211 times.

- 92.1 % Agree/Strongly agree that their practice will change or improve due to participating
- 97.5 % Agree/Strongly agree that content was relevant to their practice

### Planned for next period (April - September 2022)

This project has been completed. The recording is available for ongoing spread and scale.

The Office of Lifelong Learning and the Physician Learning Program presents  
**COVID-19 Vaccination in Pregnancy: Safety & Acceptance Webinar**  
Tuesday, October 19, 7:00 to 8:00 pm MT

COVID-19 infection in pregnancy increases the risk of adverse maternal and baby outcomes. Vaccination in pregnancy (VIP) saves lives, but its uptake is low: for "old" and new vaccines like COVID-19. Please join us to learn about COVID-19 VIP safety, effectiveness and an approach to promotion.

Dr. Eliana Castillo | Dr. Cora Constantinescu

**Learning Objectives**

- Summarize effectiveness and safety data supporting COVID-19 vaccination prior, during, and after pregnancy
- Apply a Framework to effectively promote COVID-19 vaccination in pregnancy in your practice
- Demonstrate basic communication principles to engage in COVID-19 vaccination dialogue online (e.g., social media)

**Register now!**  
<https://uofalberta.com/obstetrics>

This webinar is eligible for Mainpro® certified credits through Linking Learning to Practice.

UNIVERSITY OF ALBERTA FACULTY OF MEDICINE & DENTISTRY | Physician Learning Program

Current stage: Completed, ongoing spread and scale of recorded event  
Mid-year stage: Project onboarding completed and webinar in development  
Supports strategic priorities: 3  
PLP Medical Director: Dr. Eliana Castillo  
Pillar: COVID-19

### Understanding and mitigating the effects of COVID-19: Vaccine hesitancy tools

Discussions during our community engagement and interventions for our COVID-19 Vaccine Hesitancy project also identified a pressing need for physician resources and patient education tools. In support of our pillar on responding to emerging needs of Albertans, a second fast-response project in our COVID-19 program was launched. Several patient education tools are being developed - one tool relates to pregnancy and addresses misinformation about miscarriages, congenital malformations, and effects on the baby. A second tool is for vaccine hesitant parents of adolescents. Additional tools may also be developed.

### October 2021 – March 2022

Discussions to plan the project's scope began, and a draft infographic resource for vaccine hesitancy in pregnant women was developed. With the vaccine hesitancy webinar, and strong vaccination rates in



Alberta, we paused the project in order to reassess the ongoing need for such tools.

Current Stage: On hold

Mid-year Stage: Project onboarding and tool development under way

Supports strategic priorities: 3

PLP Medical Director: Dr. Eliana Castillo

Pillar: COVID-19

## **Syphilis: Responding to the crisis in primary care webinar + workshop**

Alberta Health Services declared a syphilis outbreak in the province in 2019, and the primary care networks identified this as a high priority topic for responding to the emergent needs of Albertans. Congenital syphilis is a severe and life threatening illness that occurs when the disease is transmitted to babies when the mother has a syphilis infection during pregnancy. In addition to causing birth defects, congenital syphilis has a high rate of fetal death, with approximately 40% of infected mothers having stillborn babies. Despite advances in health care and the fact that syphilis can be treated with antibiotics, the number of syphilis infections is skyrocketing across Alberta, reaching their highest levels in about 70 years. This outbreak is province-wide, affecting all genders and socioeconomic groups.

At the request of the Edmonton Southside PCN, we collaborated to develop a pan-PCN educational webinar + workshop for November 16 2021, for family physicians and their teams. The webinar will review the epidemiology of syphilis in Alberta. In addition to reviewing the signs and symptoms, participants learned about treatment options and the importance of prenatal STI testing. During the quality improvement workshop, participants focused on their processes for screening at-risk patients in primary care.

### **October 2021 – March 2022**

This webinar and facilitated quality improvement workshop presented information on syphilis, testing, and treatment. Participants then had an opportunity to work on improving processes within their clinic by working with quality improvement facilitators in breakout rooms. The family doctors were provided with information to complete a learning activity for Mainpro credits using Linking Learning to Practice, and the PCNs followed up with physicians six weeks later.

138 physicians, allied health, and PCN personnel attended, with engagement from 10 PCNs. Resources, including a summary reference sheet, were distributed to all registrants, and the recording is available on the PLP website for ongoing spread and scale (downloaded 47 times).

- 93.3 % Agree/Strongly agree that their practice will change or improve due to participating
- 93.5 % Agree/Strongly agree that content was relevant to their practice

### **Planned for next period (April - September 2022)**

This project was completed in November 2021. In support of ongoing spread and scale, [a recording of the webinar](#) is available on the PLP website.

Current Stage: Completed, event recording is available for ongoing spread and scale  
Mid-year Stage: New active project (in lieu of completed/dropped projects or those delayed by the pandemic)  
Supports strategic priorities: 3  
Physician lead(s): Dr. Petra Smyczek  
Pillar: Primary Care  
Partner(s): Edmonton Southside PCN

## **Understanding and mitigating the effects of COVID-19: Understanding psychological safety and cultural change among physicians**

The Office of Professionalism, the Office of Lifelong Learning, and the PLP are undertaking a culture change initiative to enhance the sense of psychological safety for physicians and teams as they recover from the COVID-19 pandemic. This project would focus initially on one academic department and use Sensemaker to identify changing needs and gaps in terms of support, resources, leadership, moral injury, compassion fatigue, and burnout in the context of COVID-19 over time and in response to interventions of the culture change initiative. The goal of the work is to identify and understand trends in pressures on physicians and teams that could be addressed during the culture change initiative.

### **April 2020 - March 2021**

Formal onboarding of this project began. Numerous stakeholder engagement sessions were held to understand the problem and identify areas of focus for data collection. As part of our work to develop the project design, an initial version of the data collection tool was co-created with the stakeholder and pilot tested, based on the feedback, the tool underwent some revisions. Work began on the research ethics application, which will be submitted in the next reporting period, to be followed by data collection and analysis.

### **October 2021 - March 2022**

The research ethics application was completed and submitted. The data collection tool was presented to key stakeholders in January. The stakeholder group will review and determine next steps.

### **Planned for next period (April 2022 - September 2022)**

Departmental capacity to undertake this work depends on the COVID-19 pandemic. If the department decides to proceed in the coming months, final revisions to the data collection tool will be completed, a recruitment strategy will be planned and implemented, data collection will begin, and several facilitated sensemaking sessions with key members of the department project team will be carried out, as we support them in understanding their data and identifying appropriate interventions.

Current Stage: Preparation and planning for data collection  
Mid-year Stage: Ethics application and preparation for data collection  
Supports strategic priorities: 3  
PLP Medical Director: Dr. Denise Campbell-Scherer  
Pillar: COVID-19  
Partner(s): The Illuminate Lab and the FOMD Office of Professionalism at the University of Alberta.

# Active Projects

## Calgary

### **Acute care bronchiolitis management in Alberta**

For infants under 12 months, bronchiolitis is the most common respiratory infection and most common cause of hospitalization. Using facilitated audit and feedback, with the Calgary Audit and Feedback Framework (CAFF) and quality improvement strategies, this project aims to reduce low-value testing and medications for bronchiolitis in 16 emergency departments and eight inpatient pediatric units across Alberta. The project is already achieving success at the Alberta Children's Hospital in Calgary, and has the potential to generate cost savings, while improving bronchiolitis management.

#### **April 2021 to September 2021**

Through the course of the COVID-19 pandemic, Alberta has observed a decrease in the number of respiratory syncytial virus (RSV) infections, the primary cause of bronchiolitis. This temporary pause in the cases has provided a window of opportunity to plan and prepare our implementation and analysis strategies. A resurgence of RSV infections is anticipated for the upcoming bronchiolitis season (November – April), as increased numbers have been observed in other countries such as Australia, United Kingdom and United States. The management of bronchiolitis will need to take place at the same time as other health care needs brought on by the pandemic are addressed. Thus, the study will help to prioritize health system capacity within emergency departments and inpatient units and strengthen physician's ability to differentially diagnose respiratory problems and manage them appropriately.

We have engaged with 7 sites (5 emergency departments, 2 inpatient units) for implementation of audit and group feedback sessions with their physician groups. A qualitative analysis with site-champions has been developed to help understand site-specific barriers and enablers to sustainability of bronchiolitis initiatives. These interviews will help highlight what is needed for facilities to be efficient and effective in their response to future needs pertaining to bronchiolitis management. These interviews will take place after the audit and group feedback sessions.

#### **October 2021 – March 2022**

Six sessions were completed at emergency department (n=4) and inpatient (n=2) sites. Sessions were co-facilitated by site champions, along with clinical implementation leads. Aggregate reports and site session summaries were provided afterwards. Preliminary findings on the provincial spread and scale initiative were presented at the AHS Emergency Strategic Clinical Network Quality Improvement and Innovation Forum in February 2022. Abstracts from the forum were published in the Canadian Journal of Emergency Nursing. Qualitative interviews have been completed with five site champions.

The next phase of the initiative includes site champion identification and engagement at all five regional centres in Alberta, one teaching centre, two urban sites and four rural sites. Continued follow-up and engagement will occur with site that had audit and feedback sessions in the past year by providing mid-season (January) and end-of-season (April) practice data updated. Clinical dashboards and order set integration will continue as the implementation of ConnectCare continues across the province.

Current stage: Spread of completed project in Calgary to rest of province.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Daina Thomas (Stollery), Dr. David W Johnson (Provincial), Dr Lindsay Long (ACH)

PLP Medical Director(s): Dr. J. A. Michelle Bailey

Partner(s): AHS Maternal Newborn Child and Youth Strategic Clinical Network, AHS Improving Health Outcomes Together (iHOT)

### **Acute care lab utilization**

It is estimated that Canadians receive over one million unnecessary tests each year. In the inpatient setting, excessive phlebotomy (blood tests) leads to patient discomfort, hospital-acquired anemia, unnecessary transfusions, and prolonged hospitalization. Using the audit and feedback (using CAFF), this project seeks to optimize routine laboratory testing on inpatient medical units in Calgary. It has the potential to reduce spending on health care while improving patient care.

#### **April 2021 to September 2021**

Over the past six months, 12 one-hour virtual audit and feedback sessions at four Calgary hospitals were held, with a total attendance of 130 Internists and Hospitalists. A qualitative and quantitative analysis is underway to evaluate the effectiveness of the sessions, with the goal of publishing by the end of the year. This approach was piloted and published demonstrating an 11% reduction in lab use on a medical teaching unit (Ambasta, 2020). If success along these lines is demonstrated, we can spread the approach across all provincial hospitals for very substantive provincial savings.

#### **October 2021 – March 2022**

Qualitative analysis is underway for the virtual audit and feedback sessions. The sessions have been transcribed and coded according to the CAFF framework. Preliminary data has revealed a 17% overall reduction in inpatient laboratory testing following the intervention, with a 23% reduction for the hospitalist group. Data analysis is underway with the goal of publishing three manuscripts by June 2022. Approval has been granted for spread and scale to other zones.

Current stage: Audit and feedback sessions are completed across the Calgary Zone. Moving towards provincial scale-up.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Anshula Ambasta

PLP Medical Director(s): Dr. Doug Woodhouse

Partner(s): AHS Calgary Zone, Choosing Wisely Alberta

### **Calgary zone emergency department physician performance dashboard**

Since 2018, we have used the CAFF to help emergency room (ER) physicians review individual performance reports, designed in collaboration with the PLP. All 242 Calgary ER physicians have access to an individual dashboard and 70 have attended facilitated audit and feedback sessions. These sessions review measures of flow and practice performance and address barriers to making practice change. The aims of the project are to improve physicians' receptiveness to their practice data, and to encourage physicians to both identify and employ opportunities for practice change.

### **April 2021 to September 2021**

Due to the COVID-19 pandemic, this project has been delayed. However, the PLP keeps in touch with emergency department leadership and plans to hold a virtual session for new emergency physicians before the end of 2021. Once the COVID-19 pandemic has passed, the Emergency Strategic Clinical Network (ESCN) has expressed interest in partnering with the PLP to spread and scale this project to a provincial audience utilizing a new dashboard currently being built using Connect Care.

### **October 2021 – March 2022**

Capacity for quality improvement remains low among ED physicians due to the ongoing COVID-19 pandemic. A group audit and feedback session was offered in December 2021 but didn't go forward due to low registration. While we wait for the pandemic to pass PLP has worked with AHS analysts to prepare the current SCM based Calgary ED Dashboard for the transition to Connect Care.

The adult ED dashboard has been redesigned away from a printable PDF format to capitalize on a completely virtual delivery. Metric views are now more clear and intuitive and the dashboard will start to populate with Connect Care data as Calgary sites come online. Once Connect Care is fully implemented in Calgary, Calgary urgent care physicians will be added to the dashboard and will be able to attend PLP group audit and feedback sessions. In March 2022 a proof of concept dashboard was completed and is currently being reviewed by other AHS analysts, the Emergency SCN and emergency department leadership.

Current stage: Implementation

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Shawn Dowling, Dr. Charles Wong and Dr. Chris Bond

PLP Medical Director(s): Dr. JA Michelle Bailey and Dr. Kelly Burak

Partner(s): AHS Calgary Zone Emergency Departments

### **Calgary Zone pediatric emergency department physician performance dashboard**

The PLP is developing a physician dashboard for pediatric ER services in the Calgary Zone. Using the CAFF, ER physicians will have the opportunity to reflect on their practice and, ultimately, improve patient care by strengthening adherence to evidence-based practice, improving efficiency of care, and reducing inappropriate testing and treatments.

### **April 2021 to September 2021**

This project has been delayed due to the COVID-19 pandemic. Programming the dashboard relies heavily on analysts who are familiar with Connect Care. The Connect Care rollout has been delayed devoting resources to the COVID-19 pandemic.

### **October 2021 – March 2022**

The Calgary Zone pediatric emergency physician performance dashboard has been incorporated into the adult ED dashboard redesign. The SCM based adult ED dashboard has been redesigned to start populating with Connect Care data as Calgary pediatric emergency sites come online. Pediatric emergency physicians will be able to access the dashboard and select filter their metrics for their work at pediatric sites. Pediatric emergency physician audit and group feedback sessions will be able to begin after all pediatric sites are running on Connect Care data. In March 2022 a proof of concept dashboard was completed and is currently being reviewed by AHS Analysts, the Emergency SCN, and emergency

department leadership.

Current stage: Dashboard design and development phase.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Antonia Stang and Dr. Jennifer Thull-Freedman

PLP Medical Director(s): Dr. J. A. Michelle Bailey

Partner(s): AHS Calgary Zone Emergency Departments

## **Cardiac Choosing Wisely: Reducing low-value cardiovascular investigations to provide higher quality care at lower cost**

Alberta Health Services has identified provincewide overuse of many cardiovascular screening, monitoring, and diagnostic investigations including expensive items such as coronary catheterization. The provincial vision is to systematically implement Choosing Wisely Canada recommendations and its principles to guide how every adult Albertan is being screened, monitored, and/or treated for cardiovascular disease.

### **April 2021 to September 2021**

This project has modified and implemented a bedside clinical decision aid to help healthcare workers in outpatient cardiology clinics determine when an ECG should or should not be ordered. The PLP is working with cardiac data analytics team to develop a Tableau dashboard that will report on ECG ordering trends and outcomes associated for each cardiologist in the Calgary zone. Individual site level reports are being built for distribution to each outpatient clinic for use by the entire healthcare team. This project has been delayed as a result of the COVID-19 ongoing pandemic.

### **October 2021 – March 2022**

During this period the Tableau dashboard was created and reviewed by the research team. This dashboard was intended to be used for audit and feedback intervention to decrease the use of low-value ECGs in four Calgary outpatient cardiology and preoperative clinics. After analyzing the data in the dashboard, it was identified that the project would benefit more from peer coaching than a PLP audit and feedback session. This was due to the data which revealed only a few Cardiologists were responsible for over 70% of the ECG utilization. The project has since branched to focus on community ECG utilization in the Calgary Zone, where approximately 120,000 ECGs are completed every year. This community ECG project is currently in the planning and discovery phase, as well as identifying data sources and engaging physician buy in for such work.

Current stage: Dashboard complete and reviewed. Community ECG project in potential planning phase.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Carlos Morillo and Dr. Sonia Butalia

PLP Medical Director(s): Dr. Doug Woodhouse

Partner(s): AHS, Cardiovascular Health and Stroke Strategic Clinical Network

## **Improving care for people living with liver disease**

PLP has two projects to improve care for people with liver disease:

**Complex care management:** Variceal bleeding is a potentially life-threatening complication of cirrhosis. Patients with this condition in Calgary are being readmitted to the hospital for variceal bleeding at twice the rate seen in the USA. The PLP will work with multidisciplinary stakeholders from primary and acute care to help understand and address problems to improve care and reduce readmission rates.

**Cancer Screening and Prevention:** Patients with cirrhosis, and certain populations of non-cirrhotic patients with chronic Hepatitis B virus infection, are at an increased risk of developing hepatocellular carcinoma. This project aims to help physicians increase screening of this population to detect this carcinoma earlier.

### **April 2021 to September 2021**

We developed a summary report which identified key opportunities to improve care for patients admitted to Calgary hospitals with variceal bleeding. Key stakeholders from various departments including Emergency, Medicine, Gastroenterology (GI), Hepatology, and primary care have been identified to form a working group to develop joint solutions. Areas of focus will include finding ways to shorten the time for patients to receive a consult from GI and/or hepatology, reducing low value blood transfusions, booking follow up endoscopy before patients leave the hospital, and improving communication with family physicians. Results were shared at the 2021 Choosing Wisely Canada National Meeting. The project on hepatocellular carcinoma has been delayed due to COVID-19 and will re-start in 2022.

### **October 2021 – March 2022**

The stakeholders collaborating on this project were particularly impacted by the COVID-19 pandemic. We have continued to communicate with interested departments to align other activities related to care of patients presenting to hospitals with variceal bleeding.

Current stage: Audit and feedback at aggregate level has been performed related to adherence to clinical practice guidelines for variceal bleeding at four Calgary hospitals

Supports strategic priorities: 1 and 2

Physician lead(s): Dr Abdel-Aziz Shaheen

PLP Medical Director(s): Dr. Kelly Burak

Partner(s): AHS Calgary Zone Hepatology

## **Operative vaginal delivery practices in Calgary zone**

Childbirth carries risks regardless of the mode of delivery; however, Operative Vaginal Delivery (OVD) carries with it several perinatal and maternal risks. Birth statistics from Calgary hospitals show OVD rates of between 13.1% and 29.6% in 2018 and 2019. This project assesses variation in rates between Calgary hospitals and provides individual physician reports paired with opportunities to discuss their OVD practices, OVD guidelines, and opportunities for improvement.

### **April 2021 to September 2021**

Between April and the end of September 2021 the PLP has held audit and group feedback sessions for the OBGYN department physicians at the South Health Campus, Foothills Medical Center, and Rockyview General Hospital. To date, 90% of the Calgary OBGYN department has attended one of our sessions and

used the dashboard to review their practice. Moving forward, we will review the feedback from our sessions with the OBGYN department's internal QI team and determine if there is a new area to review in the spring of 2022.

### **October 2021 – March 2022**

In November 2021 this project was submitted and subsequently accepted as a virtual poster presentation under the OBS, patient safety category at the 2022 ACSC conference in June 2022. We continue to monitor outcomes and are seeing a positive trend of reduction in rates of operative interventions during delivery in the Calgary Zone. Given that surgical intervention during childbirth carries some serious risks of long-term complications such as incontinence reducing these interventions is positive for women served by OBGYN in the zone.

Current stage: Audit and feedback sessions (using CAFF) are complete across the Calgary Zone. Moving towards review.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Maryam Nasr-Esfahani

PLP Medical Director(s): Dr. Jackie Thurston

Partner(s): AHS Calgary Zone Obstetrics and Gynecology

### **Optimizing safe and effective use of human albumin in critical care in Alberta**

Albumin, a protein made by the liver that helps keep fluid in the bloodstream, should only be used for fluid resuscitation in limited clinical settings. This project will help reduce the use of low-value albumin in adults at 16 ICUs in Alberta. It will share individual and comparator aggregate data with more than 100 attending physicians through audit and feedback sessions using CAFF. Reducing the use of albumin when not indicated has the potential to improve patient safety and save \$350,000 per year.

### **2021-2022 Project Outcomes**

PLP support for this project has resulted in significant reduction in low value albumin use in ICUs. Since the project began, there has been a 32% reduction resulting in 647 patients avoiding a potentially unnecessary blood product, and 1419 kg of biomedical waste avoided. Annual savings resulting from this project are estimated to be between \$150,000 to \$175,000 per year and are expected to be sustained into the future.

### **April 2021 to September 2021**

We have delivered 965 audit and feedback reports to ICU physicians and other healthcare workers at 16 sites across Alberta. 256 health professionals have attended PLP-facilitated educational sessions. COVID-19 has significantly impacted rollout; however, we anticipate completing this project in the first quarter of 2022.

### **October 2021 – March 2022**

Audit and feedback reports continued to be sent out to ICUs with reports going to physicians and their healthcare teams. Aggregate data reports showing site utilization of low value albumin were delivered to 614 healthcare workers. Additionally, we developed individualized prescriber reports for the ICU in Alberta with the highest rate of low-value albumin use. These reports will be delivered to both physician and nurse practitioners directly responsible for ordering albumin. PLP has collaborated with the Critical



Care SCN to co-develop a data dashboard with prescriber metrics that will launch in Spring 2022. The dashboard will be utilized by the SCN and ICU sites to monitor albumin use and ensure long-term sustainability of these successes. Additionally, PLP is collaborating with the AHS Benefits Realization Group to conduct a more thorough economic analysis of the impact of this project.

Current stage: Audit and feedback with aggregate data reports is underway across the province.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Daniel Niven

PLP Medical Director(s): Dr. Selena Au

Partner(s): AHS Critical Care SCN

## **Primary care laboratory services utilization**

Alberta spends approximately \$700 million annually on laboratory services with close to 60% of costs associated with lab tests ordered by family physicians. However, studies find that approximately 35% of all lab testing is of little value given. To help family physicians optimize the value of laboratory tests, the PLP led a group of organizations in the development of a lab utilization dashboard and online learning environment, hosted within the Health Quality Council of Alberta (HQCA) Primary Care Panel report. This dashboard is available to all 4500 family physicians in Alberta.

### **April 2021 to September 2021**

The dashboard is complete, however, due to technical and data sharing issues, the primary care lab utilization report is temporarily unavailable to on the HQCA site. AHS, HQCA and other stakeholders are working to reinstate the lab report shortly and we will collaborate in renewed province wide marketing of the resource and conduct a series of virtual audit and feedback sessions for individual physicians working with their own lab reports.

### **October 2021 – March 2022**

Due to administrative issues around privacy between the HQCA and the AHS the data flow is still being delayed which is negating the benefits of employing this information for quality improvement.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Chris Naugler, Dr. Mike Allan, Dr. Rod Elford (HQCA)

PLP Medical Director(s): Dr. Doug Woodhouse and Dr. Katrina Nicholson

Partner(s): Alberta Precision Labs, HQCA, AHS Improving Health Outcomes Together (IHOT)

## **Pulmonary function test ordering in primary care**

Studies show that there are persistent issues with misdiagnosis of respiratory conditions in Canada, with between 20-70% of patients with asthma and 70% of patients with chronic obstructive pulmonary disease (COPD) living in the community going undiagnosed. This project will provide clinically actionable data and education resources to assist primary care providers to select the most appropriate lung test for diagnosing common respiratory conditions. As a result, primary care providers will be able to confidently select the most appropriate tests to diagnose respiratory conditions.

### **April 2021 to September 2021**

With our partners, the PLP designed and released a new metric for primary care physicians in the 2021 HQCA Panel Reports. Physicians can now view their patients with a confirmed diagnosis of asthma and whether they have had pulmonary function tests ordered, either a spirometry or the full set of pulmonary function tests (PFT), in the past 10 years. Asthma can be diagnosed with a spirometry test alone and full PFT is not usually required. Data can be filtered by age, sex, and continuity. Upon reviewing the metric, physicians will reflect on their test ordering patterns and, if warranted, engage in further investigations to confirm whether their patients with asthma or those with suspected asthma have had appropriate testing. To address knowledge gaps, we developed four short education videos featuring Alberta respirologists answering frequently asked questions that physicians have when deciding which lung test to order to diagnose asthma.

Expert recommendations on which tests to order to diagnose asthma and other common respiratory conditions, and an introduction to the Panel Report, were presented at the April 2021 Clinical Connections Conference. Two additional sessions for a primary care audience are planned for Fall and Winter 2021 in conjunction with the U of C Office of Continuing Medical Education. Future plans include delivering group audit and feedback to primary care physicians using the Panel Report, and adding a new metric to measure test ordering for patients with a diagnosis of COPD.

### **October 2021 – March 2022**

Two continuing professional development events were delivered to primary care audiences (Pearls for Practice and Rural Videoconference Series session hosted by the University of Calgary Office of CME). Plans are under way to deliver an integrated CME and audit and feedback event for primary care physicians featuring the Panel Reports. The launch is tentatively planned for Fall 2022, with future spread to other interested Primary Care Networks or physician groups across the province. The addition of a new metric to the Panel Reports for COPD has been paused until 2023 due to re-organization within HQCA.

Current stage: Implementation

Supports strategic priorities: 1 and 2

AHS SCN Partners: Scott Jalbert and Eileen Young

PLP Medical Director(s): Dr. Katrina Nicholson

Partner(s): Medicine SCN (MSCN) and HQCA

## **Antimicrobial stewardship for UTI infections in emergency departments**

### **April 2021 to September 2021**

PLP Calgary has two projects in this area: 1) Antibiotic use for pediatric ER visits for urinary tract infections (UTIs) will be examined and appropriate prescribing practices will then be promoted using the CAFF (this project is currently in the data analysis phase); and 2) We are implementing a UTI pathway tool for adult ER departments originally designed by the Edmonton PLP office. Implementation of the UTI pathway tool at the Rockyview General Hospital has been delayed allowing emergency physicians to focus on the COVID-19 pandemic.

### **October 2021 – March 2022**

Since October all requested data for the antibiotic use for pediatric ER visits project has been pulled by PLP/AHS analysts and Alberta Precision Labs analysts. The data is currently being cleaned and validated

by PLP analysts and project leads. PLP has also put together a draft report that is ready to be populated with physician data once the data is approved.

The implementation of the UTI pathway tool at the Rockyview General Hospital continues to be delayed by the COVID-19 pandemic.

Current stage: Execution phase. Pulling and analysing data for physician reports.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Cora Constantinescu, Dr. Joan Robinson, Dr. Alena Tse-Chang

PLP Medical Director(s): Dr. J. A. Michelle Bailey

Partner(s): AHS Calgary and Edmonton Zone Emergency Departments

## **Contract induced acute kidney injury prevention**

### **April 2021 to September 2021**

The PLP has produced audit and feedback reports for 27 practicing cardiologists in Alberta's cardiac catheterization centres at the Libin Cardiovascular Institute at Foothills Medical Centre, the Mazankowski Alberta Heart Institute at the University of Alberta Hospital and the CK Hui Heart Centre at the Royal Alexandra Hospital. Reports help identify high-risk patients and patients at increased risk of contrast induced acute kidney injury. Of those at increased risk, reports further identify patients who exceed safe contrast volumes and those that are below optimal IV fluid volumes when undergoing cardiac catheterization procedures. Individual physician level data is shown in comparison to the physicians practicing site and provincially. Strategies to reduce contrast volume and optimize IV fluids are presented within the report. These reports are to be used internally as an audit and feedback tool for practice improvement at each site.

### **October 2021 – March 2022**

There has been no progress on this initiative during the reporting period. Although there is strong support for this initiative among key stakeholders' interest across Alberta's catheterization centres does not have sufficiently robust support to continue this initiative.

Current stage: Closing stage completing lessons learned

Supports strategic priorities: 1

Physician lead(s): Dr. Matthew James, Dr. Michelle Graham

PLP Medical Director(s): Dr. Selena Au

Partner(s): Kidney Health Section Medicine Strategic Clinical Network, Cardiovascular Health and Stroke Strategic Clinical Network, Alberta Provincial Project for Outcomes Assessment in Coronary Health Disease (APPROACH)

## **Improving endoscopy utilization dyspepsia phase 3 – Spread to Edmonton**

### **April 2021 to September 2021**

A completed PLP project in the Calgary Zone demonstrated a 50% reduction in low-yield endoscopy procedures for healthy adults with dyspepsia using audit and feedback (CAFF). The project has been scaled to involve gastroenterologists in the Edmonton zone to improve the value of endoscopy services. PLP Calgary is collaborating with Edmonton to share project knowledge and providing audit and feedback coaching for the project leads. A group audit and feedback session with Edmonton gastroenterologists is

planned for early 2022.

### **October 2021 – March 2022**

Work is underway to deliver an audit and feedback session with Edmonton Zone specialists.

## **My practice improvement (MYPI) digital learning environment development**

### **April 2021 to September 2021**

PLP Calgary, in collaboration with CME&PD at the University of Calgary, is working on developing a digital learning environment to facilitate the process of Physician Practice Improvement (PPI) as required by CPSA over a 5-year-period. The learning environment will also enable physicians to receive credits for the activities they complete with their respective college.

The project was initiated late Fall 2020, with an extensive discovery phase in order to understand physician's needs in order to effectively complete data driven PPI activities independently. 15 pathfinders were recruited, physicians willing to contribute to the project as part of user-engagement on a recurrent basis, and 33 sessions were conducted with the pathfinders over the course of the last year (2020 – 2021). In Spring and Summer 2021 the project has started design and development of the tool, with the limited beta-release expected late Fall 2021 and release to all physicians in Alberta Winter 2022.

### **October 2021 – March 2022**

Continued development and testing has taken place, leading to new changes and iterations of the content and interface. Internal beta-testing has taken place, and the tool is ready for external beta testing with participants of other PLP projects.

Current stage: Alpha Test

Supports strategic priorities: 1

Scientific Planning Committee: Dr. J. A. Michelle Bailey, Dr. Kelly Burak, Dr. Katrina Nicholson, Dr. Doug Woodhouse, Dr. David Topps

Partner(s): CME&PD

## **Peer Coaching for Practicing Professionals**

PLP Calgary, in collaboration with CME&PD at the University of Calgary, is developing a blended course for physicians to gain core skills to create a coaching for change culture. This course will facilitate development of a coaching community of practice. A specialization module will focus on peer coaching using data to inform practice and opportunities for change.

### **October 2021 – March 2022**

Content for the Peer Coaching for Practicing Professionals course has been created including: two self-directed online educational modules; two interactive online workshops; and nine educational resources. Content for the specialization module is being drafted and pilot participants are being recruited.

Current stage: execution

Supports strategic priorities: 1

Scientific Planning Committee: Dr. Heather Armson, Dr. Kelly Burak, Dr. Thomas Raedler, Dr. Michelle Bailey, Dr. David Topps, Dr. Aaron Johnston, Dr. Jared Van Bussel  
Partner(s): CME&PD

## **OBGYN pathway development**

PLP is working with partners to develop pathways to support appropriate care in the medical home, freeing up specialists for more complicated patients. In Spring 2020, the PLP collaborated with colleagues in gynecology and primary care to design three new pathways to support persons with abnormal uterine bleeding and bleeding after pregnancy loss. As many aspects of managing abnormal uterine bleeding can be safely handled in primary care, the pathway guides physicians through clinical management in the medical home, and provides clarity on when patients must be referred to specialty care. These pathways are available on Specialist Link and are regularly downloaded. To raise awareness and enhance the use, the pathways were introduced to a primary care audience at a Pearls for Practice webinar hosted by the PLP and the University of Calgary Continuing Medical Education in September 2020.

### **April 2021 to September 2021**

Following on that work, the PLP and colleagues from the Calgary Pelvic Floor Clinic, urology, and primary care are collaborating on a primary care pathway to support women with urinary incontinence. The PLP was approached by the Pelvic Floor Clinic to create a pathway for women with incontinence as waiting times to access the clinic for treatment of urinary incontinence can be greater than 12 months. Symptoms could be effectively managed in the patient's medical home by the primary care physician. We expect this pathway to be available in late Fall 2021.

### **October 2021- March 2022**

The pathway was approved by the working group and uploaded to the Specialist Link website in December 2021. Since then, downloads of the pathway are in the range of 65-85 per month. Early findings from the Pelvic Floor Clinic are that the quality of referrals for female urinary incontinence are improving, helping them to triage their patients more effectively at admission.

Current stage: Pathway Approved and released

Supports strategic priorities: 2

Physician lead(s): Dr. Shunaha Kim-Fine

PLP Medical Director(s): Dr. Katrina Nicholson

Partner(s): AHS Calgary Zone Pelvic Floor Clinic, Calgary and Area PCNs (Specialist Link), and colleagues in the Calgary Zone Urology and Calgary Zone Gynecology Divisions

## **Prescribing sedating medications to seniors in community**

As a result of the COVID-19 pandemic, older adults in the community may be feeling increased social isolation, loneliness, anxiety, and early dementia behavioural concerns. During the pandemic, many assisted living (SL) and long-term care (LTC) facilities were not accepting new residents and families were concerned for the safety of their relatives. As a result, older adults who would have met the criteria for transition to SL or LTC may have continued to live in the community with their families. These factors may have contributed to changes in prescribing patterns in sedating medications by family physicians.

### **April 2021 to September 2021**

Choosing Wisely Canada (CWC) has identified de-prescribing of antipsychotics and sedative medications in seniors over the age of 65 years with no clinical indications for use as a priority area for improvement. The Geriatrics Update took place on September 23, 2021 and the PLP worked with the Geriatrics Planning Committee to facilitate a group audit and feedback session. The purpose of the session was to review the prescribing patterns of sedating medications by primary care physicians to older adults (>65 years) in the community during the COVID-19 pandemic. Approximately 100 healthcare prescribers attended the session and through small breakout room discussion developed innovative solutions to manage response behaviours in dementia.

### **October 2021- March 2022**

The PLP is in the process of updating and generating individual feedback reports for 11 consenting physicians who attended the 2021 Geriatrics Update. We continue to collaborate with the Geriatrics Planning Committee and plan to be involved in the delivery of another AGF this fall the 2022 Geriatrics Update.

Current stage: Execution

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Heidi Shmaltz

PLP Medical Director(S): Dr. Douglas Woodhouse

Partner(s): Geriatrics Planning Committee, CME&PD

## **Cardiovascular risk reduction in primary care**

Cardiovascular disease is endemic in Canada and is the leading cause of death of women. High cholesterol, dyslipidemia, affects one in three Canadian adults. Dyslipidemia can be modified with effective, safe, and inexpensive treatment cholesterol lowering medications, such as statins. Unfortunately, statins are widely under prescribed by physicians and poorly adhered to by patients.

### **April 2021 to September 2021**

The PLP are working in close collaboration with the MyHealth Alberta team to develop an online cholesterol pathway. This pathway will be co-designed with input from patients and physicians through interviews and iterative user testing processes. It will allow patients and providers to access shared decision-making resources including a cardiovascular disease risk calculator, information on cholesterol, statins, lifestyle changes and additional external resources. Following the pathway's implementation, we will work with the HQCA to develop an enhanced report on cardiovascular risk as part of the HQCA Primary Care Panel Reports. This report will further support physicians in identifying high-risk patients and show practice data compared to their colleagues.

### **October 2021- March 2022**

The research team created a semi-structured interview guide to gain insight into what users would want to see in an online cholesterol management tool including content and uptake. Information gathered from participants during the interviews will be used to create the preliminary design of the tool. Semi-structured interviews were performed virtually using Zoom. A total of 15 participants were interviewed: 10 patients, 4 family physicians, and 1 pharmacist. Interviews were completed March 2022 and are current being transcribed using rev.com and then they will be coded and analyzed.

Current stage: Project planning and development.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Sonia Butalia

PLP Medical Director(s): Dr. Katrina Nicholson

Partner(s): AHS - Diabetes, Obesity and Nutrition SCN, Cardiovascular Health and Stroke SCN, MyHealth Alberta

## **Kidney disease detection and prevention**

Recent and evolving evidence from RCTs have emerged for sodium glucose luminal transport inhibitors (SGLT2is) supporting its use in other indications beyond glucose control in diabetes. Evidence demonstrates SGLT2is efficacy to significantly improve clinical and patient cardiovascular and kidney outcomes. This project aims to support the use of SGLT2is through 1) the creation of a clinical decision support tool/pathway, 2) knowledge translation at conferences, and 3) creating audit and feedback tools for Primary Care Providers (i.e., HQCA panel reports). This work is intended to increase the uptake of SGLT2is for people living with Diabetic Kidney Disease, which will result in prolonging kidney life and improving an individual's quality of life.

### **October 2021- March 2022**

Work on this project is proceeding as planned. A major barrier may be block of data going from AHS to HQCA to enable the SHLT2 reports and represents a major risk to this initiative.

Current stage: Initiation

Supports strategic priorities: 1 and 2

Physician lead(s): N/A

PLP Medical Director(s): Dr. Katrina Nicholson

Partner(s): Kidney Health (KH) Section of the Medicine SCN (MSCN)

## **Improving quality and value in critical care**

Critical care is a resource intense environment where expensive drugs, complex technologies, and highly specialized care contribute to a large component of health care expenditure. Building on our work to improve the value of albumin use across 16 adult ICUs, PLP will work with critical care physicians across the province to reflect on practice data that addresses important issues, including utilization of blood transfusions, dialysis, ventilation, and others. These activities will be in partnership with PRHIS funded projects.

### **April 2021 to September 2021**

We have identified priority areas using a survey tool where ICU physicians ranked and prioritized topic areas where data-informed improvement initiatives will be valuable. Data on 17 areas was recently analyzed for the Calgary zone and we continue working with stakeholders to create meaningful and actionable practice metrics. A prototype data dashboard has been created by partners within the Critical Care SCN. We will develop 3 provincial projects from these activities. This project has been significantly delayed due to COVID-19.

### **October 2021- March 2022**

Development of the Calgary Zone ICU dashboard continued. Completed activities included refinement of topic areas, preliminary data analysis on four key practice areas, and a schedule for a series of

workshops that will engage ICU intensivists in the dashboard design and metric selection. PLP has engaged with the project leads for the Dialyzing Wisely initiative. Completed actions include a project charter, building stakeholder relationships and a plan for roll out, as well as completing an accreditation application for the program to ensure CPD eligible credits are available to participating physicians. PLP is in early stages of planning for the Don't Misuse My Blood initiative, which will launch in Fall 2022. PLP will be a member of the Steering Committee, which includes provincial representation from a broad group of stakeholders who use blood transfusions throughout the health system.

Current stage: Early planning and development.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Dan Niven, Dr. Oleksa Rewa

PLP Medical Director(s): Dr. Selena Au

Partner(s): AHS - AHS Critical Care SCN

## **Rheum4U: Patient & Physician Dashboard**

It is estimated that one million Canadians live with inflammatory arthritis. Rheumatoid arthritis, being the most common form of IA, affects approximately 1% of Canadians. The total cost of arthritis in Canada is projected at \$257 billion by 2040 with an increased prevalence of 1.4%. Rheum4U Precision Health Registry Platform (Rheum4U) is a virtual, longitudinal data collection platform integrated in two Calgary Rheumatology clinics capturing data from patients with inflammatory arthritis, including disease progression, medication use, and patient-reported outcome measures (PROMs). PLP supports this project by providing Human Centred Design expertise on the effective translation of research registry to design a data dashboard suitable for physician-patient communication, clinical decision making, monitoring of disease, and patient education.

### **October 2021- March 2022**

This initiative is unfolding as planned with design, physician engagement and user testing activities well underway. This also includes a heuristic evaluation to ensure that the tool is consistent with common design-use guidelines.

Current stage: Discovery

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Diane Mosher

PLP Medical Director(s): Dr. J. A. Michelle Bailey

Partner(s): Rheum4U

## **Medicine SCN – Know Your Data**

### **April 2021 to September 2021**

Acute care length of stay in Alberta is almost one day longer than the national average and is considered a key cost driver in the system. This project aims at improving quality of care while also ensuring efficient use of health-care resources. Acknowledging that many physicians do not have routine access to metrics about the care they provide, the project offers access to relevant care metrics, and provide opportunities for reflective practice improvement. The initial focus will be on length of stay and 30-day readmissions (as a balancing and safety measure). There will be other metrics of relevance to physicians and patients



added as the project progresses. PLP is providing consultative support.

### **October 2021- March 2022**

PLP remains as a key consultant supporting this initiative providing the project team with knowledge translation advice and assisting with strategies for peer to peer audit and feedback methods.

Current stage: Execution (pilot)

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Peter Jamieson, Dr. Braden Manns, Dr. Jim Eisner

PLP Medical Director(s): Dr. Michelle Bailey

Partner(s): AHS, Hospital Medicine Section, Medicine

### **Outcome Harvesting and Realist Evaluation**

Outcomes Harvesting (OH) is a rigorous approach to identifying program-level outcomes of complex interventions. Realist evaluation is a social science methodology that applies multiple methods to understand complex interventions and the interrelationships between the context of a program, its mechanisms (processes), and its outcomes. Outcomes harvesting and realist evaluation methodologies will be used to study audit and group feedback projects and the Calgary PLP to determine how this novel approach of providing data in a socially constructed learning approach can be best applied to enhance physician performance.

### **April 2021 to September 2021**

Outcome harvesting methodology was used to review documents from Calgary PLP and six audit and group feedback projects from 2015 to 2018. The review of documents identified over 150 outcomes that were synthesized to 22 verified outcomes which were categorized into seven outcome types.

### **October 2021 to March 2022**

Three focus groups were conducted, engaging seven PLP team members and medical directors, to verify outcome descriptors. Semi-structured interviews were conducted with five PLP team members and medical directors and ten external stakeholders to identify outcomes, verify outcome descriptors and query perceptions of AGFs and PLP, including what factors contributed to outcomes. Oral presentation was accepted at OHMES Health and Medical Education Symposium.

Current stage: execution

Supports strategic priorities: 1

PI: Dr. Lara Cooke

Co-investigators: Dr. Kelly Burak, Dr. Heather Armson, Dr. Michelle Bailey

## **Edmonton**

### **Provincial surgery wait time: Patient and provider experiences with the integrated province-wide central access system for surgical consultation**

Alberta Health has identified surgical access as a priority for health system improvement. The Surgery Strategic Clinical Network together with its partners will address the problem of long surgical wait times in Alberta by implementing an integrated electronic central access system to handle all surgical consultation in the province by 2023. Implementing the integrated electronic central access system will represent a massive change in the way referrals for surgical care are done in Alberta. Although, in theory, this change will be beneficial to both patients and providers as well as to the overall health system, we are unsure how different people in the health care system and patients will react/respond to these changes. The aim of this project is to understand the evolving experiences and entangled realities of clinicians (Family Physicians, Surgeons, Patient Care managers, Nurses) health leaders, policy makers as well as patients and families with the central access system and its implications over time to inform the work of the roll-out committee. This project will use a novel approach, Sensemaker, to collect and make sense of mass qualitative data.

#### **April 2021 to September 2021**

Regular engagement sessions with the Surgery SCN and AHS Implementation team and Operations team have occurred during the review period to understand the needs and identify the scope of work to be carried out by PLP, as part of the major AHS ASI project. Based on these discussions with stakeholders, the focus has shifted to evaluating the provider and patient impact of the Central Access and Triage component of the ASI bundle.

Since April, formal onboarding of the project has begun, including designing the project, co-creating and refining the data collection tools with the Surgery SCN stakeholders, and beginning work on the research ethics application. In the next reporting period, the research ethics application will be submitted.

Stakeholder presentations are scheduled in the coming months: AIS Implementation leadership team (October), and the Zone Executive Meeting (November) in support of obtaining operational approval, which is required prior to beginning data collection.

#### **October 2021 – March 2022**

There has been extensive engagement to advance this high-impact project during the review period. There have been regular meetings for the PLP and Surgery SCN team, as well as AHS stakeholders to determine the objectives, scope, and methodology for this project. AHS stakeholders, including the AIS Implementation leadership team and Zone Executive have been consulted to ensure the project is aligned with AHS operational needs, have approved the project methodology, and are enthusiastic supporters of the project. and to ensure that the project is aligned with the needs of AHS operations, an. The project team determined that a pilot study in the Edmonton zone study with the FAST Program (Facilitated Access to Surgical Treatment) was warranted, and is being developed. In addition to co-designing the provider experience data collection tool with surgeons, a patient advisory group has been established, with 11 patients representing diverse communities including ethnocultural immigrant and refugee, Indigenous, and LGBTQ communities. In February and March, the patient advisory group co-designed and tested the data collection tool, and developed recruitment strategies for patients in February and March. The research ethics application is being finalized for submission.

### **Planned for next period (April - September 2022)**

A pilot evaluation will be carried out with the FAST program in Edmonton where a central access program is already successfully established. Study methods will be designed, including: developing, testing, and refining a data collection tool; developing recruitment strategies; and co-creating the structure for regular stakeholder meetings to present and make sense of the incoming data. The pilot will run for approximately 3 months. Based on learnings, PLP and Surgery SCN team members, in collaboration with the AHS Implementation team, will decide and plan for roll-out of the evaluation to other specialities and regions in the province.

Current stage: Active planning for pilot study and preparing ethics application

Mid-year stage: Stakeholder engagement and project design for adjusted project scope

Supports strategic priorities: 3

Physician lead(s): Dr. Mary Brindle

Pillar: Surgery

Partner(s): Surgery SCN and the Illuminate Lab

### **Management of alcohol use disorder in liver disease – workshop series**

The prevalence of Alcohol Use Disorder (AUD) and Alcohol-Associated Liver Disease (ALD) is on the rise, and alcohol-related hospital admissions in Alberta have increased during the COVID-19 pandemic in comparison with previous years. AUD is known to contribute to development of cirrhosis, and it contributes to the progression and complications of disease. Early detection is critical to reverse these trends, however, well-intentioned healthcare professionals lack confidence and education around substance use management and so do not engage in routine screening for alcohol misuse. Family physicians often encounter these patients and our needs assessment showed that they lack comfort and knowledge of how to manage AUD in this population, at any stage, to prevent AUD complications, particularly with screening and brief interventions, and prescribing medications to manage AUD. Attitudes about individuals with substance use disorder have also been found to impact clinicians' perspectives of patients with AUD and the care they provide. This 3 part workshop series, for specialists, family physicians, and their teams, complements previous work in our cirrhosis program, and will address:

- › Alcohol Use Disorder 101 - January 20, 2022
- › Screening, brief intervention (motivational interviewing), and setting patient-centered goals - January 27, 2022
- › Pharmacotherapy and Behavioural Therapy - February 3, 2022

### **October 2021 – March 2022**

All work to plan and develop the educational content, and prepare and submit accreditation applications for each of the three workshops (with both the Royal College of Physicians and Surgeons of Canada, and the College of Family Physicians of Canada), was completed during the current review period. These workshops, delivered in January and February, are the first events PLP has delivered using a flipped classroom model, where participants viewed a pre-recorded video prior to their participation in a live, interactive session.

- [Alcohol Use Disorder 101 \(Jan 20, 2022\)](#): 81 participants (428 online viewings) learned about the biological process of alcohol use disorder as a brain disease along with the multi-system consequences of alcohol use disorder. They also learned about alcohol withdrawal and management strategies specific to

patients with liver disease. In the live session, participants engaged in case-based discussions to help them apply the strategies they learned. Participants also received resources for reference.

- 92.9 % Agree/Strongly agree that their practice will change or improve due to participating
- 89.3 % Agree/Strongly agree that content was relevant to their practice

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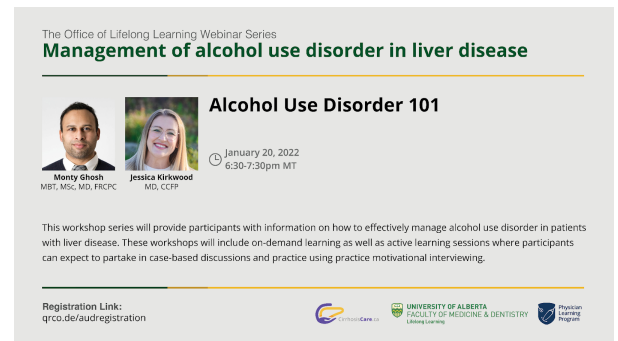
- 92.9 % Agree/Strongly agree that their practice will change or improve due to participating
- 89.3 % Agree/Strongly agree that content was relevant to their practice

**Screening, brief intervention and setting patient-centred goals (Jan 27, 2022):** 64 participants ( 291 online viewings) learned about screening using the Alcohol Use Disorder Identification Test-Concise (AUDIT-C) and how it can be used to provide patient-centred feedback. They also learned about motivational interviewing and how to set patient centered goals. During the live, interactive session, participants had the opportunity to practice using motivational interviewing with peers.

- 100.0 % Agree/Strongly agree that their practice will change or improve due to participating
- 100.0 % Agree/Strongly agree that content was relevant to their practice

**Pharmacotherapy and Behavioural Therapy (Feb 3, 2022):** 75 participants (318 online viewings) learned about anti-relapse pharmacotherapy and behavioural therapy with consideration of comorbid mental health conditions and poly-substance use. The interactive session involved case-based discussions around how to apply this in practice.

- 100.0 % Agree/Strongly agree that their practice will change or improve due to participating
- 93.3 % Agree/Strongly agree that content was relevant to their practice



The Office of Lifelong Learning Webinar Series  
**Management of alcohol use disorder in liver disease**

**Alcohol Use Disorder 101**

January 20, 2022  
6:30-7:30pm MT

Moniy Ghosh  
MB, MSc, MD, FRCPC

Jessica Kirkwood  
MD, CCFP

This workshop series will provide participants with information on how to effectively manage alcohol use disorder in patients with liver disease. These workshops will include on-demand learning as well as active learning sessions where participants can expect to partake in case-based discussions and practice using practice motivational interviewing.

Registration Link:  
[qrco.de/audregistration](http://qrco.de/audregistration)

Logos: qrc.ca, UNIVERSITY OF ALBERTA FACULTY OF MEDICINE & DENTISTRY, Physician Learning Program



The Office of Lifelong Learning Webinar Series  
**Management of alcohol use disorder in liver disease**

**Screening, Brief intervention (Motivational interviewing), and setting patient-centered goals**

January 27, 2022  
6:30-7:30pm MT

Jessica Mellinger  
MD, MSc

Gerald Winder  
MD

Anne Fernandez  
PhD

This workshop series will provide participants with information on how to effectively manage alcohol use disorder in patients with liver disease. These workshops will include on-demand learning as well as active learning sessions where participants can expect to partake in case-based discussions and practice using practice motivational interviewing.

Registration Link:  
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The Office of Lifelong Learning Webinar Series  
**Management of alcohol use disorder in liver disease**

**Pharmacotherapy and Behavioural Therapy**

February 3, 2022  
6:30-7:30pm MT

Jessica Mellinger  
MD, MSc

Gerald Winder  
MD

Anne Fernandez  
PhD

This workshop series will provide participants with information on how to effectively manage alcohol use disorder in patients with liver disease. These workshops will include on-demand learning as well as active learning sessions where participants can expect to partake in case-based discussions and practice using practice motivational interviewing.

Registration Link:  
[qrco.de/audregistration](http://qrco.de/audregistration)

Logos: qrc.ca, UNIVERSITY OF ALBERTA FACULTY OF MEDICINE & DENTISTRY, Physician Learning Program

### **Planned for next period (April - September 2022)**

Delivery of this workshop was completed by March 31, 2022. For ongoing spread and scale, [recordings of all three sessions](#) are available on the PLP website.

Current Stage: Completed, ongoing spread and scale of recorded workshops

Mid-year Stage: New project in active stage (*in lieu of completed/dropped projects, and projects delayed by the COVID-19 pandemic*)

Supports strategic priorities: 1, 2, and 3

PLP Medical Director: Dr. Puneeta Tandon

Pillar: Gastroenterology

Partner(s): Cirrhosis Care Alberta, Office of Lifelong Learning at the UofA.

### **Chronic heart failure quality improvement workshops**

Most patients with heart failure are managed by primary care physicians. A common issue is that patients are not optimized on all medical therapies, leading to poorer patient outcomes, as measured by quality of life, frequency of ER visits and hospitalizations, or earlier mortality. This project builds on a previous PLP webinar on Chronic Heart Failure in Primary Care. It features two clinic-level workshops that will establish quality improvement initiatives using clinic data and tools developed with the project partners. Launching at the Edmonton Southside PCN first, this program is accredited and can be expanded across the province.

#### **April 2021 to September 2021**

This project included developing, accrediting, and delivering three events: a webinar followed by two quality improvement workshops. The first 2 events were completed prior to this reporting period, and the second workshop was completed in April 2021, bringing the workshop series to completion.

During the second pan-PCN workshop ("Heart Failure in Primary Care : Workshop #2 : Management and Referral), 93 participants learned how to initiate and optimize the disease modifying medications for patients with Heart Failure with reduced ejection fraction, when and how to refer appropriate patients to the Cardiac rehab or palliative care services. The participants then worked with their QI teams to develop a team based clinic approach for these patients. The recordings have subsequently been downloaded 125 times during the current period. Based on the success of this workshop series, which is now in spread and scale, we are repeating the series in the spring of 2022, in partnership with the Edmonton Southside PCN and the Mazankowski Heart Institute.

- 100.0 % Agree/Strongly agree that their practice will change or improve due to participating
- 96.2 % Agree/Strongly agree that content was relevant to their practice

#### **October 2021 – March 2022**

In support of ongoing spread and scale of last year's two- part, accredited, webinar-workshop series, we have updated the accreditation information and have repeated the workshop series using the previous content. Participants viewed the [recording of the webinars](#), followed by a live, online, team-based quality improvement workshop, facilitated by the project's quality improvement team, in collaboration with our partners.

- [Heart Failure in Primary Care: Screening and Prevention](#) (Feb 15, 2022): 104 participants, and 121 website downloads)

- 96.7 % Agree/Strongly agree that their practice will change or improve due to participating
- 93.3 % Agree/Strongly agree that content was relevant to their practice
- [Heart Failure in Primary Care: Management and Referral](#) (March 1, 2022): 69 participants, and 59 website downloads)
- 100.0 % Agree/Strongly agree that their practice will change or improve due to participating
- 100.0 % Agree/Strongly agree that content was relevant to their practice

Participants, from 14 PCNs and AHS, had the opportunity to work in teams, using the resources created by the project quality improvement team to improve processes in the clinics to better manage patients with Heart Failure.

### Planned for next period (April - September 2022)

This workshop series has been completed, but could be repeated in ongoing scale and spread, if there was sufficient demand. At this time, there are no firm plans to repeat the workshop, however the webinar recordings remain available on the PLP website.

Current Stage: Completed

Mid-year Stage: Preparation for spread and scale in Spring 2022

Supports strategic priorities: 1

Physician lead(s): Dr. Justin Ezekowitz and Dr. Bibiana Cujec

Pillar: Primary care

Partner(s): Edmonton Southside PCN and the Mazankowski Alberta Heart Institute

### Optimizing the use of gastroscopy for dyspepsia in low-risk patients in the Edmonton zone

This project will determine the proportion of gastroscopies performed in Edmonton for the indication of dyspepsia (i.e., indigestion) in patients that are low risk and have no appropriate indications for this test, as well as the proportion of gastroscopies with clinically actionable findings, such as malignancies. These

results will be used to create individual and aggregate data reports for audit and feedback sessions. The goal is to reduce the proportion of low-value gastroscopies being performed in the Edmonton region, which will improve wait times for more urgent cases and will reduce costs.

### **April 2021 to September 2021**

Since April, two rounds of manual data collection from a sample of patient charts have been completed. The AH data request was submitted, and the data pull from AH is currently underway, with further data analysis to follow. Based on the project sampling plan, the scope of the project was amended to exclude individual reporting, however, in the future, individual reports may be considered once all the participating sites are using Connect Care. Preliminary findings suggest that the percentage of low-yield endoscopies for dyspepsia increased in 2021 (compared to 2019), and that there is considerable opportunity for improvement in the Edmonton area.

Next steps for this project include completing the dragging and co-creation of the aggregate report (currently underway), completing the data analysis, and preparing and delivering the study findings at audit and feedback sessions with Edmonton Zone Gastrointestinal Town Hall and a provincial meeting for gastrointestinal specialists in 2022. A new follow-on project, examining physician's decision making process for referrals for endoscopy is currently under consideration.

### **October 2021 – March 2022**

This project advanced significantly during the current review period. Data from the paper charts were analyzed, and supplemental data analysis using administrative data was planned and analyzed after the data were received in January. A preliminary individual physician report design was developed collaboratively with our human centred design team and gastroenterologists, and was revised upon completion of data analysis. To support dissemination and awareness of the project, preliminary findings were presented at the Choosing Wisely Alberta conference, and an abstract was submitted to Digestive Disease Week. Preliminary findings suggest that approximately 30% of endoscopies could have been avoided based on alarm symptoms or other appropriate indications. Among endoscopies where the patient had no alarm symptoms, a clinically actionable finding was exceedingly rare (<4%) and no cases of cancer were found, indicating that these scopes could have been safely avoided.

### **Planned for next period (April - September 2022)**

A number of facilitated audit and feedback sessions are planned for spring/early summer 2022, and the project findings will be presented at the Gastrointestinal Provincial Meeting in April. Dyspepsia key performance indicators will be added to the GI dashboard in Connect Care, and indication code will be added to the ConnectCare data collection. In the future, if all sites are on ConnectCare and the indication coded is collected in ConnectCare, it would be possible to repeat the data to look for improvements in the appropriateness of endoscopies.

Current Stage: Finalizing data analysis and findings in preparation for dissemination with physicians.

Mid-year Stage: Acquiring and analyzing additional data

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Dan Sadowski, Dr. Sander Veldhuyzen Van Zanten, Dr. Kerri Novak

Pillar: Digestive health

Partner(s): Digestive Health SCN, Choosing Wisely Alberta

## **Appropriateness of surgical antibiotic prophylaxis: Audited surgeries across all sites**

Surgical antimicrobial prophylaxis (SAP) prevents postoperative infection, but variance in its use within the Edmonton Zone is associated with increased risk of postoperative infections, extended hospitalization, increased readmission rates, and higher system costs, this despite revised guidelines for SAP in 2018. This project builds on an initial project for acceptance of recent findings within stakeholder groups and exploration of opportunities for action in other projects.

### **April 2021 to September 2021**

The data analysis for this project was completed last year. Among the findings, which were examined by site and by subspecialty, was that Cefazolin was appropriately given when indicated in 82% of procedures, and inappropriately given when not indicated in 8% of procedures. Spread and scale activities have been limited this year due to the COVID-19 pandemic, which has relied heavily on Infectious Disease specialists. Findings from the project were disseminated in 7 posters at the American Medical Microbiology and Infectious Disease Conference in April 2021. Stakeholder engagement to continue spread and is ongoing, but in a limited capacity due to the pandemic. Dr. Lynora Saxinger, the PLP Project Lead, presented to the Calgary Zone Surgical Zone Quality Council, which has a broad audience and included Quality Improvement leads from each surgical speciality, site NSQIP nursing and physician champions, analytics, from all 5 urban acute care sites in the Calgary Zone, as well as Dedicated QI staff (anesthesia, surgeon, and nursing champions) from the 16 high volume sites.

### **October 2021 – March 2022**

Further dissemination of this project has been paused due to the COVID pandemic.

### **Planned for next period (April - September 2022)**

Plans for further dissemination of the findings with key stakeholders will be revisited when the COVID-19 pandemic subsides.

Current Stage: Completed, in scale and spread.

Mid-year Stage: Completed, in Scale and spread

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Lynora Saxinger

Pillars: Surgery and Antimicrobial stewardship

Partner(s): AHS Infection Prevention and Control

## **General beta-lactam allergy assessment algorithm**

Patients who have inaccurate beta-lactam (i.e., penicillin) allergy labels receive suboptimal antibiotic therapy, which is associated with poorer patient outcomes and higher system costs. New evidence regarding penicillin allergy and cross-reactivity to certain classes of antibiotics has not been widely disseminated. This project will develop and test a beta-lactam allergy assessment tool for use in primary care, which will increase the shared understanding and management of true allergic reactions.

### **April 2021 to September 2021**



The fourth physician tool in the beta-lactam allergy resource collection was presented to key stakeholders in AHS for feedback at the Calgary Zone Surgical Quality Council. The audience included surgical specialty QI leads, nurses and NSQPI physician champions from all 5 urban acute care sites in the Calgary Zone, as well as dedicated quality improvement staff (anesthesiologists, surgeons, and nursing champions) from each of the 16 high volume centers in the province. The project has been completed and the tool is available on the PLP website.

### October 2021 – March 2022

As part of disseminating this tool within the province, it was presented to the Calgary Zone Surgical Quality Council in April, and their feedback was incorporated in further revisions of the tool. In November, we completed user testing for this primary care algorithm with family physicians from the Centre de Santé Communautaire Saint-Thomas/Saint-Thomas Community Health Centre. The [completed tool](#) is available to all physicians on the PLP website, and will also be available on the Surgery SCN website.

### Planned for next period (April - September 2022)

This project has been completed. Ongoing spread and scale will continue.

Current Stage: Completed, in Spread and scale  
 Mid-year Stage: Completed, in Spread and scale  
 Supports strategic priorities: 1 and 2  
 PLP Medical Director: Dr. Lynora Saxinger  
 Pillar: Digestive health  
 Partner: AHS Infection Prevention and Control

### Assess your patients' β-lactam allergy



**β-lactam cross reactivity list**  
 Shared β-lactams side chains determine cross reaction risk  
 Cefazolin is structurally different therefore does not cross-react with other β-lactams.

<ul style="list-style-type: none"> <li>Cefazolin</li> <li>Cefuroxime</li> <li>Ceftriaxone</li> <li>Cefepime</li> <li>Ceftazidime</li> </ul>	<ul style="list-style-type: none"> <li>β-lactamase inhibitors</li> <li>Mertensan</li> <li>Ceftriaxone</li> <li>Cefepime</li> <li>Cefepime</li> </ul>	<ul style="list-style-type: none"> <li>Amoxicillin</li> <li>Amoxicillin</li> <li>Cephalexin</li> <li>Cefadroxil</li> <li>Cefprozil</li> </ul>	<ul style="list-style-type: none"> <li>Penicillin</li> <li>Cefaclor</li> <li>Cloxacillin</li> <li>Piperacillin</li> <li>azlocicillin</li> </ul>
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**Avoid all β-lactams if the patient had a serious, delayed, non-anaphylactic reaction**  
 Avoid all β-lactams in same group if the patient had a mild non-anaphylactic reaction

## Appropriateness of care for pediatric diabetic keto-acidosis: Emergency department

Type I diabetes mellitus (T1DM) is one of the most common endocrine disorders and chronic conditions in the pediatric population. Approximately 40% of children with new-onset T1DM will present in diabetic keto-acidosis (DKA). This project assesses whether pediatric patients with DKA are being treated in accordance with the Clinical Practice Guidelines in Alberta hospitals. The results and recommendations will support the development of engagement of sessions for physicians that aim to reduce practice variation across sites. For hospital sites not included, the project's findings will help to promote broader practice reflection.

### April 2021 to September 2021

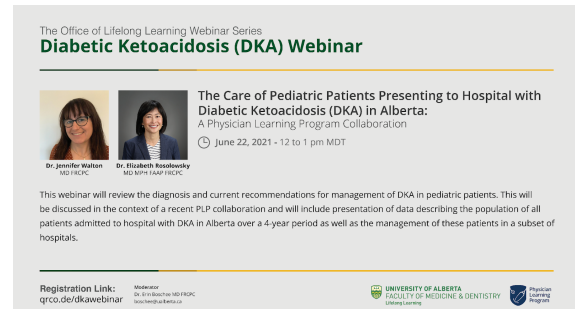
This project was completed during the current period - work during this stage included completing the data analysis, and developing and delivering a webinar where findings were disseminated. A goal of the project was to examine appropriateness of treatment and testing. Some key findings were that approximately 15% of patients were admitted to the ICU and 1.4% had head imaging (a proxy for cerebral edema), and 5% of patients had hypoglycemia throughout their admission.

A PLP webinar to spread and scale the findings was held on June 22, 2021 (presented by Dr. Jennifer Walton and Dr. Elizabeth Rosolowsky). Content included a review of the pathophysiology and clinical features of diabetic ketoacidosis in the pediatric population and the current guidelines for managing DKA in this population. The project data and findings were presented, and with discussion on how participants could use the project results to improve patient care.

### [Diabetic ketoacidosis Webinar](#) (June 22, 2022): 98

participants, and 83 website downloads)

- 80.0 % Agree/Strongly agree that their practice will change or improve due to participating
- 86.7 % Agree/Strongly agree that content was



A possible follow-on project in this pediatric DKA series, look consideration.

### **October 2021 – March 2022**

This project was completed in June, and remains in ongoing spread and scale, with the event recording available for review online.

Current Stage: Completed, ongoing spread and scale

Mid-year Stage: Completed and into Spread and scale; a possible new project within this program of work, focusing on a different hospital unit, is currently under consideration

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Jennifer Walton

Pillar: Pediatrics

### **Diabetes prescribing in primary care**

Newer medications for diabetes are now available, offering weight loss, less hypoglycemia, and improved ability to prevent heart and kidney disease, but the extent of their use in primary care is unknown. This project evaluates the prescribing patterns for patients with primary diabetes in Northern Alberta. It will support educational interventions and inform future work in our diabetes quality improvement program.

### **April 2021 to September 2021**

To support dissemination of the completed project's findings, the team co-authored a manuscript during the current reporting period, and submitted it to the Canadian Journal Of Diabetes, where it is awaiting review. Key findings in the study were that, contrary to current evidence, two medications (SGLT2i and GLP1-RA) were less likely to be prescribed to patients with pre-existing cardiovascular disease, heart failure, and/or chronic kidney disease.

Hao R, Myroniuk T, McGuckin T, Manca D, Campbell-Scherer D, Lau D, Yeung RO. Underuse of Cardiorenal Protective Agents in High-Risk Diabetes Patients in Primary Care: A cross-sectional study. (Under review at *Canadian Journal of Diabetes*).

### **October 2021 – March 2022**

The manuscript was revised, and was submitted to *BMC Family Practice*, where it is undergoing peer-review.

Hao R, Myroniuk T, McGuckin T, Manca D, Campbell-Scherer D, Lau D, Yeung RO. Underuse of Cardiorenal Protective Agents in High-Risk Diabetes Patients in Primary Care: A cross-sectional study. (Under review at *BMC Family Practice*).

### **Planned for next period (April- September 2022)**

Findings from this project will support future quality improvement projects and/or educational events for physicians and their teams. The academic dissemination part of this project will be completed once the paper has been published.

Current Stage: Project completed, pursuing academic dissemination through publication in a peer reviewed journal

Mid-year Stage: Scale and Spread

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Roseanne O Yeung

Pillar: Primary care

Partner: NAPCReN

### **Socializing diabetes management data with five regional diabetes clinics**

This project builds on an earlier PLP project (Diabetes management in five regional diabetes clinics) which established a baseline understanding of the types of patients and services provided across each diabetes clinic in the Edmonton Zone. Those project findings are intended to support the Edmonton Zone Diabetes Quality Council in prioritizing quality improvement efforts and promote more rational service delivery. This new project in the Diabetes program socializes the data and results with participating regional diabetes clinics and may include preparing site-level data reports to advance their quality improvement efforts.

### **April 2021 to September 2021**

The project team's focus during the current review period was reviewing the implications of the findings and writing a manuscript for dissemination. This project shed light on how the value and impact of EMR and administrative databases for data-driven quality improvement can be hampered by substantial gaps in key data. Recommendations include improving data capture, storage, and flow in order to support data-driven quality improvement and regional prioritization of resources. Site level data has been shared with the five clinics to support quality improvement efforts as planned, however the COVID pandemic has delayed further action at the site level. The academic manuscript was completed and submitted to the *Canadian Journal of Diabetes* for review.

Swaleh, R, McGuckin, T, Campbell-Scherer D, Setchell B, Senior P, Yeung R. Realizing the potential of EMR and administrative health data for regional quality improvement in diabetes: No magic bullets. (Under review at *Canadian Journal of Diabetes*).

### **October 2021 – March 2022**

As formal engagement and socialization of the project findings with the Diabetes clinics have been on hold due to the COVID-19 pandemic, we have focused on academic dissemination of the findings during

the interim. The manuscript was not accepted at *Canadian Journal of Diabetes*, and was subsequently revised using reviewer feedback, and submitted to *BMJ Open Diabetes Research & Care*, where it is currently undergoing peer-review.

Swaleh, R, McGuckin, T, Campbell-Scherer D, Setchell B, Senior P, Yeung R. Realizing the potential of EMR and administrative health data for regional quality improvement in diabetes: No magic bullets. (Under review at *BMJ Open Diabetes Research & Care*)

### **Planned for next period (April - September 2022)**

Once the COVID-19 pandemic subsides, we anticipate re-engaging with the diabetes clinics to explore next steps, however the timeframe is uncertain.

Current Stage: Completed, in Spread and scale

Mid-year Stage: Data analysis completed, pursuing Spread and scale with clinics

Supports strategic priorities: 1

PLP Medical Director: Dr. Roseanne Yeung

Pillar: Medicine

### **Physician practice improvement – Managing gestational diabetes in primary care**

The prevalence of gestational diabetes (GD) has been increasing, especially in certain ethnic communities, and with higher maternal age and increased BMI. This workshop for family physicians reviews the epidemiology of GD in Alberta, the implications for mother and baby, and its prevention and management. Aggregate data from another PLP project on Diabetes Management in the five Edmonton Diabetes Centres is used to inform the discussion and encourage quality improvement.

### **April 2021 to September 2021**

This completed project is in the ongoing scale and spread stage. The information may be included in future webinars, given the increased incidence of gestational diabetes and the poor outcomes for both mother and child, as well as a heavier burden on the healthcare system. At this time, there are no dissemination activities planned for the balance of this grant year, however, we remain flexible to potential opportunities that may arise.

### **October 2021 – March 2022**

There were no additional dissemination activities planned for the current review period.

### **Planned for next period (April - September 2022)**

At this time, there are no dissemination activities planned for next, however, we remain flexible to potential opportunities that may arise, including additional dissemination in upcoming PLP educational events or follow-on projects.

Current Stage: Completed, in ongoing Scale and spread

Mid-year Stage: Completed, in Scale and spread

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Roseanne O Yeung

Pillar: Primary care

## **Cirrhosis: applied human-centred design of online tools and resources**

Damage to the liver can lead to a chronic condition called cirrhosis, which is a major cause of health complications and premature death. Dr. Puneeta Tandon and her PRHIS sponsored research team have developed a website to support cirrhosis care for physicians and patients, including decision algorithms for [varices](#), [ascites](#), [hepatic encephalopathy](#), [spontaneous bacterial peritonitis](#) and [primary liver cancer](#), which have been adapted for online use. The PLP is supporting the development of the online tools and will use human-centred design approaches to understand and address physician feedback on these decision algorithms.

### **April 2021 to September 2021**

The project team has met regularly for ongoing updates on implementation of the website and tools. The scenarios for usability testing co-creations with physicians were developed and end user testing sessions have been planned. Although end users have had time to use the online tools before participating in our end user testing, we have had to postpone scheduling the events and recruiting physicians due to the COVID-19 pandemic. The events will be scheduled at a later date.

### **October 2021 – March 2022**

The project team narrowed the testing to scope to focus on palliative care functions, and has narrowed the testing audience to primary care physicians, as AHS accessibility issues have been identified. Case scenarios for website user testing were developed for evaluating useability of specific aspects. In response to preliminary feedback that identified a need for a cirrhosis care checklist for family physicians, the principal investigator has drafted checklist content, which will be added to the website and will also undergo user testing. Recruitment for user testing for the palliative care pages is currently underway.

### **Planned for next period (April - September 2022)**

User testing will be carried out to collect feedback. Following data analysis, website changes that will improve useability will be planned and implemented. The web-based design for the cirrhosis care checklist will be created, and the medical content will be reviewed for appropriateness. User testing for the new cirrhosis care checklist will be carried out, using a similar approach to the palliative care tool testing, to optimize useability of the web-based tools.

Current Stage: User testing planning and recruitment

Mid-year Stage: Ready for user-testing, postponed due to COVID-19 pandemic.

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Puneeta Tandon

Pillar: Gastroenterology

Partner(s): PRHIS-funded "Cirrhosis project" and AHS Digestive Health SCN

## **Cirrhosis: Evaluation of the implementation of a new order set and web resources**

With the aim of improving health and reducing the cumulative length of stay in hospital, a comprehensive best practice care guidance (orders set, website algorithms) was developed by Dr. Puneeta Tandon and her PRHIS sponsored research team to support clinicians across Alberta caring for patients with cirrhosis. In this partnered project, PLP will lead part of a qualitative evaluation of the implementation of the order

set, to understand how clinicians are using the best practice care guidance and the factors that help or hinder using it in daily practice. Knowledge from this evaluation will be used to develop strategies to optimize its use.

### **April 2021 to September 2021**

This project has been delayed by the COVID-19 pandemic, as it addresses order sets in ConnectCare and requires health care worker participation. However, meetings between PLP and the Cirrhosis research team have continued. The study methodology was designed and the research ethics application was submitted and approved in June. Applications for operations approval were submitted and approved by two (of three) sites; however recruitment for the study is on hold as hospitalist physicians and staff respond to pandemic needs. Work is ongoing on the roll out of the order set and website (cirrhosiscare.ca) via engagement activities.

### **October 2021 – March 2022**

This project has been delayed by the COVID-19 pandemic, and the departure of our implementation scientist who was leading the qualitative work. Recruitment for a new Implementation Scientist is currently underway. As part of the ongoing PRHIS grant, Dr. Tandon and her team have continued working on content for supporting clinicians.

### **Planned for next period (April - September 2022)**

We anticipate completing the recruitment and selection process for an implementation scientist in the coming months. Timelines for resuming work on this project will depend on the COVID-19 pandemic and onboarding new staff.

Current Stage: Delayed due to COVID-19, PRHIS research team is continuing to develop content

Mid-year Stage: Data collection stage, but delayed due to COVID-19.

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Puneeta Tandon

Pillar: Gastroenterology

Partner(s): PRHIS-funded "Cirrhosis project" and AHS Digestive Health SCN

## **Patient journey map for hepatic encephalopathy**

Hepatic encephalopathy (HE) is a dysfunction in the brain caused by poor liver function. It can cause personality changes, alterations in level of consciousness and motor function, and can leave patients unable to care for themselves. Improved management of HE, which can be supported by developing education materials for patients and caregivers, can reduce hospital stays for patients and reduce the financial and social burdens of this illness for patients, caregivers, and the health system. This project, which will develop a journey map depicting the patient experience of HE, will help physicians standardize treatment according to best practices and promote positive outcomes in patients by assisting them to participate in decision-making, comply with management protocols, and cope more effectively with their diagnosis.

### **April 2021 to September 2021**

Considerable work has been completed on this project during the reporting period, including 10 qualitative interviews with patients, a caregiver, nurse practitioners, a registered nurse, and

gastroenterologists to collect information that would inform the journey map. The findings and the draft journey map were shared with the physician lead and a summary report was prepared for stakeholders. Next steps for this project include planning and hosting a co-creation with stakeholders to generate ideas and possible solutions for barriers and problems that were identified during data collection, which may be incorporated into the final version of the patient journey map.

### **October 2021 – March 2022**

The patient journey map was finalized and will be added to the cirrhosiscare.ca website so that people can easily access the information and provide feedback. This tool development project has been completed.

Current Stage: This project is completed

Mid-year Stage: Ideation stage - gathering feedback from stakeholders

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Puneeta Tandon

Pillar: Gastroenterology

Partner(s): PRHIS-funded "Cirrhosis project"

### **Developing an amyotrophic lateral sclerosis tableau dashboard**

Diagnosing amyotrophic lateral sclerosis (ALS) is a long and complex process, and the speed with which patients are diagnosed is key to accessing drugs that can slow the disease progression and extend quality of life. This project will create a tableau dashboard that will continuously monitor the proportion of patients at the University of Alberta ALS clinic on certain medications. Improvements in patient results will indicate that patients are being referred to the clinic earlier in their disease progression. Findings from this project will support the development of more effective interventions that will address the knowledge to action gap for clinicians, and support better patient outcomes.

### **April 2021 to September 2021**

Since April, the project has been onboarded (developing project plan, planning the study's methods and design), and the application for research ethics was submitted and approved. Data extraction from patient charts for clinic visits has been completed, and data analysis is underway, with plans to create a baseline report using the data. In addition to the data work, a parallel process of engaging with Connect Care staff to support planning and early development work for the tableau dashboard has been underway, and the project team has identified what data is available in the AHS Connect Care platform and what variables should be included in the dashboard.

### **October 2021 – March 2022**

During the current review period, additional data analysis was completed, and is being reviewed by the principal investigator. Preliminary findings indicate that 92 patients with ALS were seen at the ALS Clinic in Edmonton between Sept 2019 and June 2021. The average time from symptom onset to their first ALS clinic visit was 1.25 years (with a standard deviation of 1.2). 77% of these patients were eligible for one of the new medications, and 33% were eligible for the other new medication. Preliminary findings were shared with ALS Canada and the Canadian ALS Research Network (CALN) in a brief presentation in November.

Our team has engaged with the ConnectCare group to understand the processes for creating dashboards, and has mapped the desired variables and identified which will need to be developed. Dr. Johnston has engaged with the ALS clinic in Calgary to align priorities, as the dashboard will be rolled out provincially.

### **Planned for next period (April - September 2022)**

The request for dashboard construction has been submitted to the ConnectCare team in AHS, and their prioritization of the request and resource availability will determine when the dashboard creation will begin, and how long it will take to complete and implement. In the meantime, the project team will pursue academic dissemination of their findings.

Current Stage: Data analysis completed, waiting for AHS ConnectCare team to build and implement dashboard.

Mid-year Stage: Data analysis

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Wendy Johnston

Pillar: Medicine

Partner(s): University of Alberta ALS Multidisciplinary Clinic

### **Human centred-design tools for amyotrophic lateral sclerosis**

ALS is a fatal, progressive disease that results in a loss of motor control. Diagnosis is often a lengthy process and involves referring patients to multiple medical specialties. This project is using qualitative and human-centred design approaches to understand the preconceptions, attitudes, and system-level barriers that need to be addressed for patients with ALS to have more timely access to the University of Alberta ALS Multidisciplinary Clinic after the initial onset of their disease. By engaging with physicians, nurses, and patients, this project will identify barriers and opportunities for change, and will also create a patient journey map that will help with patient education.

### **April 2021 to September 2021**

Data collection was the primary focus during the review period, with 19 individual interviews carried out with patients, community neurologists, an otolaryngologist, a neurosurgeon, and a family physician. Participant recruitment will continue in the next reporting period, and following data synthesis and analysis, a draft journey map will be created and reviewed with stakeholders, followed by revisions to finalize the tool and planning for implementation.

### **October 2021 – March 2022**

During the current period, five additional individual interviews were completed with otolaryngologists, neurosurgeons, and an orthopedic surgeon. All participants identified a need for more education about ALS for the general public and family physicians to, to help increase the likelihood of symptoms being recognized earlier in the disease progression. Recruitment for family physicians continues.

### **Planned for next period (April - September 2022)**

Following completion of all interviews, qualitative and quantitative analysis of data collected during the interviews will be analyzed, and will be synthesized in a draft version of a patient journey map. Feedback to refine the tool will be collected and the journey map will be revised. Once the journey map is complete, a follow on project for dissemination and knowledge transfer will be planned.

Current Stage: Qualitative research through interviews



Mid-year Stage: Stakeholders engagement and creating a journey map

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Wendy Johnston

Pillar: Medicine

Partner(s): University of Alberta ALS Multidisciplinary Clinic

## Diabetes webinar series for primary care: The diabetes updates – from guidelines to practice

Family doctors care for many patients with diabetes. As part of our broader diabetes program, PLP is in the early stages of planning and developing a multi-event webinar series on managing diabetes in primary care.

**April 2021 to September 2021**

### The Diabetes Updates – From Guidelines to Practice

**webinar series** included four case-based webinars that were developed and delivered during the spring of 2021. While the first webinar focused on nutrition, the other three addressed newer medications for diabetes (SGLT2 inhibitors and the GLP-1 agonists) from the perspectives of an endocrinologist, an internist and a family doctor. The projects were well attended, and the recordings are available on the PLP website to support ongoing spread and scale.

The Office of Lifelong Learning presents  
**Diabetes Updates - From Guidelines to Practice**  
A case-based webinar series

**Nutrition and Diabetes Management - Let's not sugar coat it!**  
Wednesday, May 12, 2021 | 7 pm MT  
No one diet fits all people with diabetes. In this webinar, the speakers will cover the principles of good nutrition for people with diabetes.  
Dr. Ross Young, Kim Young, MD, CDE

**Diabetes and Chronic Kidney Disease**  
Wednesday, May 19, 2021 | 7 pm MT  
A review of the latest evidence around managing patients who have diabetes and chronic kidney disease.  
Dr. Ross Young, Dr. Darren Lee, Dr. Donna Manca

**Diabetes and Cardiovascular Disease**  
Wednesday, May 26, 2021 | 7 pm MT  
A review of the latest evidence around managing patients who have diabetes and cardiovascular disease.

**Deprescribing Insulin - Can this be done?**  
Wednesday, June 2, 2021 | 7 pm MT  
With introduction of the newer agents that have good benefits, do patients need to be on insulin and if they are already on insulin, can we deprescribe? If so, what are the practical principles to guide deprescribing of insulin?

Physician Learning Program | UNIVERSITY OF ALBERTA FACULTY OF MEDICINE & DENTISTRY | Lifelong Learning | DIABETES CANADA

- **Nutrition and Diabetes Management – Let's not sugar coat it!** (May 12, 2021 - 341 registrants, 178 attendees, 272 website downloads). The webinar focused on the evidence behind various diets that impact blood sugar control, and covered the principles of good nutrition for people with diabetes.
  - 80.4 % Agree/Strongly agree that their practice will change or improve due to participating
  - 98.0 % Agree/Strongly agree that content was relevant to their practice
- **Diabetes and Chronic Kidney Disease** (May 19, 2021 - 294 registrants, 114 attendees, 125 website downloads). The webinar reviewed the latest evidence for managing patients who have diabetes and chronic kidney disease, focusing on the benefits and practical considerations of some newer medications (SGLT2 inhibitors), to improve patient outcomes.
  - 96.3 % Agree/Strongly agree that their practice will change or improve due to participating
  - 96.4 % Agree/Strongly agree that content was relevant to their practice
- **Diabetes and Cardiovascular Disease** (May 26, 2021- 286 registrants, 113 attendees, 64 website downloads). The webinar reviewed the latest evidence for managing patients who have diabetes and cardiovascular disease, focusing on the benefits and practical considerations of some newer medications (GLP-1 and SGLT2 inhibitors), to improve patient outcomes.
  - 100.0 % Agree/Strongly agree that their practice will change or improve due to participating
  - 100.0 % Agree/Strongly agree that content was relevant to their practice
- **Deprescribing Insulin – can this be done?** (June 2, 2021 - 284 registrants, 99 attendees, 87 website downloads). The webinar reviewed current prescribing patterns of insulin using provincial aggregate data, and provided information why and when insulin prescribing is appropriate as well as key considerations in de-prescribing insulin.

- 100.0 % Agree/Strongly agree that their practice will change or improve due to participating
- 100.0 % Agree/Strongly agree that content was relevant to their practice

### **October 2021 – March 2022**

This project was completed in the spring. Ongoing spread and scale continues, as the [event recordings](#) are available on the PLP website.

Current Stage: Completed, the webinars are available on our website for continuing spread and scale

Mid-year Stage: Completed, the webinars are available on our website for continuing spread and scale

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Rose Yeung

Pillar: Medicine

### **Adrenal insufficiency toolkit development and user testing**

The Division of Endocrinology & Metabolism at the University of Alberta has been working to improve the quality of care provided to patients with adrenal insufficiency. Adrenal insufficiency (AI) is an uncommon hormonal disorder where the adrenal glands are not working properly, and adrenal hormone replacement in the form of steroid medications (e.g., prednisone, hydrocortisone, dexamethasone, etc.) is required. Replacing these hormones appropriately helps reduce symptoms of fatigue, aches, nausea, etc. related to their deficiencies, and ensures that blood pressure remains at safe levels. Under stressful circumstances like infection or surgeries, medication adjustments known as “stress dosing” are needed and require special education and instructions. Working together with patients living with AI and physicians in the Division of Endocrinology and Metabolism, we co-created a patient education toolkit.

### **April 2021 to September 2021**

In order to make sure the toolkit is easy to use and understand, user testing and evaluation is currently being carried out between endocrinologists and patients. Project onboarding, study design, and research ethics approval were completed during the review period, and data collection is currently underway.

### **October 2021 – March 2022**

User testing and data collection is ongoing. As this disease has a low prevalence in Alberta, recruitment of eligible patients is progressing slowly.

### **Planned for next period (April - September 2022)**

Data collection will continue until a sufficient sample size is reached. Then data analysis will be completed, and potential revisions to the tool will be identified and implemented. Disseminating the tool with relevant stakeholders will be planned, and may include a follow-on project focused on KT.

Current Stage: User testing and data collection

Mid-year Stage: User testing and data collection

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Rose Yeung

Pillar: Metabolic Diseases

Partner(s): Division of Endocrinology & Metabolism, University of Alberta

## **Appropriateness and stewardship in asymptomatic bacteriuria: diagnosis and management of urinary tract infection in long term care**

Inappropriate use of antimicrobials in the treatment of asymptomatic bacteriuria (ASB) is a commonly recognized issue across health care. PLP continues to collaborate with the AHS Antimicrobial Stewardship group to support decision making for appropriate urine testing, having previously developed adult and pediatric algorithms. The new project extends the work to long term care, and will involve updating the Long Term Care -UTI care and management checklist developed by Towards Optimized Practice (TOP). The Physician Learning Program human centered design team will update the existing tool to match the design and utility of the previously designed [suite of tools](#) purposed for [Pediatric](#) and [Adult](#) Diagnosis and Management of Urinary Tract Infection.

### **October 2021 – March 2022**

The project objectives and scope were determined, and a project intake form was completed. The existing Long Term Care tool bundle was reviewed by the ASAB group to evaluate content appropriateness in the context of current guidelines. A preliminary wireframe design was developed and supported the creation of a prototype. The project team has met several times to review successive iterations of the prototype design, to ensure content appropriateness while optimizing understandability of the tool.

### **Planned for next period (April - September 2022)**

In the coming months, a final draft of the algorithm will be completed. Medical content will be reviewed by the ASAB group, the prototype will be revised based on their feedback, and will be circulated for final approval. Once the tool is finalized, plans for distribution and knowledge transfer will be developed.

Current Stage: Prototype design - updating pre-existing LTC checklist to match suite

Start of year Stage: Content review of old checklist and wireframe preparation

PLP Medical Director: Dr. Lynora Saxinger

Supports strategic priorities: 1 and 2

Pillar: Medicine

Partners: AHS Appropriateness and Stewardship in Asymptomatic Bacteriuria

## **Income and housing insecurity resources**

Public health responses and reduced economic activity associated with the COVID-19 pandemic are affecting the housing and income security of ethnocultural communities in Edmonton. Local, provincial, and national programs and services can provide support, but information about them is fragmented and challenging to navigate. A coalition of immigrant and refugee serving organizations, including AHS, City of Edmonton, and our team represented by Dr. Campbell-Scherer, has been gathering information on eligibility and scope of services for various programs. The PLP is partnering with the Multicultural Health Brokers Cooperative to validate and expand the information and create a knowledge tool, with the goal of making it available to community brokers and interdisciplinary clinicians.

### **April 2021 to September 2021**

During the current period, feedback was collected from the MCHB to update the content for community organization audiences. Work began on the development of an adapted version for physicians, with preliminary content revisions completed and reviewed with content experts. The designers have prepared for an October co-creation with multiple stakeholder groups, including MCHB brokers, primary

care physicians, and allied healthcare practitioners, in support of final revisions before the tool is distributed.

## October 2021 – March 2022

Following data verification with the MCHB, our human centred design team engaged with a Faculty of Nursing leader with relevant expertise to refine the list of organizations and understand challenges in identifying and specifying level of income or economic support for each organization. The project was presented to social workers at the Rundle Health Center in October. In November, we held a co-creation session with primary care physicians, social workers, and MCHB brokers to test and collect information of the tool's useability for physicians and health care team. Information collected during the co-creation confirmed that the tool is useful for primary care teams, suggestions for improving and revising the tool were discussed, and the potential for a follow-on project to develop an adapted version for patient use was also identified. Final revisions of the tool were completed, and in December, the tool was presented at grand rounds for the Faculty of Medicine & Dentistry at the University of Alberta. This project developed two tools that detail access to financial and housing resources for newcomers/immigrants in Edmonton. After completing a feedback summary report, the finished tools for resources for [income and economic insecurity](#) and [housing insecurity](#) were presented at the U of A Faculty of Medicine & Dentistry Grand Rounds in December, and spread and scale activities are ongoing.

**Income and Economic Support for Immigrants**

**Alberta Works**  
Available benefits  
Depending on your needs, ability to work and size of your family, you may get money for:  
Basic expenses: food, clothing and shelter, childcare, special diets, utility connection fees, work related expenses, unexpected emergencies, costs to leave family violence, school expenses for children.

**Main Alberta Supports Contact Centre**  
info@alberta.ca  
1-800-451-4800  
https://www.alberta.ca/home-support.aspx  
7:30 am to 8 pm (Monday to Friday, closed some holidays)

**24-hour Emergency Income Support Contact Centre**  
col.soc@ouab.ca  
1-866-644-5135

**Economic support** Employment guidance, Career support, Resume help, Job search support, language training

**Helping newcomers in French**  
**Francophonie Albertaine Plurielle (FRAP)**  
FRAP's mission is to offer services in French allowing the Francophone community an equalization of opportunities in Alberta and to promote diversity and social economic and cultural inclusion of Francophones.  
https://www.frapp.ca/

**Support multiple languages**  
**Edmonton Mosaic Centre for Newcomers**  
EMCN offers various programs and services, from helping you with your resume to assisting you with your job search, EMCN is here to help you obtain employment.  
info@mosaic.ca  
(780) 424-7709  
https://www.mosaic.ca/

**Support multiple languages**  
**Action for Healthy Communities**  
Our program leaders share their expertise in building information and knowledge sharing about Alberta employers and industry sectors. The Alberta Job Bank's integration of resources into the Alberta workforce, certifications and credentials, job search techniques, career opportunities, employment trends, and much more.  
communications@ahc.ca  
(780) 544-4687  
ahc.ca

**Job Banks** You may use these online resources to find job postings in your area  
**Indeed** https://ca.indeed.com/  
**Monster** https://www.monster.ca/  
**Canada Job Bank** https://www.jobbank.gc.ca/home  
Job Bank is Canada's national employment service, available as a website and mobile app. We help Canadian job seekers find their careers, and we help employers find employees to recruit and hire across the country.

**211 - Alberta**  
211 is an essential service that helps Albertans find the right resources and services for immediate issues they need help with, at the right time. 211 is available 24/7 by phone, text and chat. The service is free, confidential and available in over 18 languages over the phone.  
info@ab.211.ca  
211  
https://ab.211.ca/

**Catholic Social Services**  
Our programs include: settlement & employment support, English, Math and Computer training, children & youth programs, small business supports, a resource centre, and volunteer opportunities.  
info@csa.ab.ca  
(780) 424-3545  
www.csaab.ca/

**Migrants Alberta**  
Migrate is a non-profit advocacy and help organization in Alberta, we address the immediate needs of immigrants and our community. We provide settlement, language, social and cultural orientation support. We work closely with labor unions and community based organizations.  
migrantsalberta@gmail.com  
(878) 882-3210  
www.migrantsalberta.ca

**Housing Issues for Immigrants in Alberta**

40.7% of recent immigrants (in Canada for under 10 years) are in core housing need.

Got housing problems? Get discreet help here

**Helping newcomers (in English)**

- Helping Albertans with whatever issues they need help with  
**ETTC** Edmonton Trust Edmonton  
info@hometrust.ca  
780-702-5267
- Helping those who are at risk of or are already homeless  
**CRAIG** Craigie Canada  
www.craigie.ca
- Common popular websites to rent a place  
**Appt** Appt  
appt.ca
- Helping seniors in Edmonton (long waiting list)  
**SEF** SEF Seniors Housing  
housing@sef.org  
(780) 482-5551
- SAPS** Seniors Association of Greater Edmonton  
info@hsg.ca  
(780) 423-5510

**Helping newcomers (in several language)**

- Helping newcomers in French  
**FRAP** Francophonie Albertaine Plurielle (FRAP)  
info@frap.ca  
(780) 540-7604
- Support multiple languages  
**EMCN** Edmonton Mosaic Centre for Newcomers  
info@mosaic.ca  
(780) 424-7709
- AHC** Action for Healthy Communities  
communications@ahc.ca  
(780) 544-4687
- CS** Catholic Social Services  
info@csa.ab.ca  
(780) 424-3545
- Helping newcomers (long waiting list)  
**CRH** Capital Region Housing  
inquiry@crh.ca  
(780) 420-6161
- BANS** Right at Home Housing Society  
info@rightathomehousing.com  
(780) 423-1339

## Planned for next period (April - September 2022)

The project is completed, ongoing spread and scale will continue.

Current Stage: Completed, in scale and spread

Mid-year Stage: Preparing a co-creation to get feedback from the stakeholders

Supports strategic priorities: 3

PLP Medical Director: Dr. Denise Campbell-Scherer

Pillar: COVID-19

Partner(s): Multicultural Health Brokers Co-operative, Alberta Health Services, and City of Edmonton

## **GLA:D back for lower back pain**

The GLA:D Back program is an evidence-based education and exercise program to help patients manage and reduce chronic and recurrent low back pain. A PRHIS grant application, currently under review, includes partnering with PLP to support knowledge transfer at the end of the PRHIS research project and advance the spread and scale of the program to achieve sustainability. If PRHIS funding is not awarded, PLP will collaborate with the physician lead on smaller projects, specifically on changes in physicians' perspectives about back pain with a focus on decreasing low-value care and improving patient experience and outcomes.

### **April 2021 to September 2021**

This project was funded through a Choosing Wisely grant, but did not receive a PRHIS grant. During the reporting period, the PLP education specialist reviewed the course content and instructional design and provided feedback to the primary investigator. Initial considerations for carrying out a quantitative data analysis project were changed when our due diligence review identified that a similar project on lower back pain imaging had been completed by the UofC PLP team last year - those results were shared with the physician project lead. The revised PLP project scope will focus on using human centred design approaches to develop a patient journey map as part of the patient education tools. At the end of the current period, work to formally onboard the project, including designing the study and preparing the ethics application was underway. Data collection and tool development will occur in the second half of the year.

### **October 2021 – March 2022**

Work during the current review period has focused on completing the qualitative study methods, developing the data collection tools and survey questionnaires. As part of finalizing the study methods in preparation for submitting the research ethics application, a questionnaire for patients and clinicians to understand stakeholders' experiences with lower back pain treatment is being refined, and the interview plan for participant interviews is being developed.

### **Planned for next period (April - September 2022)**

Once research ethics approval is received, recruitment for participants for the HCD qualitative research study will start. Data will be collected in qualitative interviews with participants using a human centred design approach. Data analysis will inform the development of a patient journey map, and will identify challenges patients face in treating lower back pain. A complementary project - an educational webinar co-learning series for physicians is being developed as a separate project in collaboration with the Office of Lifelong Learning at the UofA.

Current stage: Designing the study and preparing ethics application

Mid-year Stage: Preliminary Inquiry (Project under consideration or in development in initial work plan submission)

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Greg Kawchuk

Pillar: Medicine

## **Physician reports for diabetes care and management**

This project will develop and distribute basic diabetes feedback reports to individual primary care

physicians, with benchmark comparisons, in March 2021 and 2022, followed by enhanced diabetes feedback reports and management resources (renal function and medications), and then quality improvement workshops/seminars.

### **April 2021 to September 2021**

During the current period, our project partners at NAPCReN extracted electronic medical report data from sentinels in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), and updated the NAPCReN data set. The project team examined the extent to which new medications recommended by the CDA for diabetic patients with cardiac and renal conditions have been prescribed, and found that these medications are being prescribed at a lower frequency for this subset of patients than for patients without these additional indications. Hence, the CPCSSN sentinel physicians may not be prescribing optimal diabetic medications. Resources are being developed or updated to help improve appropriateness of prescribing, including adding the new medications to the Data Presentation Tool, to enable physicians to identify diabetic patients with a range of comorbidities and check their medications, and to support practice level (or PCN level) quality improvement projects. In addition, information is being prepared for inclusion in the individual physician reports that are scheduled for March 2022.

### **October 2021 - March 2022**

Follow up reports were created with data collected since March 2021, and were distributed to 83 physicians in December 2021. Among the resources provided to physicians were links to recordings of PLP's past educational events on diabetes, including our spring 2021 four webinar series on diabetes. Physicians who received reports were invited to provide feedback to improve the content and/or report layout.

### **Planned for next period (April - September 2022)**

We plan to distribute follow up reports, with new data, before March 31, 2023. These follow up reports assist physicians in evaluating the impact of their practice changes, with the goal of improving patient outcomes.

Current Stage: New reports distributed in Dec 2021, will repeat again next year.

Mid-year Stage: Data updated for next round of reporting, preparing information

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Donna Manca

Pillar: Primary care

Partner: NAPCReN

### **Physician reports for EOSS dashboard**

The Canadian Primary Care Sentinel Surveillance Network (CPCSSN) is a multi-disease surveillance system of electronic medical records. It features the Edmonton Obesity Staging System in a dashboard tool (EOSS-DPT) that supports primary care physicians in caring for patients with obesity. This project will develop and distribute individual physician reports regarding use of EOSS-DPT, with repeat reports to follow a year later. It will share resources to assist and inform primary care providers on obesity management, and it will hold quality improvement workshops/seminars on the use of the EOSS-DPT report and resources.

### **April 2021 to September 2021**

During the current period, our project partners at NAPCReN extracted electronic medical report data from sentinels in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), and updated the NAPCReN data set and the Data Presentation Tool. Updating the data allows sentinels and practices to use the Edmonton Obesity Staging System for practice level assessment and quality improvement projects to support their patients living with obesity. The team is developing resources to circulate to physicians in the next round of individual physician reports planned for March 2022.

### **October 2021 – March 2022**

Follow up reports were created with data collected since March 2021, and were distributed to 83 physicians in December 2021. Among the resources provided to physicians were links to recordings of PLP's past educational events on diabetes, including our spring 2021 four webinar series on diabetes. Physicians who received reports were invited to provide feedback to improve the content and/or report layout.

### **Planned for next period (April - September 2022)**

We plan to distribute follow up reports, with new data, before March 31, 2023. These follow up reports assist physicians in evaluating the impact of their practice changes, with the goal of improving patient outcomes.

Current Stage: 2022 Follow-up reports distributed

Mid-year Stage: Data updated for next round of reporting, preparing information

Supports strategic priorities: 1 and 2

PLP Medical Director(s): Dr. Donna Manca, Dr. Denise Campbell-Scherer

Pillar: Primary care

Partner: NAPCReN

### **Physician reports for polypharmacy and sedative medication use in seniors**

Polypharmacy, when a patient is on ten or more medications, is associated with poorer patient outcomes. This project will develop and distribute feedback reports to individual primary care physicians about the proportion of older patients with polypharmacy and prescriptions for sedatives, with benchmark comparisons, in March 2021 and 2022. It will develop and distribute resources to optimize prescribing (including deprescribing and managing insomnia, etc.). Quality improvement workshops/seminars on optimal medication will be held.

### **April 2021 to September 2021**

During the current period, our project partners at NAPCReN have extracted electronic medical report data from sentinels in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), and updating the the NAPCReN data set in preparation for the next round of individual physician reports planned for March 2022.

### **October 2021 – March 2022**

Follow up reports were created with data collected since March 2021, and were distributed to 83 physicians in December 2021. Among the resources provided to physicians were links to recordings of PLP's past educational events on diabetes, including our spring 2021 four webinar series on diabetes.

Physicians who received reports were invited to provide feedback to improve the content and/or report layout.

### **Planned for next period (April - September 2022)**

We plan to distribute follow up reports, with new data, before March 31, 2023. These follow up reports assist physicians in evaluating the impact of their practice changes, with the goal of improving patient outcomes.

Current Stage: 2021 Follow-up reports distributed

Mid-year Stage: Data updated for next round of reporting, preparing information

Supports strategic priorities: 1 and 2

PLP Medical Director(s): Dr. Donna Manca

Pillar: Primary care

### **5AsT virtual obesity management training workshop**

Obesity has been declared a chronic disease by national and international medical associations. Despite the urgency to improve provider education and training in obesity management, no widely recognized programs have been implemented to date. Many healthcare providers are left feeling ill-prepared and lack the knowledge and confidence to effectively address weight concerns with their patients.

Complicating this issue further, misinformation regarding the chronicity and complexity of obesity has led to negative attitudes and unrealistic expectations on the part of both the healthcare provider and patient. As a result, providers are not routinely discussing weight and many patients feel uncomfortable bringing it up.

PLP and the Office of Lifelong Learning have been working to develop a version of the 5AsT Obesity Management Training Workshop adapted for virtual delivery. Using a flipped classroom model, participants will view pre-recorded material on their own time and then participate in live, interactive sessions where they will learn to apply new knowledge within their own context. This workshop series will be offered as a pan-PCN event, in conjunction with the Edmonton Southside PCN, in spring of 2022.

### **October 2021 – March 2022**

Further discussion with the Edmonton Southside PCN in the late fall resulted in a joint decision to modify plans for the project, to better meet the needs of physicians and their teams. Rather than offering the full course over 4 weeks, we jointly determined that a condensed version of this course would be offered as a 2-part pan-PCN workshop series in conjunction with the Edmonton Southside PCN, in the spring of 2022. Based on the revised objectives, the condensed course content was planned and developed, and the accreditation applications for both colleges were prepared. Both workshops in the series will include a didactic education session with case-based discussions, and quality improvement sessions with PCN improvement facilitators.

### **Planned for next period (April - September 2022)**

The two part workshop series is scheduled for April 2022

- Managing Obesity in Primary Care: Screening & Assessment, April 12, 2022, to be presented by Dr. Denise Campbell-Scherer.
- Managing Obesity in Primary Care: A Collaborative Approach to Management & Therapeutic Options,



to be presented by Dr. Denise Campbell-Scherer

Current Stage: Preparing to deliver workshops in April

Mid-year Stage: New active project (in lieu of completed/dropped projects or those delayed by the pandemic)

Supports strategic priorities: 1 and 2

PLP Medical Director(s): Dr. Denise Campbell-Scherer

Pillar: Primary Care

Partner(s): Office of Lifelong Learning at the UofA

## **FOMD resources for clinical research and implementation: A concept mapping exercise**

This project is using cognitive task analysis to map the expert knowledge of faculty leaders about resources

and assets of the Faculty of Medicine & Dentistry at the University of Alberta that support clinical and implementation research.

### **April 2021 to September 2021**

Concept mapping and facilitated discussion with six key leaders identified 36 groups, organizations, or programs/departments that would benefit from more linkages and increased awareness to support faculty members in this area. Findings were discussed to inform recommendations and actions to better align and integrate supports to strengthen successful and impactful clinical and implementation research. This information will also inform PLP's implementation hub.

### **October 2021 – March 2022**

Information collected during the cognitive task analysis sessions was refined, and six maps that outline research resources embedded within FOMD were created. Following distribution of a draft report to key stakeholders for feedback, the final report describing and comparing concept maps, and summarizing action items from stakeholder discussion was completed. Discussions with stakeholders identified opportunities to collaborate and coordinate between resource groups and improve visibility and user-friendliness of faculty supports and resources. The report and maps were shared with the Dean of the Faculty of Medicine & Dentistry and faculty leaders. This project and the final report provided an opportunity to promote the Physician Learning Program within the Faculty and increase opportunities for collaboration on projects that will help physicians and their teams advance practice.

Current Stage: Project completed

Mid-year Stage: New active project (in lieu of completed/dropped projects or those delayed by the pandemic)

Supports strategic priorities: 1

Physician lead(s): Dr. Denise Campbell-Scherer

Pillar: Implementation science

Partner(s): Faculty of Medicine & Dentistry, University of Alberta

## **Webinar: Debunking myths around work-related mental health**

Physicians play an important role for Albertans experiencing work-related health problems, including mental health problems. To support physicians, PLP partnered with the Office of Lifelong Learning at the University of Alberta, and Dr. Quentin Durand-Moreau, an occupational health medicine specialist, to develop and deliver a webinar and discussion in February, 2022. Participating physicians learned about

the clinical management of work-related mental conditions and appropriate reporting to the Workers' Compensation Board, and reviewed the use of mindfulness methods in the workplace using the ethical and conceptual frameworks from Occupational Health. (122 registered, 67 attended, 28 [website](#) recording downloads)

- 100.0 % Agree/Strongly agree that content was relevant to their practice

Current Stage: Completed

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Quentin Durand-Moreau

Pillar: Medicine

Partner(s): Office of Lifelong Learning, University of Alberta



The Office of Lifelong Learning and the Physician Learning Program presents  
**Debunking Myths Around Work-Related Mental Health** Webinar  
Thursday, February 17, 12:00 to 1:00 pm MT

 Quentin Durand-Moreau, MD  
Assistant Professor, Preventative Medicine  
Director, Post-Grad Occupational Medicine Programs

**Register now!**  
[qcco.de/workmentalhealth](http://qcco.de/workmentalhealth)



## Using electronic medical record and administrative health data to describe type 1 diabetes in Edmonton, Alberta

People living with Type 1 diabetes require daily insulin injections to survive, and are prone to rapid changes in blood sugar that make eating, exercising, and partaking in life's various activities challenging. At their medical appointments, information about bloodwork results, other measurements and notes are recorded in the electronic medical record. This study is reviewing and analyzing the information captured in the electronic medical record to better understand the health of people living with type 1 diabetes in Edmonton. Along with statistical analysis of quantitative data, a qualitative approach will be used to examine patients' lived experiences and the professional knowledge of the health care team members. Findings from this study will be shared with diabetes specialty care clinics in Alberta to improve patient outcomes, and to support quality improvement projects.

### April 2021 to September 2021

The project onboarding process, including designing the study and applying for research ethics approval were completed. Data collection began.

### October 2021 – March 2022

A comprehensive literature review was carried out to inform finalizing the project's protocol. The project received ethics approval during the current review period. We carried out engagement discussions regarding project involvement with a team of healthcare providers and participants living with Type 1 Diabetes, to continue data collection for this project.

### Planned for next period (April - September 2022)

Data analysis and interpretation will be completed, and academic dissemination of the findings will be pursued through peer-reviewed publication.

Current Stage: Data collection

Mid-year Stage: Data Collection

Supports strategic priorities: 1 and 2  
PLP Medical Director: Dr. Rose Yeung  
Pillar: Metabolic Diseases  
Partner(s): Division of Endocrinology & Metabolism, University of Alberta

## Early-stage projects

### Calgary

#### **Addressing the value of hormone testing**

In Alberta, approximately 370,000 common hormone tests cost Albertans \$2.1 million each year. While the testing can provide valuable insights in certain situations, clinicians agree that a significant amount of hormone testing is low value. Using Alberta data, PLP will explore current utilization of five common tests in relation to Choosing Wisely Canada and other guidelines with the aim of reducing low-value hormone testing. The PLP is in the process of pulling aggregate data for five common hormone tests for women in Alberta. Due to staffing shortages the data pull has been delayed but is now in progress.

#### **October 2021- March 2022**

In January 2022, the preliminary data was returned and is now being cleaned and analyzed for trends and areas for improvement.

Current stage: Project planning and development  
Supports strategic priorities: 1 and 2  
Physician lead(s): Dr. Simrit Brar  
PLP Medical Director(S): Dr. Katrina Nicholson  
Partner(s): AHS Department of Obstetrics and Gynecology

#### **Alberta surgical initiative (AHS Performance review recommendation)**

Approximately 70,000 people in Alberta were waiting for surgery at the time of the Alberta Health Service Review (2019), and 50% were considered waiting longer than clinically appropriate. At the same time, acute care facilities continue to perform surgical procedures that are of low value. These low-value cases require detailed review and consensus measures to ensure surgical time and expertise is focused on the most appropriate cases. The PLP will use its expertise in data analytics, human-centred design, and audit and feedback to support the Reduction in Clinical Variation (RCV) aspect of the Alberta Surgical Initiative (ASI).

The PLP has been working closely with AHS (ASI team and IHOT) to compile a detailed list of clinical indications for each identified surgery, based on indications developed by the National Health Service (NHS) in the United Kingdom. Preliminary data of panniculectomy surgery in Alberta was pulled and prepared, which highlighted variation across Alberta facilities. In addition, the PLP plans to begin working with the Alberta Bone and Joint Health Institute (ABJHI) to focus the next efforts on improving the value of certain orthopaedic surgeries.

### **October 2021- March 2022**

The PLP has conducted three working group meetings with subject matter experts and surgical leadership across the province to generate panniculectomy surgery clinical indications. Using a human-centred design approach, we met privately with individual surgeons to collect their feedback on the surgical indications. The next step includes conducting the final working group meeting, where we plan to finalize the panniculectomy surgery clinical indications. Following, the clinical indications will be disseminated to surgical leadership across the province and implemented in practice.

Acting in a consultative role with the ABJHI, a preliminary report has been generated investigating variability of hip and knee revision surgery across the Alberta. Further investigation into the data is underway by the ABJHI.

Working with the ASI and IHOT teams, a preliminary data pull of tonsillectomy and adenoidectomy has been conducted, revealing variability across the province. Tonsillectomy and adenoidectomy will be the next surgical procedure to be explored within ASI.

Current stage: Project planning and development.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Stewart Hamilton, Dr. Don Dick, AHS (IHOT)

PLP Medical Director(s): TBD (with surgical QA experience)

Partner(s): AHS, Hospital Medicine Section, Medicine

## **Improving the use of TXA for hip fractures**

Medications which lower the need for blood transfusions, like tranexamic acid (TXA), may improve outcomes for hip fracture patients. Using facilitated audit and feedback (CAFF) with Calgary anesthesiologists and orthopedic surgeons, PLP previously demonstrated an increase in TXA use for knee and hip arthroplasty, with a corresponding decrease in red blood cell transfusions at the South Health Campus. This project will build on our previous work and will examine TXA use in hip fracture procedures.

### **April 2021 to September 2021**

The feasibility of data collection from two sources was explored and after discussion with analysts, numerous issues were identified. The existing databases will be legacy archives once ConnectCare is implemented. Therefore, the timing of the study should be considered before proceeding further. Secondly, utilization of OR manager database for tracking the use of TXA is lower than anticipated for hip fracture procedures. A chart review would be required to obtain the necessary data. The labour, time and cost to complete this task needs to be considered.

Project closed. Inadequacies in data collection and recording of TXA use during hip fracture surgeries were identified. Thus, the project was untenable to continue

Current stage: Early execution.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Richard Ng

PLP Medical Director(s): Dr. Doug Woodhouse

Partner(s): Orthopedic Surgery Calgary Zone

## **Utilization of diagnostic imaging services**

### **April 2021 to September 2021**

Alberta spends \$457 million annually on 2.9 million diagnostic imaging procedures. However, wait times for diagnostic imaging are significantly higher than other provinces which can lead to delays in needed surgery or treatment. At the same time, the Canadian Association of Radiologists estimates that up to 30% of these procedures are of low-value and Choosing Wisely Canada recommends improving the value of diagnostic imaging.

The PLP is working with partners including AHS and HQCA to improve DI utilization with two initiatives:

- › Primary Care Ordering of CT and MRI: Develop a primary care panel report with learning content to help family physicians understand their ordering practices compared to colleagues for CT & MRI and receive evidence-based practice suggestions to improve utilization.
- › Create Practice Reports for Radiologists: Work with radiologists to develop reports and support facilitated feedback to address variation in the prioritization of diagnostic imaging referrals.

In response to the Auditor General's report on the use of publicly funded CT and MRI services, the work with radiologists will focus on variation in prioritization. The evaluation will be based on AHS CT and MRI prioritization guidelines. Assigning the appropriate prioritization to imaging referrals should help address health system capacities and patient wait times. Few quality improvement studies have engaged with radiologists to identify opportunities for practice improvement on prioritization of diagnostic imaging referrals. Stakeholder engagement is a potential risk to project timelines as a cohort of radiologists to facilitate the development of a feedback report that is evidence-based, meaningful and actionable has yet to be established. A project charter was drafted and disseminated for review by the physician leads in July 2021.

### **October 2021- March 2022**

Project team members have been identified which include two radiologists and one senior radiology resident. Support for the project has been established from the current radiology department head. A prospective chart review of musculoskeletal imaging referrals will be coded by the radiologists. The results of the review will form the basis of an evidence-based practice improvement report on prioritization for Calgary radiologists.

Next steps include piloting the data collection tool to quantify and evaluate the factors which may impact variation of MSK referrals. Knowledge translation outputs and outcomes will be planned in the upcoming project team meetings.

Current stage: Early project planning and development.

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Richard Walker, Dr. Bill Anderson

PLP Medical Director(s): TBD (with Radiology QA experience)

Partner(s): AHS Diagnostic Imaging

## Edmonton

### **Developing rapid cycle clinical projects using Connect Care data for quality improvement**

Alberta Health Services is continuing to roll out the ConnectCare electronic medical record system. The PLP is working with the ConnectCare Quality Improvement Group on rapid cycle clinical projects that address learning how to use ConnectCare as a resource for quality improvement. Learnings from this collaboration will inform future PLP projects.

#### **April 2021 to September 2021**

These project opportunities have been delayed by the COVID-19 pandemic, however we have had a number of conversations with people knowledgeable about ConnectCare to gather information in support of other PLP projects.

#### **October 2021 – March 2022**

These project opportunities continue to be delayed by the COVID-19 pandemic. Relationship building with people knowledgeable about ConnectCare has been relevant for some of our other projects, like the ALS dashboard, and Reducing low value endoscopies.

#### **Planned for next period (April - September 2022)**

This project remains under consideration, and will be revisited when the COVID-19 pandemic subsides and relevant stakeholders have more capacity.

Current Stage: Preliminary inquiry - delayed due to COVID-19 pandemic

Mid-year Stage: Preliminary inquiry - delayed due to COVID-19 pandemic

Supports strategic priorities: 1

Physician lead(s): Dr. Neesh Pannu

Pillar: Medicine

Partner(s): Connect Care Quality Improvement group

### **New 2021 COPD and asthma practice guidelines across the care continuum**

New practice guidelines are being released in 2021 for both chronic obstructive pulmonary disease (COPD) and asthma. PLP will host webinars to support physician education on them. These webinars will provide a foundation for future PLP projects on these chronic diseases.

#### **April 2021 to September 2021**

This project has been delayed due to the COVID-19 pandemic, as the PLP physician project lead is a pulmonologist. A timeline for resuming work on the project has yet to be determined.

#### **October 2021 – March 2022**

This project continues to be delayed due to the COVID-19 pandemic, as the PLP physician project lead is a pulmonologist. A timeline for resuming work on the project has yet to be determined.

#### **Planned for next period (April - September 2022)**

This project remains under consideration, and will be revisited when the COVID-19 pandemic subsides

and relevant stakeholders have more capacity.

Current Stage: Understanding the problem.

Mid-year Stage: Understanding the problem.

Supports strategic priorities: 1

Pillar: Medicine

Physician lead(s): Dr. Mohit Bhutani

### **Understanding and mitigating the effects of COVID-19: Resilience of ethnocultural and visible minority families during COVID-19**

This potential project would study the ways in which ethnocultural and visible minority families are demonstrating resilience during the COVID-19 pandemic in Edmonton. Using a tool to collect mass qualitative data (Sensemaker), the project would examine, for example, children's development, mental health impacts, and impacts on seniors and youth, etc. Findings from the project would provide insights into the strengths of families and communities that can be leveraged for support during the COVID-19 pandemic and recovery.

#### **April 2021 to September 2021**

The PLP project team met regularly with the MCHB project stakeholders from April to August to co-create the project design, formally onboard the project, and begin work on developing the data collection tools. However, the project was put on hold in mid-August in order to pursue a project on understanding and mitigating COVID-19 vaccine hesitancy, which is a more urgent problem, and required the same project members. This project will remain on hold for now.

#### **October 2021 – March 2022**

The PLP team held several engagement meetings with representatives of the MCHB to clarify project aims and co-design a theoretical framework for the data collection tool. Co-design of the data collection tool is ongoing. As our MCHB partner has been heavily involved in our project on COVID-19 Vaccine Hesitancy and has limited capacity, this resilience project has been progressing at a moderate pace, and is expected to pick up when the vaccine hesitancy project is completed.

#### **Planned for next period (April - September 2022)**

Next steps for this project will include inviting a peer researcher team from MCHB and refining the data collection tool. The timeline for developing the ethics application and launching the project will depend on community partner capacity.

Current Stage: Scoping discussions

Mid-year Stage: Project co-design with MCHB; Delayed due to pandemic

Supports strategic priorities: 3

PLP Medical Director: Dr. Denise Campbell-Scherer

Pillar: COVID-19

Partner(s): Multicultural Health Brokers of Edmonton and the Illuminate Lab

## **Assessing adherence to secondary prevention guidelines for myocardial infarction for patients discharged from an Alberta hospital**

This project will evaluate follow-up care after hospital discharge for patients who have had a heart attack and received a bare-metal or drug-eluting stent. It will determine if patients are following the care guidelines for secondary prevention of further heart attacks, related to filling their prescription medications and completing laboratory testing. Findings from this project will provide insight on patient engagement, and support the development of patient education and resources, clinician tools and resources, and data driven quality improvement.

### **April 2021 to September 2021**

Onboarding and scoping of the project began during the current period, including planning the project methods and identifying key medications of interest. The research ethics application will be completed and submitted next, so that data extraction and analysis can begin.

### **October 2021 – March 2022**

Scoping of the project was completed, and resulted in aligning the project within a broader myocardial infarction program and connecting with clinicians from Calgary and Edmonton to establish this program. The study design was finalized and we applied for, and received, research ethics approval. Detailed plans to support data extraction were completed, including development of a data pull template, and preliminary data analysis strategies were identified.

### **Planned for next period (April - September 2022)**

The next steps for this project include data extraction and analysis.

Current Stage: Preparing for data extraction and analysis

Mid-year Stage: Project onboarding and methods design

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Rob Welsch

Pillar: Cardiology

## **Physician reports for use of asthma medications across the care continuum**

Approximately 12 percent of Albertans have asthma, a condition which requires long term control, as well as immediate treatment of acute exacerbations. This project will develop and distribute basic feedback reports for individual primary care physicians on the use of various asthma medications (with benchmark comparisons), with follow-up reports distributed one year later. Resources to optimize prescribing asthma medications will be developed and shared, and quality improvement workshops/seminars on asthma management will be held. For the tertiary component, the project will start with a feasibility study of the data and explore the use of ConnectCare to support ongoing quality improvement.

### **April 2021 to September 2021**

PLP partnered with NAPCReN for the primary care portion of this project. Building off webinars for optimizing asthma treatment that PLP delivered last year, NAPCReN is in the process of developing feedback reports/resources to facilitate quality improvement on optimizing asthma treatment for primary care physicians, and exploring a case definition for asthma for the CPCSSN database. In addition, EMR data extraction and CPCSSN updates are underway, in preparation for delivering individual physician



reports on use of asthma medications, scheduled for March 2022. Further consideration of the tertiary component of this project was delayed by the COVID-19 pandemic, and it remains in the preliminary inquiry stage.

### **October 2021 – March 2022**

Our NAPCReN partners developed a new case definition for adult asthma for use with the CPCSSN Dashboard. In addition to the literature review that supported the development of the case definition, the team tested and evaluated it. The draft individualized feedback report was designed, and relevant resources were identified. This report includes links to the [PLP asthma webinars](#) from last year as part of spread and scale of past project and to support physicians in improving their practice. Reports were distributed to 83 physicians in March 2022.

### **Planned for next period (April - September 2022)**

Physicians who receive this individualized report using NAPCReN's newly-created CPCSSN case definition for asthma will be invited to provide feedback on the report, to support ongoing improvement of the report. We anticipate repeating the individualized reports before the end of March, 2023, so that physicians can evaluate the impact of changes in their practice.

Current Stage: First round of individualized reports distributed

Mid-year Stage: Primary care portion: Data updates and resource development - Tertiary component: Preliminary inquiry

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Donna Manca

Pillars: Primary care and Medicine

Partner: NAPCReN

## **Understanding referral decisions for endoscopy**

Preliminary findings in our project *Optimizing the use of gastroscopy for dyspepsia in low-risk patients in the Edmonton Zone* indicate that the volume of low-value endoscopies for dyspepsia without alarm symptoms in the Northern Zone exceeded the target threshold of <20% low yield endoscopies. Most tests (>90%) had no significant findings and did not alter the patient treatment or outcomes. This project uses cognitive task analysis (CTA) to examine physicians' decision making and mental models for referring patients for endoscopy. We will compare family physicians' mental models around referral for endoscopy with specialists' mental models that lead to the decision to perform the test. Findings will inform the development of an effective intervention to help reduce the number of low value endoscopies being ordered.

### **October 2021 – March 2022**

This project progressed considerably during the current review period. PLP team members PLP team held several engagement meetings with the physician leads to develop a project plan, and co-designed the project questions and recruitment strategy. CTA interview guides for family physicians and GI specialists were prepared and reviewed by clinician stakeholders. Recruitment materials were drafted and have been reviewed and refined with stakeholders who will assist with recruitment. The research ethics application was developed, submitted, and approved, and recruitment and data collection began.

### **Planned for next period (April - September 2022)**

Data collection will continue, and iterative data analysis of the interview transcripts will be carried out. The cognitive task analysis maps will be finalized, and a summary report describing the maps and study findings will be prepared and share with physician leads. Opportunities for knowledge translation activities will be discussed, and the project will transition to a follow on KT project.

Current Stage: Project design complete, beginning data collection

Supports strategic priorities: 1 and 2

Physician Lead(s): Dr. Dan Sadowski, Dr. Sander Veldhuyzen Van Zanten, Dr. Kerri Novak

Pillar: Digestive health

Partner(s): Digestive Health SCN

### **Understanding contextual factors for secondary prevention of myocardial infarction in primary care**

This new project on secondary prevention of myocardial infarction (heart attack) in primary care is being onboarded, with a focus on continuity of care and health care utilization. This project aims to understand the contextual factors that may affect secondary prevention of myocardial infarction (heart attack), in the primary care setting, for patients discharged from the Mazankowski Alberta Heart Institute. The goals of the project are to characterize the social factors related to continuity of care among patients after MI, and to assess healthcare utilization adherent and non-adherent patients who have been discharged from hospital following a heart attack. Findings from this project will provide insight on patient engagement, and support the development of patient education and resources, clinician tools and resources, and data driven quality improvement.

### **October 2021 – March 2022**

A collaborative stakeholder team was developed, including Edmonton clinicians Dr. Robert Welsh, Dr. Pishoy Gouda and Calgary clinician Dr Terry McDonald, and a shared vision for the project was established. The project scoping and intake form were completed, and the ethics application has been approved at the University of Calgary.

### **Planned for next period (April - September 2022)**

In preparation for data extraction, a detailed data pull template will be created, and data analysis will begin.

Current Stage: Preparing for data extraction and analysis

Mid-year stage: Project onboarding and study design are being developed

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Terrence McDonald Pillar:

Primary Care

### **Understanding mental models of referral to surgery to support implementation of central access & triage**

The implementation of Central Access & Triage across Alberta requires teams across the health care system to change the way they process referrals to surgery. This project will use Cognitive Task Analysis

to understand mental models of the referral decision and process of providers and teams to identify where challenges may emerge for the Central Access implementation. Findings will inform recommendations for effective implementation of Central Access & Triage.

### **October 2021 – March 2022**

This project has been on hold while the evaluation planning of the Central Access & Triage project was prioritized, as both projects involve the Surgery SCN.

### **Planned for next period (April - September 2022)**

Subject to Surgery SCN's capacity, we anticipate developing the project workplan and finalizing shared understandings of the aim and methods of the project. Interview guides and recruitment materials will be designed and the ethics application will be prepared by the PLP team. Launch of data collection is anticipated for spring 2022.

Current Stage: preliminary discussions

Mid-year Stage: a new project in early stages of project onboarding and study design

Supports strategic priorities: 1 and 2

Physician Lead(s): Dr. Mary Brindle

Pillar: Surgery

Partner(s): Surgery SCN

## **Projects under consideration or in development**

The following projects are at the preliminary inquiry stage. As part of considering whether or not to proceed with potential projects, PLP examines whether the project is feasible from the standpoint of data quality and accessibility. Some projects included in this stage may not proceed past the preliminary consideration stage or may be delayed because of the COVID-19 pandemic.

### **Edmonton**

#### **Continuity of care in diabetes**

Many patients with diabetes receive ongoing care from primary physicians. This project seeks to understand healthcare utilization and continuity of care in the primary care setting for people living with diabetes. The project will examine the processes for admission to hospital from the community, transfer between hospital wards or inpatient departments, and discharge from hospital into the community. Hospital readmissions may be examined. Findings from this project will inform future project development.

Current Stage: consideration

Supports strategic priorities: 1 and 2

Physician Lead(s): Dr. Terrence McDonald

Pillar: Primary Care

## **Understanding and mitigating the effects of COVID-19: impacts of COVID-19 on the multicultural health brokers cooperative**

The Multicultural Health Brokers Co-op supports immigrant and refugee families to attain optimum health through health education, holistic family support, community development, and system advocacy. This potential project aims to understand how COVID-19 and its attendant issues are impacting the lives and work of the Multicultural Health Brokers. It would provide insights, in real time, into challenges and barriers brokers face in their work focusing on recovery from the pandemic and building resiliency in the communities they work with, and help identify ways to support the brokers' work in pandemic situations.

### **April 2021 to September 2021**

In light of the other high-priority COVID-19 projects (such as vaccine hesitancy) underway with the MCHB, this project on broker resiliency has been paused, and remains under consideration at this time.

### **October 2021 – March 2022**

This project remains under consideration - several engagement meetings have been held to discuss potential project aims and scope.

Previous Stage: Preliminary inquiry

Current Stage: Preliminary inquiry

Supports strategic priorities: 3

PLP Medical Director: Dr. Denise Campbell-Scherer

Pillar: COVID-19

Partner(s): Multicultural Health Brokers of Edmonton and the Illuminate Lab

## **Appropriateness of surgical antibiotic prophylaxis: Implementation of beta-lactam surgical prophylaxis tools**

Patients that receive suboptimal surgical antimicrobial prophylaxis (SAP) have a considerably higher risk of postoperative infection compared to those receiving optimal SAP. PLP recently developed a suite of resources and decision algorithms to support appropriate use of cefazolin in SAP. This project will focus on implementing these tools throughout AHS. In addition, these tools will be submitted for consideration as additions to the surgical pre-operative checklist, which is overseen by the World Health Organization.

### **April 2021 to September 2021**

This project remains under consideration, and has been delayed by the COVID-19 pandemic and prioritization of the surgery wait time project, which involves the same stakeholders.

### **October 2021 – March 2022**

This project remains under consideration, and continues to be delayed by the COVID-19 pandemic and prioritization of the surgery wait time project, which involves the same stakeholders (Surgery SCN).

### **Planned for next period (April - September 2022)**

We will revisit this project implementation opportunity with the Surgery SCN as additional capacity emerges. Next steps would involve understanding the project scope and creating a project plan in collaboration with our partner.

Previous Stage: Preliminary inquiry  
Current Stage: Preliminary inquiry  
Supports strategic priorities: 2  
Physician lead(s): Dr. Mary Brindle  
Pillars: Surgery and Antimicrobial stewardship  
Partner(s): Surgery SCN

### **Pediatric diabetic ketoacidosis: Socializing the data with local experts**

A current project in PLP's diabetes program focuses on assessing adherence to Clinical Practice Guidelines for treating diabetic ketoacidosis in children in Alberta hospitals. As part of these efforts, we will socialize the data with local stakeholders at the Alberta Children's Hospital, who have expertise and understand the local context. The results and recommendations will support the development of engagement sessions that aim to reduce practice variation across sites for treatment and management of this condition.

#### **April 2021 to September 2021**

This project remains under consideration as possible directions are considered, but is not active at the current time.

#### **October 2021 – March 2022**

This project remains under consideration as possible directions are considered, but is not active at the current time.

Previous Stage: Preliminary Inquiry  
Current Stage: Preliminary Inquiry  
Supports strategic priorities: 1 and 2  
Physician lead(s): Dr. Jennifer Walton  
Pillar: Pediatrics

### **Pediatric diabetic ketoacidosis: Assessing guideline concordant care using the DOSE database**

A recent PLP project on managing pediatric diabetic keto-acidosis was limited to hospitals that use Sunrise Clinical Manager (SCM), as information on electrolyte, fluid, and medication administration, which are key metrics for assessing guideline concordance, were not available outside of SCM. The launch of DOSE, a health administration database that tracks medications dispensed to in-hospital patients, would make it possible to complete this project with other hospitals. This would allow us to assess guideline concordant care and suggest areas for improvement across more hospital sites.

#### **April 2021 to September 2021**

This project remains under consideration as possible directions are considered, but is not active at the current time.

#### **October 2021 – March 2022**

This project remains under consideration, but is not currently active.

Previous Stage: Preliminary inquiry  
Current Stage: Preliminary inquiry  
Supports strategic priorities: 1 and 2  
Physician lead(s): Dr. Jennifer Walton  
Pillar: Pediatrics  
Partner: AHS Infection Prevention and Control team

### **Safe surgical checklist initiative**

The safe surgery checklist, which was developed by the World Health Organization, will be piloted at three Alberta hospitals in 2021. The initiative includes a tool kit, checklist update, and staff training. This project will focus on feasibility and useability. It will explore staff and patient perspectives and concerns about working with the tool to improve scale and spread across the province.

#### **April 2021 to September 2021**

This project, which is in partnership with the Surgery SCN, has been paused while the Surgery SCN is prioritizing work to address the waitlist problem. Work on this project is expected to resume when there is capacity during the COVID pandemic recovery period.

#### **October 2021 – March 2022**

This project remains under consideration

Previous Stage: Preliminary inquiry (Project under consideration or in development in initial workplan submission)

Current Stage: Preliminary inquiry - On hold due to pandemic

Supports strategic priorities: 2

Physician lead(s): Dr. Mary Brindle

Pillar: Surgery

Partner(s): Surgery SCN and The Illuminate Lab

### **Secondary prevention of coronary artery disease in people with diabetes**

People with diabetes face an increased risk of coronary artery disease. This project will explore secondary prevention of coronary artery disease through optimal prescribing and patient adherence to the guidelines.

#### **April 2021 to September 2021**

Discussions among project team members determined that the other project on secondary prevention of myocardial infarction for patients discharged from the Mazankowski Alberta Heart Institute, which has a broader focus, should be addressed first. We may return to this project at a later date, or may modify the scope based on findings in the other project.

#### **October 2021 – March 2022**

This project remains under consideration

Previous Stage: Preliminary inquiry

Current Stage: Preliminary inquiry

Supports strategic priorities: 1 and 2

Physician lead(s): Dr. Robert Welsh

Pillar: Cardiology

### **Surgical prophylaxis: Audited surgeries by site**

Patients that receive suboptimal antibiotic prophylaxis before surgery have a greater risk of developing surgical site infections. Building on our recent project on surgical antibiotic prophylaxis for patients with and without listed beta-lactam (penicillin) allergy, the aim of this project is to disseminate aggregate results with participating sites. It may include preparing site-level data reports to inform their quality improvement efforts.

#### **April 2021 to September 2021**

This project relies on infectious disease specialists, who are fully occupied with the COVID 19 pandemic. Accordingly, the project is currently on hold.

#### **October 2021 – March 2022**

A summary report of project findings for obstetrics/gynecology at the Misericordia Hospital is being developed, to support knowledge transfer of the project findings, and provide the obs/gyne department with data to inform quality improvement initiatives. Other aspects of the project remain on hold due to the COVID-19 pandemic.

#### **Planned for next period (April - September 2022)**

Once the COVID-19 pandemic winds down and project physicians have capacity to re-engage with this work, we explore opportunities to spread and scale the project findings with the participating sites and/or specialties, as appropriate.

Previous Stage: Preliminary inquiry

Current Stage: Delayed due to COVID-19 pandemic

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Lynora Saxinger

Pillar: Surgery and Antimicrobial stewardship

Partner: AHS Infection Prevention and Control team

### **Development of resources to guide treatment for diabetes using Continuous Glucose Monitoring in adults with type 2 diabetes**

Adults with type 2 diabetes who are not on insulin therapy are known to have improved lifestyle and fewer events of hyperglycemia when they self-monitor their capillary blood glucose levels. An increasingly popular alternative to capillary blood glucose monitoring is the use of continuous glucose monitoring (CGM) via a wearable sensor that continuously samples interstitial fluid glucose. However, there is a paucity of well-accepted, non-corporate educational materials developed with patient and provider engagement to help patients make the best use of isCGM, and to guide clinicians on how best to train or advise them. Many existing materials are manufacturer-authored and designed for adults on basal-bolus insulin therapy or who have type 1 diabetes. These individuals have distinctly different learning and support needs than persons with type 2 diabetes not on insulin, or on fixed dose basal insulin only. With the ultimate aim of improving glycemic control to meeting Diabetes Canada's standards of care, PLP is considering a project that would use human centred design approaches to develop and test tailored

support materials to:

- Help persons with type 2 diabetes make and sustain dietary and physical activity measures.
- Help educators supporting these persons provide consistent and effective education on using isCGM, followed by individualized advice based on isCGM data.
- Help prescribers use isCGM data to initiate timely and appropriate medication adjustments.

Current stage: Under consideration

Supports strategic priorities: 1

PLP Medical Director: Dr. Rose Yeung

Pillar: Metabolic Diseases

### **ADHD Across the Lifespan**

ADHD is one of the three most common chronic disorders seen in primary care settings. Physicians in primary care have identified a need for more information on ADHD diagnosis and management. In partnership with the Edmonton Southside PCN, we are co-developing a 3-part webinar and quality improvement workshop series, for delivery in the fall of 2022. Early planning, topic selection, and identification of presenters is underway. Preliminary plans for the webinar series topics are:

Workshop 1: ADHD in pediatric population

Workshop 2: ADHD in adolescent population

Workshop 3: ADHD in adults

### **Planned for next period (April - September 2022)**

In the coming months, PLP team members and quality improvement with the PCN will work with presenters to finalize learning objectives, develop the content and facilitation plan for the quality improvement workshop portion, and prepare the accreditation application.

Current stage: Early stage planning and development

Supports strategic priorities: 1 and 2

Physician lead(s): Dr Alice Yeung and Dr Alec Oskin

Pillar: Primary Care

Partner: Edmonton Southside PCN

### **Palliative care in family medicine/primary care webinar series**

Adults and children diagnosed with life-shortening illnesses can benefit from palliative care. Recognizing the usefulness of additional education on palliative care for family physicians and their teams, we have partnered with the Office of Lifelong Learning and the Department of Oncology (palliative care division) at the University of Alberta to develop and deliver a webinar series on this topic. Early discussions suggest that appropriate topics may include, for example, conducting serious illness conversations with patients and families, understanding the roles and challenges of both primary and consultant palliative care provision, and coordinating care for patients in the community. Participating physicians will have the option of pursuing credits for carrying out a practice improvement cycle on this topic.

Current stage: Early stage planning and development

Supports strategic priorities: 1 and 2



Physician lead(s): Dr. Sarah Burton-Macleod

Pillar: Primary Care

Partner: Division of palliative care in the Department of Oncology and Office of Lifelong Learning, UofA

## **Caring for patients with cirrhosis in primary care webinar series**

Cirrhosis is a chronic disease of the liver, and is a major cause of health complications and premature death. Building on our recent work on cirrhosis and alcohol use disorder, early planning is underway for a webinar series on cirrhosis for family physicians and their teams. In addition to orienting healthcare providers to the many resources available at the [cirrhosiscare.ca](http://cirrhosiscare.ca) website, these sessions will provide information on caring for patients with cirrhosis in the primary care setting. Participating physicians will have the option of pursuing credits for carrying out a practice improvement cycle on this topic.

Current stage: Early stage planning and development

Supports strategic priorities: 1 and 2

PLP Medical Director: Dr. Puneeta Tandon

Pillars: Primary Care and Gastroenterology

Partner: Department of Gastroenterology, [cirrhosiscare.ca](http://cirrhosiscare.ca), and Office of Lifelong Learning, UofA

## **Supporting Primary Care**

Through our ongoing engagement with primary care physicians and their teams, we learn about various topics that physicians recognize as learning needs or learning opportunities. In partnership with the Office of Lifelong Learning, and other relevant departments at the University of Alberta, PLP will develop education sessions to help address those perceived learning needs. Working with physicians who have expertise on the topic at hand, we'll identify learning objectives, support content development, and develop the educational design, which could include a webinar or webinar series, a flipped classroom discussion, a facilitated quality improvement workshop, etc. Potential topics include hypertension, new lipid medications, non-alcoholic fatty liver disease, women's health issues, men's health issues, thyroid issues, long COVID, mental health, diabetes, and other emerging health needs of Albertans. Participating physicians will have the opportunity to pursue credits for carrying out a practice improvement cycle on the topic. As we move beyond preliminary planning, we will transition each topic to a spin-off project to facilitate project management and reporting.

Current stage: Early stage planning and development

Supports strategic priorities: 1, 2, and 3

Physician lead(s): TBD

Pillars: Primary Care

Partner: Office of Lifelong Learning, UofA and other departments

## **Supporting Tertiary Care**

In a program similar to "Supporting Primary Care", PLP will explore opportunities to develop education sessions for specialist physicians in tertiary care. In partnership with the Office of Lifelong Learning, and other relevant departments at the University of Alberta, PLP will develop education sessions to help address perceived learning needs (as we did in 2021-22 in developing a flipped classroom series for Alcohol Use Disorder). Working with physicians who have expertise on the topic at hand, we'll identify learning objectives, support content development, and develop the educational design, which could include a webinar or webinar series, a flipped classroom discussion, a facilitated quality improvement

workshop, etc. Participating physicians will have the opportunity to pursue credits for carrying out a practice improvement cycle on the topic. As we move beyond preliminary planning, we will transition each topic to a spin-off project to facilitate project management and reporting.

Current stage: Early stage planning and development  
Supports strategic priorities: 1, 2, and 3  
Physician lead(s): TBD  
Pillars: TBD  
Partner: Office of Lifelong Learning, UofA and other departments

## Projects not being pursued

### **Surgical prophylaxis: exploring replication opportunities**

DOSE is a newly released health administration database that tracks medications dispensed to in-hospital patients. Previously, this information was only available from patient charts in Edmonton hospitals. A potential project is to revisit PLP's recent chart audit project for use of the antibiotic cefazolin for SAP at five Edmonton hospitals. The aim of the project would be to explore whether the SAP chart audit project could be extended using the new DOSE administrative health database, Connect Care, and NSQIP information, to create opportunities for repeat data pulls to assess change in SAP practice and guideline concordance over time.

#### **April 2021 to September 2021**

The project remains under consideration, but is not active at this time.

Previous Stage: Not pursued  
Current Stage: Preliminary inquiry  
Supports strategic priorities: 1 and 2  
PLP Medical Director: Dr. Lynora Saxinger  
Pillars: Surgery and Antimicrobial stewardship  
Partner(s): AHS Infection Prevention and Control team

### **Understanding and mitigating the effects of COVID-19: COVID futures - understanding how COVID-19 recovery can lead to a more dynamic, resilient health system**

The aim of this potential project would be to understand, in real-time, the perspectives of health service providers on the COVID-19 impacts and to identify opportunities for supporting recovery. Findings from this project would provide insights on the issues that could enhance or inhibit the health care system and health care providers' recovery from the COVID-19 pandemic.

#### **April 2021 to September 2021**

As part of our due diligence and project prioritization review, we have determined that this project will not be pursued.

Current Stage: Project not being pursued.  
Mid-year Stage: Not pursued  
Supports strategic priorities: 3  
PLP Medical Director(s): Dr. Denise Campbell-Scherer and Dr. Lynora Saxinger  
Pillar: COVID-19  
Partners: The Illuminate Lab

### **Surgical prophylaxis – Timing of vancomycin administration**

Patients that receive suboptimal antibiotic prophylaxis before surgery have a greater risk of developing surgical site infections. This project builds on our recent project on surgical antibiotic prophylaxis for patients with and without listed beta-lactam (penicillin) allergy. It focuses on the administration of the antibiotic vancomycin, usually given to patients who are MRSA positive and at high risk of developing a surgical site infection. This project will examine surgical infection rates for patients receiving vancomycin, to determine whether early or late administration influences postoperative infections. Findings from the study will inform procedural recommendations to improve timely administration of vancomycin before surgery, with the goal of improving patient outcomes.

#### **April 2021 to September 2021**

Preliminary examination of the relevant health data during the current period indicated that the available data did not meet our quantity and quality threshold to invest in the project, and we decided not to proceed with the project. The project was discontinued in summer 2021.

Mid-year Stage: Not pursued  
Supports strategic priorities: 1 and 2  
PLP Medical Director: Dr. Lynora Saxinger Physician Lead(s): Dr. Katherine Impey  
Pillars: Surgery and Antimicrobial stewardship  
Partner(s): AHS Infection Prevention and Control team

### **Understanding useability of a patient portal for patients with HIV**

This potential project would use mass real-time data collected through Sensemaker to understand the experiences of patients and health care providers navigating diagnosis, lived experience, and management of HIV. The scope of this project is still under consideration. Findings could support future projects, new physician resources, and patient education resources that would assist them with treatment decisions and coping with their diagnosis.

#### **October 2021 – March 2022**

This PLP-partnered project opportunity was contingent on the collaboration partners at McGill University securing funding through a grant. The McGill team decided not to pursue the grant, and the project is not being pursued.

Mid-year Stage: Not pursued  
Supports strategic priorities: 1 and 2  
PLP Medical Director: Dr. Lynora Saxinger  
Pillar: Medicine  
Partner(s): McGill University colleagues

# Appendix A: Definitions and Acronyms

**Albumin** is a protein made by the liver. It keeps fluid in the bloodstream so it doesn't leak into other tissues. It also carries various substances throughout your body, including hormones, vitamins, and enzymes. Low albumin levels can indicate a problem with your liver or kidneys.

**BMI or Body Mass Index** is a person's weight in kilograms divided by the square of height in meters. A high BMI can be an indicator of high body fatness. BMI can be used to screen for weight categories that may lead to health problems.

**Calgary Audit and Feedback Framework (CAFF)** is a practical, evidence-informed approach that facilitates physicians' reflection on performance data around important clinical topics, and coaches them to create plans for change.

**Complexity Science** studies complex adaptive systems, including patterns of relationships, selforganization, self-sustainment, and the emergence of outcomes.

**HQCA** is an acronym for Health Quality Council of Alberta.

**Improvement Science** focuses on how to make changes and improvements in health care in the most effective way

**Low-value care or interventions** are those that provide little or no benefit to patients, have potential to cause harm, incur unnecessary costs, or waste limited healthcare resources.

**Medicine SCN™ (MSCN)** refers to a Medical Strategic Clinical Network.

**MRSA** is a germ that cannot be treated with the drugs commonly used to treat staph infections.

**NAPCRen** is the Northern Alberta Primary Research Network, a family physician and multidisciplinary collaboration of researchers and clinicians.

**Operative Vaginal Delivery** refers to a delivery in which the operator uses forceps, a vacuum, or other devices to extract the fetus from the vagina, with or without the assistance of maternal pushing.

**Patient Recorded Outcome Measures (PROMS)** are measures that are used to assess a patient's health status at a particular point in time.

**SCNs** are Strategic Clinical Networks are networks of people who are passionate and knowledgeable about specific areas of health, looking for new and innovative ways of delivering care that will provide better quality, better outcomes, and better value for every Albertan.

**Surgical antimicrobial prophylaxis** refers to the use of antibiotics for the prevention of surgical site infections.

**Tranexamic acid (TXA)** is a medication used to treat or prevent excessive blood loss during surgery.

# Appendix B: Key Performance Indicators



## Key Performance Indicators April 2021 - March 2022

<b>Impact</b>	Percentage of physicians/health care providers who feel that participation in a PLP event helped them in their practice.	93.10%
	Evaluation of tools and resources being used by physicians and their teams	3 active projects
	Number of tools and resources developed	71
	Number of PLP projects that completed their planned outputs.	14
	Changes in attitudes and behaviors over time (tool and metrics to be developed)	N/A
<b>Value</b>	Projects with Patient Reported Outcome Measures (PROMs) or Patient Reported Experience Measures (PREMs)	N/A
	Projects with other patient experience evaluations	3 active projects
<b>Engagement</b>	Number of stakeholders engaged in partnerships with the PLP	43
	Number of stakeholder partnered projects in scale and spread	14
	Knowledge translation and partnership activities	
	Participants in PLP KT events and activities	5,171
	Additional participants viewing recordings of PLP KT events and activities	2,259
	Audit and feedback sessions	29
	Human centred design co-creations	51
	Co-learning sessions	3
	Quality improvement workshops, events, or sessions	7
	Measures of satisfaction (weighted averages)	
	Agree/Strongly agree the content is relevant to their practice	95.70%
	Agree/Strongly agree that they intend to change their practice as a result of attending	93.10%
Agree/Strongly agree that, overall, they were satisfied with the event	97.10%	
<b>Knowledge transfer and scholarship</b>	Data and evidence shared with partners	
	Stakeholder reports or presentations	51
	Publications	20
	Additional abstracts (submitted but not yet presented)	5
	Conference presentations (oral or poster)	28
	System impacting grants supported by PLP	10

# Appendix C: Scholarly Product for Dissemination

## Publications

### April 2021 - September 2021 Update

Barber T, Toon L, **Tandon P**, Green L. (2021). Eliciting and understanding primary care and specialist mental models of cirrhosis care: A cognitive task analysis study. *Canadian Journal of Gastroenterology and Hepatology*, June 15: :5582297. doi: 10.1155/2021/5582297.

**Campbell-Scherer D, Ofosu NN, Hunter KH, Jabbour B, Luig T**, Farooq S, Mahdi A, Gayawira A, Awasis F, Olokude F, Goa H, Syed H, Sillito J, Yip L, Belle L, Akot M, Nutter M, Farhat N, Wang Y, Jalal N, Khalif S, Chapagain S, Fernandez S, Azarcon S, Hama Z. (2021). Illuminating and mitigating the evolving impacts of COVID-19 on ethnocultural communities: A participatory action mixed methods study. *CMAJ* August 09, 2021 193 (31) E1203-E1212. doi.org/10.1503/cmaj.210131

Chen JZ, Hoang HL, **Crick KC**, Fryters SR, Chandran AU, Williams DC, **Myroniuk T, Yeung RO, Campbell-Scherer D, Saxinger LM**. (2021). Review of surgical antibiotic prophylaxis practice in adult urology procedures: Opportunities for antimicrobial stewardship collaboration. Impact of a reported beta-lactam allergy on cefazolin administration in surgical prophylaxis: Cefazolin is still best, but is it given? *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada July, 6(1):*1-85. doi:10.3138/jammi.6.s1.abst

Dahiya M, Eboreime E, Hyde A, Rahman S, Sebastianski M, Carbonneau M, Tapper EB, **Tandon P**. (2021). International Classification of Diseases Codes are Useful in Identifying Cirrhosis in Administrative Databases. *Digestive Diseases and Science, Jun 6*. doi: 10.1007/s10620-021-07076-1. Epub ahead of print.

Fryters SR, Chen JZ, Chandran AU, Hoang HL, **Saxinger LM, Crick KC, Myroniuk TW**, Williams DC, **Yeung RO, Campbell-Scherer D**. (2021). Audit of surgical antibiotic prophylaxis in obstetrical and gynecological surgery. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada July, 6(1):* 1-85. doi:10.3138/jammi.6.s1.abst

Fryters SR, Chen JZ, Chandran AU, Hoang HL, **Saxinger LM, Crick KC, Myroniuk TW, Williams DC, Yeung RO, Campbell-Scherer D**, Tse-Chang AW. (2021). Audit of surgical antibiotic prophylaxis in orthopedic surgery with particular focus on duration of prophylaxis. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada July, 6(1):* 1-85. doi:10.3138/jammi.6.s1.abst

Halasz JB, **Burak KW, Dowling SK**, Murray B, Williams J, Misra T, Veldhuyzen van Zante SJ, Kaplan GG, Swain M, Novak KL. (2021). Do Low-Risk Patients With Dyspepsia Need a Gastroscopy? Use of Gastroscopy for Otherwise Healthy Patients With Dyspepsia. *Journal of the Canadian Association of Gastroenterology*. <https://doi.org/10.1093/JCAG/GWAB017>

Herrera MA, **Campbell-Scherer DL**, Bell RC, Chan CB. (2021). Contextually appropriate tools and solutions to facilitate healthy eating identified by people with type 2 diabetes. *Nutrients*, 13, 2301. <https://doi.org/10.3390/nu13072301>

Hoang HL, **Crick KC**, Chen JZ, Fryters SR, Chandran AU, Tse-Chang AW, Williams DC, **Myroniuk TW, Yeung RO, Campbell-Scherer DC, Saxinger LM**. (2021). Impact of a reported beta-lactam allergy on cefazolin administration in surgical prophylaxis: Cefazolin is still best, but is it given? *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada July, 6(1):* 1-85. doi:10.3138/jammi.6.s1.abst

Hoang HL, Winkelaar GB, **Crick KC**, Chen JZ, Fryters SR, Chandran AU, Williams DC, **Myroniuk TW, Yeung RO, Campbell-Scherer D, Saxinger LM**. (2021). Examination of selection, timing, and duration of surgical prophylaxis for vascular procedures at a major Canadian vascular surgery centre. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada July, 6(1):* 1-85. doi:10.3138/jammi.6.s1.abst

**Noel G**, Pasay D, **Campbell-Scherer D, Saxinger L**. (2021). Co-designing to Improve Practice in Treating Urinary Tract Infections: a case study of reducing inappropriate antibiotic treatment. *Visible Language*, 55(1): 67-96.

doi.org/10.34314/vl.v55i1.4605

**Peterson A**, Rose S, **Solbak NM**, **Dowling SK**. (2021). Virtual grand rounds in the Calgary Emergency Medicine Department. Winnipeg: Poster presented at Canadian Association of Emergency Physicians Conference, June 2021. doi.org/10.1007/s43678-020-00035-1

**Saxinger LM**, Williams DC, **Crick KC**, Chen JZ, Hoang HL, Fryters SR, Chandran AU, **Myroniuk TW**, **Yeung RO**, **Campbell-Scherer DL**. (2021). Quality audit of surgical antibiotic prophylaxis timing, redosing, and post-operative dosing practices at five hospital sites: The devil is in the details. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada*, July, 6 (1): 1-85. doi:10.3138/jammi.6.s1.abst

Tse-Chang AW, **Crick KC**, Fryters SR, Chandran AU, Williams DC, **Myroniuk TW**, **Yeung RO**, **Campbell-Scherer D**, **Saxinger LM**. (2021). Assessment of surgical antibiotic prophylaxis practices at a Canadian tertiary pediatric centre. *Official Journal of the Association of Medical Microbiology and Infectious Disease Canada* July, 6(1): 1-85. doi:10.3138/jammi.6.s1.abst

**Woodhouse DC**, Frolkis AD, Murray BJ, **Solbak NM**, **Samardzic N**, **Burak KW**. (2021). The Impact of Comorbidities on Calgary Hospital Utilization in Patients With Chronic Obstructive Pulmonary Disease and Heart Failure. *Cureus*, 13(8). doi.org/10.7759/CUREUS.17303

## October 2021 to March 2022 Update

Gjata I, Olivieri L, Baghirzada L, Endersby RWW, **Solbak NM**, Weaver CGW, **Law S**, Cooke LJ, **Burak KW**, Dowling SK. The Effectiveness of a Multi-faceted Group Facilitated Audit and Feedback Intervention to Increase Tranexamic Acid Use During Total Joint Arthroplasty (Canadian Journal of Anesthesia) In Press: January 22, 2022

Hyde AM, Watt M, Carbonneau M, Eboeime EA, Abraldes JG, **Tandon P**. (2022). Understanding preferences toward virtual care: A pre-COVID mixed methods study exploring the perspectives of patients with chronic liver disease. *Telemedicine Journal and E-Health*, Mar, 28(3):407-414. doi: 10.1089/tmj.2021.0099.

Johnson E, Ghosh SM, Daniels VJ, Wild TC, **Tandon P**, Hyde A. (2022) Clinicians' perspectives and perceived barriers to caring for patients with alcohol use disorder and cirrhosis. *Addiction Science & Clinical Practice*, Feb 9;17(1):9. doi: 10.1186/s13722-022-00292-8.

**McGuckin T**, **Crick K**, **Myroniuk TW**, **Setchell B**, **Yeung RO**, **Campbell-Scherer D**. (2022) Understanding Challenges of Using Routinely Collected Health Data to Address Clinical Care Gaps: A case study in Alberta, Canada. *BMC Open Quality*, 11:e001491. doi: 10.1136/bmjoc-2021-001491

**Oofosu NN**, **Luig T**, Chiu Y, Mumtaz N, **Yeung RO**, Lee KK, Wang N, Omar N, Yip L, Aleba S, Maragang K, Ali M, Dormitorio I, **Campbell-Scherer D**. (2022). Understanding the bigger picture: Syndemic interactions of immigrants and refugee context with the lived experience of diabetes and obesity. *BMC Public Health*, 22, 345. doi.org/10.1186/s12889-021-12305-3

**Schroeder D**, **Luig T**, Beesoon S, Robert J, **Campbell-Scherer D**, Brindle M. (2021). What work is required to implement and sustain the National Surgical Quality Improvement Programme (NSQIP)? A qualitative study of NSQIP implementation in Alberta, Canada. *BMJ Open*, September, 11:e044720. doi:10.1136/bmjopen-2020-044720

**Schroeder D**, **Luig T**, Finch T, Beesoon S, **Campbell-Scherer D**. (2021). Understanding implementation context and social processes through integrating Normalization Process Theory (NPT) and the Consolidated Framework for Implementation research (CFIR). *Implementation Science Communications*, 11:e044720. doi: 10.1136/bmjopen-2020-044720

Sekhon S, **Crick K**, **Myroniuk T**, Ghosh M, **Yeung R**, **Campbell-Scherer D**. (2021). Adrenal Insufficiency: Investigating its Prevalence and Healthcare Utilization Using Administrative Data. *Journal of the Endocrine Society*, December, bvab184. doi.org/10.1210/jendso/bvab184

Swaleh R, **McGuckin T**, **Myroniuk TW**, **Manca D**, Lee K, Sharma AM, **Campbell-Scherer D**, **Yeung RO**. (2021). Using the Edmonton Obesity Staging System in the real world: A feasibility study. *CMAJ Open*, 9 (4) E1141-E1148. doi.org/10.9778/cmajo.20200231

## Manuscripts under Review

Gjata I, Olivieri L, Baghirzada L, Endersby RVW, **Solbak NM**, Weaver CGW, **Law S**, Cooke LJ, **Burak KW**, Dowling SK. The Effectiveness of a Multi-faceted Group Facilitated Audit and Feedback Intervention to Increase Tranexamic Acid Use During Total Joint Arthroplasty (*Canadian Journal of Anesthesia*)

Swaleh R, **McGuckin T**, **Campbell-Scherer D**, **Setchell B**, Senior P, **Yeung RO**. Real word challenges in integrating electronic medical record and administrative health data for regional quality improvement in diabetes: A retrospective cross-sectional analysis (*BMC Health Services Research*).

## Manuscripts in Progress

Duncan, D., Crisall, N., **Burak, K.**, **Bailey, M**, Rivera, L., Armson, H., Cooke, L.J. Evaluating Audit and Group Feedback with Outcome Harvesting.

**Luig T**, Chiu Y, **Ofosu NN**, **Yeung RO**, Lee KL, Wang N, Omar N, Yip L, Aleba S, Maragang K, Ali M, Dormitorio I, **Campbell-Scherer DL**. Cultural brokering at the intersection with primary health care in obesity and diabetes: a participatory qualitative study.

**Luig T**, Chiu Y, **Ofosu NN**, **Yeung RO**, Lee KL, Wang N, Omar N, Yip L, Aleba S, Maragang K, Ali M, Dormitorio I, **Campbell-Scherer DL**. Creating a space for radical care: cultural brokering and making place with immigrant and refugee communities.

## Conference presentations and posters

### April 2021 – September 2021

**Burak K**, **Law S**, **Rice C**, Hu J, Fung CI, Woo AKH, Fonseca K, Lang ALS, Kanji JN, Meatherall BL. *COVID-19 outbreak among physicians at a Canadian curling bonspiel: A descriptive observational study*. AMMI Canada – CACMID virtual poster presentation, April 2021.

**Burak K**, **Law S**, **Setchell B**, Enns E, Swain M, & Shaheen AA. *Are we Using Blood Wisely in patients with cirrhosis and GI bleeding in Calgary hospitals?* Oral presentation delivered virtually at the Choosing Wisely Canada National Meeting, Ottawa, ON, May 2021.

**Burak K**, **Woodhouse D**, **Nicholson K**. *Advancing audit and feedback in primary care*. Oral presentation delivered virtually at the Choosing Wisely Canada National Meeting, Ottawa, ON, May 2021.

**Campbell-Scherer DL**. *Implementing Canada's CPG's in Primary Care Practice*. Oral presentation delivered virtually at the Canadian Obesity Summit, May 2021.

**Campbell-Scherer DL**. *Making Sense of the Personal Narrative. Personalizing Obesity Management Webinar: Who, When, and How*. Oral presentation delivered virtually at The Obesity Society Conference, March 2022.

**Campbell-Scherer DL**, **Heatherington M**, Kucera M, Jay M, McPherson A, Lee-Baggley D, Vallis M, Pramyothin P, Wicklums S, Al-Najim W, Rodriguez Flores M, Cardoso E, Abraham J, Sajwani T. *Building an international community of practice for obesity education*. Oral presentation delivered virtually at the Canadian Obesity Summit, May 2021.

Chen JZ, Hoang HL, **Crick KC**, Fryters SR, Chandran AU, Williams DC, **Myroniuk T**, **Yeung RO**, **Campbell-Scherer D**, **Saxinger LM**. *Review of surgical antibiotic prophylaxis practice in adult urology procedures: Opportunities for antimicrobial stewardship collaboration*. Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Disease Canada (AMMI), April 2021.

Chen J, Hoang H, Tse-Chang A, **Saxinger L**, Fryters S, Chandran U, **Crick K**, **Myroniuk T**, Williams D, **Yeung R**, **Campbell-Scherer D**. *A Multicentre Review of Adherence to Surgical Antibiotic Prophylaxis Recommendations in Adult*



*Urologic Procedures*. Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Diseases, April 2021.

Dowling S, **Peterson A, Saxinger L**, Shkrobot R, Pasay D, Nickonchuk T. *Reducing overuse of urine cultures in the emergency department*. Oral presentation delivered virtually at the Canadian Association of Emergency Physicians Conference, Winnipeg, MB, June 2021.

Fryters S, Chen J, Chandran U, Hoang H, **Saxinger L, Crick K, Myroniuk T**, Williams D, **Yeung R, Campbell-Scherer D**. *An Audit of Surgical Antibiotic Prophylaxis in Obstetrical/Gynecological Surgery*. Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Diseases, April 2021.

Fryters S, Chen J, Chandran U, Hoang H, **Saxinger L, Crick K, Myroniuk T**, Williams D, **Yeung R, Campbell-Scherer D**. *An Audit of Surgical Antibiotic Prophylaxis in Orthopedic Surgery with a Particular Focus on Duration of Prophylaxis*. Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Diseases, April 2021.

Hao R. *Underuse of Cardiorenal Protective Agents in High-Risk Diabetes Patients in Primary Care*. Oral presentation delivered at the Family Medicine Research Day at the University of Alberta, June 2021.

Hoang H, Tse-Chang A, **Saxinger L**, Fryters S, Chen J, Chandran U, **Crick K, Myroniuk T**, Williams D, **Yeung R, Campbell-Scherer D**. *An Examination of Selection, Timing and Duration of Surgical Prophylaxis for Vascular Procedures at a Major Canadian Vascular Surgery Centre*. Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Diseases, April 2021.

Hoang H, Tse-Chang A, **Saxinger L**, Fryters S, Chen J, Chandran U, **Crick K, Myroniuk T**, Williams D, **Yeung R, Campbell-Scherer D**. *The Impact of a Reported Beta-Lactam Allergy on Cefazolin Administration for Surgical Prophylaxis: Cefazolin Is Still Best, But Is It Given?* Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Diseases, April 2021.

**Luig T**, Chiu Y, **Ofosu N, Campbell-Scherer D**. *Mutuality, narratives, and complexity: moving from understanding entanglements to action during a pandemic*. Oral presentation delivered virtually at the CASCA (Canadian Anthropology Society) conference, May 2021.

**Luig T, Ofosu NN**, Chiu Y, **Campbell-Scherer DL**. *Cultural brokering during COVID-19: using a salutogenesis lens to understand how migrant families are impacted and supported through crisis*. Oral presentation delivered virtually at the 6th International Conference on Salutogenesis, June 2021.

**Luig T, Ofosu NN**, Chiu Y, **Yeung RO**, Lee KK, **Campbell-Scherer DL**. *"The problem first is what to eat and where to sleep": Social Determinants of Health in migrants living with obesity and the role of cultural brokering*. Invited presentation delivered virtually at the Canadian Obesity Summit, May 2021.

**Luig T, Ofosu NN**, Chiu Y, **Yeung RO**, Lee KK, **Campbell-Scherer DL**. *The role of cultural brokers in obesity and diabetes care for vulnerable members of immigrant and refugee communities*. Poster delivered virtually at the European Congress on Obesity, May 2021.

Marcet C, Damant R, **Nicholson K**. *Lung testing: choosing the right test for the right patient*. Oral presentation to the ACFP Clinical Connections Conference, April 2021.

**Nicholson K**, Naugler C, Oliver D, **Burak K, Mehta A**, Pow J, Lahtinen M, **Metcs A**. *Utilization of data in education opportunities- A model for promoting sustained practice improvement: Lab Utilization*. Oral presentation delivered virtually at the Choosing Wisely Canada National Meeting, Ottawa, ON, May 2021.

**Ofosu NN, Luig T**, Chiu Y, Mumtaz N, **Yeung RO**, Lee KK, **Campbell-Scherer DL**. *Understanding the bigger picture: Lived experienced of immigrants and refugees with obesity and diabetes*. Poster delivered virtually at the European Congress on Obesity, May 2021.

**Saxinger L**, Fryters S, Chen J, Chandran U, Hoang H, Tse-Chang A, **Crick K, Myroniuk T**, Williams D, **Yeung R, Campbell-Scherer D**. *A Quality Audit of Surgical Antibiotic Prophylaxis Timing, Redosing, and Post-Operative Dosing Practices in 5 Hospital Sites: The Devil is in the Details*. Poster presented virtually at the Conference of the Association

of Medical Microbiology and Infectious Diseases, April 2021.

**Schroeder D, Luig L, Beesoon S, Campbell-Scherer DL.** *Integrating a process theory and a determinant framework to understand how contextual factors, cognitive work and social processes interact to drive implementation: Methodological insights.* Oral presentation delivered virtually at the 4th UK Implementation Science Research Conference, July 2021.  
**Received the Best Presentation Award**

**Tandon P.** *Be a liver not a fighter - coordinating cirrhosis care in the community.* Oral presentation delivered at the GI for GPs course, Edmonton, AB, May 2021.

**Tandon P.** *State of the art in nutrition and exercise: comprehensive evaluation and therapeutic management of the cirrhotic patient.* Oral presentation delivered at the 15th Journee Andre Viallet, Montreal QPC, September 2021.

Tse-Chang A, **Saxinger L**, Fryters S, Chen J, Chandran U, Hoang H, **Crick K, Myroniuk T**, Williams D, **Yeung R, Campbell-Scherer D.** *An Assessment of Surgical Antimicrobial Prophylaxis at a Canadian Tertiary Pediatric Centre.* Poster presented virtually at the Conference of the Association of Medical Microbiology and Infectious Diseases, April 2021.

## October 2021 – March 2022

Novak, K. *Can we improve the use of gastroscopy to investigate dyspepsia in otherwise healthy adults in Alberta? Sharing Choosing Wisely Canada guidelines, current practice patterns and resources to optimize appropriate use.* Oral presentation delivered virtually at the Choosing Wisely Alberta: Forum of the Future, December 2021.

**Solbak NM**, Thompson E, Long L, **Bailey JAM**, Thomas D, Johnson DW. *Scale and spread of quality improvement initiatives for bronchiolitis management in Alberta emergency departments.* Oral presentation delivered virtually at the AHS Emergency SCN Quality Improvement and Innovation Forum, February 22, 2022. Abstract submitted to the Canadian Journal of Emergency Nursing

**Tandon P.** *Introduction to [cirrhosiscare.ca](http://cirrhosiscare.ca).* Oral presentation delivered at the American Association for the Study of the Liver | the Liver Meeting 2021, Anaheim CA, November 2021.

**Tandon P.** *Cirrhosis care - gaps and opportunities for whole person care.* Oral presentation delivered at the Puerto Rico Association of Gastroenterology conference, San Juan, PR, February 2022.

**Yeung RO.** *Starting the Process of Quality Improvement in Edmonton's Tertiary Diabetes Clinics: Getting our Data Ducks in a Row.* Oral presentation delivered virtually at the Diabetes Canada Professional Conferences, November 2021.

## Abstracts accepted for upcoming conferences

### October 2021 – March 2022

**Campbell-Scherer DL.** *Making Sense of the Personal Narrative.* Abstract accepted for a virtual presentation at the Diabetes Kongress, Berlin, Germany, May, 2022.

**Campbell-Scherer DL, Yeung RO, Myroniuk T, Mathe N, Hunter, K.** *Embracing complexity, advancing medical practice, and the need for Wicked Teams.* Abstract accepted for a workshop at EBMLive 2022, Oxford, UK, July 2022.

Thurston J, Nasr-Esfahani M, **Peterson A.** Using the Calgary audit and feedback framework to address operative vaginal delivery rates at four community hospitals. Abstract accepted at Society of Obstetricians and Gynaecologists of Canada - 2022 Annual Clinical and Scientific Conference, Quebec City, QC, June 2022.

Veldhuyzan van Zanten S, Novak K, Maracle B, **Campbell-Scherer D, Crick K**, Sadowski D. *Choosing Wisely: Gastroscopy for Upper Gastrointestinal Symptoms in Patients <65 Years has a Low Yield of Clinically Important Findings.* Abstract submitted to Digestive Disease Week, May 2022.

## System Impacting Grants Supported by PLP

- “Cirrhosis Care Alberta Program”, an Alberta Innovates / PRIHS grant led by Dr. Puneeta Tandon at the University of Alberta.
- “Alberta Back Pain Pathway (ABCp)”, a Choosing Wisely Alberta grant led by Dr. Greg Kawchuk at the University of Alberta.
- “Building on Existing Tools To Improve Chronic Disease Prevention and Screening in Primary Care Virtually: The Virtual BETTER Study”, a CIHR Project Grant - CMA Foundation - Virtual Care Grant led by Dr. Kris Aubrey-Bassler.
- “Addressing clinical and social determinants of health to advance obesity and diabetes prevention and management in vulnerable newcomer ethnocultural communities”, a NOVAD: Novo Nordisk Alberta Diabetes Fund grant led by Dr. Denise Campbell-Scherer at the University of Alberta.
- “Can we improve the use of gastroscopy to investigate dyspepsia in otherwise healthy adults in Alberta? Sharing Choosing Wisely Canada guidelines, current practice patterns and resources to optimize appropriate use”, a Choosing Wisely Alberta grant led by Dr. Kerri Novak at the University of Calgary.
- “ALS-ID: developing a roadmap for early diagnosis and rapid referral of probable ALS cases to the multidisciplinary ALS Clinic at the Kaye Edmonton Clinic”, a Kaye Edmonton Clinic grant led by Dr. Wendy Johnston at the University of Alberta.
- “Alberta SPOR SUPPORT Unit (AbSPORU) phase 2”, an Alberta Innovates Grant led by Dr. Finlay McAllister at the University of Alberta.
- “Audit and Group Feedback: What works for whom and in which context? A realist evaluation of the Calgary Physician Learning Program”, an Office of Health and Medical Education Scholarship (OHMES) grant led by Dr. Lara Cooke at the University of Calgary.
- “Improving the delivery of acute dialysis to critically ill patients in Alberta – DIALYZING WISELY”, an Alberta Innovates, PRIHS 6 grant led by Dr. Oleksa Rewa at the University of Alberta.
- “Don’t Misuse My Blood: Reducing Avoidable Blood Tests and Avoidable Blood Transfusions in Patients admitted to Critical Care and High-risk Surgical Units in Alberta”, an Alberta Innovates, PRIHS 5 grant led by Dr. Dan Niven at the University of Calgary.

# Appendix D: Presentations – Audit & Feedback, Physician Engagement, and Stakeholder Presentations

## Individual or aggregate audit and feedback, physician engagement, and stakeholder presentations

### Primary care:

- *Vaccine safety in pregnancy webinar*, October 2021
- Diabetes Update Series (Webinar Co-Learning Series)
  - *Nutrition and Diabetes Management*, May 2021
  - *Diabetes and Chronic Kidney Disease*, May 2021
  - *Diabetes and Cardiovascular Disease*, May 2021
  - *Deprescribing Insulin*, June 2021

### Primary Care Outreach:

- Edmonton North PCN: *Opportunities for PLP-PCN collaborations*, May 2021
- Sherwood Park PCN: *Opportunities for PLP-PCN collaborations*, June 2021
- Edmonton North PCN: *Understanding co-creations*, October 2021
- Edmonton North PCN: *Information and recruitment for Housing and Income support Knowledge management tool co-creation*, October 2021
- Leduc, Beaumont, Devon PCN: *Opportunities for PLP-PCN collaborations*, November 2021
- Edmonton North PCN: *Opportunities for PLP-PCN collaborations*, November 2021
- Edmonton Southside PCN: *Obesity and program planning*, November 2022
- Edmonton North PCN: *EPIQ in primary care - information and Q&A session*, December 2021
- RhPap: *Overview of PLP primary care pillar*, January 2022
- Edmonton North PCN: *Physician engagement and recruitment, resource dissemination*, February 2022
- Edmonton North PCN: *Overview of PLP diabetes and primary care pillars*, February 2022
- Edmonton Southside PCN: *ADHD and program planning*, February 2022
- Edmonton Southside PCN: *ADHD and program planning*, March 2022

### Primary care: Edmonton Southside PLP-PCN events

- QI workshop: *Heart failure in primary care - Management and referral*, April 2021 (pan PCN)
- QI workshop: *Responding to the Syphilis crisis in Primary Care*, November, 2021
- QI workshop: *Heart failure in primary care - Screening and prevention*, February 2022 (pan PCN)
- QI workshop: *Heart failure in primary care - Management and referral*, March 2022 (pan PCN)

### Cardiology groups:

- AHS Cardiovascular health and stroke SCN: *Enhanced lipid reporting project*, November 2021

### Child and Youth Psychiatry groups:

PLP supported the delivery, and scale and spread of Child and Youth Psychiatry Grand Rounds at the UofA:

- *Approaches to patients with Intellectual and Developmental Disabilities*, May 2021
- *Good Psychiatric Management for Adolescents (GPM-A) with Borderline Personality Disorder (BPD)*, June 2021
- *Syndrome of Executive Dysfunction and Pediatric Psychopathology*, September 2021
- *The WIDER LENS Curriculum*, October 2021
- *Collective Trauma in Adolescents: Lessons Learned from the 2016 Ft. MacMurray Wildfires*, November 2021
- *Gender Dysphoria and Gender Development in Childhood and Adolescence*, December 2021
- *Tourette Syndrome & Tic Disorders: An Update*, January 2022
- *In with the New and Revival of the Old: Overview of CYFMHA Programs in Edmonton Zone*, February 2022
- *Eating Disorders Part 1: Understand and Assessing Eating Disorders in Children and Adolescents*, March 2022

### **Diabetes groups:**

- AHS Diabetes and Obesity SCN: *Opportunities for PLP-SCN collaboration*, November 2021
- AHS Diabetes and Obesity SCN: *Eye care pathway*, November 2021
- Diabetes Quality Council: *Collaboration with PLP for zonal quality improvement projects*, November 2021
- UofA Division of Endocrinology & Metabolism Case Rounds: *Realizing the potential of EMR and administrative health data for regional quality improvement in diabetes*, May 2021
- Endocrinology and Diabetes CSD Work Group, UofA: *Opportunities for quality improvement projects with Connect Care*, July 2021

### **Gastroenterology groups:**

- AHS Digestive Health SCN divisional clinical research meeting: *Prevention of SSI Surgical Antibiotic Prophylaxis The Antibiotic Stewardship Viewpoint - review of principles, opportunities, local data, next steps*, January 2022
- UofA Gastroenterology Noon Rounds: *Alcohol, pushups and meditation*, March 2022
- *Managing alcohol use disorder in liver disease co-learning webinar series*
- *Alcohol use disorder 101*, January 2022
- *Screening and brief intervention*, January, 2022
- *Pharmacotherapy and behavioural therapy*, February 2022

### **Medical Groups**

- UofA Faculty of Medicine & Dentistry Grand Rounds: *Order sets in Connect Care: Are they worth it?* March 2022
- Misericordia Hospital Multidisciplinary Grand Rounds: *Top tips you need to know for cirrhosis care*, November 2021

### **Neurology groups:**

- Canadian Amyotrophic Lateral Sclerosis Research Network (CALNS): *Preliminary results of ALD dashboard project*, November 2021

### **Occupational medicine:**

- Co-learning session: *Debunking myths around work-related mental health*, February 2022

### **Pediatric groups:**

- Aggregate audit & feedback: *The Care of Pediatric Patients Presenting to Hospital with Diabetic Ketoacidosis (DKA) in Alberta: A Physician Learning Program Collaboration*, June 22, 2021

### **Respirology groups:**

- Division of Respiratory Medicine, UofA: *COPD and Asthma projects for PLP*, June 2021

### **Surgery groups:**

- Calgary Zone Surgical Quality Council: *Beta-Lactam Allergy and Surgical Prophylaxis - What you need to know*. April 2021
- AHS Surgery SCN CAT Implementation Team: *Using sensemaker methodology for qualitative evaluation of Central Access and Triage to AHS/Surgery SCN Evaluation team*, July 2021
- AHS Surgery SCN CAT Implementation Team: *Qualitative evaluation of patients and provider experience of Central Access and Triage using Sensemaker*, October 2021
- AHS Surgery SCN CAT Implementation Team: *Making sense of change in complexity: provider & patient experience. The Surgical Central Access Project*, October 2021
- Surgery ZDEC: *Surgical wait list project - Overview and discussion*, November 2021
- AHS Surgery SCN: *Prevention of SSI Surgical Antibiotic Prophylaxis The Antibiotic Stewardship Viewpoint - review of principles, opportunities, local data, next steps*, March 2022

### Other groups:

- EPICORE at University of Alberta: Outreach - Introduction to PLP-PCN programs, April 2021
- Royal Danish Embassy: NOVAD Alberta Innovation Panel Discussion: Secondary Uses of Health Data and related Economic impact (government, industry, international audience). *The Illuminate Project 2020: A story of radical adaptation*, Dr. Denise Campbell-Scherer, invited speaker, June 2021
- First Mile Health Panel - Biome Summit on cardiovascular disease healthcare transformation, Dr. Denise Campbell-Scherer, invited panelist, September 2021
- Alberta Health CME Working Group: *Enabling the Learning Health Systems -The Provincial CPD Network*, October 2021
- Alberta CPD Network Steering Committee: *CPD Network update*, October 2021
- Faculty of Medicine & Dentistry, UofA Grand Rounds: *Care for patients from ethnocultural migrant communities: considerations and resources*, December 2021. Featured PLP Housing and Income Insecurity Resource Tools.
- Chilean and Irish Teams working on on adaptation of Adult Obesity CPGs: *Obesity Assessment in Primary Care*, December 2021
- AbSPORU Learning Health System Team: *What work is required to implement and sustain the NSQIP A qualitative study of NSQIP implementation in Alberta, Canada*, January 2022

### COVID presentations:

- AHS/MCHB Vaccination/ Community Engagement Meeting: COVID-19 Vaccine Hesitancy Project, August 2021
- Multicultural Health Brokers Cooperative: COVID-19 vaccine hesitancy project, 4 meetings in August 2021
- Multicultural Health Brokers Cooperative: COVID-19 vaccine hesitancy project, 6 meetings in September 2021
- Multicultural Health Brokers Cooperative and community: *School COVID & Vaccination information session*, September 2021
- Multicultural Health Brokers Cooperative COVID-19 Pop-up Vaccination Clinic, Edmonton Intercultural Center, September 2021
- Multicultural Health Brokers Cooperative COVID-19 Pop-up Vaccination Clinic, Clareview Community Recreation Center, September 2021
- Multicultural Health Brokers Cooperative COVID-19 Pop-up Vaccination Clinic, Millbourne Mall, September 2021
- Multicultural Health Brokers Cooperative and Community Faith Leaders: *COVID-19 Vaccination Hesitancy outreach and information session*, October 2021
- Multicultural Health Brokers Cooperative full group: *COVID-19 Vaccination Hesitancy project information*, October 2021
- Multicultural Health Brokers Cooperative: COVID-19 vaccine hesitancy project, 6 meetings in October 2021
- Multicultural Health Brokers Cooperative: COVID-19 vaccine hesitancy project, December 2021

### COVID Corner, with Office of Continuing Medical Education & Professional Development, Cumming School of Medicine, University of Calgary

- *Vaccines vs. Variants Pt. 2*, **Saxinger L** (presenter), **Burak K** (moderator), May 2021
- *Management of Acute COVID-19 in the Hospital and Long COVID in the Community*, **Burak K** (moderator), June 2021
- *Moving into the Grey: The 4th Wave & Beyond*, **Burak K, Bailey M** (moderators), September 2021
- *Update on the Inpatient Management of Covid-19*, **Burak K** (moderator), September 2021
- *COVID & Pregnancy: Vaccine Safety and Patient Management*, **Burak K, Bailey M** (moderators), September 2021
- *The Long Shadow of COVID: Reflecting on Moral Challenges*, **Burak K** (moderator), October 2021
- *Mental Health in the Pandemic: Early Detection and Intervention*, **Burak K, Nicholson T** (moderators), November 2021
- *Keeping COVID Out: Optimizing Outpatient Care to Reduce Hospitalizations*, **Burak K, Nicholson T** (moderators), December 2021
- *Bringing Clarity to Omicron Challenges*, **Nicholson T, Raedler T** (moderators), January 2022
- *Reflections After Two Years on the COVID Roller Coaster*, **Bailey M, Nicholson T** (moderators), March 2022



[www.albertaplp.ca](http://www.albertaplp.ca)

[plp@ualberta.ca](mailto:plp@ualberta.ca) | [plp@ucalgary.ca](mailto:plp@ucalgary.ca)