

# Department of Emergency Medicine Annual Report 2022



Credits Dr. H Patterson



UNIVERSITY OF CALGARY  
CUMMING SCHOOL OF MEDICINE  
Department of Emergency Medicine

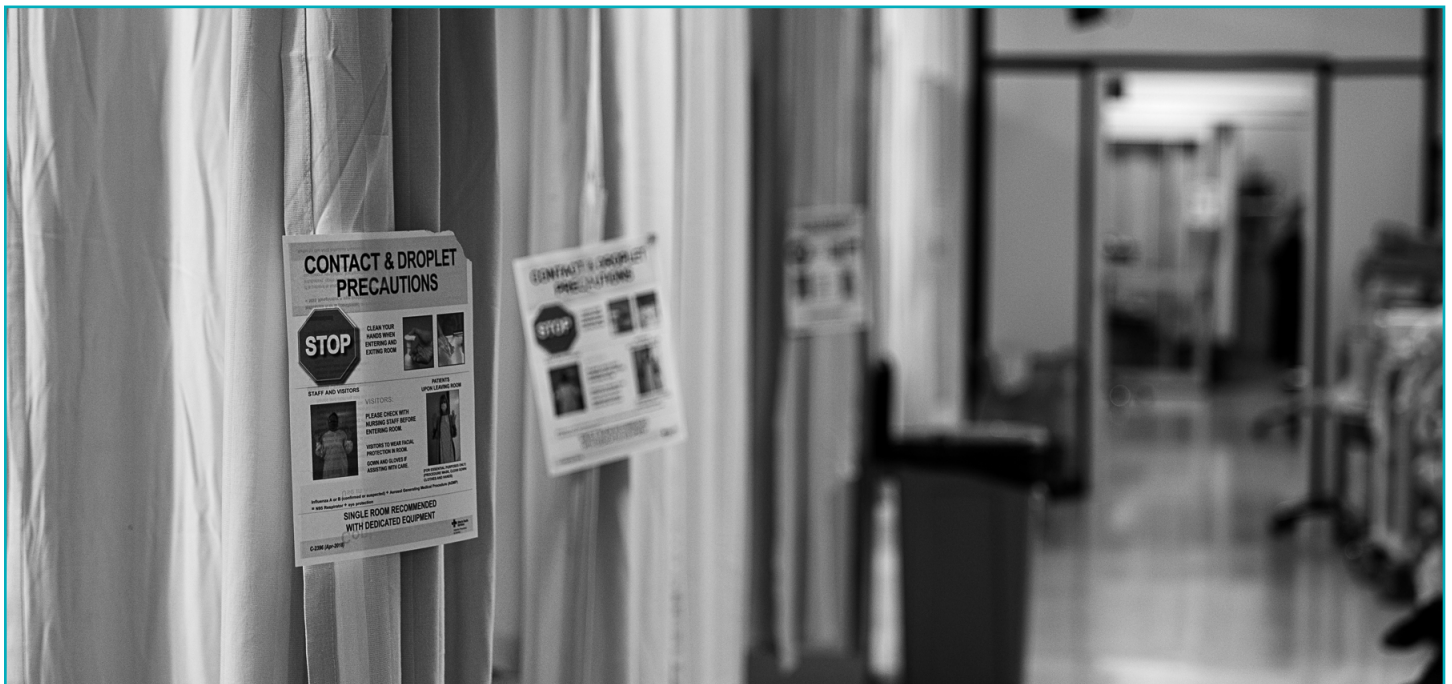


Alberta Health  
Services

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# Message from Department Leadership

## Message from the Department Head and Executive Director for the 2022 annual report on behalf of the Zone Department of Emergency Medicine (EM)

While the zone department of Emergency Medicine (EM) was anticipating and hopeful for a year characterized by stability and rebuilding post-pandemic, 2022 would be characterized as one of the more eventful and tumultuous years in the department's history. With over 280,000 unique visits across the four adult emergency departments in the Calgary Zone, we finally saw a return to pre-pandemic visit volumes as well as admission burden through the Emergency Department (ED). Unfortunately, two factors would lead to a significant deterioration in operational metrics in tandem with negative impacts both on staff morale and ED safety and quality of care. These included a widespread staffing crisis affecting our nursing colleagues primarily but the changes were also the result of unprecedented levels of ED inpatients threatening the mission of emergency and pre-hospital care in the city. With such high proportions of ED space and resource dedicated to admitted patients, 2022 saw some of the worst wait times both for admitted and discharged patients that the zone has experienced in well over a decade. This also contributed to extensive delays in EMS response as a result of large numbers of EMS crews and patients were held awaiting off-load into emergency departments across the four sites.

Despite the challenges, ED leadership including nursing, physicians and directors came together with resolve and poised to introduce and trigger innovative solutions to address these circumstances. By the end of 2022 with enhanced attention to ED wait times and EMS response times highlighted through the appointment of the Official Administrator, the following efforts were either initiated or well underway.

These included:

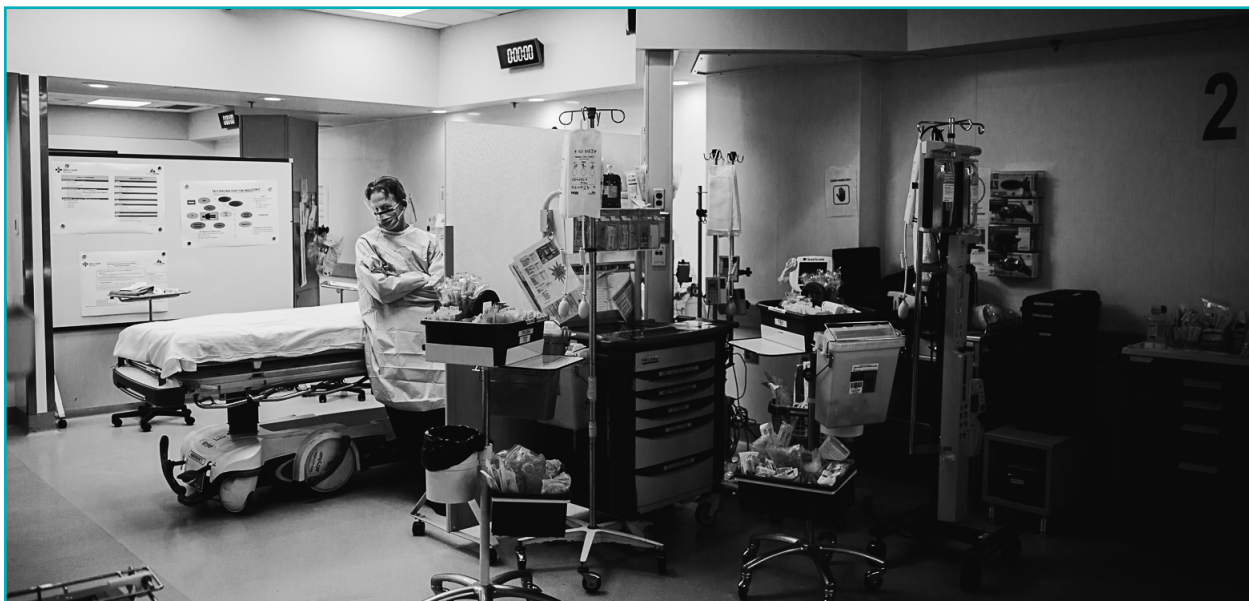
1. Creation of an Emergency Inpatient Task force to address the access block and flow issues affecting emergency and pre-hospital care.
2. Creation of an ED staffing recruitment and retention task force.
3. Creation and staffing of the ED Park nurse position for EMS to download patients.
4. Launch of the Clinical Emergency Physician Liaison initiative to mitigate the risks of EMS holding and facilitate patient flow through the EDs and onto inpatient units.
5. Concerted province-wide efforts on EIP threshold work and capacity management initiatives.

As 2022 entered its final month, the Calgary Zone Emergency Departments appreciated a turning point in the ED crisis which marked the last several months. With progress in staffing and capacity management, our department remains hopeful that 2023 will see sustained improvements and a return to the kind of timely care that is the pride of our team.



## Other highlights for 2022 included:

1. A return to face to face learning with our department hosting Dr. Anton Helman and his widely subscribed EM Cases featuring a dedicated episode to Calgary talent and accomplishments. <https://emergencymedicinecases.com/posterior-stroke-ep-lead-hear-score-ketamine-for-suicidal-ideation-peer-support-highlights-from-calgary-em-hodsman-lecture-day/>
2. 2022 was an exceptionally strong year for all branches of medical education in Calgary. Under the leadership of the new Deputy for Education, Dr. Fareen Zaver, our department undertook an educational strategic plan to establish a wide range of priorities over the next several years.
3. Our postgraduate residency training programs received full accreditation and the Royal College program was even commended on its efforts to advance EDI within the curriculum.
4. Plans for the Zone Department of Emergency Medicine in 2023 include a strategic re-orientation to how our committee functions with the revamp being led by the four co-chairs, Karen Foudy, Neil Collins, Michael Suddes and Eddy Lang.
5. Ayesha Khory took on the lead as our department's Mental Health Liaison with our colleagues in Psychiatry, Addiction and Mental Health.
6. Colin Bell was appointed as our point of care Ultrasound Lead.
7. Geriatric Emergency Care continues to receive significant boosts in visibility and impact through our Lead Physician on this portfolio, Dr. Margaret McGillivray.
8. Significant turnover in operational leadership with new Site Chief, Meira Louis, at the PLC with Haley Cochrane as Assistant Site Chief and Carly Hagel coming on board as the Assistant Chief at SHC.
9. Calgary remains a highly attractive place for emergency physicians to work. Our Physician Resource Committee, now with revised terms of reference, aligned with EDI principles has recruited 13 new physicians into the Zone in 2022.
10. A successful launch of Connect Care at both the PLC and FMC during Launches 4 and 5.
11. The launch of the Integrated Operational Centre that has resulted in an increase in UCC EMS transports without the increase in secondary transports.



ED operations have worsened in 2022 by virtue of a high EIP load and prolonged length of stay for admitted patients but it is worth noting that this is a national and even international phenomenon and Calgary still fares well in comparison to the national average.

<https://yourhealthsystem.cihi.ca/hsp/indepth?lang=en#/theme/f3647a180b929173539c81ef6e4de088e99bdf8/3/N4lgKgFgpgtIDCAXATgGxALIAYwPatQEMAHAYgBNNQAGGgRkxQFcoBfDoA>

In summary, 2022 posed significant challenges for our department but also allowed us to transform the crisis into opportunities and innovations that highlight and cement the critical role that our department plays in providing care for all Calgarians with emergency healthcare needs.



**Dr. Eddy Lang**  
Calgary Zone Clinical and Academic  
Department Head



**Karen Foudy RN BN MST**  
Executive Director Program Lead  
for Emergency

# Alberta Health Services Mission and Vision

## Vision:

Healthy Albertans. Healthy Communities. Together.

## Mission:

To provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.

## Values:

Our five values – compassion, accountability, respect, excellence and safety – are at the heart of everything that we do. They inspire, empower and guide how we work together with patients, clients, families and each other.



## Emergency Medicine

### Mission Statement

Calgary Emergency Medicine is committed to Providing High Levels of Patient Care that Involve Integrated Clinical and Academic Leadership.

Foothills Medical Centre  
Main Building, Room C1150  
1403 – 29th ST NW  
Calgary AB T2N 2T9

Rockyview General Hospital  
Holy Cross Ambulatory Care Centre  
Room 5A105  
1007 – 14th St SW

Calgary AB T2V 1P9

[INSITE](#)

[UNIVERSITY OF CALGARY](#)



# Cumming School of Medicine

## University of Calgary

### VISION

We partner with University leaders to support the “Eyes High” vision. “Eyes High” is the University of Calgary’s bold and ambitious vision to become one of Canada’s top five research universities, grounded in innovative learning and teaching and fully integrated with the community of Calgary, by the university’s 50th anniversary in 2016.

### MISSION

By creating and delivering exemplary human resources services, processes, and outcomes we contribute to and share in the University’s mission and goals to:

- Sharpen focus on research and scholarship;
- Enrich the quality and breadth of learning;
- Fully integrate the university with the community.

### VALUES

The strategy also articulates eight core values shared by the university community; curiosity; support; collaboration; communication; sustainability; globalization; balance and excellence.

## Dean’s Office

### Cumming School of Medicine Strategic Plan

### VISION

Creating the future of health.

### MISSION

We must fulfill our social responsibility to be a school in which the common goal of improved health guides service, education and research. We must foster the collective pursuit of knowledge and its translation, through education and application, to better the human condition.

### VALUES

Excellence |Collaboration| Engagement| Respect

### STRATEGIC GOALS

We are committed to maintaining the public’s trust and respect as a premier academic health science centre by meeting the following goals:

Serve our diverse communities by understanding and responding to their health needs and by effectively stewarding the resources entrusted to us by Albertans.

Generate knowledge that has both local and global impact by fostering novel collaborative alignments among basic and clinical scientists, physicians and educators.

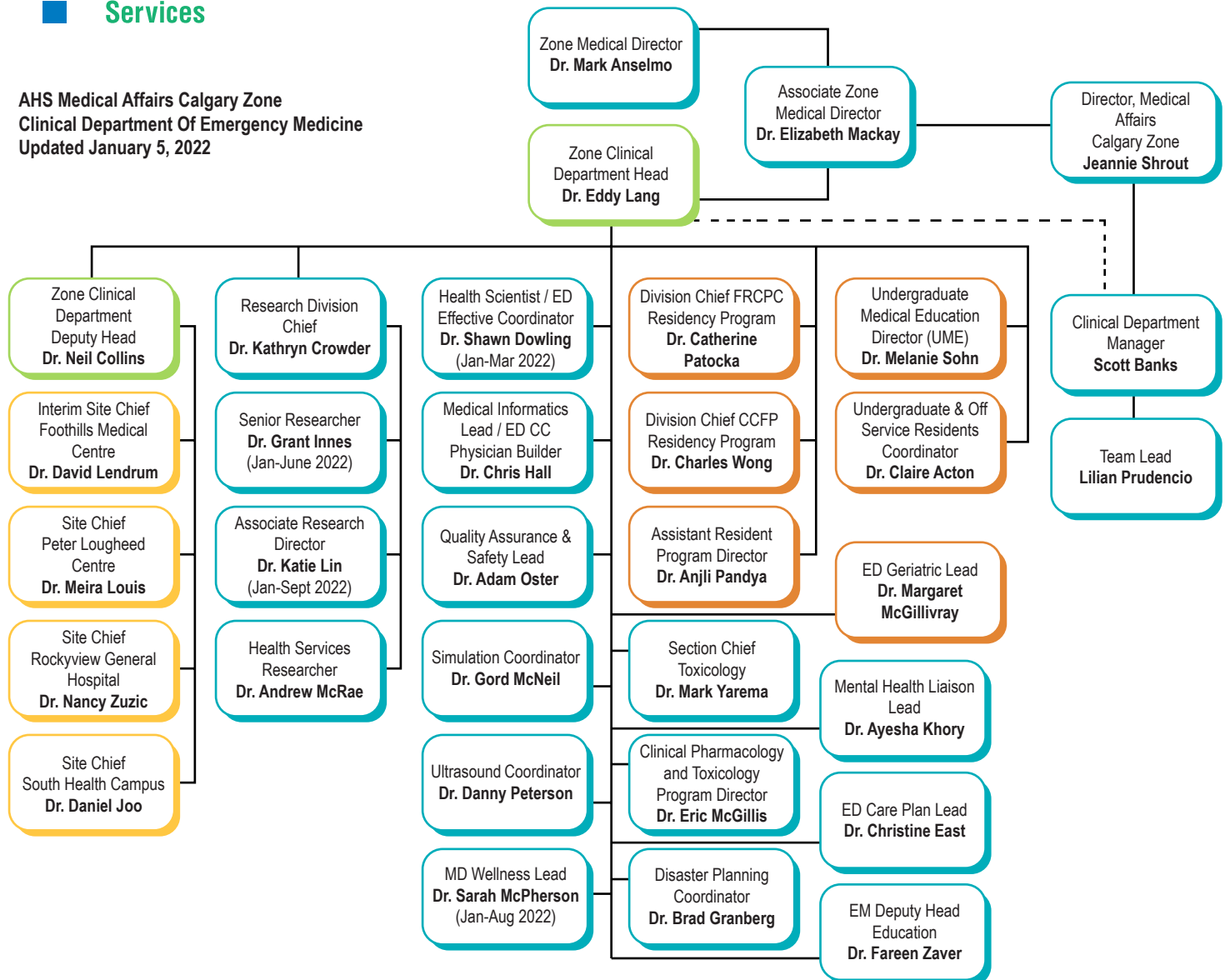
Train the next generation of health-care pioneers and providers by rejuvenating the education and career development of biomedical innovators.

# Department Structure and Organization

The Department of Emergency Medicine currently employs 202 active physician staff and treats approximately 300,000 patient visits per year (annualized value based on current and projected inflow volumes). Historically there were two main “practice-groups” (The Foothills Medical Centre-Peter Lougheed Centre group and the Rockyview General Hospital group), but an increasingly zone focus and multi-site practice has changed this model. We now have extensive physician cross-coverage of sites, with a variety of site combinations. Currently all our Emergency Medicine physicians have academic appointments.



**AHS Medical Affairs Calgary Zone**  
**Clinical Department Of Emergency Medicine**  
 Updated January 5, 2022





# Calgary Zone Emergency Department Strategic Planning

## Innovative. Nimble. Responsive. Patient Centered.

Members of the Calgary Zone Emergency Department undertook a modified Delphi process to establish a consensus based vision, mission, goals and objectives for the next five years. Four key focal areas arose for the Emergency Department: High quality patient care for high acuity patients, a genuine commitment to provider wellness, adequate funding investment in sustainability, and targeted equity, diversity and inclusion initiatives.

Achieving patient and health care system outcomes cannot be done in isolation. Coordination between providers within the hospital is essential, and in particular with diagnostic imaging and specialty care. Members were also clear that additional investment is required to adequately support the acute needs of patients who require post Emergency Department follow up care. This includes recognizing and supporting the needs of people living with mental health and addiction issues, those living in rural or remote communities, and aging populations, which may require a transition to long term care. Additionally, members were strongly supportive of including a distinct goal targeting equity, diversity and inclusion (related to both the patient and provider experiences. Members acknowledged that the Emergency Department's role is only part of the patient's journey. Better coordination and collaboration with primary care in the community is required.

To implement the strategic plan, the Emergency Department will need to establish key leaders for each goal area and undertake a diligent force planning exercise to ensure retention of key staff and robust requirements to meet future needs. Exploring how physicians are compensated in light of the activities outlined in this plan will be critical. The plan was co designed by members of the department, is supported by senior leadership and is consistent with the goals and values of both Alberta Health Services and the University of Calgary. In several areas research<sup>2</sup> and EDI there are already strong initiatives underway. As such, the Calgary Zone Emergency Department will build on its current position to achieve national leadership in emergency medicine and beyond.

## Innovation

Health innovation improves the efficiency, effectiveness, quality, sustainability, safety, and/or affordability of healthcare. Includes 'new or improved' health policies, practices, systems, products and technologies, services, and delivery methods that result in improved health care.<sup>1</sup> Improvements in research, patient satisfaction, education, and access to care are additional factors to keep in mind.

<sup>1</sup> Emergency Medicine Journal (EMJ). What do we mean by innovation in healthcare? January 10 2017. Available from: <https://www.emjreviews.com/innovations/article/what-do-we-mean-by-innovation-in-healthcare/>

<sup>2</sup> Emergency Medicine Research Group: 5-year strategic plan (appended)



## Our VISION

Our engaged and thriving team delivers world class emergency care to Calgarians.

## Our MISSION

To provide optimal, patient and family-centered emergency care to Southern Albertans by fostering provider wellness and investing in education and innovation.

## Guiding Principles

The Emergency Department will approach all issues with a 'principles first' perspective, even if this means challenging existing norms and accepted practices. The core values of both Alberta Health Services and the University of Calgary are reflected in the following five areas.

Excellence	Safety	Collaboration	Respect	Accountability
We exceed expectations and push boundaries in the pursuit of better care.	We mitigate risk of physical and psychological harm for patients and providers.	We empower each other and work together in a multi-disciplinary approach.	We demonstrate mutual admiration for the experience, expertise and uniqueness of others.	We do what we say and take ownership for the outcome of our actions.
How do we know that we are following our guiding principles?				
Calgary Zone Emergency Department is nationally recognized for developing and implementing innovative clinical practices, educating the next generation of emergency physician leaders, and conducting cutting edge research.	Evidence of a just culture is realized with an increase in reporting risk incidents and a heightened focus on system improvement.	Teamwork is evident in the successful outcomes of committees, education initiatives, research projects, and clinical teams.	Calgary Zone Emergency Department is regarded by staff to be a safe place to work. Where people are valued. Clear standards of professionalism are defined and followed.	Transparent expectations are set and evaluated through regular performance reviews.

## FOCUS AREA 1 | PATIENT ACCESS TO CARE

Goal	Objective	Potential Activities
Optimize wait times for patients accessing emergency and acute care services.	1. Deliver high quality emergency care for patients in crisis.	<p>1. Develop a consensus for what quality indicators most optimally reflect the quality of care delivery in Calgary EDs, these include those already tracked and those requiring development.</p> <p>2. Work with the Emergency SCN patient partners and the HQCA to define measures, including patient-reported outcome measures that can allow us to monitor and improve the patient experience and potential pinch points.</p>
	2. Find sustainable solutions to Emergency Department access block by reducing the impact of emergency inpatients (EIPs).	<p>1. Partner with the SCN to review the literature to identify evidence-based solutions.</p> <p>2. Work with senior AHS and hospital leadership assure constant vigilance and adherence to mechanisms that mitigate the risks and impact of EIPs.</p>
	3. Optimize existing in hospital and community based partnerships and pathways towards improved continuity of care and follow up of patients who present to the Emergency Department.	<p>1. Conduct a detailed evaluation of ED practice patterns related to patient referrals both inside of the hospital and out to the community.</p> <p>2. Host a multi-disciplinary stakeholder session to identify solutions to the identified challenges and begin to streamline some of the care fragmentation that impacts our Emergency Department.</p>

## FOCUS AREA 2 | PHYSICIAN WELLNESS

Goal	Objective	Potential Activities
Maintain and enhance staff and physician wellness as impacted by working in the Emergency Department.	1. Reduce duplication of clerical duties which interfere with the delivery of care.	<p>1. Determine key areas of duplication and the root cause leading to the duplication.</p> <p>2. Hold an interactive session to brainstorm ideas on how best to streamline clerical duties.</p> <p>3. Create a phased approach, including evaluation, to implement the ideas from the interactive session.</p>
	2. Increase retention of nurses and other allied health professionals.	<p>1. Conduct 'employee pulse job satisfaction survey' to help guide departmental workforce planning.</p> <p>2. Evaluate any new interventions on the outcomes and impact for staff retention.</p>

## FOCUS AREA 2 | PHYSICIAN WELLNESS continued...

Goal	Objective	Potential Activities
	3. Enhance physical and psychological safety in the Emergency Department.	<ol style="list-style-type: none"> <li>1. Draft a communication from leadership to all staff that patient and staff safety is a departmental priority.</li> <li>2. Discuss patient and staff safety at every executive leadership meeting.</li> <li>3. Provide a 'lessons learned' forum where staff can present to colleagues on recent cases with adverse events or near misses.</li> <li>4. Conduct a patient survey to identify expectations of Emergency Department care.</li> <li>5. Co-design communication to adjust or reinforce expectations as needed.</li> <li>6. Develop an annual department safety plan with specific emphasis on resilience and coping during a pandemic.</li> <li>7. Enhance transparency around decision making specific to scheduling, site allocation, and site-based decision-making.</li> </ol>
	4. Invest in physician and staff wellness by allocating sufficient resources and advocating for continued financial investment and reallocation.	<ol style="list-style-type: none"> <li>1. Create a robust mentorship program for new members.</li> <li>2. Revise the current newsletter format to include a spotlight on physician members who do administrative activities on behalf of the department both to recognize their contributions but also raise awareness of these activities.</li> <li>3. Include physician burnout through the Wellness Hub program.</li> <li>4. Develop a robust framework to measure key health and wellness metrics (e.g., # hours of sleep), and regularly report to the full department.</li> <li>5. Revisit remuneration schedule for administrative physicians to create opportunities for teaching and clinical leadership.</li> <li>6. Develop overcapacity plans and clearly communicate expectations.</li> <li>7. Design and implement flow improvement studies and interventions.</li> <li>8. Encourage adequate investment into vacation/breaks.</li> </ol>
	5. Identify and secure funding for both clinical and non clinical leadership positions.	<ol style="list-style-type: none"> <li>1. Investigate the benefits of emergency physicians on alternative payment plans, and prepare a briefing note.</li> <li>2. Advocate, through appropriate pathways, for the compensation mix and number of staff to actualize the strategic plan.</li> </ol>

### FOCUS AREA 3 | FUNDING INVESTMENT AND FINANCIAL SUSTAINABILITY

Goal	Objective	Potential Activities
Increase investment in Emergency Department services and improve financial sustainability.	1. Improve flexibility in staffing to support research, education and quality improvement activities.	<ol style="list-style-type: none"> <li>1. Prepare a briefing note on the benefits of enhancing the number of emergency physicians on alternative payment plans.</li> <li>2. Advocate, through appropriate pathways, for the compensation mix and number of staff to actualize the strategic plan.</li> </ol>
	2. Improve allocation of resources within the department to priority areas (i. physician wellness and process improvement interventions).	<ol style="list-style-type: none"> <li>1. Develop a working group to identify a budget plan for identifying sources and potentially re-orienting funding to physician wellness and process improvement interventions.</li> <li>2. Conduct a mid-year review of budget allocation to determine budget overage/underage and impact of spending to date.</li> <li>3. Conduct a physician and staff satisfaction survey on the short-term outcomes of funding re-orientation and collect input on long-term objectives for resource allocation.</li> </ol>
	3. Improve access to infrastructure, physical plant, equipment and resources required to provide world class patient care in the Emergency Department.	

## FOCUS AREA 4 | EQUITY, DIVERSITY AND INCLUSION

Goal	Objective	Potential Activities
Equity, diversity and inclusion is a collective responsibility of every department member.	1. Support anti racism and equity, diversity and inclusion initiatives.	1. All members of the department take unconscious bias training. 2. Conduct a pre/post survey to measure shifts in self-awareness. 3. Develop an Education, Awareness and Outreach Committee to mobilize EDI activities within the department and in the community.
	2. Deliver culturally competent care to patients accessing emergency services.	1. Co-develop a tailored approach to delivering BIPOC emergency care.
	3. Improve diversity of our physician population intentionally inclusive of sex, gender, race, and ability.	1. Develop an equitable hiring policy statement that reflects the population of those the department serves. 2. Where possible, create a diverse hiring panel. 3. Develop diversity resources to help plan and inform hiring decision-making and leadership appointments in the department.

## Emergency Medicine Research Group: 5 Year Strategy 2021-2026

Strategic Goals		Strategic Initiatives
<p><b>Mission:</b></p> <p>The Emergency Medicine Research Group exists to improve patient and family care and health system efficiency through actionable research, collaboration, and mentorship.</p> <p><b>Vision:</b></p> <p>In five years, we will become a nationally recognized leader in meaningful emergency research, and have a growing cohort of researchers and a stable research infrastructure enabling further growth and success.</p>	<p>G1: "Becoming a nationally recognized leader in emergency research"</p> <p>G2: "Achieve sustainable growth of the research group"</p> <p>G3: "Meaningful engagement of patients and families in emergency research"</p>	<ol style="list-style-type: none"> <li>1. "Leverage our senior researchers, health systems research, decision support and analytical experience to use the staged implementation of <b>EPIC/Connect Care</b> as an unprecedented opportunity for research, knowledge translation, and clinical practice improvement across the province"</li> <li>2. "Use access to and relationships with the four adult sites to increase <b>staff engagement across the Calgary Zone</b>"</li> <li>3. "Recruit, mentor, and <b>support junior researchers</b>"</li> <li>4. "Use access to and relationships with the Calgary EM zone leadership/operations to <b>identify and continuously evaluate priority projects and procure dedicated funding</b>"</li> <li>5. "Use previous materials and plans to create a central research <b>funding opportunity database</b>"</li> <li>6. "Leverage <b>available infrastructure</b> to promote emergency research within Calgary"</li> <li>7. "Develop a comprehensive <b>system for multi-centre projects</b>"</li> <li>8. "Engage with the <b>provincial government to identify shared priority projects</b>"</li> <li>9. "Identify <b>key competencies</b> needed and secure <b>permanent funding</b> for them"</li> <li>10. "Integrate <b>patient and family experience</b> in EM research"</li> <li>11. "Identify <b>key scholarly areas</b> for our group"</li> </ol>



# Educational Strategic Plan

It has been one year since starting as the new Department of Emergency Medicine (DEM) Deputy Head of Education, and I wanted to provide both a summary of what work has been completed as well as the plan moving forward.

## Completed tasks:

1. National environmental scan of other DEM educational offerings
  - a. Meetings with 20 education leaders from various DEM sites across Canada including program directors, directors of faculty development, grand rounds coordinators, continued professional development leads and research leads. These conversations helped understand what Calgary's DEM strengths, weaknesses and gaps are and potential collaborations and opportunities to build from other programs instead of re-inventing the wheel in our department.
  - b. These meetings also helped broaden the scope of the subsequent needs assessment survey sent to all DEM staff and trainees.
2. DEM educational needs assessment survey
  - a. This survey was built from the completed national environmental scan as well as a gap analysis of our department. The goal of the survey was to allow all Physician Support Fund members (who partially fund the deputy head-education role) and resident trainees input and indicate where they believe education goals should go moving forward.
  - b. 14 FRCPC residents and 71 staff filled out the survey. This included a diverse response from FRCPC, CCFP-EM and PEM trained staff, gender, years of practice (30 <10 years into practice, 33 10-20 years in practice and 8 >20 years in practice) as well as representation from all Calgary DEM sites (ACH, FMC, PLC, RGH & SHC).
  - c. Major findings:
    - i. Mentorship – Most respondents wanted some form of formal mentorship. This included senior-junior pairings, site-specific pairings, near-peer mentorship, paired by area of interest, and paired by gender/visible minority. There was a need for mentorship for all levels of career (new, mid-career and late) as well as returning from maternity/paternity/leave of absence.
    - ii. Topics of interest to cover in various CME formats - Connect Care efficiency/optimization, billing, financial topics such as how to retire, investing, insurance approaches, performance metrics, CMPA-related concerns, addictions, pediatrics, HALO procedures.
    - iii. Staff as teachers' topics – small group facilitation, bedside teaching, assessment and evaluation, teaching the senior learner, learner in difficulty and teaching around cases.
    - iv. Leadership topics – strategic planning, mentoring, conflict management and building/managing teams.
    - v. Scholarship topics – writing for a publication, presentation skills, organizing sabbaticals and preparing for grand rounds.
  - d. This survey was used to inform the design of the formally facilitated DEM Education Retreat in November.

### 3. DEM Education Retreat – Nov 3, 2022

- a. Half-day session facilitated by Dr. Lisa Petermann (EXEP Consulting) and Dr. Huma Ali – both expert facilitators
- b. Objectives:
  - i. Identify action items to advance education in our DEM.
  - ii. Define the roles and responsibilities for education leadership, and the resources needed to support professional development within the department.
  - iii. Describe ways to a) mitigate for existing workload/burnout and b) facilitate participation in ongoing CME.
  - iv. Prioritizing the projects so that those that are high yield, doable and important, are the ones that get done first.
- c. Attendance: 27 faculty participated in the facilitated session. They were faculty from all five Emergency Medicine (EM) sites in Calgary (FMC, PLC, SHC, RGH and ACH) and represented both past and present site and department leadership, education leadership covering UME, PGME, simulation, research, international EM, pediatric EM and ultrasound.
- d. Major findings:
  - i. Three major areas were identified
    - 1. Small Group Sessions
      - a. Small group sessions are designed not only to deliver content but also to foster collegiality, create informal mentorship/peer support, and build a more cohesive workspace. As such, planning should include consideration of the social aspect, and the location (e.g. café, restaurant, house).
      - b. Curate the existing resources so that people are aware of what exists, where it lives and how to access it.
      - c. Timing – consistency, accessibility, advance scheduling,
      - d. Size/Composition - <20 participants, blend of colleagues (seniority levels, sites/ locations, areas of expertise)
      - e. PSF funding for expert facilitation of these sessions.
    - 2. Mentorship
      - a. Mentorship has both a formal and informal component. Paired, formal mentorship is most successful for process-oriented, onboarding needs. Other mentorship needs are best served through more organic development processes.
      - b. Navigator – formal, assigned individual to help with career stages (e.g. onboarding, retirement, sabbaticals, major life events).
      - c. Peer-Support – build psychological safety and host informal events whereby colleagues build trust and a network of support to help on an ‘as needed’ basis.
      - d. Ensure that there are equitable resources for new staff who may have trained in Calgary (e.g., there is much formal guidance on the department when you are new staff from elsewhere).

- e. Explore the possibility of hosting speed 'mentoring' style evenings where you have the opportunity to meet with and chat with several colleagues over the course of the evening (e.g semi-structured).
- 3. Research and simulation emerged as core areas of the survey but were not discussed further at this session as unique retreats were being held to discuss each of these areas.

## Next Steps:

1. DEM Faculty Small Group Sessions
  - a. Monthly facilitated small group sessions – the DEM is launching a new faculty-only, expert facilitated, small group session that will run monthly. These small group sessions will run once a month. Topics are pre-planned with the goal to cover bread-and-butter Emergency Medicine topics and will be facilitated in person by experts in the topic areas. Some of the topics we will be covering this year include: pediatrics (twice), addictions, sports medicine, Connect Care optimization, geriatrics and neurology. Each session will be 1.5 hours long, with a maximum of 20 staff participating in each group. The goal is to have not just the expertise of the facilitator, but also staff members of various years of practice and knowledge attending the session for a shared experience.
  - b. Application to Physician Support Funding to allow payment of facilitators both for their time spent on building the curriculum as well as time spent facilitating the session.
2. Mentorship
  - a. Application to Physician Support Funding for a Physician Mentorship Coordinator. The Physician Mentorship Coordinator (PMC) will develop the components of a comprehensive program that will provide opportunities for professional growth for every willing and engaged mentor and mentee in our department. In this role and with the assistance of administrative staff from the department and support from the Physician Executive Committee, Academic Steering Committee and Deputy Head – Education, the following specific objectives will be achieved:
    - i. Re-initiate the transition to practice/first two years in practice mentorship program.
    - ii. Highlight opportunities for skill and knowledge development as both a mentor and mentee and make these available through regular communication in the newsletter.
    - iii. Develop mentorship at the mid-career and late-career levels including a mix of senior-junior pairings, site-specific pairings, near-peer mentorship, paired by area of interest and paired by gender/visible minority.
    - iv. Develop a mentorship program for those physicians returning from maternity/paternity/leave of absence.

Dr. Fareen Zaver  
Deputy Head – Education

# MD Recruitment and Training

We currently have 191 MD's working in the Calgary Zone Emergency Departments of the four adult hospitals. Physicians are scheduled to work between 0.5 and 1.0 of a Full Time Equivalent (FTE). Currently a 1.0 FTE equates to 13 shifts worked in 28 days.

We conduct a hiring process once per year in the Fall. Applications are received from across Canada and as many as 19 candidates are interviewed by multi-disciplinary teams. Candidates are ranked by the interviewers and final hiring decisions are made by the Physicians Resource Committee (20 plus voting members).

This year's hiring process resulted in 14 positions being offered. Successful candidates included newly graduating residents from several programs, as well as experienced physicians from other provinces.

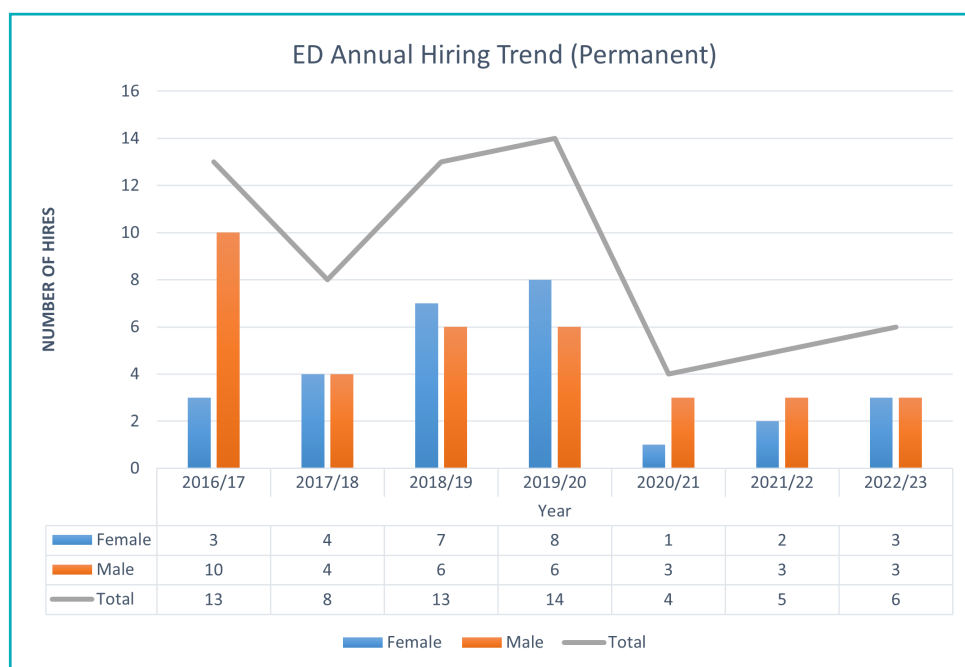
We have currently six locums working to fill short term shortages in manpower during the period July 2022 to June 2023. Some of those physicians are going to continue to work in the Calgary Zone as permanent members when their locum period expires, expanding our permanent group further.

We will also hire locums for temporary work in the summer of 2023. Hiring summer locums gives much needed tertiary care experience to new graduates and allows time off for permanent ED staff. We aim

for no more than 20% of the shifts being covered by locums. Some of these summer locums may have their contracts extended for up to 12 months of total work. All of them are encouraged to apply for permanent positions in the fall hiring cycle. We anticipate a shortage of physicians available for short term locum work as Emergency Physicians.

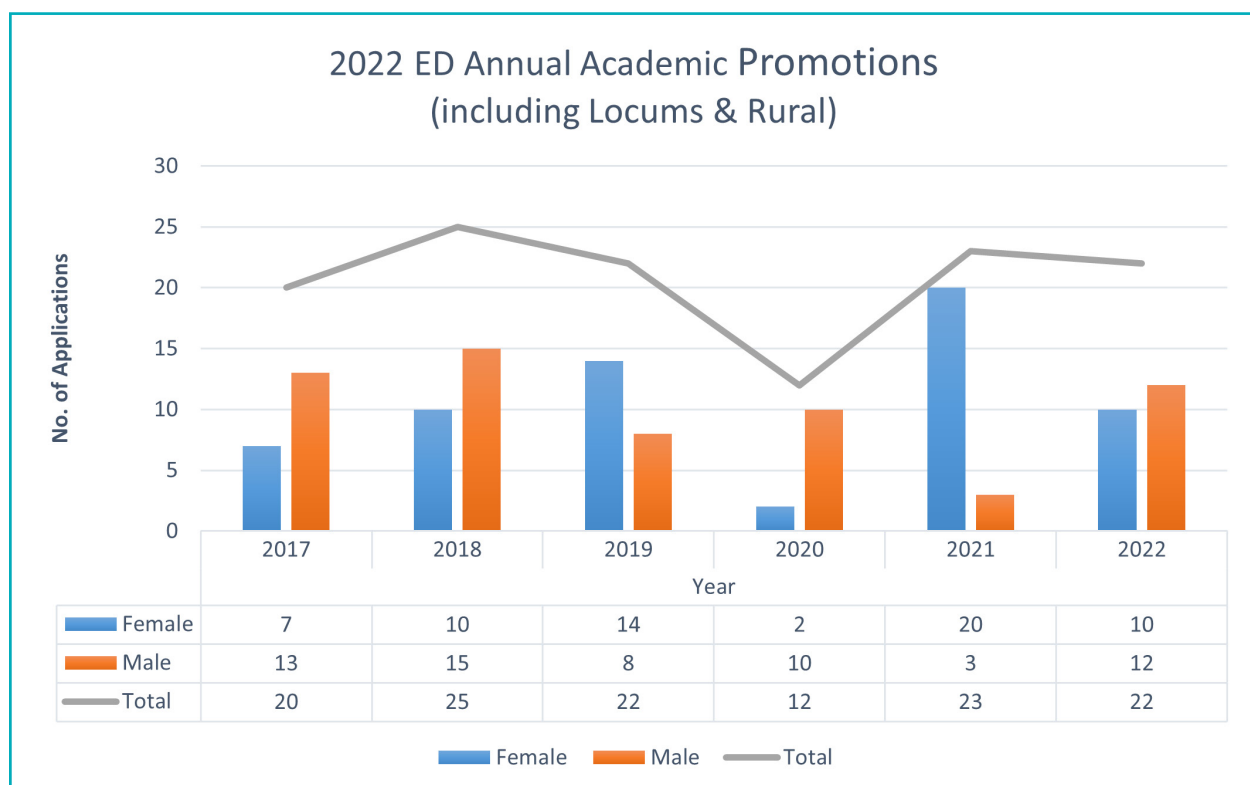
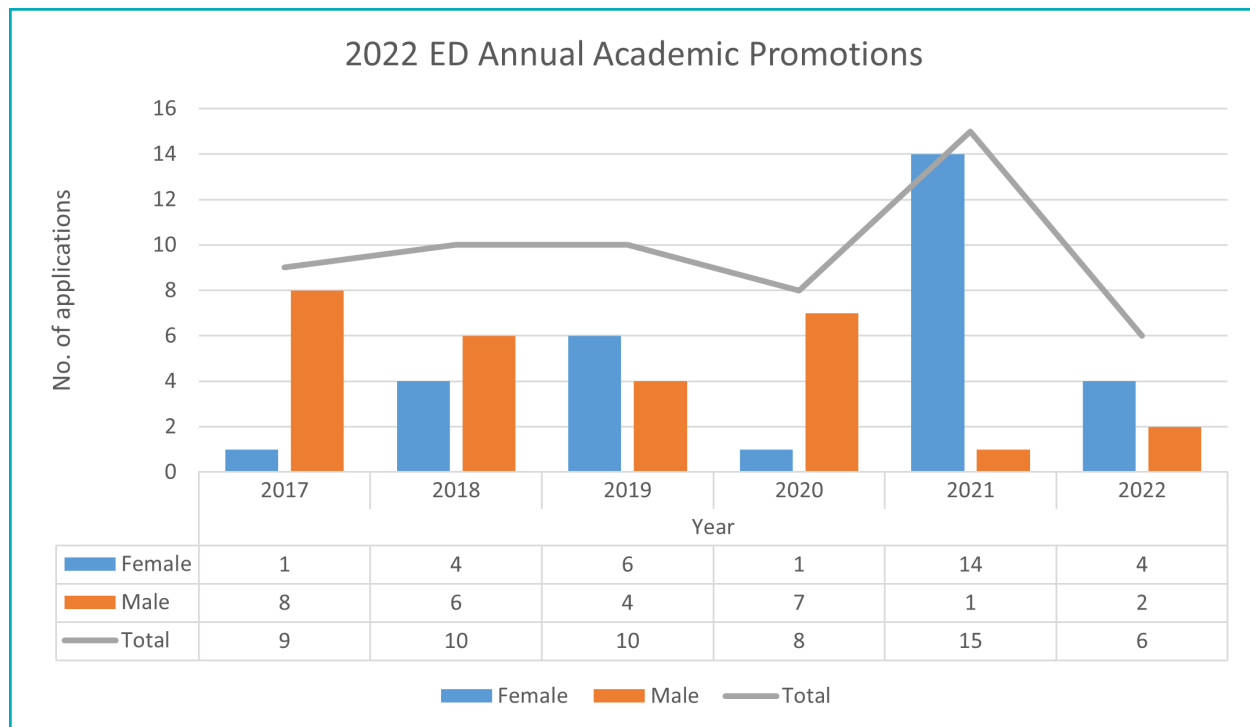
Turnover and expansion of operations usually results in the hiring of four to six new permanent Emergency Physicians per year. Resignations, retirements, and an unprecedented increase in requests for leaves of absence and a reduction in shifts has led to us hiring 13 new physicians this year.


Many of our physicians have part time work in other area of medicine such as Hyperbaric Medicine, Sports Medicine, Toxicology and Clinical Pharmacology, Urgent Care, Long Term Care, Addictions, On Line Medical Control for EMS and the public, transport medicine (STARS) and prehospital care.



## Retention Strategies

AHS Calgary Zone Emergency Departments represent the largest single group of ED physicians in Canada. We have on staff 202 physicians with 0-46 years of service in the region. The Calgary Zone provides highly coordinated and well-organized care to a catchment area that includes 1.2 million patients.





Calgary Zone Emergency Physicians staff the Emergency Departments of four adult hospitals, and some are cross appointed at the tertiary care Alberta Children's Hospital. There is a wide variety of work available. Shifting is flexible with most physicians getting time off when they request it. Sabbaticals, parental leave and leaves for international medical work are usually accommodated. Seniority is currently recognized with enhanced scheduling flexibility including exclusion from nights, or increased holiday time during the summer. Planning is in progress to provide further scheduling flexibility based on seniority, and to rationalize the scheduling process at Christmas and in the summer.

Job satisfaction is enhanced by a collegial atmosphere, and a robust academic program. High-level Grand Rounds occur on a weekly basis and in-house procedural skills sessions are offered. A robust simulation program is offered at all Calgary hospitals. Staff physicians have expert simulation sessions available to them where they can practice their resuscitation skills and crisis resource management in a non-threatening collegial atmosphere.

## Goals and Strategies

Our underlying primary goal is to provide safe and efficient care to all patients that present to a Calgary Zone Emergency Department. We continue to modify ED shift scheduling so that we can better match physician capacity to patient demand. This requires ongoing reassessment of demand, but it is also dependent on modifying operations so that added physicians are effective (i.e. able to examine patients in care spaces). Our "surge strategy" takes effect when patient demand exceeds physician resources and a minimum number of assessment spaces are available, the departments proceed with a physician call out to assist in the department. Surge shifts stipends have unfortunately been eliminated due to budget restraints. Surge callouts will continue despite the loss of the stipend. However, it remains infrequent

that an ED physician is able on short notice to attend the ED. The increased number of admitted patients remaining in the ED because of a shortage of available inpatient beds in the Calgary Zone, has been extremely challenging and has crippled many of our previously successful ED in-patient process changes (i.e. creation of intake area in all adult ED's; Over Capacity Plan (OCP) triggering and implementation to name a few).

ED overcrowding is not the root of the current crisis rather it is the result of the limited number of available inpatient beds stemming primarily from the province's shortage of long-term care beds.

Hospital overcrowding manifesting as access block in the ED is currently the subject of multiple performance improvement initiatives at AHS. We have every expectation that the system changes required to provide safe and efficient care to patients seeking Emergency Care in the Calgary Zone will be a priority of AHS this year.

## Impact on other Departments and AHS Resources

We anticipate only hiring between six to 12 permanent physicians next fiscal year. Hiring Emergency Department physicians has an impact on the provincial physician budget (payments are fee for service billings through the physician services branch), but minimal impact on other Calgary departments and the CMO (Medical Affairs) budget, as the physicians are fee for service workers.

Recruitment of six to eight permanent physicians annually will maintain current levels of physician staffing accounting for retirements, resignations, mat/pat leaves etc.



# Emergency Medicine Committees

## Main Committees

These committees meet on a regular basis as indicated below.

### The Physician Executive Committee (monthly)

The Physician Executive Committee provides leadership, direction, and support for all physician-related activities. The Committee is a decision-making body for physician resources, scheduling, operational, and quality, safety, and financial aspects of the Zone Department of Emergency Medicine (ZDEM).

### The ZDEM Operations Committee (monthly)

The Operations Committee is a multi-disciplinary committee including Physician, Nursing, and administrative representatives. Duties include strategic planning, prioritization, quality, safety, innovation and oversight of all ED systems and processes.

### The Physician Resources Committee (monthly)

The Physician Resources Committee is a subcommittee of the Physician Executive Committee. It provides leadership and makes decisions with respect to physician resource needs, search and selection, and physician hiring in the Department of Emergency Medicine.

### The Quality Assurance Committee (monthly)

This committee reports to the ZDEM Operations Committee. It is one of the few departmental QAC's that have been allowed to continue within the new AHS Safety framework.

### Emergency Medicine Research Advisory Committee (EMRAC) (monthly except summer)

The Emergency Medicine Research Group exists to improve patient and family care and health system efficiency through actionable research, collaboration, and mentorship.

### The Academic Steering Committee (bi-monthly)

The Academic Steering Committee guides the development of the EM academic program. Primary agenda items for the 2021 year included strategic planning towards short term and long-term academic goals, faculty development and educational programming.

### **ED Treatment Plan Committee (bi-monthly)**

The ED Treatment Plan Committee coordinates the development of individualized care plans for patients who present frequently to emergency departments (ED) and/or urgent care centres (UCC). The committee is co-chaired by an emergency physician and a nurse clinician, and representatives from multi-disciplinary team.

### **The Promotions Committee (as needed)**

This committee processes faculty appointments and promotion requests for the Academic Department of Emergency Medicine.

### **The Calgary Physician Support Fund Oversight Committee (bi-annual)**

This committee is comprised of emergency physicians representing each site who oversee a fund that was set up to support education, development and research in the Calgary Emergency Department. Funding for this committee is provided exclusively by emergency physicians who have agreed to support the fund. The maximum emergency physician contributes \$1,800 annually to this fund.



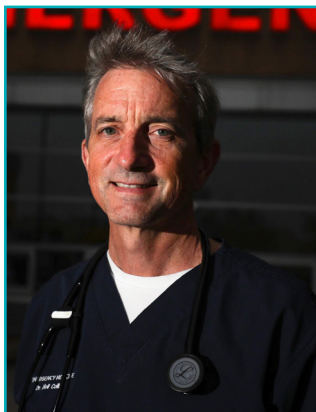
Credits Dr. H Patterson

# Emergency Leadership Group



**Dr. Eddy Lang**  
Calgary Zone Clinical and  
Academic Department Head

Dr. Eddy Lang is a Professor and Department Head for Emergency Medicine at Cumming School of Medicine-University of Calgary and Alberta Health Services, Calgary Zone. His areas of interest are knowledge translation, evidence-based medicine and operations research. He is a member of the GRADE working group and has led the development of GRADE-based clinical practice guidelines in pre-hospital care in the US as well as with the International Liaison Committee for Resuscitation. Dr. Lang is also an award-winning educator having received recognition at both the university, national and international levels. He also serves as Senior Editor for the Canadian Journal of Emergency Medicine, Associate Editor for both ACP Journal Club and the International Journal of Emergency Medicine. In addition, he is a member of the Canadian Task Force on Preventive Health Care (CTFPHC). Dr. Lang has served as the chair of the Canadian Association of Emergency Physicians Conference (CAEP) Leadership Committee from 2017 to 2020 and is now the Chair of the CAEP Academic Section and a member of the CAEP Board. He is also appointed as the Scientific Director of the Emergency Strategic Clinical Network ESCN in Alberta. Dr. Lang is co-Chairing the 2022 Preventing Overdiagnosis Conference in Calgary.



**Dr. Neil Collins**  
Calgary Zone Clinical Deputy  
Department Head and Operation Lead

Dr. Neil Collins graduated from the University of Calgary in 1990. He practiced urban and rural family medicine/emergency medicine in British Columbia and Alberta prior to completion of his CCFP(EM) residency training in Calgary. He has worked as an Emergency Physician in Calgary for the past 26 years. He has previously held the administrative positions of CCFP (EM) Residency Program Director and Peter Lougheed Centre Emergency Department Site Chief. Since November 2017 Dr. Collins has held the position of Calgary Zone Emergency Deputy Department Head. His administrative interests include ED Resource utilization, ED Flow and Physician Metrics and Evaluation.



**Scott Banks**  
Calgary Zone Department Manager

Scott is the Calgary Zone Department Manager for Emergency Medicine, Critical Care Medicine and Obstetrics & Gynecology. Scott assumed the Critical Care portfolio in Sept 2017, Obstetrics & Gynecology in July 2018 and has continued to serve as the Zone Manager in Emergency Medicine since 2008. Scott completed his Master of Business Administration degree (MBA) at the University of Calgary in 1993 specializing in Human Resources and International Management, and his Bachelor of Arts Honors degree in 1989 from the University of Regina. Scott is a 25 year Chartered Professional in Human Resources (CPHR) in Alberta, and holds a Certified International Trade Professional Designation (CITP) in Canada. Previously Scott served as the Vice President of Operations & Human Resources at The Brenda Strafford Foundation, and as Senior Vice President & Chief Operating Officer at a for profit healthcare college in Oahu, Hawaii. He has also served as an International Development Consultant with the Canadian International Development Agency in Guyana, Manager of the Mount Royal University Small Business Training Centre, and as a Market Intelligence Research Officer for the Canadian Federal Government at the Canadian High Commission in Trinidad. In addition, he served as the Manager of Business Training & Commercial Accounts with the Business Development Bank of Canada. Scott has lived and/or worked in Hawaii, Canada, Trinidad, Guyana, Haiti, and Dominica. Scott is married and has very active nine and eleven year old boys. He enjoys spending quality time with his family, his French bulldog, jogging, travelling, and volunteering with World Vision.



**Dr. David Lendrum**  
FMC Site Chief, Interim  
(Jun 2022 - Aug 2023)

Dr. David Lendrum completed his medical degrees at the University of Calgary and Emergency Medicine residency and Masters of Medical Education at the University of Toronto. He has since worked in Calgary since graduating in 2008 and currently split his clinical time between Foothills Medical Centre and Alberta Children's Hospital. He took the role of Assistant Site Chief of FMC Emergency in early 2018. His extra clinical roles includes working as a transport physician for STARS, as an on-hill medical provider at Sunshine and Lake Louise with an urban search and rescue team known as CANTF2.

**Dr. Ian Walker**  
FMC Site Chief  
(Jan 2022 - May 2022)





**Dr. James Andruchow**  
Assistant FMC Site Chief, Interim  
(Jul 2022-Aug 2023)

Dr. Andruchow was raised on a farm northeast of Edmonton, but did some medical tourism, completing his medical degree at McGill and emergency medicine residency and fellowship at Harvard. His experience in the US created a strong interest in evidence-based practice, reducing unnecessary testing and treatment and pragmatic health policies. Dr. Andruchow spends most of his free time outdoors, enjoying mountain biking, wildlife photography, gardening, working on his acreage(s), and hiking with wife Rachel and daughter Ella.

**Dr. David Lendrum**  
Assistant FMC Site Chief  
(Jan 2022 - May 2022)



**Dr. Meira Louis**  
PLC Site Chief  
(Mar 2022-ongoing)

Originally from Toronto, I finished an undergraduate and masters in Ontario before moving to Calgary for my MD and FR residency in emergency medicine. I have worked as a staff physician at the PLC and FMC since graduating in 2014. Soon after starting work, I took over as the coordinator of Elective and Off Service Education. Recently I have also taken over as course chair for electives in the Undergraduate Medical Education program. In my spare time I help my amazing husband juggle our four kids.

**Dr. Chris Bond**  
PLC Site Chief  
(Jan 2022-Feb 2022)



**Dr. Haley Cochrane**  
PLC Assistant Site Chief  
(Mar 2022-ongoing)

Dr. Haley Cochrane is the assistant site chief at the Peter Lougheed Emergency Department. She completed medical school at the University of Sydney in Sydney, Australia. She completed a four year Emergency Medicine residency at the Harvard Affiliated Emergency Medicine residency in Boston, Massachusetts and an extra year of Emergency Medicine Training at the University of Saskatchewan in Saskatoon, Saskatchewan to obtain her FRCPC. Clinically she has an interest in hospital administration, point of care ultrasound and medical education. Outside the hospital you will find her spending time with her husband and daughter, traveling, painting and cooking.

**Dr. Alyssa Morris**  
PLC Assistant Site Chief  
(Jan 2022-Feb 2022)



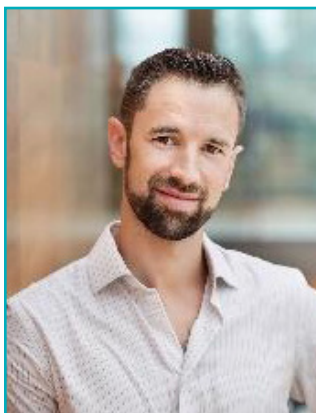
**Dr. Nancy Zuzic**  
RGH Site Chief

Dr. Nancy Zuzic continues as the Site Chief at the Rockyview General Hospital. Dr. Zuzic received her MD at the University of Ottawa in 1997 and then completed her CCFP-EM residency in Calgary in 2000, working clinically at the Rockyview ED ever since. Nancy is fortunate to work with a cohesive and supportive administration team at the RGH ED that continues to find innovative ways to improve flow and patient care.



**Dr. David Fu**  
RGH Assistant Site Chief

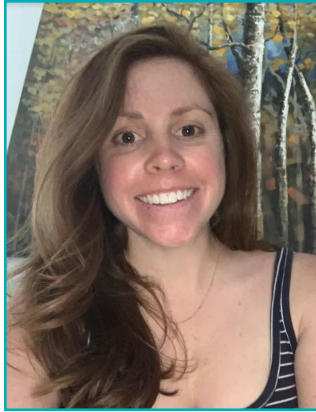
David is from Edmonton and obtained his MD from the University of Alberta. He then ventured to Ontario where he trained in Emergency Medicine at Western University and completed a Masters of Science in medical education at the University of Toronto. David enjoys listening to podcasts, going to the gym and smoking meats on his kamado grill.



**Dr. Daniel Joo**  
SHC Site Chief

Dr. Daniel Joo took on the role of Site Chief in June of 2021, proceeding three years as Assistant Site Chief. Dan is a graduate of the University of Calgary (MD 2008, CCFP-EM 2011), and after spending a few years working in Vancouver and Ottawa, returned to Calgary in 2014. He enjoys teaching residents, particularly in the areas of ultrasound and simulation. Dan maintains balance by enjoying the outdoors, playing sports, reading, and spending time with his wife and kids. He laments the loss of his beard - a casualty of the COVID-19 induced requirement to frequently don a N95 respirator.





**Dr. Carly Hagel**  
SHC Assistant Site Chief

Dr. Carly Hagel graduated from University of Calgary Medical School in 2012. She completed her residency in Emergency Medicine at Queen's University in Kingston. Following completion of her Royal College certification she embarked in a 15 month locum working in New Zealand. She returned to Calgary in 2019 and started working at the South Health Campus. She now works a split line with SHC and PLC. She took over the position of Deputy Site Lead in September of 2021. Her other interests include medical education and simulation. When she's not at work she can be found reading, bike riding, walking with friends or hiking in the mountains.



**Dr. Adam Oster**  
Quality Improvement and Safety Lead

Dr. Adam Oster graduated from the RCPS EM Program via University of Calgary in 2006, through the FRCPC program. He enjoys cross-country skiing and biking in his spare time.



**Dr. Tom Rich**  
Associate Chief Medical Information Officer  
Alberta Health Services, Calgary Zone  
University of Calgary Clinical Assistant Professor

Dr. Tom Rich graduated from the University of British Columbia in 1991, then completed his inner city Family Practice Residency at St. Paul's Hospital in Vancouver. He then moved to Calgary to complete his CCFP-EM residency in 1994 and has been working in Calgary as an Emergency Physician ever since. Over the past 30 years he has been actively involved in numerous administrative interests such as Patient Safety and Quality Improvement. The last 15 years he has been focused on Clinical Informatics providing leadership roles within the Calgary Zone, and is now on the provincial Connect Care project. His interests and involvements included STARS, CAEP, McMahon Stadium events, FIS World Cup Ski racing Lake Louise, and Vancouver Olympics 2010.



**Dr. Charles Wong**  
CCFP-EM Residency Program Director  
(Jul 2022-ongoing)

Charles did his medical schooling at McMaster University and came to Calgary for both the CCFP and CCFP(EM) training, at the time under the Program Directorship of Aaron Johnston. He has been active in the EM Department, working mainly out of the Rockyview General Hospital. His wife is a GP who also works as a hospitalist at RGH, and they have two children together (Emma 7, and Oliver 4). This is Charles' first year as CCFP-EM Program Director. His outside interests include CrossFit, reading (non-fiction), and French wines from Burgundy.

**Dr. Jason Fedwick**  
CCFP-EM Residency Program Director  
(Jan 2022-Jun 2022)



**Dr. Catherine Patocka**  
FRCPC Medical Education  
Program Director

Born and raised in Edmonton, Catherine came to Calgary in 2013 after completing medical school and FRCP residency training at McGill University. She works clinically at the FMC and PLC and has a special interest in medical education. She became the FRCPC residency program director in April 2019 and continues to have a strong interest in medical education scholarship and research. Outside of medicine she likes to hike, ski and spend time in the mountains with her husband Stephane and three children Juliette, Samuel and Dominic.



**Dr. Anjali Pandya**  
Assistant FRCP Director

After completing her undergraduate degree at Queen's University, Anjali returned to Calgary for medical school and residency training. She received her FRCPC in Emergency Medicine in 2017 and has since been working as a full time staff physician at the PLC and FMC. Prior to becoming Assistant Program Director, Anjali worked on helping the program transition to Competency-by-Design by designing an introductory curriculum for incoming residents and acting first as Competency-by-Design Assessment Lead and subsequently stepping into the role of Competency-by-Design Lead. She has also pursued further training in Global Health Policy and obtained her Diploma in Global Health Policy from the London School of Hygiene and Tropical Medicine in 2018. Anjali is passionate about constantly improving the quality of residency training and education in Calgary, and is grateful to be part of such an innovative and dedicated team of educators, who are privileged to work with an excellent group of residents.



**Dr. Claire Acton**  
Off-Service and Undergraduate  
Resident Coordinator  
(May 2022 - Ongoing)

Claire Acton completed her FRCP residency training at the UofT in 2018, and worked in Toronto as a staff physician for two years before moving to Calgary. As a resident, she travelled to Ethiopia as part of the Toronto Addis Ababa Academic Collaboration - EM branch, where she recognized an immediate need for point-of care ultrasound training. After this elective, she founded the POCUS curriculum for TAAAC-EM, of which is the still a co-director. Claire also co-founded the Equity, Diversity, Advocacy and Cultural Safety (EDACS) curriculum for emergency medicine residents at UofT, with the goal to help residents gain knowledge and experience to act on health inequities and advocate for their patients in vulnerable populations. With the help of Dr Kelsey Ragan, they have brought the EDACS curriculum to UofC emergency medicine, of which they have just completed their first academic cycle. Claire received a Master Teacher Certificate from the UofT in 2020, and is looking forward to improving curriculum design and postgraduate education in her new role.

**Dr. Meira Louis**  
Off-Service and Undergraduate Resident Coordinator  
(Jan 2022-Apr 2022)



**Dr. Melanie Sohn**  
Clerkship Director, UME  
(Apr 2022 - Ongoing)

Dr. Melanie Sohn completed her medical school at the University of Alberta, her family practice residency at Dalhousie University, and her CCFP(EM) residency at the University of Ottawa. She then did her Masters in Medical Education at the Ontario Institute for Studies in Education at the University of Toronto. Melanie is the Course Chair for Procedural Skills and the Clerkship Director for Emergency Medicine at the Cumming School of Medicine at the University of Calgary. She enjoys reading, running and trying to find the best almond croissant in Calgary.

**Dr. Gavin Greenfield**  
Clerkship Director, UME  
(Jan 2022-Mar 2022)



**Dr. Tania Principi**  
Section Chief Pediatric  
(Dec 2022-ongoing)

While at SickKids, Tania was the Director for Strategic Operations as well as the Director of Quality Improvement for the Pediatric Emergency Department. She is a Pediatric Emergency Physician who enjoys working with others to problem solve and leverage data to improve care delivery and the patient experience within the hospital through continuous improvement. She has implemented several strategies to improve operations including the use of artificial intelligence to improve ED flow and optimize inpatient and ED capacity planning. Tania received her MD and Pediatric training at the University of Western Ontario and pursued her subspecialty training in Pediatric Emergency Medicine at SickKids. In addition to completing her Masters in Health Research Methodology at McMaster University and a fellowship in Quality Improvement, she has recently completed her MBA at Rotman.

**Dr. Antonia Stang**  
Section Chief Pediatric  
(Jan 2022-Nov2022)



**Dr. Kathryn Crowder**  
Director, Research Section  
(Sept 2022-ongoing)

Kathryn Crowder is the Department of Emergency Medicine Research Director at the University of Calgary Cumming School of Medicine. She is an Emergency Physician in the Calgary Zone and Assistant Professor of Emergency Medicine at the University of Calgary. Her research interests include ED overcrowding, access and flow interventions, multi-disciplinary collaboration in ED patient care, and care of ED patients with opiate use disorder. She also participates in ED-level quality improvement projects and believes that ED knowledge and practice is advanced by collaboration in research.

**Dr. Stephanie Vandenberg**  
Director, Research Section  
(Jan 2022-Sept 2022)



**Dr. Katie Lin**  
Associate Research Director

Dr. Katie Lin is a Clinical Assistant Professor and Associate Research Director with the University of Calgary's Department of Emergency Medicine. In addition to her work as an emergency physician, she also works as a stroke physician with the Calgary Stroke Program. Dr. Lin completed her residency training through the Calgary FRCPC Emergency Medicine residency program, her stroke training through the Canadian Stroke Consortium (CSC), and her Masters of Public Health through Harvard TH Chan School of Public Health. Dr. Lin's research and clinical interests include acute stroke, simulation, quality improvement, and medical education. In her spare time, she enjoys reading, painting, hiking, and skiing.



**Dr. Eric McGillis**  
Program Director  
Royal College Clinical Pharmacology  
and Toxicology Program

Eric McGillis is a Clinical Assistant Professor and works as an Emergency physician with AHS-Calgary Zone and as a Medical Toxicologist with PADIS. He is the Program Director of the RCPSC Clinical Pharmacology and Toxicology subspecialty program. He obtained his FRCPC in Emergency Medicine from the University of Calgary, followed by a Medical Toxicology fellowship at the Minnesota Poison Control System.





**Dr. Ayesha Khory**  
Mental Health Liaison Lead  
(Sep 2022-ongoing)

Originally an engineer in the oil and gas industry Ayesha eventually found her way to medicine. She completed her medical degree at the University of Alberta and then the CCFP EM program in Calgary where she has worked as a staff physician since. Ayesha is interested in working to find improved care for vulnerable populations with mental health and addictions issues.

**Dr. Jennifer Nicol**  
Mental Health Liaison Lead  
(Jan 2022-Mar 2022)



**Dr. Marge McGillivray**  
Geriatric Care Lead

Dr. Margaret McGillivray graduated with her MD from the University of British Columbia (UBC) in 2002. She subsequently completed her family practice residency at the UBC Prince George site and her EM fellowship at St. Paul's Hospital in Vancouver graduating in 2005. Since then she has worked in various Emergency Departments and Urgent Care Centres across Canada including Nanaimo Regional General Hospital, Thunder Bay Health Sciences Centre and Sheldon Chumir Urgent Care. Dr. McGillivray has worked at the SHC ED since 2018 where she has been involved with various geriatric initiatives including the development and implementation of the SUPER (SUPporting seniors in the ER) volunteers.



**Dr. Christine East**  
Treatment Plans Physician Lead

Christine East is an Emergency Physician at Rockyview General Hospital, having completed the CCFP(EM) program in Calgary in 2017. She has co-chaired the ED Treatment Planning Committee alongside RN Lead Ken Mont (Nurse Clinician, RGH) since 2018. In this role, Christine leads a multi-disciplinary team including EMS, social work, nursing leadership, physicians and others to identify frequent ED visitors and develop individualized care plans to improve safety and redirect care into the community whenever possible. In 2022, Christine and her team were awarded the RGH Medical Staff Association Innovation Award for this important work. Outside of work, Christine loves getting outdoors with her husband Scott and her two kids. She is currently on parental leave from clinical work with her second baby boy.



**Dr. Chris Hall**  
Connect Care and Physician  
Builder Lead & Medical  
Informatics Lead

Chris is a 13 year member of the Calgary Zone Emergency Medicine team. Since moving here after completing his residency in Hamilton, he has dabbled in a number of roles over the years, including contributions to the Royal College residency training committee, various hospital and zonal quality improvement initiatives, and the Clinical Knowledge and Content Management division of AHS. This year he took over the Medical Informatics Lead role for emergency medicine in the Calgary Zone. In his spare time he enjoys skiing, mountain/road biking, and spending time with his wife and three kids.



**Dr. Sarah McPherson**  
MD Wellness Lead

Sarah is a born and raised Calgarian. She completed medical school at the University of Calgary in 1999 and graduated from the FRCP EM program in Calgary in 2004. From 2007-2019 she was the Assistant PD and then PD of the FRCP EM residency program. Currently, Sarah works clinically at both FMC and ACH and she is the Wellness Director for the Department of Emergency Medicine. She is also a collaborator with WellDoc Alberta where she partners with like-minded colleagues to advance a co-operative, pan-provincial approach to physician wellness. Currently she is also a student at Royal Roads University studying to obtain her Certification in Executive Coaching. She is passionate about partnering with others to create opportunity, spaces, and educational initiatives to help others realize and achieve their full potential and experience both professional and personal fulfillment. Core values of challenge, contribution, creativity, learning, and fairness are her north star. Outside of medicine you can find her cross-country skiing, hiking, backpacking, reading, mixing cocktails, travelling (hopefully) and learning new things.

# Site Updates

## Foothills Medical Centre Site Update

### Physician Clinical Leadership

This year was a time of change for the physician leadership team in our department. After serving over five years as the FMC ED Site Chief, Dr. Ian Walker stepped down from his role to take on a new series of exciting challenges with AHS EMS. We are all very thankful for his many years of solid leadership and are also grateful that we will have ongoing contact with him in his new role. With this leadership vacancy, Dr. David Lendrum transitioned from his position as the FMC Assistant Site Chief into the position of Interim Site Chief while a search for a new Site Chief occurred. Dr. Andrea Boone was the successful applicant, and we are all excited to have her join the leadership team after her maternity leave. Dr. James Andruchow joined the team as the Interim Assistant Site Chief until the new Site Chief is in place.

### Physician Workforce


The size of the physician workforce remains relatively unchanged over the past year. Currently, approximately 125 physicians are working at the FMC ED. Most physicians also have a clinical position at one of the other Emergency Departments in Calgary. All physicians working at the FMC ED maintain a minimum of three monthly shifts at this site to ensure familiarity with the site-specific challenges. Most FMC physicians work at the Peter Lougheed and Alberta Children's Hospitals as their secondary sites. An increasing number of physicians call the South Health Campus and Rockyview General Hospital their secondary sites.

New for 2022 is the addition of a small group of physicians who have chosen trial working at the FMC as their only clinical site. This trial was undertaken to assess if a small group of physicians working at one site can help identify and solve site-specific challenges that will help the entire physician workforce. So far, this trial has led to improvements in care delivery at the FMC, such as a new chest tube equipment cart. However, challenges in ensuring that all physicians working at this site achieve an equitable distribution of shifts have identified some issues that the leadership team needs to review. We are in the fortunate position to have a large physician workforce that is eager to work and improve our site.

### Physician Scheduling

The timing of the physicians' shifts at the site has not changed significantly. However, the mechanics of where and how physicians work during their shifts have evolved over the past few years. Departmental resources challenges from the pandemic have necessitated the administration team to change how the shifts are best utilized in the department. When COVID-19 restrictions were first in place, the FMC admin team adjusted the intake and minor treatment patient care areas to meet the infection prevention and control measures. These changes significantly decreased our ability to efficiently assess and manage patients, especially those who didn't require a medical bed to receive care. Thankfully, we have moved back to an intake and minor treatment patient care model and are seeing gains in departmental efficiency.

There are five physician shifts where each physician starts their shift with a two-hour block dedicated to managing intake care space patients. These two-hour blocks give a physician a protected block of time



to work with a small group of intake nurses to efficiently manage patient care. This scheduling change has worked well in improving patient flow in the department. Over 30% of the daily patient volume is commonly managed through the intake care space. A well-functioning intake space is vital to managing ED patient flow.

Before the pandemic, the FMC physician shift roster had two dedicated minor treatment shifts where the cohort of lower-risk patients were cared for in a dedicated care space. As pandemic-related resource limitations increased, the physicians scheduled for this shift were no longer restricted to this specific treatment area. We have returned to the pre-pandemic model and again have two dedicated physicians managing this patient cohort.

There are several benefits to having dedicated Minor Treatment shifts. Most physicians enjoy working in this area as they spend their entire shift in one clinical space with a specific care team. They also can see a patient population with less complex care needs than the remainder of the department. This shift is also used as a scheduling buffer to help manage the significant increase in physician illnesses leading to open shifts. If we cannot fill a shift, we attempt to re-arrange the daily physician assignments and leave this shift open as it does not have dedicated responsibilities for managing incoming critically-ill patients.

## Physician Scheduling Innovations

Over the next year, the FMC MD workforce will trial another version of the Emergency Physician Liaison physician (EPL) position to improve departmental efficiency and patient flow. This six-hour physician shift is scheduled during the mid-day to early-evening hours, where the physician will work with the RN team at triage and in the EMS park area to assess and initiate treatments for patients waiting to be seen. The prior trial of this position during the COVID-19 pandemic was generally helpful but highly dependent on the availability of nursing resources. We are optimistic that this second trial will again help with departmental efficiency and are working to bolster the availability of RN resources during these shifts.


A future physician workflow idea includes evaluating the benefits and impacts of having a physician working their entire shift in a specific department area instead of managing patients over the whole department - commonly referred to as physician podding. Many other EDs use this physician scheduling model, and there are possible advantages for our department. We are already using variations of physician podding at FMC in our minor treatment and intake areas, but the change comes down to applying it to a more complex patient population. Benefits of this model include more efficient physician workflow and better communication with a consistent team managing the same cohort of patients in one care space instead of being spread out over the entire department. Challenges to this model are balancing patient acuity and volume due to the frequent lack of care spaces.

We look forward to working with the entire clinical group to provide the most efficient and sustainable patient care possible.

## Connect Care Implementation

Connect Care came online in November, and we were very thankful that most FMC physicians had already used this program at their secondary clinical site for months. We were also very grateful that the physician group at the Peter Lougheed Centre had already worked through several challenges with this new system during their launch (many thanks to Meira and Haley). Their groundwork led to a significantly smoother launch at our site. The physician group also owes a debt of gratitude to Jennifer Jordan and the whole FMC RN administration team, who worked tirelessly behind the scenes to ensure our launch went as smoothly as possible.





While Connect Care is not perfect, it does have a few distinct advantages, including the ability to efficiently dictate a comprehensive patient care record, securely capture and share clinical images, efficiently communicate with the entire care team through a secure text messenger application and better follow-up on results. We continue to work through challenges printing documents, making outpatient referrals, documenting on handover patients and efficiently visualizing results. We are thankful for the dedication and commitment of Dr. Chris Hall in his role as the IT lead for this program and the physicians from the Peter Lougheed Centre who continue to help us work through this transition.

## COVID-19 / Viral Illnesses

Our EDs have been forever changed by COVID-19, both in how we manage patients with potential viral illnesses and the toll it has taken on the ED workforce. We will never go back to the pre-pandemic approach to this patient cohort, where the healthcare team did not prioritize personal protective equipment to the extent it is now. We developed and implemented safe, effective and team-based processes that ensured safety for all and effective care for our patients. However, this has come at a high cost. We have not connected with our colleagues as we once did, and the burden of managing increased physician illness is significant. Thankfully, the number of critically ill COVID-19 patients is decreasing, and we are enjoying the re-connection with our colleagues. Should future waves of this pandemic, or other viral illnesses, lead to significant increases in patient volumes, we are confident that we have a workforce that can safely manage these challenges, but we do look forward to a day when we may not need to wear a mask during our entire shift.

## Emergency Medical Services In ED

We continue to experience EMS offload delays leading to EMS crews being detained in hallways at all Calgary EDs. This issue has been particularly acute at the FMC, given the large number of high-acuity patients arriving by EMS. We recognize that EMS Park is a challenging place to work for physicians and nurses, especially given the need for dedicated assessment spaces, privacy and difficulty in promptly completing orders. Still, we continue to work with site and zone leadership to work toward getting these patients into dedicated treatment spaces in a timely manner (see ED Overcrowding section below). In the meantime, we have a dedicated EMS Park Nurse from 1100-2300 to initiate orders for these patients, and we look forward to using the EPL physician role to assist in assessing and initiating orders for these patients. We continue to appreciate the efforts of our entire physician and nursing group in going out of their way to care for this complex and high-acuity population.

## ED Overcrowding / Admitted Patients In ED

The Calgary Zone Department of Emergency Medicine leadership team has been working tirelessly to address unprecedented ED overcrowding across all Calgary EDs resulting from system-wide capacity issues leading to admitted emergency inpatients (EIPs) boarding for prolonged periods in our EDs. Our ongoing advocacy has led to recent meaningful changes, including creating an EIP task force and zone-wide surge strategies designed to limit the number of EIPs boarding in our EDs. This work is now translating into some noticeable changes, and in late December, EIP numbers dropped off noticeably across the zone for the first time in months. We know that we have a long way to go, yet we are encouraged by the engagement shown by our inpatient teams and stakeholders throughout the healthcare system in sharing the clinical workload that has been disproportionately concentrated in the EDs. Stay tuned for more updates as we work on durable long-term solutions.

## Looking Forward To 2023

We look forward to the challenges ahead in 2023 for the FMC ED. The entire administration team continues to identify common goals for the upcoming year and is optimistic that we now have increased capacity to improve workflow and patient care now that the Connect Care launch is complete and the burden of COVID-19 (and hopefully influenza) patients continue to decrease. We hope to see a decrease in the burden of illness on our entire healthcare team, shorter EMS offload times and a reduction of the EIP burden. Thankfully, we have an incredibly talented, passionate and caring group of physicians and nurses to work through whatever comes forward in 2023.

Dr. David Lendrum  
FMC Site Chief, Interim  
on behalf of the FMC  
Emergency Leadership Team



Credits Dr. H Patterson

# Peter Lougheed Centre Site Update

## Leadership

Despite a very difficult year in Emergency Medicine, the PLC ER is fortunate to have retained a strong leadership group. Suzanne Wickware (PCM), Terri Roth, and Maria Vera bring experience and flexibility to a department that has undergone many challenges this year. Aaron Shaw and Brock Love continue as nurse educators, with Janine van Beurden replacing Janice Dekkers who moved away this last year. Janice has been missed, but Janine has done an amazing job of stepping in. Jackie Miller remains the department QI lead and continues to work with patient care plans and safety concerns. After several very challenging years of leadership through the COVID-19 Pandemic, Drs Chris Bond and Alyssa Morris stepped down as physician leads, and Drs Meira Louis and Haley Cochrane took over their roles. We are very grateful for Chris and Alyssa's hard work in getting us through the ever-changing requirements of medicine during a pandemic.




## Operations and Bed Pressures

This year saw the emergence of the health care system from the COVID-19 pandemic, with some return to prior processes. In reality, this meant new challenges and the onset of a very intense respiratory season with unforeseen bed pressures. The latter half of 2022 was dominated by bed block and EIP numbers that were significantly worse than the PLC had seen in many years. In response, we instituted a number of measures – some tried and true and some novel.

Intake and minor treatment shifts returned, with dedicated staffing to both those areas allowing for faster flow for patients. Physical space was redesigned in the pandemic response unit (PRU) to allow both those areas to function at higher efficiency. A section of the ER was re-imagined as a care space for our





admitted inpatients, with nurses brought in specifically to do in-patient nursing and thus allowing our ER trained nurses to focus on their undifferentiated ER patients. A trial of an Emergency Physician Lead (EPL) was started in November that has been very successful in reducing the length of stay for many of our patients. This role has been extended to the other sites and will continue to run into 2023. These measures have allowed the department to continue to assess and treat new patients, despite having most of our traditional care spaces being occupied by admitted in-patients.

## Manpower

At a time when many industries are experiencing worker shortages, the ER was no exception. For a large part of the year, the PLC ER was significantly understaffed – with a similar situation happening throughout Alberta and Canada. In a testament to the fantastic staff that work at PLC, everyone worked more hours, more roles, and more days than they had signed up for. Thankfully, as winter approached, we were able to fill a large number of the empty lines and morale improved. This culminated in a fantastic holiday party in December that was reminiscent of the pre-COVID-19 gathering we had all been missing.

We are happy to welcome the new staff and the whole department is benefitting from this. We cannot say enough about the experienced nurses, ortho techs, units clerks, patient care assistants, respiratory techs, and housekeeping staff that went above and beyond to keep the department running on days when there were massive staffing shortfalls. We have also been very lucky to have Emily Yu from the pharmacy team working in the ER this year – her enthusiasm and motivation have benefitted the department and we will miss her as she moves to the RGH. With regards to MDs, we have seen a stable pool of doctors, with several new hires, and some transfers from other sites. We have also seen a small pool of PLC-only doctors with very extensive clinical experience that benefit the whole department.

## Connect Care

May of 2022 saw the launch of connect care at the PLC and ACH in Calgary. Despite a long standing partial electronic medical record in Calgary, the launch was still a massive shift in practice for everyone at the site. The PLC was the only adult site in Calgary using connect care for the following six months, which meant there was lots of internal trouble-shooting and hiccups to work through. In anticipation of the launch, there was hardware (computer stations, rovers etc) and “software” (very extensive staff training) implementation that required high hours. The lessons learned at the PLC helped to ensure a smoother launch at the FMC in November 2022, when launch 5 happened. We were able to send trained staff to the FMC to help, as well as allow physicians to see the system in action prior to launch. Dr Chris Hall has continued to help with the ongoing challenges of downtime, ever changing referral processes, and updates.

## New Department

Work is still ongoing on the first phase of the ER departments new space. This year saw the finalization of plans and significant progress in the space. While we had hoped for a launch in fall of 2022, we are now planning to move into the space in June 2023. The PRU has been instrumental in helping us manage volume during this time of transition.

Dr Meira Louis  
PLC ER site Chief  
on behalf of the PLC  
Emergency Leadership Team

# Rockyview General Hospital Site Update

## Introduction

Rockyview Emergency Department (RGH ED) volumes increased this year, rising from 76,700 patients in 2021 to 80,760 in 2022. The average daily volume was 221 patients per day, including an average 49 EMS arrivals per day. Distribution of patients throughout the department fluctuated this year as a result of departmental changes and increasing ED volumes. In the summer, C Corner, the contact droplet intake area, was altered and primarily became a space to locate the large volume of mental health Emergency Inpatients (EIPs) holding in the ED. Intake has become increasingly busy this year due in part to the increasing ED visits and record numbers of EIPs holding. This fall intake saw on average over 50% of total ED patient volumes, a department record. Overall for the year, about 42% of patients went to intake, 24% to MET and 34% to the main department. Acuity continued to increase this year with 39% of all ED visits being assessed a CTAS 2, compared to 38% in 2021. The ED Nursing and Physician Leadership Team continues to monitor all of the metrics above and adjust processes accordingly. Going into 2023, we are focusing on how to maintain our efficient flow and processes as we plan for the Connect Care launch in May.

## Leadership

Our ED department and AHS bid farewell to our Patient Care Manager Lisa Eady in March of 2022. We are fortunate to have Kyla Craig return to the RGH ED as our Patient Care Manager since April 2022. Kyla previously worked in the RGH ED as a staff RN before leaving the department for leadership opportunities. The rest of our administrative team remains under Kyla's strong leadership.

## Physician Staffing

ED physician staffing remained relatively consistent however several physicians have retired or left the department for other opportunities resulting in a higher full time load. The back-up MD was changed to a scheduled shift as opposed to a voluntary shift ensuring daily coverage. This MD is called in to cover a shift for a last minute sick call by a physician. A "physician in charge" has been identified from 0900 to 2300 to address any issues with the charge nurse regarding flow, abnormal labs/ tests or administrative issues. The RGH will be adding an Emergency Physician Lead (EPL) on a trial basis along with the other sites in January of 2023.

## RN Staffing

The nursing assignments were altered to better support the flow in the Intake area to support the higher patient volumes. We have been fairly successful with having an EMS Park nurse during peak hours of 1100 to 2300 to support patient volume in that area while attempts are made to clear treatment spaces in the department. Staffing and recruitment continue to be a challenge resulting in areas of the department needing to be closed. The nursing management team has been working tirelessly on retention and recruitment with a fair amount of success.

## QI Initiatives

### ASAB

This spring, RGH ED implemented the Appropriateness and Stewardship in Asymptomatic Bacteriuria (ASAB) initiative. Physicians and nurses received evidence based training focused on the reduction of inappropriate ordering of urine bacterial cultures. Prior to this initiative, the median number of cultures ordered per 1000 patients was 10.6; this number was halved post implementation and has been a sustained successful change with approximately 5.7 urine cultures ordered per 1000 ED patients post implementation.

### Geriatrics

The SUPER volunteer program has been valuable when available. Efforts continue to recruit more volunteers.

### Mental Health

The ED team continues to meet regularly with the Psychiatry Emergency Services team to improve patient care, work on the parallel clearance process and to help prepare for the upcoming 24 hour coverage in the Emergency Department.

## ED Care Plans

Under the leadership of Dr. Christine East and RN Ken Mont this multi-disciplinary team continues to implement ED care plans for our vulnerable population of patients that have a high number of ED visits. These care plans improve patient care by providing consistent care amongst different providers and by providing resources in the community that help prevent ED visits. Dr. East received the RGH Medical Staff Association Award for Innovation in December of 2022 to her leadership and implementation of these plans at the RGH and in the entire Calgary Zone.

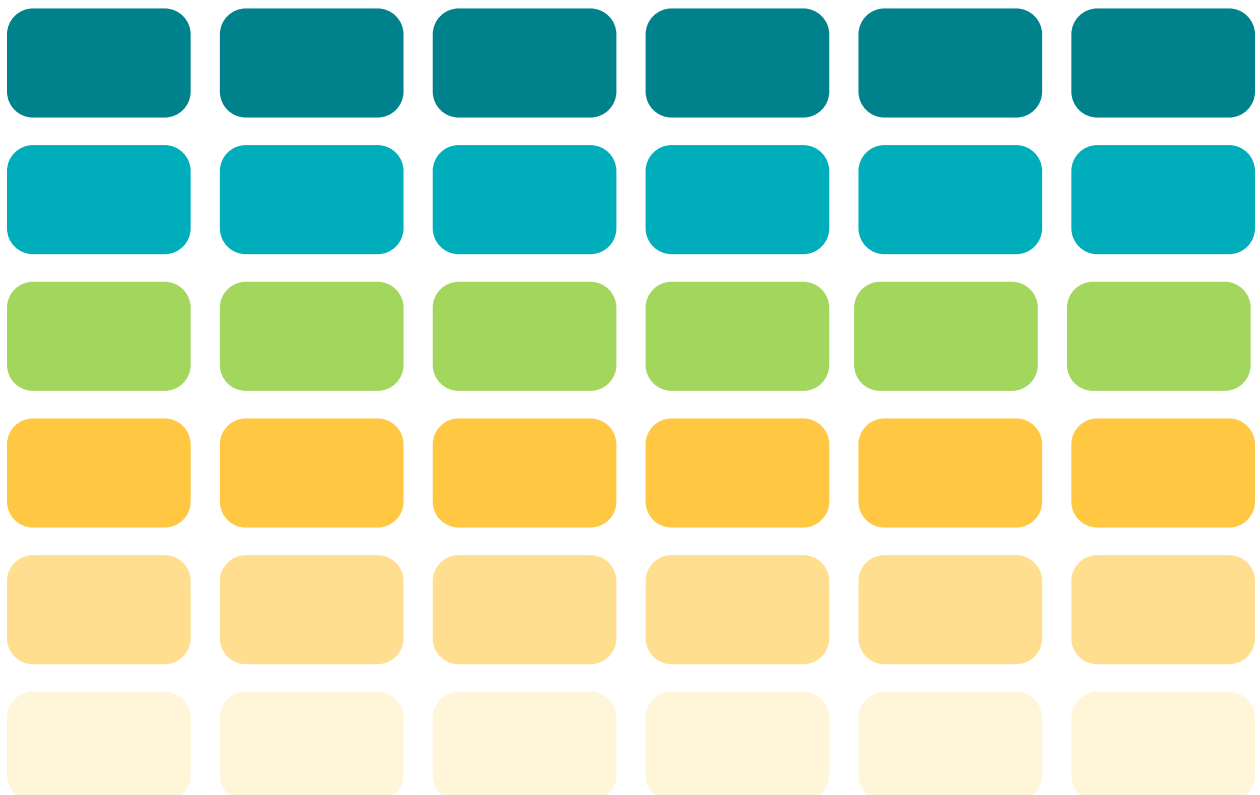
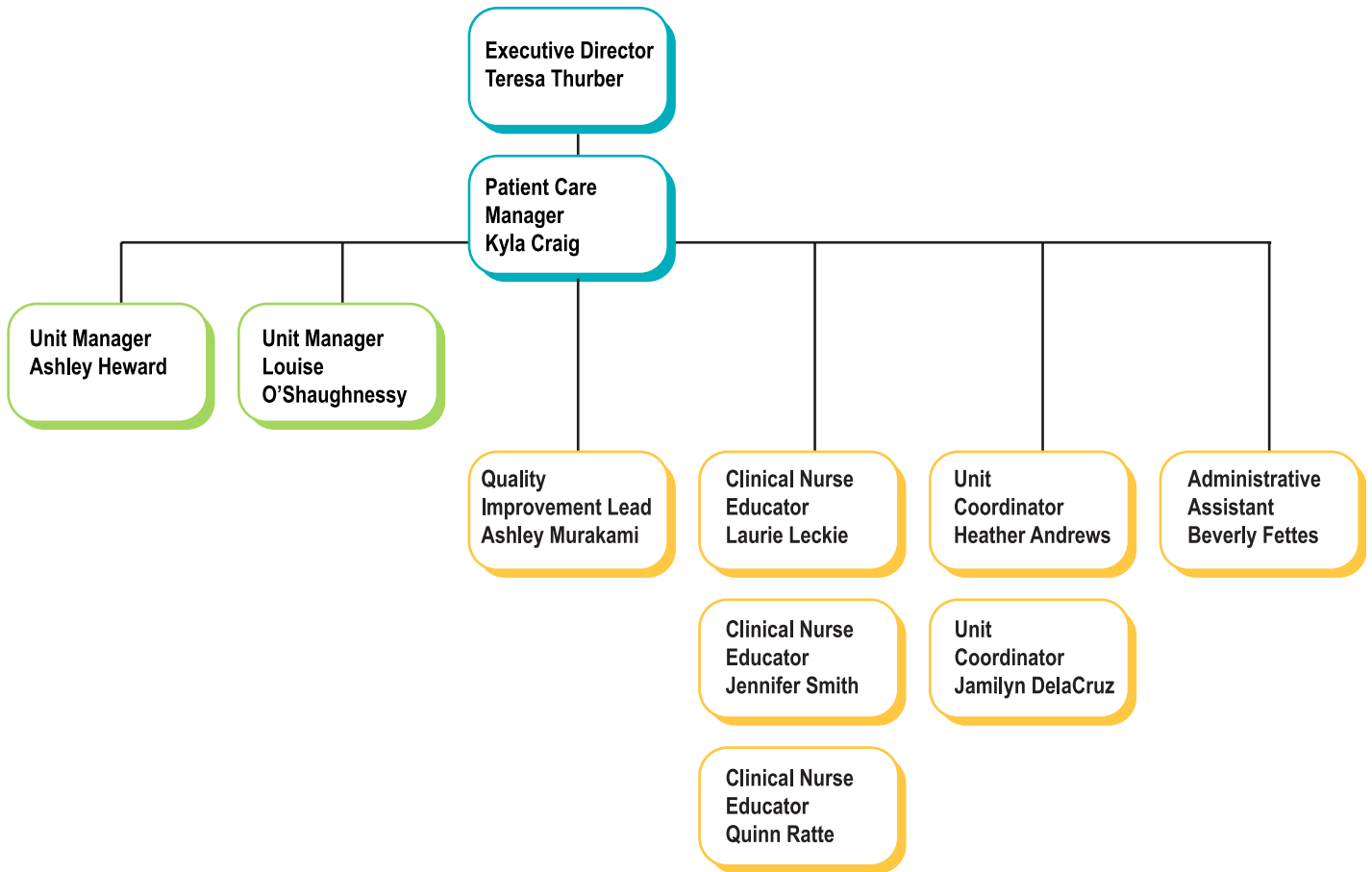
## Connect Care Preparation

RGH ED Connect Care launch is slated for May 2023. We have established a Connect Care Council responsible for developing multi-disciplinary workflow and decision making. We are also gratefully learning from the PLC/FMC launches and continue to integrate these learnings and experiences into our work going forward.

## Looking Forward

Despite challenges with ED overcrowding and staffing challenges our department and site continue to work as a team to provide excellent and empathic care to our patients. Connect Care will bring challenges over the next few months but will hopefully help bring cohesive care to patients in the zone. We continue to work on QI initiatives and hope to focus on both patient and staff safety as well as staff wellness in the coming year.

Dr. Nancy Zuzic MD CCFP(EM)  
Site Chief RGH  
Clinical Lecturer University of Calgary  
on behalf of the RGH  
Emergency Leadership Team





# South Health Campus Site Update

## Department

Situated in the rapidly growing southeast end of the city, the SHC ED continued working to expand its services and footprint to provide Emergency Care to Calgarians of all ages. 2022 saw ongoing efforts to deliver more care with the fixed resources we have. Built and staffed a decade ago with 36 treatment spaces, we now run up to 65 treatment spaces during peak hours of the day with effectively unchanged staffing levels we've had since opening. Our footprint today includes a 5-bed Intake Area / Rapid Assessment Zone with 17 Treatment Chairs where our orthopedic stretchers used to be, an 8-bed pediatric emergency pod, a 4-bed Minor Treatment space, and an EMS patient care area in addition to our pre-existing Acute Care pods, Mental Health unit, and Resuscitation bays. Given this extent of stretching, our dedicated and industrious staff have allowed this site to punch well above its weight in terms of provision of tertiary-level emergency care.

## Human Resources

The SHC has 46 scheduled physicians, roughly half of whom split their time working at another site in the Zone. The physician group includes individuals with a broad range of expertise including pre-hospital medicine, sports medicine, medical education, point-of-care ultrasound, geriatric EM, clinical research, QI, clinical informatics, global health, and sexual assault care.

We continue to struggle with finding and retaining staff when it comes to Nursing and Allied care positions. The ever-expanding footprint of our ED, combined with Site Capacity pressures on the inpatient side makes for a challenging work environment and a higher staff turnover rate than we would like. Enormous efforts have been made to respond to this challenge by relentless recruitment and increased focus on retention. Nursing leadership has created part-time lines to facilitate improved work-life balance and opened more positions for LPNs, which has worked to improve staffing levels.

## Flow and Capacity Efforts

The greatest challenge we face as a department is maintaining timely care of patients in the face of nursing shortages and chronic hospital overcapacity status. These factors lead to access-block for new ED patients due to a high number of Emergency Inpatients (EIPs) waiting for beds upstairs. Compounding this challenge in 2022 was a major flooring repair necessitating staged shutdowns of each pod in our department while maintaining patient care.

Our department rose to the challenges above by designing and/or implementing several new initiatives and strategies.

- The Logistics team did a phenomenal job in planning the flooring repair, communicating with ED leaders as well as all the stake-holders of the hospital, and executing the 7-month project with remarkable competence. The project was completed a few weeks ahead of schedule in December.
- Intake was moved to E pod with the addition of several treatment chair spaces (mentioned above). While moving acute care patients to chairs and recliners is not ideal, this intervention has increased our capacity to see patients and reduce wait times.

- C pod – our pediatric emergency medicine pod was temporarily used as a flex pod during our floor repair when our gracious PEM colleagues moved their service to a clinic space adjacent to the ER. By the end of the year, C pod was restored as a pediatric ED unit, seeing up to 60 children per day during the “tripledemic” viral surge of RSV, Influenza, and COVID-19. MD shifting was also adjusted to better match RN shifting.
- Hospital Site Administration worked extremely hard, as did all of our inpatient units, to surge patients upstairs to maintain ED function on our busiest days. The incredible efforts to maintain patient care while chronically overcapacity is a real testament to the commitment our leaders and frontline staff have to care for patients.
- An EPL (Emergency Physician Liaison) program was started in November as an initiative to speed up diagnostics for patients in the waiting room or identify patients suitable for rapid discharge. This position exists to improve patient safety as well as ED throughput.
- A nurse dedicated to care for EMS patients waiting for an ED bed allowed for more ambulance units to be returned to the road and available to respond to the next call.

## Projects and Developments

1. Geriatric Emergency Medicine. Great strides have been made to support geriatric care in our emergency department led by Dr Marge McGillivray and our NP Paige Guinn. A separate year-end report on their projects is presented elsewhere in the annual update.
2. QI. Cass Carriere has taken on the role of QI Nursing Lead. We are restructuring and re-prioritizing our Quality Council to allow engagement with new nursing staff and continue to remain in maintenance phase of the STEMI and Stroke door-in-door out improvement projects, asymptomatic bacteriuria project and delirium screening initiatives.
3. SHC Case Rounds continued in 2022, led and organized by Drs Eva Courvoisier and Nikki Schiebel.

## Looking Ahead

**Connect Care:** We are actively preparing launch 6 in May, which will bring our site alongside the rest of the EDs and Urgent Care Centres in the city. Superusers from our site are selected and confirmed, and our physician team has initiated training.

**Flow and Physician Engagement:** We will continue to regularly meet as a physician team to collaborate on ways to further improve our service to patients. We will strive to balance this with wellness and balance for our physicians in order to keep our workforce intact and strong.

**Advocacy:** In areas outside our direct control that influence our ability to care for patients, we will continue advocating at all levels to shorten wait-times, minimize barriers to care, and improve emergency care delivery.

Dr. Daniel Joo  
SHC Site Chief  
on behalf of the SHC  
Emergency Leadership Team

## Nursing Leadership Update

It has been another busy year for nursing leadership at SHC ED. Two new managers, Amanda Danks and Daniela Moreira joined the team, as well as an additional CNE, Joanne Yurko and new Quality Improvement Lead, Cassandra Carrier.

Efforts over the past year focused on returning to pre-pandemic 'business as usual'. Renovations added to our challenges in 2022, in the form of replacing the flooring throughout the entire department. Planning, moving, jack-hammering and dust will forever remind us of this past year.

SHC ED, as with many healthcare systems across the province, country and the globe, was hit hard with the global healthcare worker shortage. The leadership team doubled down on efforts to recruit, educate and retain staff to maintain high standards of patient care during the worst staffing shortage in near memory.

## Some of our accomplishments from the past year include:

- We welcomed over 60 new nurses to the department
- We added Licensed Practical Nurses to our staffing mix.
- We created 20% more part-time RN lines to support staff work-life balance
- We created a separate Fast Track stream and improved our Intake processes
- We added an EMS Park nurse assignment
- We formed a Recruitment and Retention Strategy Working Group and developed many recommendations and initiative to support existing and new staff, including a new grad mentorship program.

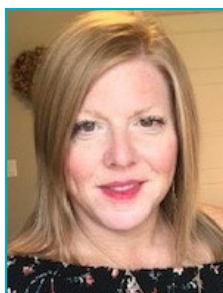
### Continued focus geriatric care in the ED including:

- Support from our GEM NP, Paige
- Initiating b-Cam for identifying seniors at risk for delirium
- Dedicated ED physiotherapist Scott to prioritize early ambulation
- *See the Person* course for all new hires to the department

## Staff education:

- Orientation of over 60 new nurses
- Eight nurses oriented to triage
- 29 nurses oriented to the monitored area/pediatrics
- 27 nurse oriented to the code room
- Eight nurses oriented to charge





**Heather Battle**  
Manager

I have been a nurse with AHS for over 30 years. I graduated from the Foothills Hospital School of Nursing in 1990, and am currently working full time on my MBA, with a focus in Health Leadership. I joined the SHC ED team in January 2020. I am a Mom to an 11 year old, and I'm an avid downhill skier and a frequent but lousy golfer.



**Danielle Binda**  
Clinical Nurse Educator

I graduated from the U of C/Mount Royal Conjoint Nursing Program in 2001 and have worked as an Emergency nurse with AHS for almost 20 years. I joined the SHC ED team as a Clinical Nurse Educator in 2011 and assisted with the orientation on-boarding of staff, opening of the ED, and have grown with this amazing team over the years! I have a strong interest in nursing education, quality & process improvement, and patient safety.



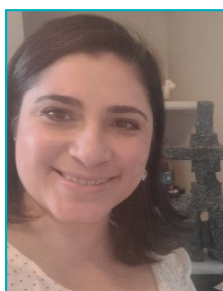
**Amanda Danks**  
Unit Manager

I graduated in the UK and then moved to Canada in 2001. I have been a Registered Nurse with AHS for over 21 years. Previous roles included working at FMC in Cardiothoracic Dept, RGH Emergency Dept for 13 years (roles included Nurse Clinician for numerous years) and my last position was a supervisor role in SHC Medical Specialty Clinics. I was fortunate to join the SHC ED team May 2022. My interests are Seniors Health, Quality Improvement and Team Development.



**Vanessa Culp**  
Clinical Nurse Educator

I have worked with AHS since 2004 at various sites including FMC, PLC and SHC. I began working @PLC ED in 2009 and transitioned to the SHC ED team in 2014. I moved through the ranks of bedside RN to clinician and then CNE. I'm a born and bred Calgarian and have 3 crazy pets at home. When I am not running at work, I am busy running after my dog, Nola.



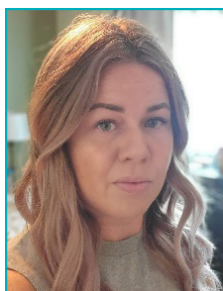
**Daniela Moreira**  
Unit Manager

Originally from Brazil, I moved to Canada in 2016 and joined AHS in 2018. I graduated in 2005 from the University of Brasilia and have worked in Emergency and Critical Care settings throughout the years. I have been involved in leadership roles since 2009 and was fortunate to join the SHC ED team in 2022. I have a passion for learning and my areas of interest are sustainability, strategic planning and Quality Improvement.



**Joanne Yurko**  
Clinical Nurse Educator

I graduated nursing in 2001 from Grant MacEwan University in Edmonton Alberta. I have been an Emergency Room Nurse for 21 years practicing in both urban and rural. Prior to joining the education team at SHC ED earlier this year, I was the CNE for ED and Medicine at Oilfields Hospital in Black Diamond for the last 9 years. I am proud to say I have worked at SHC ED since its opening Jan 14th, 2013 and have been through all the changes in our department! I have special interests in resuscitation, team dynamics, palliative care and wounds!



**Cassandra Carrier**  
Quality Improvement Lead

I graduated from the Mount Royal University Bachelor of Nursing program in 2010. I started my career at the Rockyview and the Peterlougheed Hospital in in-patient acute medicine and pulmonary. I have worked as an Emergency Nurse for 10 years and have been at SHC ED for the last 6 years. I have developed a passion for Emergency Department flow and patient safety initiatives. I joined the leadership team as the Quality Improvement Lead in 2022.



**Paige Guinn**  
Geriatric Emergency  
Management Nurse  
Practitioner

I graduated from my Bachelor of Science in Nursing from the University of British Columbia Okanagan and worked as a Registered Nurse at the Kelowna General Hospital. This is where I developed my passion for working with seniors. I went back to school to get my Master of Nursing/Nurse Practitioner designation at the University of Calgary with my final focus on seniors' health. I find providing care for older adults a rewarding experience and I am so happy to be a part of the SHC ED team.

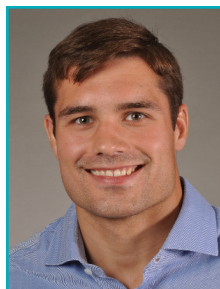


# Summer and One Year Locums



**Dr. Jacqueline Hiob**

I have completed medical school at Queen's University and RCPS Emergency Medicine residency at Dalhousie University. I also joined the PADIS team for an additional two years of residency in Clinical Pharmacology and Toxicology. Other subspecialty interests include prehospital care, remote medicine, and hyperbarics. Originally from Edmonton, I completed my Bachelor of Science in Pharmacy at the University of Alberta and served as a Pharmacy Officer in the Canadian Armed Forces before releasing to attend medical school. Outside of medicine you can find me on my mountain bike, skis or travelling the world.



**Dr. Brendan Kelliher**

I'm very excited to be starting as locum at the PLC. Originally from Victoria, B.C., I spent three great years in Calgary for med school. I completed two years of Family Medicine in Ottawa before returning to Calgary for an extra year of Emergency Medicine. I started my medical education in Calgary and am now beginning my career here. I'm grateful for the opportunity to continue to work with and learn from the great staff at PLC. Living and working in Calgary keeps me close to my family and engaged with a lot of the activities I love to do. Including cuddling with my cat, regularly eating my weight in ice cream and getting outside to ski and hike.



**Dr. Miles Hunter**

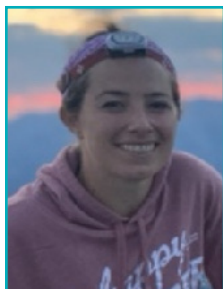
As a born and raised Calgarian, I did my undergraduate studies in biomechanics at the University of Calgary. I completed medical school and the FRCPC residency program in Emergency. With an area of focused interest in Sport Medicine, I will also be working at Innovative Sport Medicine and look forward to building positive connections between our local Emergency Departments and the Sport Medicine community.

When not working, I enjoy playing competitive hockey and baseball in local Calgary leagues. I also enjoy skiing, mountain biking and finding a sunny patio with my wife, family, and friends.



**Dr. Travis Novak**

I grew up in Lethbridge, Alberta and completed my medical education and residency in Calgary. Prior to that I completed undergraduate in Minnesota. I enjoy playing most sports and more recently embraced my geriatric side, playing pickleball.



**Dr. Colleen Jackson**

I grew up moving back and forth across BC and Alberta before settling in Calgary for my undergrad and have stuck to southern Alberta ever since. After finishing a rural residency in southern Alberta I came back to Calgary for my EM year and am excited to be working back in the city that feels like home. In my free time I can be found hiking, running, and painting.



**Dr. Robyn Palmer**

Hi! My name is Robyn and I am very excited to join the staff at PLC/FMC! I lived in Edmonton for undergrad, med school, and residency at the University of Alberta, and graduated residency in 2018. I've lived in Vancouver the past four years, working at Vancouver General Hospital. I'm looking forward to now finally returning home to Calgary! I can talk endlessly about my two cats, Luna and Loki, super hero movies, arts and crafts, and obstacle course races. I like to travel and spend time with family and friends. I dislike pandemics.

I cannot wait to meet you all and get to know my new work family!



**Dr. Alex Pistore**

I am originally from Cochrane, but have spent the last three years in Saskatchewan for residency. I like plants, books, and dogs.

Happy to be part of the Team!



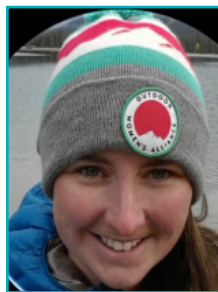
**Dr. Brett Shaw**

I'm originally from the Vancouver area, but made the move across the Rockies nine years ago with my wife to attend medical school in Calgary. I've happily stuck around to complete my Emergency Medicine residency here in Calgary over the past five years and am excited to start working as a staff within the city. Outside of the hospital, you will find me trying to balance chasing around my toddler and getting out for some adventures in the outdoors.



**Dr. Emmeline Ruka**

I am originally from Quebec and did my medical training at Sherbrooke University, followed by residency at McGill. I am moving to Alberta to join my husband who is currently doing his fellowship in Calgary. Outside of work, I am passionate about travelling. As a (former) Montrealer, I am a foodie and enjoy discovering new restaurants and chefs every opportunity I get. I love jogging outside in my free time, and yes, I thought Mont-Royal was high until I saw the Rockies for the first time!! I am thrilled to be moving to Alberta this summer and to join the Rockyview team!



**Dr. Jenny Strong**

I grew up in North Vancouver and spent my youth competing in big mountain skiing and XC and DH mountain biking. I ran XC and steeple chase for the UBC Thunderbirds while completing my BSc in Animal Biology and Human Kinetics before chasing my now husband to Calgary. I completed Medical school at the UofC, followed by Rural Family Medicine in Red Deer. After locuming for a year in Central Alberta, I returned Calgary for the CCFP-EM program and am very excited to be a part of Calgary EM group and continue locuming at SHC. When I am not working you will find me backcountry skiing, rock climbing or trying to capture the QOM on the local bike trails.



**Dr. Tyson Savage**

I am born and raised Calgarian who completed medical school at Queen's University before returning home for my residency here in Calgary. During residency I completed a fellowship in simulation at the KidSIM simulation centre at the Alberta Children's Hospital and had interests in using in-situ simulation for multi-disciplinary medical education and quality improvement initiatives. While not working, I can be found attempting improvisational acting, playing guitar, and taking my dog, Duffin, to the dog park or for a hike in the mountains. I am very excited to be transitioning to continue working with ED team here in the Calgary Zone.



**Dr. Elizabeth Williams**

I was born in London, England then grew up in Newfoundland and Toronto where I spent most of my time in dance studios (or in the car, on the way to another dance studio). I completed my undergrad at McGill, medical school in Calgary, and then made the move up to Edmonton to do my residency. As part of my residency training, I completed a fellowship in the Care of the Elderly and I have a strong interest in improving the care of older adults in the ED. If you want to get me talking about life outside of medicine, ask me about my family's dog Angus, any reality TV show, or travelling. Look forward to meeting you all soon!



**Dr. John Wink**

Hi! I grew up outside of Edmonton and completed my undergrad at the University of Alberta. I then made the move down to Calgary for medical school, and enjoyed it so much that I've stuck around ever since. I completed both my Family Medicine residency (Black Diamond site) and Emergency Medicine residency (CCFP-EM program) in Calgary. I couldn't be happier to continue working with the Calgary Emergency Medicine team. When I have free time, I'm always looking to get active outdoors including skiing, biking, fishing, and hiking.

# Clinical Programs

## Clinical Informatics

Continuing in their roles this year with the Calgary clinical informatics team were Dr. Tom Rich as Associate Chief Medical Information Officer for the Calgary Zone, Dr. Ashlea Wilmott as Pediatric ED Medical Informatics Lead, and Dr. Chris Hall as the Adult ED Medical Informatics Lead. After many years of tireless contribution, Shawn Dowling has stepped aside from his role in Clinical Effectiveness and Order Set Optimization. Meanwhile, our team was augmented by the addition of the following Superusers, whose selfless efforts made the transition to Connect Care possible: Drs. Haley Cochrane, Meira Louis, Mike Betzner, Colin Bell, Fareen Zaver, Stuart Rose, Nadim Lalani, Mandeep Sran, Mike Wolf, Catherine Patocka, Yasmin Hla, Jen Puddy, Stan Bernbaum, and Collette Flegel.

## Notable events from 2022:

### Connect Care

After multiple delays related to COVID-19, Connect Care finally went live in the Calgary Zone in 2022, starting with the PLC, ACH, and urgent care centres in May, and followed by the FMC in November. The successful transition from SCM represented the culmination of many months of preparation and effort on the part of countless nurses, physicians, and IT staff, and will create a monumental shift in how patient care is conducted in our zone. Our clinical staff benefitted tremendously from the dedicated work of our Superuser group, who undertook additional training and dedicated extra time from their already hectic schedules to help smooth the shift to the new electronic medical record. Among these, Drs. Haley Cochrane and Meira Louis deserve special mention for their dedication above and beyond the call of duty after conducting a number of supplemental educational sessions focused on the optimization of the end user experience with ASAP, the ED-

specific module of Connect Care. Their efforts received strongly positive reviews from anyone who was fortunate enough to attend and stand as a remarkable example of selfless dedication to improving the clinical functioning of our departments even at a time when the system-wide burden (and burnout) resulting from COVID-19 is still being acutely felt by all frontline clinicians.

At a provincial level, the Calgary Zone's views on system optimization continue to be represented by Drs. Wilmott and Hall, with a future focus on expanding the content and streamlining the layout of order sets and workflows within ASAP. The future will hopefully see continued growth in this area, as the focus across the zone shifts from implementing Connect Care to improving the end user experience.

### Local Initiatives

The myED online resource continued to represent the de facto hub for accessing Calgary Zone clinical pathways, guidelines, and protocols. With the arrival of a province-wide EMR, the existence of a repository of local clinical workflows has become ever more important, and will continue to represent an important supplement to the clinical guidance provided within Connect Care. In the meantime, given the limited availability of informatics personnel and resources, SEC-related content management remained focused on addressing any pressing safety concerns that might be identified in our local order sets.

### Looking forward to 2023:

The Connect Care roll-out will continue with Wave 6 including the RGH and SHC in May 2023. Preparations are already underway with Superuser recruitment and end user training at the top of the list of priorities as 2022 winds down.

**Dr. Chris Hall**  
Physician Project Lead Clinical Informatics



# Clinical Pharmacology & Toxicology

The Section of Clinical Pharmacology and Toxicology members are very pleased to present a summary of our activities for the 2022 calendar year.

Despite 2022 being the third year of the COVID-19 pandemic, PADIS continued to host residents from Emergency Medicine (Adult and Pediatric), Internal Medicine, Anesthesia, Family Medicine, Psychiatry, and Critical Care Medicine for our popular Medical Toxicology rotation. This rotation involves a combination of bedside medical toxicology consultations in Calgary hospitals and small-group teaching sessions on management of common poisonings. We also continued to have Saskatchewan RCPSC and CCFP-EM residents take call from Regina and Saskatoon and held our annual 'Toxicology Skills Day' with the University of Saskatchewan Emergency Medicine residents. We also hosted a similar day for the University of Alberta Emergency Medicine residents.

In July, we welcomed Drs. Alexandra Hamelin and Jacqui Hiob for their second year of the CPT fellowship. Jacqui also passed her FRCPC Emergency Medicine examination before starting and is working clinically at the Peter Lougheed Centre as one of the staff Emergency Physicians.

Dr. Riley Hartmann completed his CPT fellowship in June and successfully passed the Royal College examination. Riley also joined our medical toxicology call group and is now taking call for PADIS. He is working as an Emergency Physician in Saskatoon.

Drs. Lucyk and Yarema were the keynote speakers on acetaminophen at the Canadian symposium of the North American Congress of Clinical Toxicology in San Francisco in September.

Our CPT program matched two stellar candidates for a start date of July 2023: Dr. Jason Elzinga from Calgary, and Dr. Nick Sajko from Edmonton. Our program also underwent external review by the Royal College and was accredited for seven years, an amazing accomplishment for such a young program.

We continue to work on implementing our goals as part of our 2021-2025 Strategic Plan. The [strategic plan](#) and its [key elements](#) can be found on our [CPT website](#).



As part of the Strategic Planning process, we developed a series of metrics to help us determine our success in meeting our goals and objectives. What follows are our metrics for the 2022 calendar year up to December 8th. The 2021 numbers are in parentheses for comparison.

## NUMBER OF...

- Clinical Pharmacology consults: 151 (133)
- Medical Toxicology bedside consults: 33 (51)
- PADIS Medical Toxicologists: 8 (7)
- Physicians on Clinical Pharmacology consult service: 4 (3)
- Toxicology Clinic patients seen in outpatient clinic: 26 (22)
- Research projects published by Section members: 13 (26)
- Section of CPT members: 10 (9)
- Section members who are also members of University of Calgary research institutes: 3 (3)
- Residents and/or students mentored by Section members: 28 (24)
- Publications by CPT fellows: 0 (3)
- CPT lectures given by Section members to Undergraduate Medical Education students: 17 (9)
- CPT lectures given by Section members at Postgraduate Medical Education academic half days: 42 (65)
- CPT lectures given by Section members at CME events: 15 (4)
- Inquiries about Calgary CPT program: 15 (18)
- Applicants to Calgary CPT program: 7 (4)
- Residents rotating at PADIS: 72 (61)
- Residents rotating on CP consult service: 4 (2)



**Dr. Mark Yarema**  
Section Chief  
Clinical Pharmacology and Toxicology

# Distributed Learning & Rural Initiatives

Dr. Aaron Johnston leads the Office of Distributed Learning and Rural Initiatives (DLRI) at the Cumming School of Medicine as Associate Dean. DLRI believes in providing quality healthcare to the people of rural Alberta. We strive to accomplish this goal through fostering meaningful relationships between medical educators, health-care professionals in training and individuals and families in rural Alberta. Our vision is to engage communities, inspire social accountability and create opportunities. We believe that our commitment to education and research in rural Alberta is a key part of developing skilled and dedicated rural physicians.

DLRI manages two large Government of Alberta grants that support rural education for medical students, clinical clerks, and residents. Our office coordinates rural placements for learners at all levels from pre-clinical medical students to residents. We support medical student placements that can be as short as a single day of shadowing and as long the entire clerkship for our University of Calgary Longitudinal Integrated Clerkship. We support residency programs in both Family Medicine, Emergency Medicine and wide variety of specialties including to place resident physicians in rural training environments. DLRI also supports our rural preceptors and educators through a range of conferences and Faculty Development opportunities.

This past year ran a mix of in person and virtual conferences and saw excellent engagement from our rural preceptors. We look forward to our first in person Cabin Fever conference in several years in 2023. We are fortunate to have many dedicated preceptors in rural and regional centres in Alberta who strive to offer the highest quality medical education experiences.

DLRI research activities continue and this past year have had two publications in the area of preceptor engagement, a publication on medical leadership and an editorial on ED queuing. The office is also supporting additional research work on longitudinality in medical education, rural obesity and government policy in rural health and education. At DLRI we make the links between learners and interesting rural opportunities, and support rural physicians as cutting edge medical educators. We believe that exposing learners to rural practice, and supporting rural physicians in a clinical faculty is an important part of the future of rural healthcare in our province.



**Dr. Aaron Johnston**  
Associate Dean Distributed Learning  
and Rural Initiatives

# Global EM (GEM) Hub

The Global EM (GEM) Hub is dedicated to enhancing opportunities for engagement, collaboration, and education in emergency medicine worldwide. Our goal is for Calgary to become a beacon for GEM by harnessing our collective experiences and offering a variety of ways to expand them. Thus far, more than 50 emergency physicians in Calgary have joined the GEM hub.

2022 was an exciting year for the Hub as we were able to resume international travel. Margriet Greidanus spent three months this spring in Mbarara, Uganda as a consultant emergency physician and visiting professor at The Mbarara University of Science and Technology (MUST) as part of the Calgary-Mbarara Emergency Medicine (CMEM) collaboration. She was even able to bring a Sonosite point-of-care ultrasound with her as a gift to their nascent emergency department. This was graciously donated through the efforts of Stephanie VandenBerg and Ian Wishart. Dr. Greidanus chronicled her experiences as a frontline physician and teacher at a major Ugandan referral hospital in thrilling articles that were circulated through the department newsletter and the UofC website.

Ian Wishart also returned to MUST as a consultant in October. Last time, he was evacuated as the borders closed due to COVID-19, so it was great to have him return under more auspicious circumstances. He worked in the emergency department, taught seminars at the medical school, and ran trauma and pediatric simulations in their lab. Dr. Wishart had a very interesting time and published an article about his unique experiences



in the department newsletter. Both Ian and Margriet hope to return to MUST in 2023, and we are hoping to expand the program to other interested faculty and residents.

In 2023, we are planning to host several Ugandan residents in Calgary for an elective. Their applications are in progress. We will need assistance coordinating the delivery of their course here. We will need preceptors for clinical shifts and mentors for rounds. Also, to save money, we plan to homestay the residents with medical families in Calgary. One of the benefits of this collaboration is that faculty and residents in Calgary can be involved in global EM without needing to leave home. We see this as a unique and exciting educational opportunity for both Ugandans and Calgarians. More information will become available as we move into 2023.

The CMEM collaboration is funded through generous grants from the Indigenous, Local, and Global Health Office and the McLaughlin Travelling Medical Education Fund. The ongoing support of the Department of Emergency Medicine and its faculty members is also critical. Thank you. For more information on the CMEM collaboration, please visit the website:

<https://cumming.ucalgary.ca/community/calgary-mbarara-emergency-medicine-collaboration>

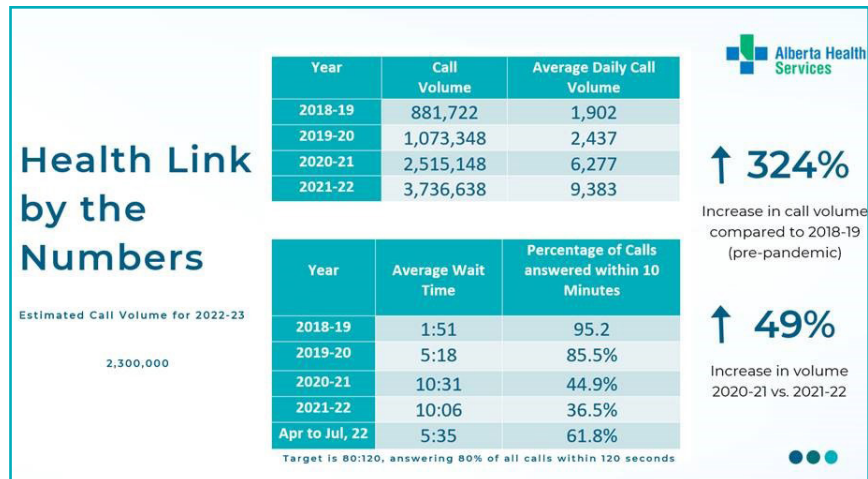
We are excited for the future of the GEM Hub! Please contact me with any questions.

Dr. Andrew Battison



# Health Link

As a trusted resource for Albertans, Health Link is often a first point of contact for health inquiries. Health Link 811 serves as a critical triage and wayfinding contact point for Albertans as well as a data source for AHS & AH. The 2021-22 fiscal year saw a record number of calls to Health Link 811 from the public.



## New Initiatives in 2022:

### Virtual MD Secondary Triage

This program was launched in January 2022 at the height of the omicron wave. A group of physicians (family and emergency medicine) assess patients virtually by phone or Zoom to determine if they can be managed at home or in another setting other than the ED. Callers to Health Link who are triaged by a RN and determined to need an assessment within four hours, or 24 hours if related to ILI, are eligible for Virtual MD. By end of November 2022, over 14,000 patients have been assessed by this service, with only 10% given the recommendation to seek care in an ED. About half of these patients would previously have gone to an ED. Over half of patients assessed virtually are given self-care advice only. Patient satisfaction survey results have been overwhelmingly positive. To date, there are over 60 MDs working on this service and four nurse practitioners.

### Virtual Hold

Virtual Hold was implemented in October 2022. This technology allows the caller to receive a callback when it is their turn in the queue, providing greater convenience for the caller.

### Indigenous Support Line

This service was launched in June, 2022 in North Zone. It is for First Nations, Metis and Inuit Albertans who are seeking culturally sensitive health services navigation support. It is staffed by Indigenous support workers and will roll out across the province in 2023.

### Out-patient COVID-19 Treatment Program

The Outpatient COVID-19 treatment program is an initiative between AHS and AH, administering several outpatient treatments. These include Paxlovid and Remdesivir, to prevent high-risk patients with mild to moderate COVID-19 symptoms from progressing to severe disease, and Evusheld for the prevention of COVID-19 for people who are immunocompromised.

Dr. Denise Watt  
Medical Director Health Link and MyHealth.Alberta.ca

# Mike Hodsman Memorial Lecture

For the 2022 Hodsman Legacy Lecture, Dr. Bruce Macleod was highlighted for his excellent clinical career complemented by many administrative and leadership accomplishments. We were also excited to host our Keynote Speaker, Dr. Anton Helman who is well known as the founder, editor-in-chief, and host of the popular EM Cases Podcast. The morning involved a multitude of Emergency Medicine experts in Calgary speaking on a range of pertinent topics, hosted by Dr. Helman in a “Quick Hits” podcast format. Dr. Andrew McRae spoke on appropriate use of troponin, Dr. Marshall Ross spoke about ketamine use for acutely suicidal patients, Dr. Stephanie Vandenberg spoke about the ED Peer Support program, Dr. Katie Lin spoke about posterior circulation stroke, and Drs. Mike Betzner and Eddy Lang discussed the recent Emergency Physician Lead (EPL) program. Dr. Helman then gave a keynote presentation on providing Compassionate Care in the ER. The morning was well attended with ~150 physicians, residents, learners and allied health care professionals, in person and via Zoom; and generally very positive feedback.

Dr. Bretton Hari



Credits Dr. H Patterson



# The Opioid Crisis in Alberta

Opioid use disorder is a chronic, relapsing illness/condition that continues to be a major public health crisis. During the COVID-19 pandemic, multiple factors may have worsened the opioid crisis, including an increasingly toxic substance supply, increased isolation, stress and anxiety, and changes in the accessibility of services for people who use substances<sup>1</sup>. Across Canada, from January to March of 2022 there were 1,883 apparent opioid toxicity deaths, which is approximately 21 deaths per day. In similar time frames prior to the pandemic, there were between eight (in 2016) and 11 (in 2018) deaths per day<sup>2</sup>.

The opioid crisis is complex and will continue to require efforts from all areas of healthcare and society. Many individuals who live with opioid use disorder visit ED/UCCs because of an overdose, withdrawal symptoms, or for other reasons.

## Initiation of Buprenorphine/Naloxone in ED/UCCs in Alberta

For many individuals who live with opioid use disorder, there are prescription medications available that can help such as buprenorphine/naloxone (brand name: Suboxone®, generics also available). When taken as prescribed, this medication reduces cravings for opioids and withdrawal symptoms. It helps people feel normal and use opioids less often and in smaller amounts. Once on a stable dose, some people can stop taking opioids altogether.

What can you do as a healthcare provider in ED/UCCs? Between 2018 and 2020, the Emergency Strategic Clinical Network™ received funding from Alberta Health to support the implementation of a program called Initiation of Buprenorphine/Naloxone at all ED/UCCs across the province. This program includes how to initiate buprenorphine/naloxone for eligible patients coupled with rapid and reliable referral pathways to clinics in the community. Staff and physician training for this program called **EPA-Sim: OAT - Buprenorphine Naloxone Initiation in the Emergency Department** is available at [www.ahs.ca/paces](http://www.ahs.ca/paces). For further information or support, please contact [emergency.scn@ahs.ca](mailto:emergency.scn@ahs.ca)

[1 Opioid- and Stimulant-related Harms in Canada - Public Health Infobase | Public Health Agency of Canada](#)  
[2 Opioid- and Stimulant-related Harms in Canada - Public Health Infobase | Public Health Agency of Canada](#)

Ken Scott  
Senior Consultant

# Quality Improvement / Assurance

**Quality Assurance and Educational Departmental Rounds** provide unique educational events for our department members through resident driven presentations of cases involving adverse events. These presentations include cases which highlight identified system risks, cognitive biases and key clinical content in a safe educational context for department members. Thank you for your thoughtful attendance and comments/questions during these rounds.

## Current QA Projects:

### RN ordered ECG Review Pathway:

Having an RN order an ECG for a patient prior to the patient being assessed by an ED MD is an important early step in identifying the potentially at risk patient. Historically the review process for this ECG was ad hoc, at times inefficient and provided a variable value add to immediate patient management.

A clinical adverse event that in part involved this ad hoc process highlighted the necessity to formalize a pathway that would provide an ED RN who requested the ECG with clear ECG findings (based on the computer interpretation) that require immediate ED MD interpretation. This process includes an accountable or quickly accessible ED MD who will review the ECG and chart this in Connect Care. The process will be soon presented to the ED group once finalized.

### Patient Safety Hot Tips:

1. Ensure that you follow up your finalized DI results. Final DI reports populate into Connect Care in your Inbox. There may be non-critical findings that require follow up. Some identified non-critical, but important, DI findings will be reported along with follow up recommendations. It is your responsibility to follow these up.
2. If you take a RAAPID call about an incoming patient and are unable to see this patient please hand this patient over. The patient safety benefits of direct communication between the referring MD and receiving ED MD are significantly enhanced when the patient is seen by the original ED MD. Since this is not always feasible there is still much benefit in having this patient seen by the ED MD most familiar with the transferred patient through handover. Transitions in care confer significant patient risk.
3. Pure epinephrine in the suture carts. Epi should not be stocked in the ED suture carts and recently additional steps have been taken to better ensure that it is not. 30cc epi vials are very similar in appearance -- a “**look alike**” — with the 30cc lidocaine vials and until we have a permanent fix for this recurrent problem, have a good look at the medication vial you plan to use.
4. EMS Park. Patients in EMS Park have undifferentiated illness/trauma and other emergencies. Some are very unwell yet still end up there. A disproportionate number of patient safety events involve patients who have been in EMS Park, even for short periods of time. Ideally, no patient would ever be in EMS Park, but this is not currently possible. Those that are there will benefit from timely ED RN and ED MD assessments since they benefit from active orders and MD advocacy regarding optimal patient care location. Communication regarding your orders should be in person.

with the EMS RN and regarding patient care location with the EMS RN and/or the Charge RN. Presence of an EPL may change this somewhat and the availability of a dedicated EMS RN may as well but continue to be cognizant of these patients and the importance of timely initial assessments.

5. If you personally are aware of an adverse event or close call please fill out a RLS which you can find on the departmental desktops on the AHS Insite splash page.

Dr. Adam Oster  
Quality Improvement and Safety Lead



Credits Dr. H Patterson

# Pharmacy Update

2022 marked a challenging but exciting year for the Calgary Zone pharmacy group as we transitioned to Connect Care, while continuing to provide support and resources in the evolving COVID-19 landscape. As the first sites to launch in southern Alberta in May 2022, the Emergency Department teams at Peter Lougheed Centre and Alberta Children's Hospital were highly involved with initiating process change using Connect Care. Foothills Medical Centre followed suit with a successful launch in November 2022. Together, these pharmacy teams in ED have worked to advance and standardize patient care processes for patients in ED or being followed up for abnormal lab results. They have also expanded their capacity to support ED in multiple ways. The ED pharmacy team at PLC has relocated to within the department, affording them a greater physical presence to support the physicians and allied health staff. An additional seven pharmacists across the city have been trained to provide ED coverage, which will allow for a more consistent pharmacist presence. Moreover, a total of eight pharmacist students, residents and military residents completed their rotations with our ED teams in 2022, and we have also hosted several shadowing medicine and pharmacy students.

The Calgary Zone pharmacy group has led a number of ED initiatives this past year. The PLC pharmacy team has facilitated their involvement in drug overdoses by being paged as part of the triage protocol. This has allowed for more timely care for overdose patients from the ER team, as well as PADIS involvement. Pharmacists at RGH have been working with the ED Treatment Plan Committee to develop robust and streamlined care plans for complicated patients with frequent ED visits. They have also helped develop screening criteria to identify high-risk geriatric patients in ED that would benefit from pharmacist involvement, as a joint project between nurse educators and pharmacists. In line with this, pharmacists were also involved in a project led by Dr. Margaret McGillivray in developing a pathway guide for ED Agitation Treatment in Older Adults, which has been shared across Calgary Zone EDs.

Teagan Zeggil, PGY2 infectious disease and antimicrobial stewardship pharmacy resident, and Phil Boilard, FMC ED pharmacist, will be leading an exciting project investigating antibiotic use in Calgary Zone ED and inpatient settings. Their research will look to describe current empiric antimicrobial prescribing patterns for intra-abdominal infections and compare their concordance to clinical practice guidelines. The secondary objectives of the project will characterize culprit pathogens and their susceptibilities, which will help us understand how often uncommon organisms like *Enterococcus* and *Pseudomonas* need to be targeted with empiric therapy. It will also investigate how duration of therapy and guideline concordance affect hospital readmission rates and mortality for these patients presenting with appendicitis, cholangitis and diverticulitis. We eagerly await the results of this project to help inform our practice in both the ED and inpatient settings.

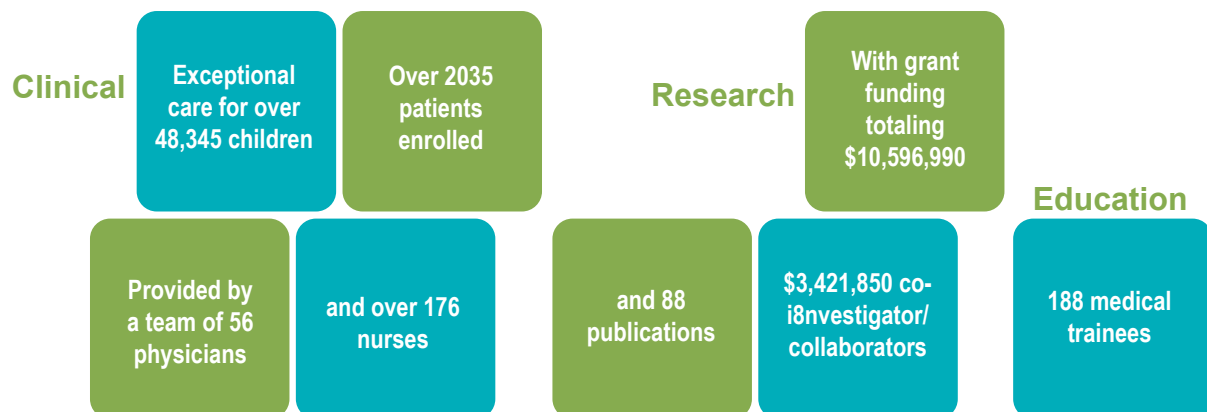
As we move into 2023, the Calgary Zone ED pharmacy teams will continue to proudly support patients and staff through new changes, challenges and opportunities. Warm wishes to all – happy new year!

Eric Duong, Pharmacist  
on behalf of the Calgary Zone Pharmacy Group

# Alberta Children's Hospital Pediatric Emergency Research Team (PERT)

## Summary

The emergency department (ED) at the Alberta Children's Hospital provides care to acutely ill and injured children 24 hours a day, seven days a week. During the past 12 months over 48,345 children received care in the Alberta Children's Hospital ED. The high volume and diversity of patients seen in the ED provides a unique opportunity for generating new knowledge and improving the quality of pediatric care. Our research team is one of the largest pediatric emergency teams in Canada. Team members contributed to expanding our understanding of the epidemiology of COVID-19 which guided the national pandemic response. We managed to continue our other research programs focused on resuscitation, precision medicine, quality improvement and simulation. In the past year we published 88 peer reviewed articles and received over \$10,596,990 dollars in peer review funding from local, national, and international sources.



## Physicians

- Antonia Stang Section Chief, Pediatric Emergency Medicine
- Graham Thompson Research Lead, PERT
- Adam Cheng Simulation Research Lead
- Stephen Freedman Alberta Children's Hospital Foundation Professor in Child Health and Wellness
- Vincent Grant Medical Director for eSIM Provincial Simulation
- David Johnson Senior Medical Director, Alberta Health Services Maternal

New- born Child & Youth Strategic Clinical Network (MNCY SCN)

- Kelly Millar Education Lead
- Jennifer Thull-Freedman Physician Lead for Quality, ACH Emergency Department

## Research Nurses

- Kristen Kersey
- Kim Wolf
- Ruza Goulden
- Sarah Weisbeck



## Coordinators/ Research Team

- Alicia Kanngiesser
- Alissa Kazakoff
- Amanda Bishop
- Ashley Jones
- Beata Mickiewicz
- Cameron Hillier
- Conné Lategan
- Jacinda Larson
- Jessica Dalere
- Jena Shank
- Jianling Xie
- Joy Gobran
- Kassi Prisnie
- Kathleen Winston
- Kelly Kim
- Mahzabin Ferdous
- Myka Estes
- Nidhi Lodha
- Rebecca Emerton
- Sarah Williamson-Urquhart
- Sunil Bhadani
- Ximena Mancipe
- 50+ Volunteer Research Assistant  
(Pediatric Emergency Medicine  
Research Assistant Program PEMRAP)

## Pediatric Emergency Medicine Fellows

- Alex St. Onge
- Gloria Yoo
- Grazyna Burek
- Katherine Anker
- Nick Monfries
- Omar Damji

## Research Trainees

- Anna Funk, Post-Doctoral Fellow
- Milan Heck, Under-Graduate Student
- Matthew Lau, Masters Student
- Conné Lategan, Master's Student.

## Administration

- Gertrud VanDerMey
- Heather Numrich
- Tanya Borthwick
- Tracey Boyle

Dr. Graham Thompson

# Physician Support Fund

The Physician Support Fund would like to thank all contributing members in good standing for their ongoing support. Your contributions make it possible for members of our department to pursue extra-clinical projects that benefit our department and our specialty.

## Mandate:

To support initiatives brought forward to the committee by individual members or departmental leadership which are likely to improve the intellectual, clinical and/or working environment of emergency physicians practicing within the Calgary area.

To provide top-up funding for the residency programs when appropriate other funding is not available. Both the Department of Emergency Medicine and the Support Fund committee group will continue to explore and advocate for appropriate level funding from the appropriate source.

**Some of the projects that have been fully or partially funded by the PSF in 2021 are as follows**

### Annual projects:

- Residency Program Funding
- Top-Up funding for Program Directors
- EM Staff Interdisciplinary Simulation Session
- 2022 Research Day
- PLC Emergency Physician Quarterly Meetings
- Grand Rounds Support
- SHC Case Rounds
- Staff POCUS
- 2022 The Legacy Lecture (Hodsman Lecture)
- ED Treatment Plans
- ED App
- Grand Rounds Coordinator
- ED Deputy, Education

### New Projects

- ED Trauma Simulation
- Connect Care Billing
- Connect Care Optimization for Physicians
- Nursing Appreciation Week
- Fall Hiring Cycle

Dr. Arun Abbi  
PSF, Chair and Treasurer

# Social Media Update

The University of Calgary faculty were highlighted prominently on these two high impact podcasts:



## Laceration Repair - Glue vs Strips vs Staples vs Sutures | Journal Jam | EM Cases (emergencymedicinecases.com)

Podcast production, sound design & editing by Anton Helman. Written Summary and blog post by Anton Helman January, 2023. Cite this podcast as: Helman, A. Cochrane, H. Morgenstern, J. Journal Jam 22 Laceration Repair – Glue vs Strips vs Staples vs Sutures. [Emergency Medicine Cases](#).

[emergencymedicinecases.com](https://emergencymedicinecases.com)



## Posterior Stroke, EP Lead, HEAR Score, Ketamine for Suicidal Ideation, Peer Support Workers | EM Cases (emergencymedicinecases.com)

Posterior circulation stroke assessment and treatment. Emergency Physician Lead to improve ED overcrowding. When not to order a troponin HEAR Score. Ketamine for suicidal ideation. Peer support workers for ED patients with mental health issues and substance use disorder on [EM Cases](#)

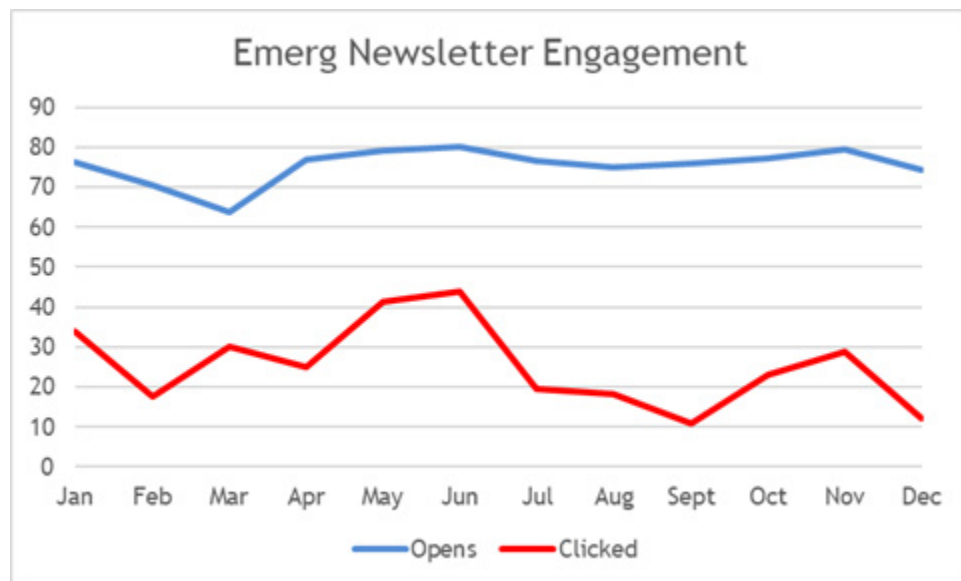
[emergencymedicinecases.com](https://emergencymedicinecases.com)

# Tuesday Newsletter

The Emergency Department weekly newsletter played a significant role in keeping physicians and administration up-to-date on the latest COVID-19 information this year again as the pandemic continues to develop. The newsletter remains well-received with an average of 75.38% of recipients opening and reading the email every week.

The content of the newsletters varies week by week, but generally contains topics such as:

- Notes from Neil and Eddy
- Operational Updates
- SCM Updates
- Upcoming Promotions/Awards/Grants
- Academic Appointment Updates
- Publications of Note
- Grand Rounds meeting info and recordings
- Research News
- Upcoming events
- Teaching Sessions
- Kudos corner
- Wellness updates



Meghan Prevost

# Ultrasound

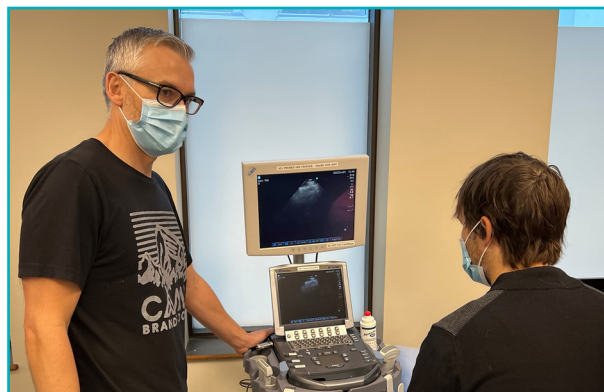
The Physician Support Fund has continued its support of the ED staff POCUS sessions. These sessions are for staff ED physicians to learn and practice POCUS with local experts in a comfortable environment with standardized patients. Each session will have a specific topic or theme, but participants are free to practice any scan or ask any questions they want. These sessions have been very well received and will continue into the foreseeable future.

Thanks again to Dr. Kasia Lenz who has been doing an excellent job in her role as the residency POCUS education lead. Our residents are obtaining excellent training and start their practice as very competent POCUS users.

Please remember to keep the machines docked and cleaned after each use! Pro tip for the new Sonosite PX systems; you do not need to completely shut down the machines like the older models, simply close the lid when your finished cleaning and docking the machine. This will save on boot up time.

Stay tuned for upcoming changes as we transition to a new Ultrasound Director for Emergency Medicine in Calgary in the new year!

Thanks everyone.



Dr. Danny Peterson  
Ultrasound Coordinator



## ED Treatment Plans

The ED Treatment Planning Committee develops consistent and supportive care plans for vulnerable patients who have a high volume of ED visits. This multi-disciplinary zone wide committee is chaired jointly by Dr. Christine East and RGH ED Nurse Clinician, Ken Mont. The team continues to develop linkages with resources and services in the community, including physicians across various specialities, MRT, PACT, the Chronic Pain Centre, CUPS/C2C, and many others. Since late 2021, the committee has collaborated with zone-wide Psychiatric Combined Urgent Services to author plans specifically for psychiatric patients who present often to ED, helping to optimize our use of Psychiatry Emergency Services (PES) resources and reducing psychiatric EIPs. These plans are overseen by a sub-committee with psychiatric expertise, which enhances the efficacy of plans for this population, and allows the main committee to focus on other cases requiring Emergency expertise. There are currently 95 active ED Treatment Plans, with additional plans under development. Results of this important work was presented at CAEP 2021 and show a reduction in average monthly ED visits and inpatient admissions after treatment plan implementation. The ED Treatment Plan Team continues to evaluate results and expects to see significant reductions on ED length of stay, advanced imaging and administration of high-risk medications (such as opioids and benzodiazepines) for this population. ED Treatment Plans will be transitioned to Connect Care during Wave 6, which will result in some enhancements to our process.

**Dr. Christine East**  
Treatment Plans Physician Lead



Credits Dr. H Patterson

# Geriatric EM Working Group

## Year End Report

The Geriatric EM working group is a multi-site, multi-disciplinary collaborative team of dedicated Calgary Zone health professionals including; ED Patient Care Managers, Unit Managers, RN CNE's, OTs, Pharmacists, Senior's Health Clinical Nurse Specialists and Educators and Geriatricians from each site. The team is guided by our focus on developing tools and improving systems to address concerns for older adults in the ED.

Dr. Margaret McGillivray and Dr. Zahra Goodarzi are physician co-leads.

SHC: Heather Battle RN, Vanessa Culp RN, Paige Guinn GEM NP, Nicole Bonin CNS Geriatrics

PLC: Suzanne Wickware RN, Brock Love RN, Marsha Jayne MacDonald Geriatric NP

RGH: Cory Banack CNS, Jennifer Smith RN Patient Care Manager, Jessie Trenholm OT

FMC: Kym-Shae Goerzen RN PCM, Jennifer Evangelista CNE, Trent Moser CNE, Suzanne Nicol CNS Geriatrics.

### ED Physician representation from each site include:

RGH: Dr. Tash Wright and Bretton Hari

PLC: Dr. Mike Kenny

FMC: Dr. Nick Packer

SHC: Paige Guinn GEM NP and Dr. Elizabeth Williams

### This year we have been working on multiple projects and initiatives.

1. **Expansion of the SUPER (Supporting Seniors in the ER) volunteer program to multiple ED's across the zone.**
  - RGH implemented the SUPER volunteers in February 2022
  - FMC is working to launch this innovative and important volunteer program by April 2023
  - Media campaign highlighting the SUPER volunteers as part of a zone wide volunteer recruitment campaign
  - Currently developing an implementation Toolkit to assist with the successful launch of the program at the remaining sites
2. **Completion and implementation of practice improvement initiatives:**
  - Approach to Agitation in the Older ED Patient algorithm
  - Mobility in the ED: Exercises to Preserve Function
  - NPO avoidance initiative
  - ABCD's of Agitation
  - Addition of topical analgesics to ADC at SHC
3. **Education:**
  - ED See the Person workshop delivered to all new RN hires at SHC ED during orientation and during recertification for those staff that have not attended as well as eight-hour workshops available to SHC ED staff
    - FMC ED working to deliver the ED Modified See the Person at their site in 2023

- Grand Rounds presentation: Falls, Frailty and Functional Decline Geriatric Trauma Part 1. Drs. Jayna Holroyd Leduc, Jacqueline McMillan, and Margaret McGillivray
  - Resident Education: Collaborated with residency directors to include Geriatric EM core competencies at annual half days. Topics for 2022 included;
    - Atypical Presentations in the Older ED Patient, Polypharmacy and Adverse Drug Interactions in the Older ED patient, and Approach to Agitation in the Older ED Patient, followed by a 1-hour interactive modified case-based ED See the Person workshop
  - Undergraduate education: In preliminary stages of exploring the inclusion of Geriatric EM competencies to the ED clerkship rotation
4. **SHC Priority Inpatient Bed Allocation project for older patients that are delirious or at risk of developing delirium:**
    - Process built by a multi-disciplinary collaboration within SHC included executive leadership and bed placement staff support, ED managers, CNEs, GEM NP and our QI leads and consultants. SHC CNEs and GEM NP educated SHC RNs on the delivery of the bCAM to identify actively delirious patients. Separately a delirium prediction tool has been applied by admitting services and those patients highlighted on admission for prioritization to available inpatient treatment spaces. The main goal of the project is to reduce exposure to the ED for patients that are delirious or at risk for delirium as the ED environment has been shown to be independently deliriogenic and an ED associated incident delirium prolongs a patients total ALOS by 4-7 days
    - This project has been negatively impacted by our staffing crisis and inpatient bed capacity limitations. ED leadership is working towards reinvigorating this important project in the new year and capitalize on the preparatory work that has been successfully completed
  5. **Advocacy:** We have met with ESCN leadership to share our ideas and initiatives, which has led to advocacy by the ESCN for funding for GEM nurses at various sites. We have also been advocating for a rapid response home care team that will be able to emergently address home care needs for patients that can be safely discharged from the ED from a medical perspective.
  6. **Presentations:** The ED See the Person team was asked to present at an international webinar delivered by the Geriatric ED Collaborative. This presentation was as part the innovative educational initiative presentations, and the team participated as panelists during the post webinar discussion.
  7. **Home Care:** We are in the planning stages of developing an ED to Home Program in collaboration with home care and transition services. This project will be piloted at the SHC. Once functional and demonstrating positive impact on admission avoidance we expect to rapidly expand across the zone.
  8. **Research:** There is preliminary research on going that is investigating restraint use for older ED patients. We are gathering qualitative and quantitative data to describe our current practice patterns and hope to understand the precipitants that guide our behaviors.

There are other projects currently in development.

# Medical Education

## CCFP - EM Residency Program

The EM Program has benefited from a virtuous cycle of graduates staying on to work in the zone and giving back to the educational program for many years. As an example, during this year's CaRMS interviews, six out of our eight interviewers were Calgary EM graduates spanning more than 15 years, including two prior Program Directors (and hopefully a couple future ones!). With that said, I can only emphasize that I inherited the Program in amazing shape from Jason Fedwick, who served for the past four years. Making the transition to the new PD role easier also was last year's match of seven superb candidates from across the country. The EM program is fortunate to be able to draw on a wide spectrum of family medicine graduates with various career objectives and personal strengths. Our goal is reflected in our current Mission Statement:

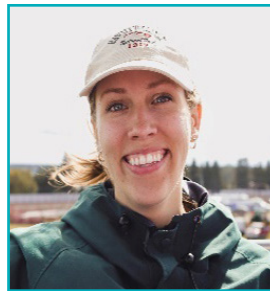
The MISSION of Calgary's CFPC-EM Residency Program is to train highly motivated and skilled physicians who will become leaders in their spheres of influence at EDs in Calgary, Alberta, and the rest of Canada.



Dr. Russell Bahar



Dr. Allison Farfus



Dr. Lindsay Gibson-Brokop



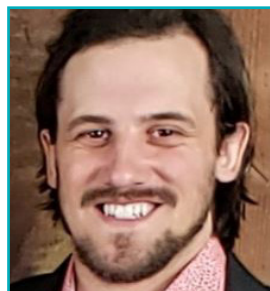
Dr. John Gunawan



Dr. Rukaiyah Lakkadghatwala



Dr. Robin Liu



Dr. Dyon Tucker



## Simulation

Margriet Greidanus

The simulation program continues to be a resident favourite involving countless hours of preparation and the contribution of many allied staff.

## Ultrasound, Airway Skills, Central Line Course, Advanced Procedural Skills, ECG Rounds, Ventilator Workshop

Mike Wolf

The CCFP-EM program is lucky to have a dedicated and talented group of educators that contribute to the curriculum and pass on the skills needed to become successful Emergency Physicians.

## Research

Kathryn Crowder

The residents are involved in a variety of research projects facilitated by a great group of clinician-researchers.

## Exam Preparation

**Dr. Charles Wong**  
CCFP-EM Residency Program Director

Geordon Avery-Cooper and Emily Quick

To prepare for the final exams a large group of staff volunteer to administer practice oral and written exams throughout the year.

## Longitudinal Preceptors

Geordon Avery-Cooper, Mike Su, Dan Joo, Marta Broniewska, Hannah Park, Eileen Kabaroff, Scott Seadon

These dedicated physicians are paired with individual residents and act as mentors, teachers, colleagues and friends as the resident's progress through the year.



Credits Dr. H Patterson



# FRCPC - EM Residency Program

This year the program underwent external review by the Royal College of Physicians and Surgeons of Canada and we excited to receive a full accreditation (with regular eight year follow-up). The program is delighted that all of our activities are back after a two year long hiatus due to the COVID-19 pandemic. We are incredibly grateful to all the education leads, faculty members, and interdisciplinary staff who have come back to in-person learning, social events and journal club. As always, the education administrative support team Madhavi Talasila and Tris Malasani are on top of everything and did an exceptional job during accreditation! We were pleased to welcome Dr. Charles Wong in the role of CCFP-EM program director and have appreciated working closely with his program to offer exceptional EM education at the University of Calgary. The close relationship between our two programs is highly valued by residents and makes both of our programs stronger.

In the 2022 CaRMS match, we recruited four excellent candidates: Julia Cirone, Kala Draney, Tess Loch, and Alan Vorobeichik. The program is already busy preparing for the 2032 CaRMS season as Emergency Medicine in Calgary continues to be a highly desired postgraduate training program among medical students from across the country. We continue to be committed to principles of equity and diversity in our selection processes.

We are grateful to the Emergency Department Operations and Leadership team for their ongoing commitment to our resident's education prior to and throughout the pandemic. We thank the department for transitioning to a hybrid model of grand rounds which ensures a broad reach of the high-quality presentations given by our colleagues and residents, but also allows for much needed in-person interactions.

Having launched our first cohort of Competence by Design (CBD) residents in 2018, we continue to make curricular adjustments to ensure that we are graduating competent and capable physicians who go on to contribute to our specialty. We are tremendously fortunate to have an incredible group of educators who have been engaged and interested in making this complete curricular overhaul successful. As of the 2022-2023 academic year our program will have completed the implementation of CBD and we will embark on a process of quality improvement to ensure continuous improvement and maintenance of our programs. CBD aims to ensure that all trainees can develop and demonstrate competence in the skills necessary to function as specialist in emergency medicine. Because it can be difficult to ensure consistent access to low-frequency, high-stakes events such as resuscitations and Level 1 traumas our program has had to dramatically increase our use of simulation for formative and summative assessment. We have highly skilled team of simulation educators who high quality simulation and debriefing experiences. We express continued thanks to the nursing operations and educator leads at the FMC for their enthusiasm and commitment to helping organize interprofessional, in-situ simulation for our residents at the FMC. These are incredibly valuable experiences for our residents and contribute substantially to their learning.





Dr. Dirk  
Chisholm



Dr. Julia Cirone



Dr. Sean Crooks



Dr. Kala Draney



Dr. Cody Dunne



Dr. Jason  
Elzinga



Dr. Mary  
Freymond



Dr. Kira Genise



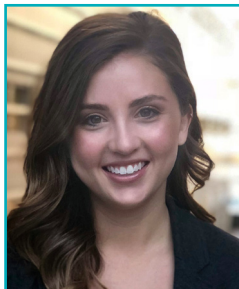
Dr. Natasha  
Goumeniouk



Dr. Bobby  
Johnston



Dr. Theresa  
Loch



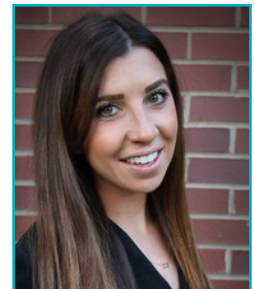
Dr. Meaghan  
Mackenzie



Dr. Julia Madill



Dr. Cara  
McCulloch



Dr. Zoe Polsky



Dr. Duncan  
Simmons



Dr. Dana  
Stewart



Dr. Allen Vorobeichik



Dr. Scott  
Wakeham



Dr. Jonathan  
Wong

We would like to acknowledge all the physicians who contribute to the physician support fund (PSF), the additional funding for PDs and residents is essential to our operations and we are incredibly thankful for your ongoing support. We are extremely grateful that the group has increased our funding to account for inflation.



## The Residency Training Committee

Meets monthly to review the program and to develop improvements and policy. Members: Catherine Patocka (chair) Claire Acton, Lisa Campfens, Conor McKaigney, Andrew Robinson, Meaghan McKenzie, Lindsay Gibson-Brokop, Sarah McPherson (leave of absence), Dirk Chisholm, Jen Puddy, Anoop Manocha, Geordon Avery-Cooper, Anjali Pandya, Charles Wong, Kathryn Crowder, Naminder Sandhu, Cathy Dorrington, and James Huffman.

## The Clinical Competency Committee

Meets quarterly to provide a transparent review of resident performance and to make promotions decisions. Members: Lester Mercuur (chair), Geoff Lampard, Ian Rigby, Julie Kromm, Heather Patterson, Fareen Zaver, Ping-Wei Chen and Patricia Lee-Nobbee (Resident advocate)

## Simulation Programs

Multi-disciplinary simulation provided bimonthly for junior residents, monthly for senior residents and in modules for specific CBD teaching and assessment:

- Junior simulation – Patricia Lee-Nobbee
- Senior simulation – Lorissa Mews
- CBD stage specific simulation – Anjali Pandya

## Ultrasound and Procedural Skills

Includes annual basic ultrasound training, certification of beginner and advanced ultrasound skills, two annual airway workshops, annual CVC workshop, casting and splinting workshops and an annual advanced procedures cadaver lab session

**FRCP US Lead:** Kasia Lenz

**Members:** Danny Peterson, Kasia Lenz, Rob Hall, Bryan Weber, Gavin Greenfield, Stefan DaSilva

## EMS and Disaster Medicine – Redesign of the EMS Rotation

Mandeep Sran, Kelsey Ragan, Brad Granberg



## Wellness Lead

Sarah McPherson

## Peer support Lead

Katie Anker

## Journal Club Leads

Dave Mainprize and Kelsey Ragan

## Equity Diversity and Inclusion Curriculum Leads

Claire Acton and Kelsey Ragan

## Longitudinal Preceptors

Teachers and mentors who are paired with individual residents throughout the year: Jason Fedwick, Brad Granberg, Alyssa Morris, Rick Morris, Brit Sunderani, Marshall Ross, Dave Fu, Ryan Deedo, Shawn Dowling, Cathy Dorrington, Gord McNeil, Hilary Ambrose, Mark Bromley, Heather Patterson, James Huffman, Karl Phillips, Katie Lin, Kasia Lenz, Sean Fair, Lorissa Mews.

The FRCP program is exceptionally grateful to have a fantastic group of hardworking residents and dedicated staff educators who continue to support and improve our training program.

**Dr. Catherine Patocka**  
FRCP Medical Education Program Director

# Grand Rounds

2022 has seen another successful year for Grand Rounds presentations. Emergency Medicine Department Grand Rounds were able to move to a hybrid model from a virtual model only starting in Sept 2022 and it has been very well received. We have had world renowned speakers attend our rounds and have coordinated with many other specialties in other departments. We have also implemented grand round summaries in the weekly newsletter which have increased the knowledge translation of the excellent lectures.

## 45 Grand Rounds Presentations in 2022

Past Grand Round presentations can be found on-line at [Cumming/UCalgary/GrandRoundsArchive](https://cumming.ucalgary.ca/grandroundsarchive)

## Deputy Head - Education Summary:

As a brand new role to our department the role has been in place for six months with great success.

A broad survey of other Emergency Departments across Canada was completed with a total of 12 meetings with other department education leaders to determine their best practices. From this a department wide education survey was built with a robust 82 responses. The survey then informed the half day inaugural in-person DEM Education Strategic Planning day held Nov 3rd with over 25 participants - thought leaders and current education, research, administration leadership both within and outside of our department attended. The facilitated session results will now inform new department wide education projects for 2023.

**Dr. Fareen Zaver**  
Deputy Head - Education



Credits Dr. H Patterson

# Off-Service & Elective Medical Education

In 2022, we said goodbye to Dr Meira Louis as she completed her seven-year position as the off-service and electives coordinator to step into her new role as the PLC Site Chief. We are sad to see her go, but have immense gratitude for her dedication to medical education over the past seven years. Dr Claire Acton started as the new electives and off-service coordinator in May 2022, and hopes she can fill the big shoes left behind.

Despite ongoing COVID-19 surges, the Emergency Department continued to welcome our full rota of both off-service and elective residents. The majority of off-service residents continues to be from family medicine, with additional residents coming from programs such as plastic surgery, orthopedic surgery, general surgery, neurology, dermatology, vascular surgery, and psychiatry. We also continue to receive a high number of elective requests from residents from other Canadian residency programs, mostly in family medicine and FR emergency medicine. In the 2021-2022 academic year, we hosted 54 elective residents, out of 73 requests. Several of our elective residents were successful in obtaining fellowships in CCFP(EM) (family medicine residents) and associate full time clinical jobs (PGY5 emergency medicine residents) in Calgary.

We continue to see a hold on elective medical students visiting from non-UofC medical schools due to restrictions from COVID-19, although we are hoping that these restrictions will be lifted before the next academic year. We continue to be a very popular department for UofC medical students looking to complete an elective in emergency medicine, and usually have a wait list for openings. This reflects emergency medicine being one of the most competitive residencies in CARMS. We hosted 52 elective students from Calgary over the 2021-22 year which is our maximum capacity at this time.

Our department hosted 60 pre-clerkship medical students, over three one-week blocks, for Career Development Week. This allows students to explore which specialties might interest them before entering into clerkship. Rather than assign a sole preceptor for their four shifts, we scheduled students with a different preceptor each shift, and with an emergency medicine resident for one shift, so that they can experience different practice patterns between emergency providers. Our Applied Evidence Based Medicine (AEBM, formerly med 440) program continues to be well received; pre-clerkship students have the opportunity to work with a preceptor to learn how to apply evidence based medicine clinically on shift. We are also happy to report that we will be welcoming back shadowing students to our department in early 2023, after being on hold due to the COVID-19 pandemic.

A new initiative was started in August 2022, where off-service and elective learners are paired with a primary preceptor for their rotation. We endeavor to schedule the learner with their primary preceptor for at least three of their shifts, and encourage the primary preceptor and learner to discuss rotation-specific learning goals. We hope that this new initiative will encourage broader continuity and improved feedback for learners.

We look forward to welcoming more elective and off-service learners in 2023, and thank all preceptors for your dedication to teaching them.

**Dr. Claire Acton**  
Off-Service and Undergraduate Resident Coordinator



# Simulation Update

The Emergency Medicine Simulation program oversees much of Emergency Medicine simulation in Calgary. The Emergency Medicine Simulation Education Advisory Committee (SEAC) consists of:

## Education Advisory Committee (SEAC) Members:

- Dr. Gord McNeil – Chair
- Dr. Patricia Lee
- Dr. Margriet Greidanus
- Dr. Lorissa Mews
- Dr. Ryan Wilkie
- Dr. James Huffman – STARS rep
- Aaron Shaw, PLC RN
- Leanne Norrena, FMC RN
- Vanessa Culp, SHC RN
- Laurie Leckie, RGH RN

This committee brings together the resources of each of these programs under one umbrella. All programs are continuing to develop more facilitators and new scenarios to enhance the education of medical students, residents and staff.

The Emergency Medicine Staff Interdisciplinary Simulation program continues to grow. The weekly sessions gather Emergency physicians, Emergency nurses, respiratory therapists and pharmacists to participate in sessions that focus on team work skills, practicing procedural skills and expanding knowledge bases. Over the past 12 years, the program has completed over 400 sessions which include a team of two physicians, four nurses, one respiratory therapist and one pharmacist leading to over 2000 participants. The team is exposed to critical care scenarios and is encouraged to practice in real time, the skills they will need to use in their daily practice of Emergency Medicine. Our team of facilitators are now well recognized as valuable teachers for a variety of simulation courses and have become speakers at international simulation events.

**Dr. Gord McNeil**  
Simulation Coordinator

# Clerkship Update

136 students from the Class of 2022 completed their Emergency Medicine (EM) mandatory clerkship rotation in Calgary. The EM rotation is two weeks in duration, with seven shifts split between the Foothills Medical Centre (FMC) and one of the other adult emergency medicine sites (Rockyview General Hospital, Peter Lougheed Centre, South Health Campus).

With bed block and staff shortages limiting the amount of clinical opportunities for learners, the Undergraduate Medical Education (UME) Hub, the Emergency Department Clerkship Committee, Dr. David Fu (Evaluations Coordinator) and I are continuously exploring ways of trying to enhance the learning of clerks.

Currently, the clerks participate in Key Concept Rounds, which cover core topics such as Chest Pain, Dyspnea, Altered Mental Status, and Shock. The case-based sessions are delivered by a dedicated group of emergency physicians within the UME Hub. Since the pandemic, they continue to be offered virtually. Clerks are also expected to attend Grand Rounds (and the resident half day, schedule permitting).

Involving over eighty emergency physicians as preceptors and occurring across all four adult sites, clerks are also scheduled for an individual Observed History and Physical (OHP) teaching session. The 45-minute session involves a staff preceptor observing a history and physical examination by the clerk on an emergency department patient and then providing verbal and written feedback.

As a testament and demonstration of the close-knit relationship we have with our nursing colleagues, clerks also participate in a three-hour Nursing Block during their two-week rotation. Students gain experience with the concepts of triage and patient assessment, as well as an opportunity to complete procedures such as IV starts and phlebotomy. Initially only scheduled at FMC, the Nursing Block expanded to SHC in November 2022 and is scheduled to begin at the PLC in February 2023.

For 2022, the overall rating for the EM mandatory clerkship was 4.3. A commonly identified strength of the rotation was the opportunity to work directly with staff and the breadth of experience that comes with working at different sites and different areas within the emergency department. Over ninety emergency physicians and ten emergency medicine residents were identified by clerks as having made “an outstanding contribution to [their] learning experience”.

Dr. Melanie Sohn  
Clerkship Director, UME

## Research Director's Summary


As we ushered in the third year of COVID-19, our research group continued to demonstrate resiliency and the capacity to adapt to the changing research environment. We welcomed Dr. Kathryn Crowder as our new Research Director in September who is guiding our team after Dr. Stephanie VandenBerg's departure. We thank her for four years as Research Director. We also said goodbye to Assistant Research Director, Dr. Katie Lin and thank her for her research leadership and mentorship. Our team was rounded out by Jenny Woo, Research Administrator, Christian Cherian, Research Coordinator and 12 research volunteers who make up the Calgary Emergency Research Program (CERAP). We are grateful to have the expertise of Stacey Lobos and Stacy Ruddell who lead data collection for the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN) Registry, as well as Urouj Rashid, our research assistant working with the Physiotherapy for Minor MSK Disorders in the ED study at RGH.

The Department of Emergency Medicine's 12th Annual Research Half Day on May 2, 2022 was an immense success, with 70 participants in virtual attendance, celebrating research excellence in Emergency Medicine across healthcare areas: staff and resident physicians, nurses, respiratory therapists, medical students, social workers, paramedics, plastic surgery residents, emergency strategic clinical network representatives and researchers. The purpose of the event was to support, advance and celebrate clinical research and quality improvement initiatives happening with the Department of Emergency Medicine at the University of Calgary (UofC).

We hosted 12 oral research presentations and four poster presentations via Zoom platform. Dr. Laurie Morrison, Professor and Clinician Scientist in the Division of Emergency Medicine, Department of Medicine at the University of Toronto and Li Ka Shing Knowledge Institute at St Michael's Hospital, presented this year's keynote on Emergency Medicine Research and the future.

Audience feedback was solicited via online survey, with 17 attendants submitting their feedback. Most attended for the breadth of topics discussed and feedback included comments such as "diverse topics", "well organized and on time", "a lot of the oral presentations were very interesting, more interesting than previous years". Areas of improvement were listed as "include more resident research projects", technical issues with sound and video lag as well as "zoom fatigue". We are excited to host in-person and virtual options for Emergency Medicine Research Day 2023 on May 4, 2023.

Our research team is also pleased to support and maintain the Research webpage hosted within the Department of Emergency Medicine's larger webpage. This resource lists our team members and ED researchers and acts as a way for colleagues both in emergency medicine and other specialties to collaborate on research work with us. We are pleased to introduce a new feature to the website: a research support request form, a simple one-step process for staff and learners to engage the research team for support on any step of their research idea and project, from protocol generation to ethics support to logistical support in carrying out research in the ED.



The Emergency Medicine Research Advisory Committee (EMRAC) continues to meet the second Thursday of each month to discuss new study protocols and operational aspects of conducting research within our department. We are pleased that many other Departments at the Cumming School of Medicine have approached us to collaborate on research projects by recruiting patients out of the Emergency Department.

Research in Development (RID) Rounds are an innovative and novel way to discuss research project ideas and receive feedback on projects that are in their infancy or are a work in progress. It is also a way we support our Residents and Medical students who engage in Emergency Medicine Research. These rounds are hosted via Zoom the fourth Thursday of every month.

While many of the studies that recruited out the FMC ED have been put on hold, we continue to contribute data to the large, multi-centre COVID-19 Registry study. Please see a detailed description of the study below. We also continue to screen and collect data on the University of British Columbia's Drug Impaired Driving (DID) study, with Dr. Ian Wishart being the principal investigator at our site and are pleased to be a host site for the "Physiotherapy care in Emergency Departments for Patients with Musculoskeletal Disorders: A Pragmatic Cluster Randomized Controlled Trial and Cost Analysis" led by Dr. Francois Desmeules, a physiotherapist at the University of Montreal. We have also recently initiated a multi-centre study Multi-Centre Cluster-Randomized Implementation of Canadian Syncope Risk Score based Practice Recommendations for Emergency Department Syncope Management. We are also very excited to begin working with the University of British Columbia and University of Alberta's EM researchers to bring a study site to Calgary for EMED: Evaluating Microdosing in the Emergency Department: A randomized controlled trial of buprenorphine/naloxone microdosing vs. standard dosing. We are also collaborating with EM colleagues in Ottawa on RAFF4 Trial: Vernakalant vs. Procainamide for Acute Atrial Fibrillation in the Emergency Department. Finally, we are excited to be collaborating with physiatry on the study RACE study: Rapid, accurate and cost-effective analysis of Glial Fibrillary Acid Protein using a hand-held biosensor for patient with concussion in acute care and at home monitoring.

We were happy to support and build the research capacity of our trainees and supported various emergency medicine researchers in applications to CIHR, PRIHS, ESCN, Alberta Health Innovates and other relevant funding opportunities. Our researchers continue to contribute to evidence and knowledge translation practices around Choosing Wisely, Audit & Feedback practices, and Quality Improvement, in addition to supporting the work of the Emergency Strategic Clinical Networks focus on opioid misuse and opioid replacement therapies (suboxone) and the Patient Experience of the ED using principles of Health Design. Ongoing partnerships within the University of Calgary with the Divisions of Cardiac anesthesia, Neuro-radiology, Neurology, Gastroenterology, Hematology and Orthopedics and Spinal Surgery allows us to participate in timely, relevant, patient centred research that aims to improve the health of Albertans.

**Dr. Kathryn Crowder**  
Director, Research Section

# Current Studies

## COVID-19 Related Studies

### 2.1 Learning in a Time of Crisis: Creating a Canadian Emergency Department COVID-19 Registry

The **national ED COVID-19 registry** addresses critical knowledge gaps in emergency care and operations by prospectively and retrospectively gathering data on COVID-19 patients seen in EDs across Canada, and follows patients by telephone after discharge from hospital to ask standard quality of life questions and determine long-term outcomes.

The vision of “Learning in a Time of Crisis” is to create a robust national ED dataset to answer multiple emerging research questions, and inform **early acute care decisions** that are currently being made without any or minimal evidence to inform them.

#### AIMS

Our overarching aim is to create a national population-based ED registry of consecutive suspected and confirmed COVID-19 patients who present to Canadian EDs (urban and rural) to generate research capacity and initiate a rapid knowledge-to-action cycle to inform our response to the evolving pandemic, and to help us plan for the next pandemic.

#### Specific aims are:

1. To enable standardized prospective and retrospective data collection on patient and treatment characteristics of suspected and confirmed COVID-19 patients presenting to EDs, and their associated resource utilization and outcomes. This includes vulnerable populations commonly served in EDs who often decline admission to hospital or are excluded from randomized trials.
2. To identify risk factors for poor patient outcomes including non-invasive ventilation strategies (i.e. CPAP and BIPAP), intubation, ICU admission, mechanical ventilation, need for prolonged mechanical ventilation, cardiac arrest and death.
3. To derive clinical decision rules to predict which ventilation strategy should be used, the need for intubation and critical care admission, cardiac arrest and death among patients presenting to acute care hospitals with suspected or confirmed COVID-19 to guide early decision-making in the ED.
4. To prospectively validate the derived clinical decision rules.
5. To determine the clinical decision rules' long-term potential impact on clinical practice and resource utilization
6. To evaluate the health outcomes among patients with confirmed COVID-19 identified in the ED who were discharged or declined hospital admission.
7. To evaluate the association of outpatient ACE inhibitor and non-steroidal anti-inflammatory medication use with health outcomes among patients with confirmed COVID-19.
8. To evaluate COVID-19 patients' long-term health outcomes, and quality of life regardless of admission status.



## **2.2 Study name: Impact of the COVID-19 Pandemic on the Incidence of Traumatic Injuries Presenting to Adult ED's in an Urban Centre**

**PI:** Lang/Chisholm

## **2.3 Study name: Where did all the patients go? The effect of the COVID-19 pandemic on Calgary ED Volume**

**PI:** Lang/Killam

## **2.4 Study name: COVID-19 Impacts on Emergency Mental Health Presentations**

**PI:** Lang/Matsivic, Riveria, George

## **2.5 Study name: Intubation of COVID-19 10 Patients**

**PI:** Fedwik/McRae/Chopra

## **2.6 Study name: COVID-19 lung POCUS**

**PI:** McRae/Petterson

## **2.7 Study name: Clinical Characteristics of Emergency Department Patients with Suspected CV19**

infection and risk to emergency care providers

**PI:** McRae

# **Non-COVID-19 related studies**

## **2.7 Drug Impaired Driving (DID)**

**PI:** Wishart/ Herb Chan (UBC)

Demographic and Regional Variation of Drug Impaired Driving in Canada

Total Recruited: 895 Goal:300 patients

## **2.8 Physiotherapy care in Emergency Departments for Patients with Musculoskeletal Disorders: A Pragmatic Cluster Randomized Controlled Trial and Cost Analysis**

**PI:** Dr. Kathryn Crowder/Dr. Francois Desmeules

This project takes the form of a pragmatic multi-centre RCT aiming to assess the effectiveness of a new model of PT-led care in the ED for patients presenting with a MSKD compared to usual ED medical care. Patients presenting to the ED with a MSKD will be randomized and independently managed by either an ED PT (PT-led care) or receive usual ED physician care (usual care).

Total number of patients predicted to be recruited: 80

## 2.9 Multi-Centre Cluster-Randomized Implementation of Canadian Syncope Risk Score based Practice Recommendations for Emergency Department Syncope Management

**PI:** Dr. Andrew McRae/Dr. Venkatesh Thiruganasambandamoorthy

Evaluating the implementation of a clinical pathway integrating the Canadian Syncope Risk Score into management (Very low risk: Discharge; Moderate risk: 15-day rhythm monitor (provided by the study); high-risk: Admit)

## 2.10 RACE study: Rapid, accurate and cost-effective analysis of Glial Fibrillary Acid Protein using a hand-held biosensor for patient with concussion in acute care and at home monitoring

- Objective - Compare blood GFAP concentrations from the nano-biosensor to the gold-standard SIMOA in patients diagnosed with uncomplicated concussion until recovery.
- PI – Dr. Chantel Debert; Co-PI – Dr. Kathryn Crowder, Dr. Amir Sanati Nezhad
- Status – Ethics approved, awaiting operational approval.

## 2.11 RAFF4 Trial: Vernakalant vs. Procainamide for Acute Atrial Fibrillation in the Emergency Department

- Objective - To compare intravenous (IV) vernakalant to IV procainamide for the ED management of acute AF patients.
- PI – Dr. Andrew McRae; Co-PI – Dr. Kathryn Crowder
- Status – Ethics to be submitted.

We are so proud of the achievements of the research team and the entire ED group in Calgary. Here is a list of our accomplishments in 2022. (see page 102) Kudos to all Calgary EM researchers!



Credits Dr. H Patterson

# Ongoing Partnerships/Collaborations (PRIHS / ESCN Updates)

## 3.1 Partnership for Research and Innovation in Health System (PRIHS)

### 3.1.1. Evaluation of the Connect 2 Care (C2C) Team for Vulnerable Patients with Complex Needs

Researchers at the University of Calgary's O'Brien Institute for Public Health have partnered with Calgary Urban Project Society (CUPS) and Alpha House to evaluate the Connect 2 Care (C2C) intervention for socially vulnerable patients with complex health needs. Socially vulnerable individuals, including those experiencing homelessness, have higher acute care utilization compared with the general population. Despite available primary care and social services, many have significant challenges accessing the services they need in the community. The C2C (formerly the Coordinated Care Team [CCT]) intervention aims to improve care coordination for socially vulnerable patients by bridging the gap between acute care and community services. This novel intervention combines elements of intensive case management with community outreach and navigation.

Initially launched November 1, 2015, C2C consists of two registered nurses, to be supplemented by first two, then four navigators. Referrals are accepted from emergency departments, hospital units and community partners. The team will have expertise in chronic disease management, mental health and addictions, and extensive knowledge around social programs, community health, housing, and financial, transportation and legal resources.

#### **Population:**

Referrals are accepted from emergency departments (ED), hospital units and community partners, for patients meeting the following criteria:

1. ≥18 years of age AND
2. Homeless or unstably housed AND
3. ≥ 3 ED/Urgent Care (UC) presentations, or ≥ two hospitalizations within the past year,  
**AND**
4. A history of one or more high-risk conditions (used by partner – Anansi Health): Substance use disorder; mental illness with functional impairment (depression, anxiety disorder, bipolar disorder, psychotic disorder); congestive heart failure; diabetes with HbA1c>9%; chronic obstructive pulmonary disease; asthma; cardiovascular disease; uncontrolled hypertension with end-organ damage; end-stage liver disease; end-stage kidney disease

## **Evaluation/Objectives:**

We will evaluate the C2C intervention using the Donabedian framework of structure, process, and outcome. To assess structure, we will document the program's context, resources, and partner supports. Process indicators include: referrals to primary care, housing, addiction and mental health programs. Outcome measures include: ED visits, hospitalizations, costs, quality of life, self-reported health status, patient, staff, and partner experiences.

The objectives of this evaluation are:

1. To document the structure and process of the C2C model of care throughout the phases of implementation.
2. To determine the effectiveness of the C2C program in reducing acute care utilization and improving patient-reported outcomes.
3. To assess patient, staff, and partner experience with the C2C.
4. To explore the links among structure and processes that lead to health and program outcomes, both positive and negative.

### **3.1.2. Improving Acute Care for Long-Term Care Residents: A Better Way to Care for the Frail Elderly in Times of Medical Urgency**

The aim of this PRIHS application is to improve the care provided to long-term care (LTC) residents who develop an acute health issue, focusing on a patient-centered approach that provides the appropriate treatment in the right location. Specifically, we will optimize, standardize and evaluate the current processes followed when considering transfer of residents from LTC to an emergency department (ED). Our proposed solution is evidence-informed and aims to better optimize and integrate the use of current healthcare resources.

## **Objectives:**

1. To implement and evaluate an evidence-informed standardized care process for the care of LTC residents experiencing an acute change in health status.
2. To scale and spread the standardized care process for the care of LTC residents experiencing an acute change in health status.

## **Methodology:**

This is an integrated knowledge translation (iKT) project that has been informed by the knowledge to action (KTA) cycle <37>. Specifically, we have identified an evidence-informed solution to address a care gap and have engaged with relevant stakeholders. We will implement this change initiative, considering both local LTC context and barriers to implementation. The implementation strategy can be modified to address these identified barriers. Although the INTERACT® tools used will remain consistent, the care and referral pathway can also be adapted to address contextual factors unique to each AHS zone. We will evaluate the initial implementation in the Calgary Zone using a rigorous evaluation plan, and continue to monitor the sustainability and provincial spread using a provincial LTC-ED transfer dashboard developed as part of this initiative.

## 3.2 Emergency Medicine Strategic Clinical Network (ESCN) Collaborations

**3.2.1 ED Buprenorphine/Naloxone (Suboxone) Initiation: a province wide strategy to improve access to opioid replacement therapy for patients with substance misuse disorder**

**3.2.1.1 ESCN Systematic Review Awards Competition**

**3.2.2 ESCN Summer Studentship Awards Competition**

**Student:** Betty Lemma

**Supervisor:** Dr. Stephanie VandenBerg

**Project Title:** Improving Calgary's Methamphetamine Toxicity Management in Emergency Departments. A Systematic Review and Implementation Study

**Student:** Johanna Jacob

**Supervisor:** Dr. Katie Lin

**Project Title:** Vertigo and predictors on CTA

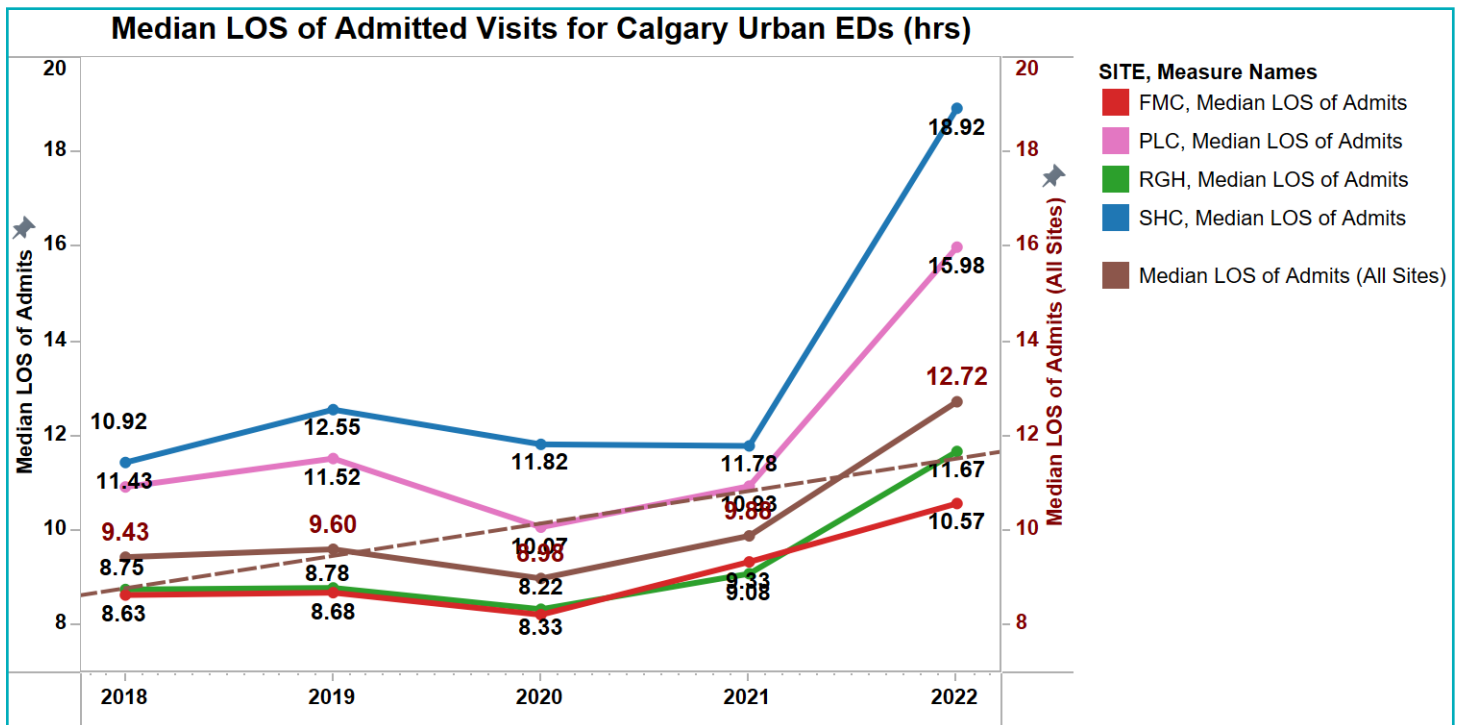
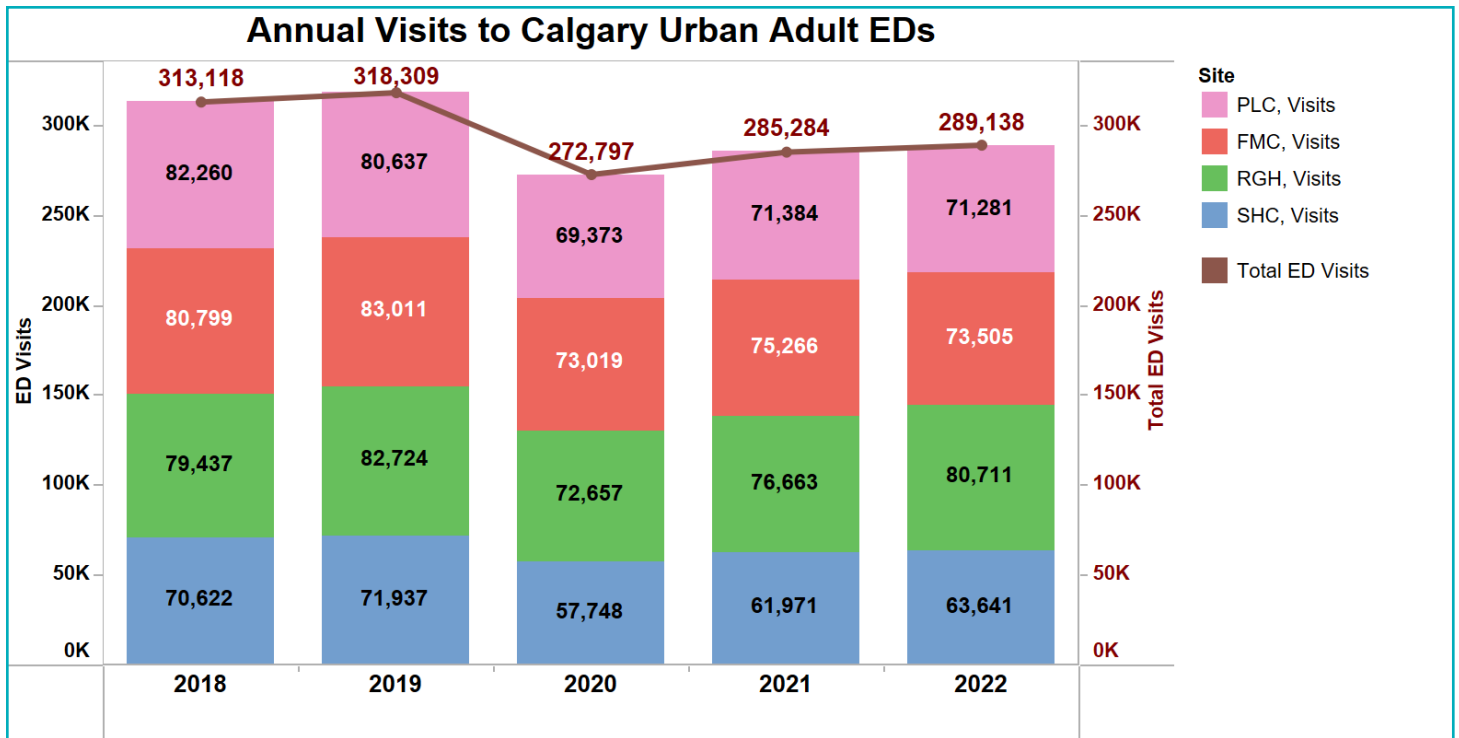
**Dr. Kathryn Crowder**  
Director, Research Section

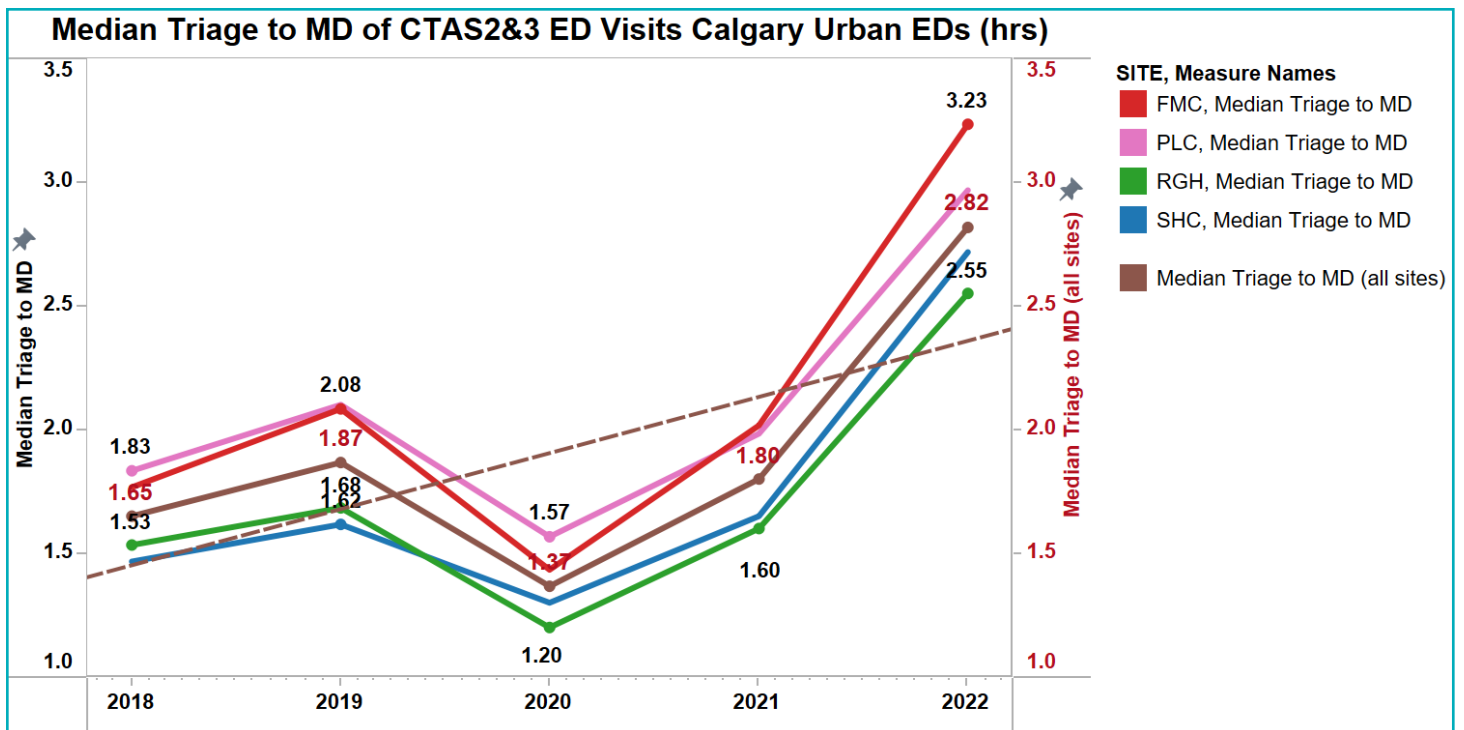
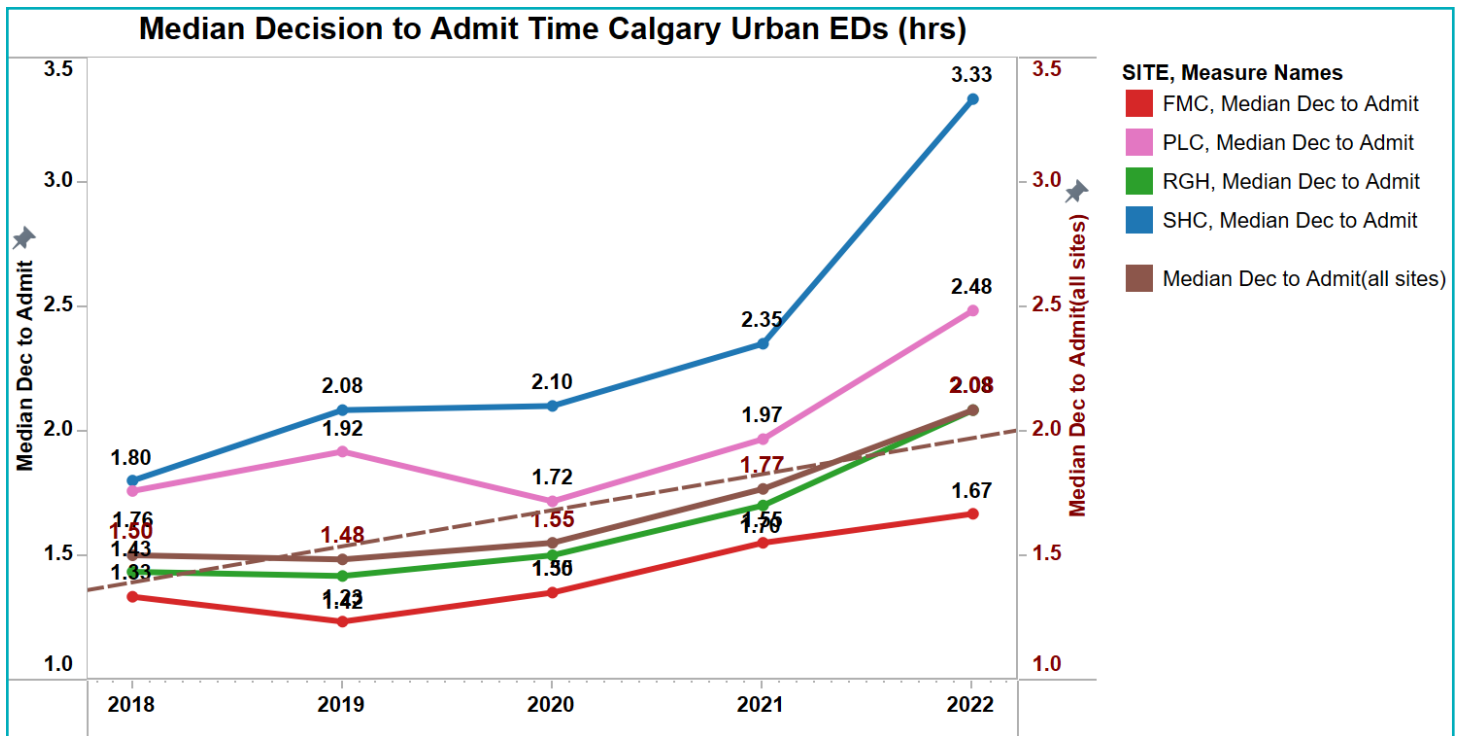


Credits Dr. H Patterson

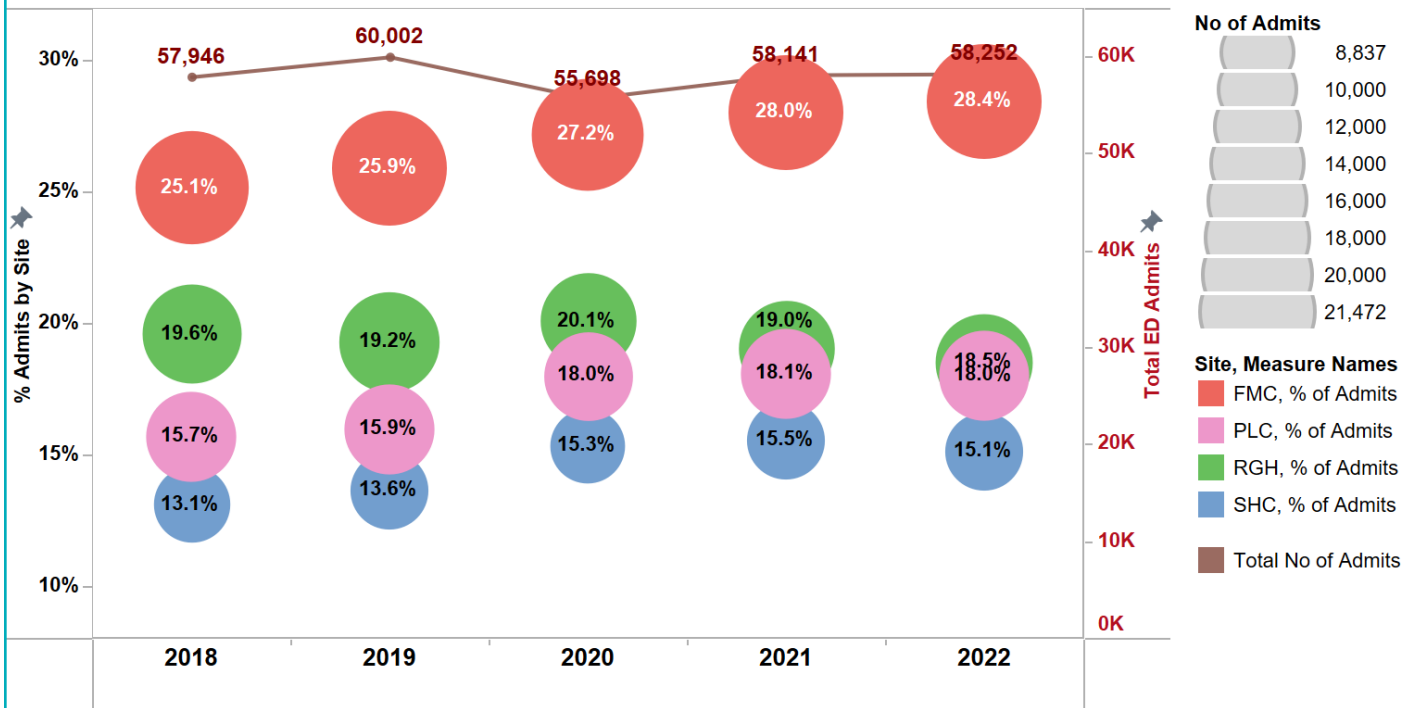


# LOS Annual Operational Data

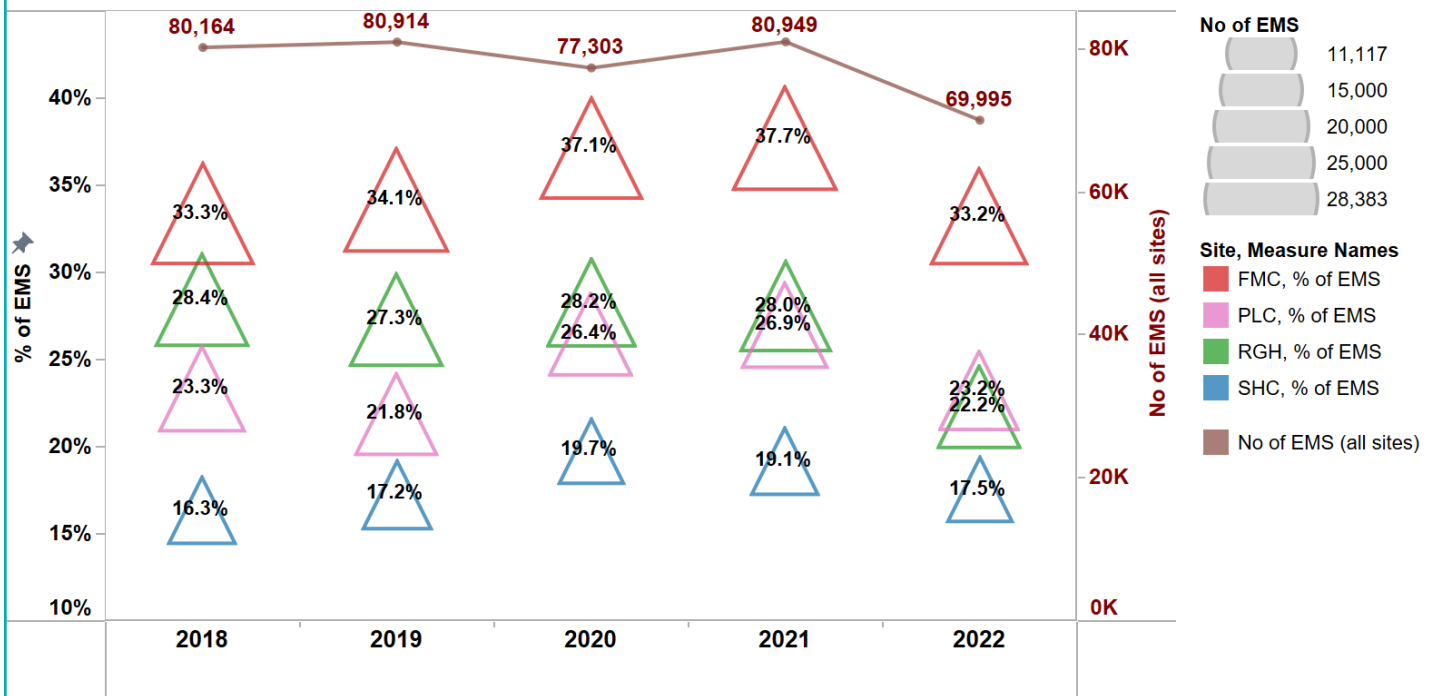




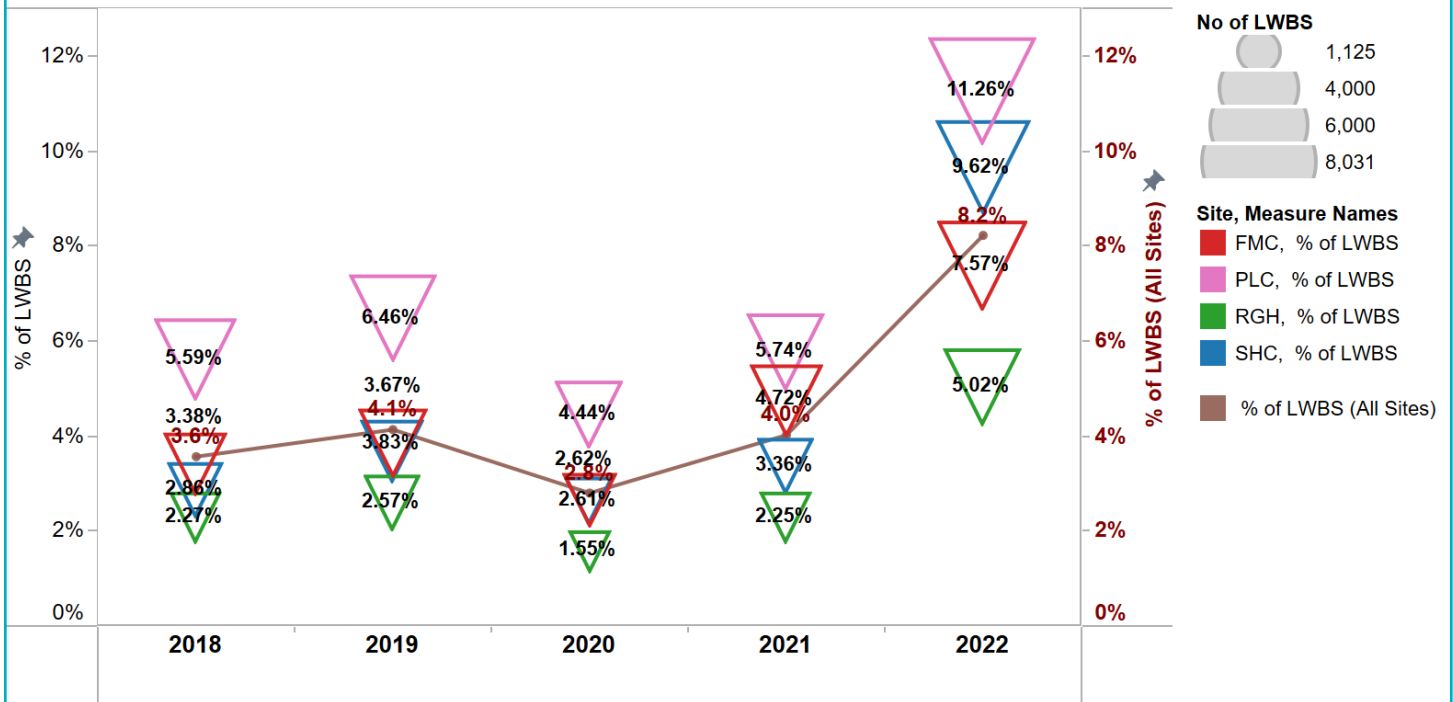
## % of Admits and Total Admitted ED Visits in Calgary Urban EDs



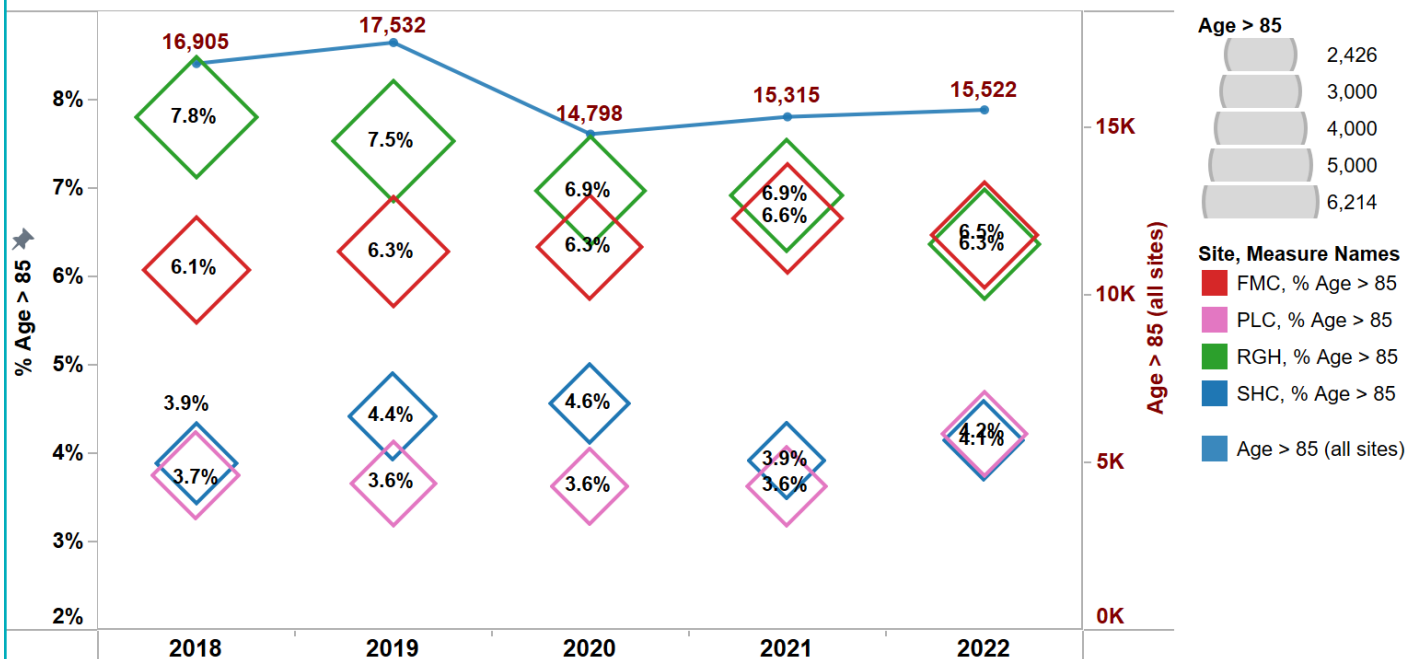
## No and % of ED Visits Arrived by EMS Calgary Urban EDs



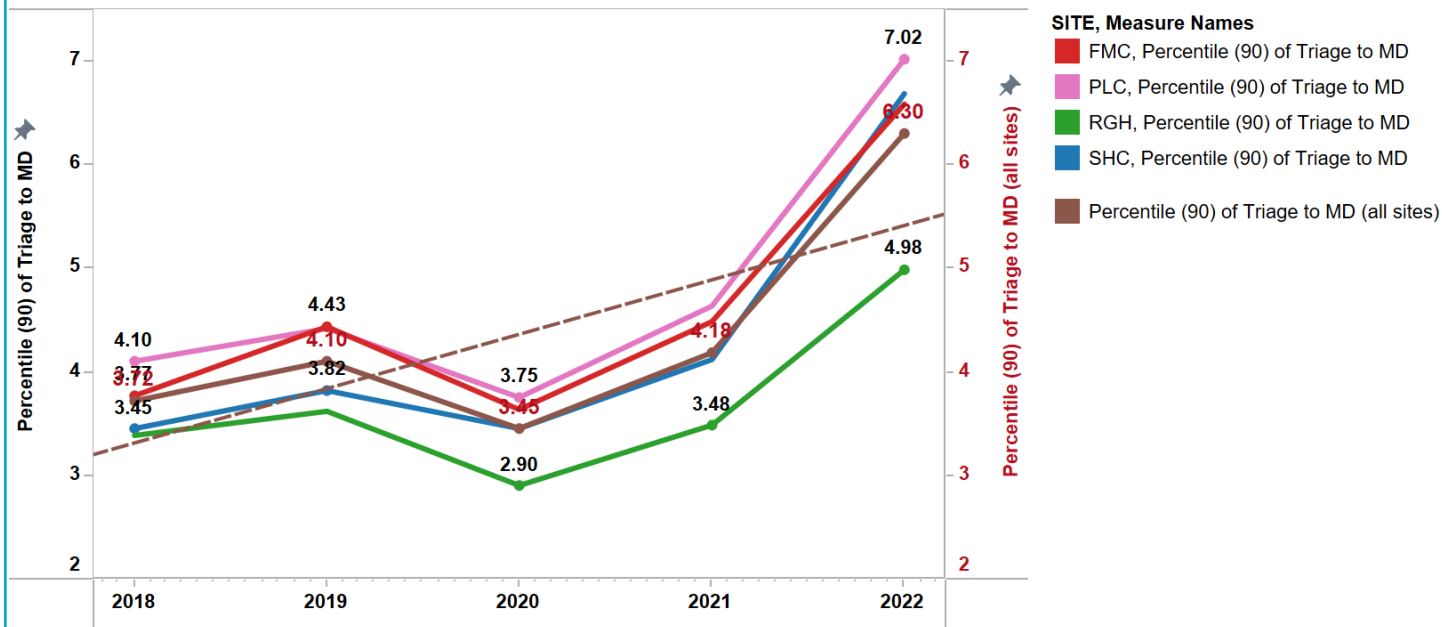
## No and % of ED Visits LWBS at Calgary Urban EDs



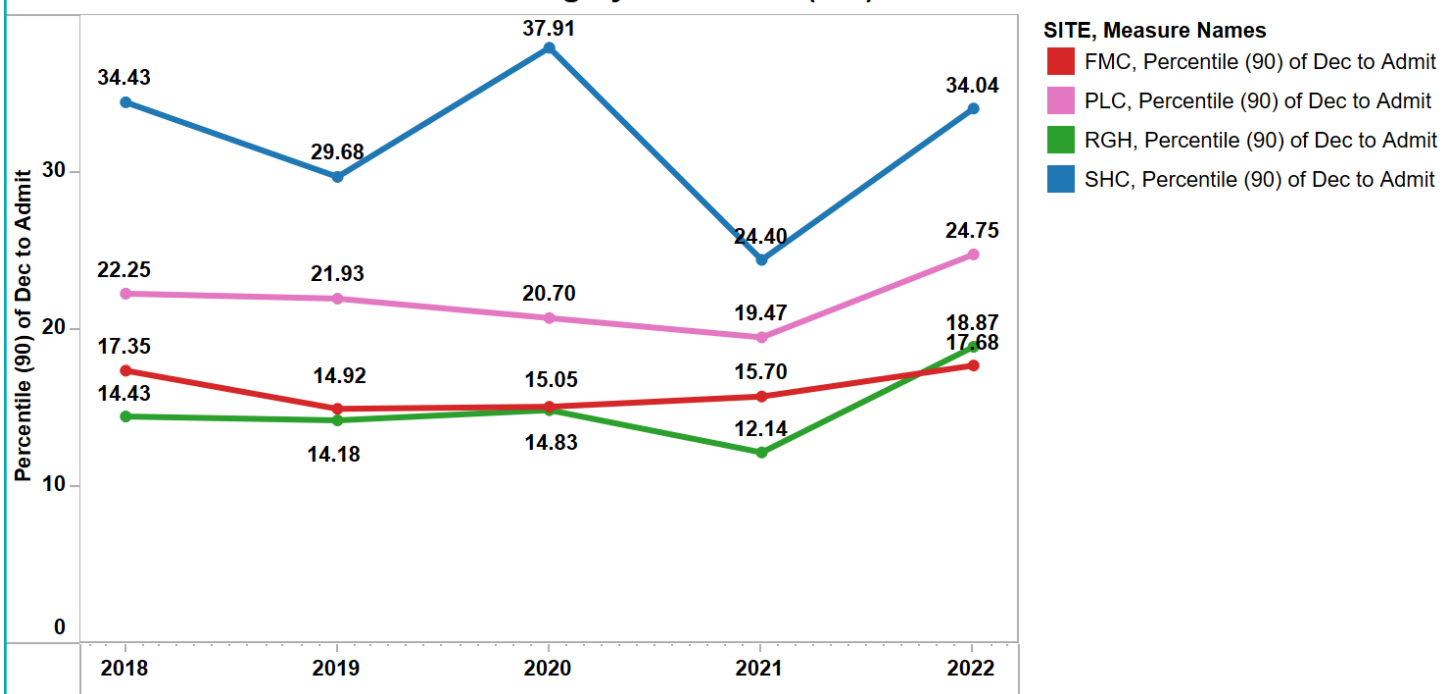
## No and % of ED Visits aged over 85 Calgary Urban EDs



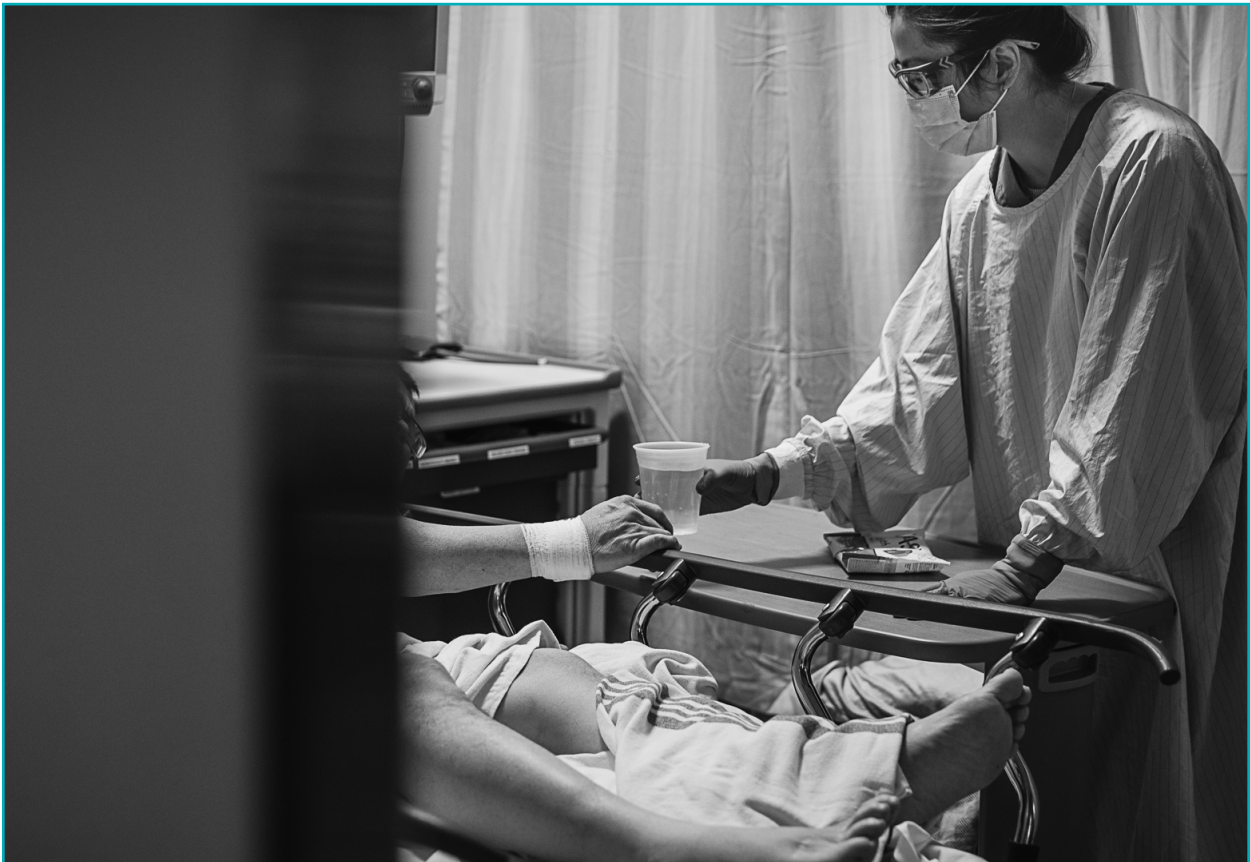
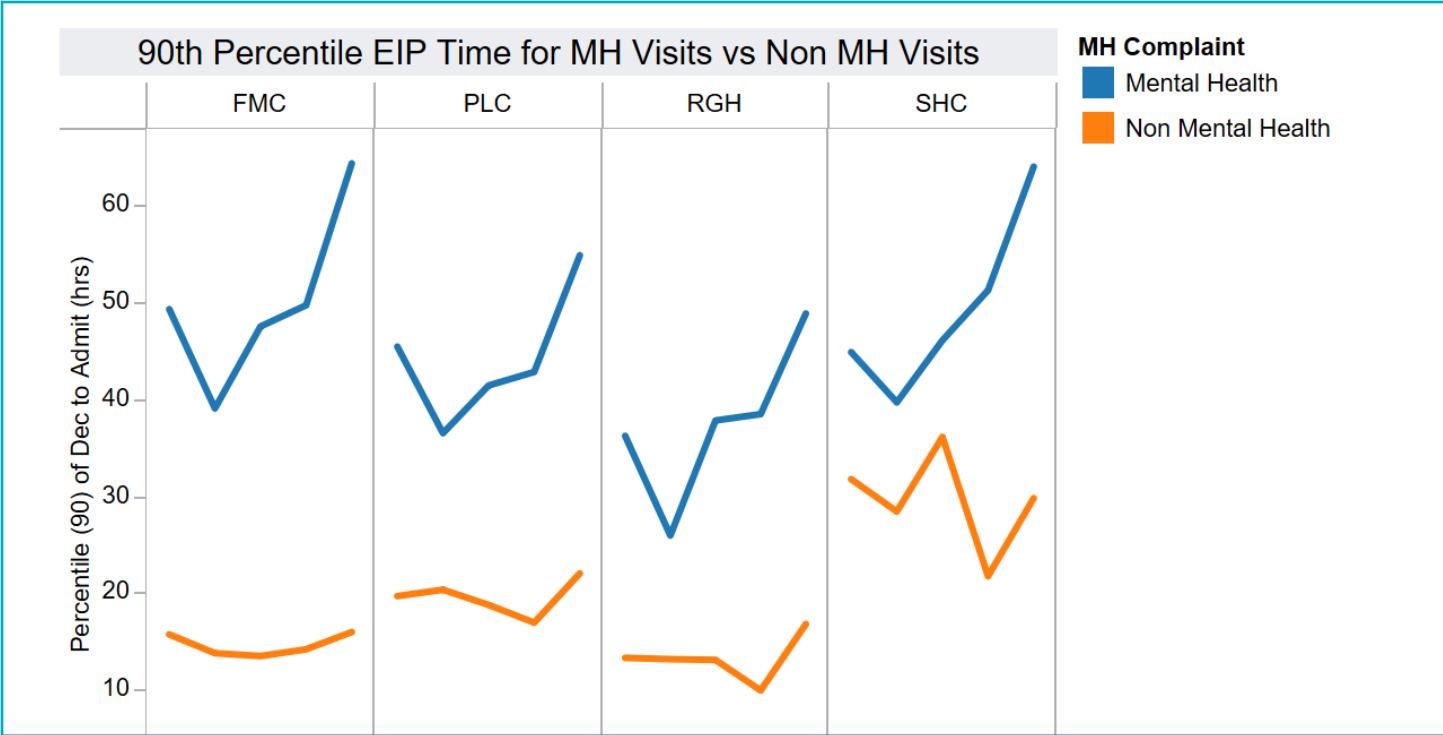
### 90th Percentile Triage to MD of CTAS2&3 ED Visits Calgary Urban EDs (hrs)



### 90th Percentile EIP time Calgary Urban EDs (hrs)





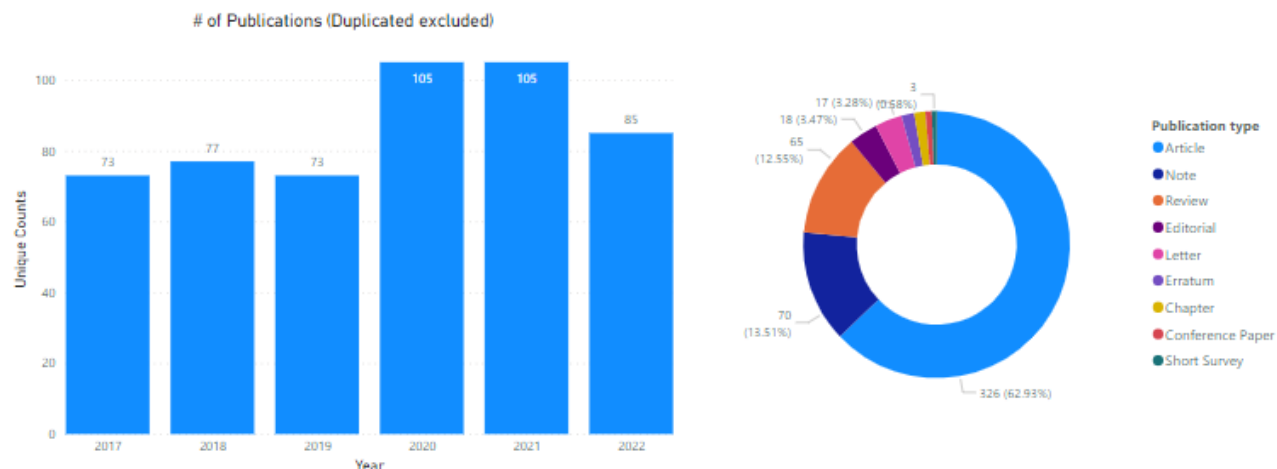


Credits Dr. H Patterson

# Cumming School of Medicine

## Activity Profile

### Department of Emergency Medicine Publication Data Between 2017 and 2022



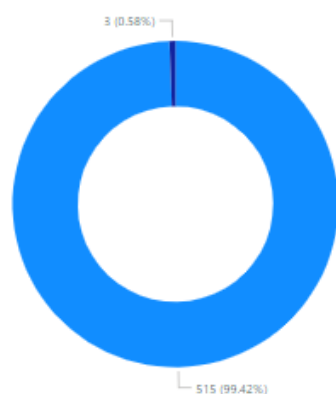
NOTE:

1. All research metrics were fetched from Scival on 1/27/2023.
2. Year = Calendar Year
3. For questions, contact Ji Guo at jiguoi@ucalgary.ca



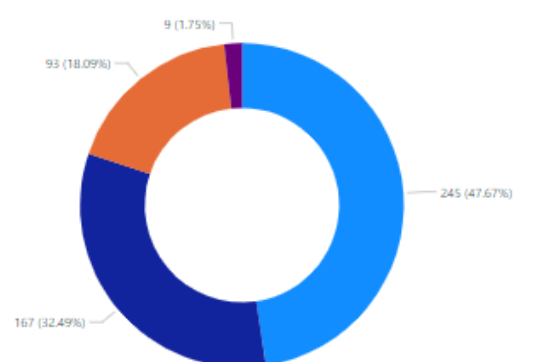
### Department of Emergency Medicine Collaboration Between 2017 and 2022

#### Academic-Corporate Collaboration



Metric: No academic-corporate collaboration, Academic-corporate collaboration

#### International/Domestic Collaboration



Metric: Only national collaboration, International collaboration, Only institutional collaboration, Single authorship (n...)

**Academic-Corporate Collaboration** indicates the degree of collaboration between academic and corporate affiliations to what extent are this entity's publications co-authored across the academic and corporate, or industrial, sectors?





## Department of Emergency Medicine Research Funds Received By Project Holder

Year	Name	Amount	# of Projects
All	Lang, Eddy	\$1,478,523	18
	Dowling, Shawn	\$841,299	5
	McRae, Andrew	\$643,549	7
	Innes, Grant	\$158,876	3
	Wishart, Ian Mackenzie	\$110,691	2
	Andruchow, James	\$79,006	2
	VandenBerg, Stephanie	\$65,000	1
	Wong, Charles	\$9,000	1
	Zaver, Faeen	\$4,993	1
	Patocka, Catherine	\$2,298	1
	<b>Total</b>	<b>\$3,393,235</b>	<b>41</b>

**Andruchow, James**  
Name

**41**

# of Projects Monitored

**339.32K**

Average Per Person

**NOTE:** This data is aggregated in default. The name shows on the page does NOT mean anything -- it's there simply because of the alphabetic order.

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## Who Sponsored Department of Emergency Medicine's Research?

Year	Sponsor Name	Amount
All	AB Innovates	\$769,623
	AB Health Services	\$632,200
	AB Innovates - Health Solutions	\$464,889
	University of British Columbia	\$459,479
	Ottawa Hospital Research Institute	\$301,269
	CIHR	\$278,764
	Sunnybrook Research Institute	\$78,203
	Workers' Compensation Board of AB	\$75,000
	Residual Balance - Ct	\$65,000
	M.S.I. Foundation	\$49,000
	Universite Laval	\$42,552
	AB Medical Association	\$40,000
	McMaster University	\$34,159
	Hoffmann-La Roche Limited	\$30,006
	AB Labour / Workers' Compensation Board - AB	\$25,000
	University of AB	\$24,000
	Canadian Association of Emergency Physicians	\$17,291
	City of Calgary	\$5,800
	Multiple Sources	\$1,000
	<b>Total</b>	<b>\$3,393,235</b>

**\$3.39M**

Total Amount By Sponsors

**41**

Unique # of Projects

**178.59K**

Average Per Sponsor

OFDP

**NOTE:** This data is aggregated if you do not select the member on the left.

## Department of Emergency Medicine Research Funds Received By Project

Project Title	Total	Count of Years	PI Name
Reassessment of Clinical Practices for Patient Presenting to the Emergency Room Department With Upper Gastrointestinal Bleeding.	\$529,623	4	Lang, Eddy
PRIHS - Partnership for Research & Innovation in the Health System.	\$465,189	2	Lang, Eddy
Improving the Stewardship of Diagnostic Imaging Resources in Alberta Emergency Departments			
Canadian COVID-19 Emergency Department Rapid Response Network	\$348,788	2	McRae, Andrew
Choosing Wisely Canada Implementation Research Network	\$240,000	4	Dowling, Shawn
De-implementing Low Value Care	\$240,000	1	Dowling, Shawn
De-implementing Low Value Care: A Research Program of the Choosing Wisely Canada Implementation Research Network	\$221,299	3	Dowling, Shawn
Impact of Emergency Department Opioid Prescribing on Health Outcomes	\$149,176	1	Innes, Grant
Development of novel risk prediction scores for emergency department patients with suspected coronary artery disease	\$129,588	2	McRae, Andrew
De-implementing Low Value Care: A research program of the Choosing Wisely Canada Implementation Research Network	\$100,000	4	Dowling, Shawn
Monitoring and Preventing Drug-Induced Driving in Canada	\$85,830	2	Wishart, Ian Mackenzie
Emergency SD Research Funds (Backfill)	\$80,000	4	Lang, Eddy
Predicting Emergency Department Delirium with an Interactive Customizable Tablet to Prevent Repeat Visits	\$78,203	1	McRae, Andrew
RCT of Electrical versus pharmacological cardioversion for RAFF in the ED (via Ottawa Heart Institute)	\$75,410	3	McRae, Andrew
DEPARTMENTAL EMER	\$65,000	1	VandenBerg, Stephanie
Emergency Strategic Clinical Network (SCN) 2022-2024 Research Priorities	\$58,500	1	Lang, Eddy
Identifying the Optimal Treatment of Emergency Department Patients with Renal Colic M.S.I. Grant #874	\$49,000	1	Andruchow, James
<b>Total</b>	<b>\$3,393,235</b>	<b>74</b>	

**82.76K**

Average Per Project

**NOTE:**

Average Per Project = Total Amount / Unique # of Projects (By Project ID)

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## 2022 Abstract Submissions

- Alexander Rudecki, Takshveer Singh, Katie Lin. Emergency Department Utilization Following COVID-19 Diagnosis
- Alia Arafat, Stephanie VandenBerg, Kati Pasanen. Examining the Characteristics of Adult Patients Transferred by Emergency Medical Services from Mass Gathering Events to Adult Emergency Departments in Calgary, Alberta
- Alisha Ebrahim, Bijoy K Menon, Eddy Lang, Shelagh Coutts, Katie Lin. Diagnostic Yield of Computed Tomography Angiography for Acute Stroke Triage
- Allen Vorobeichik, Cody Dunne, Jason Elzinga, Sanjana Sudershan, Diana Keto-Lambert, Eddy Lang, Shawn Dowling. Strategies to Reduce Computed Tomography Usage in the Emergency Department: A Systematic Review
- Schmaus, Andrew, Cooper, Ian, Whitten, Tara, Bakal, Jeff, Watt, Denise, Huang, Jane, Lang, Eddy. Geographical Perspective on Health Link Referrals and Emergency Department Utilization in Alberta
- Li (Danny) Liang, Benjamin Leung, Timothy Chan, Brian Grunau. Utilization and Cost-Effectiveness of School and Community Centre AED Deployment Models in Canadian Cities
- Dylan Viste, Ann Toohey, David Hogan, Cathy Harbidge. Developing an Evidence-Based Virtual Falls Prevention Program for Delivery to Older Patients in Calgary, AB
- George Matskiv, Laura Rivera, Chel Hee Lee, Rachel Grimminck, Jen Nicol, Suzanne George, Eddy Lang. Temporal Association Between COVID-19 Lockdowns and Changes in Trends of Mental Health Visits to Emergency Departments
- Allen Vorobeichik, Hannah Yaphe, Amber Feldmann, Dongmei Wang, Eddy Lang. Impact of Calgary's Supervised Consumption Site on Opioid-Related Emergency Health Care Usage
- Blanchard IE; Williamson TS; Hagel BE; Niven DJ; Lane DJ; Dean S; Shah MN; Lang ES; Doig CJ. The Association Between Emergency Medical Services Hospital Offload Time and System Response Time
- Ian Cooper, Andrew Schmaus, Tara Witten, Jeff Bakal, Denise Watt, Jane Huang, Eddy Lang. Evaluating Referral Patterns from Health Link to the Emergency Departments in Alberta
- Lin K, Xu V, Daoust R, Taylor J, Davis P, Clark G, McRae A and Hohl C. Diagnostic Accuracy of Age-Adjusted D-Dimer for Pulmonary Embolism Among Emergency Department Patients with Suspected Sars-Cov-2 Infection: A Canadian COVID-19 Emergency Department Rapid Response Network Study
- Lisa Alphonsus, Gudrun Reay, Nancy Moules, Catherine Laing. The Experience of Emergency Department Nurses During the COVID-19 Pandemic
- Logan Haynes, Katie Lin, Eddy Lang, Catherine Patocka. Assessing the Use of Computed Tomography with Angiography for Calgary Emergency Department Patients with Vertigo
- Priatharsini Sivananthajothy, Shima Afhami, Nina Castrogiovanni, Stephanie VandenBerg. Intimate Partner Violence in the Time of COVID-19: Facts and Figures from the Frontline

- Rutvij K, Rutvij A. Khanolkar, Majid Nabipoor, Jeffrey Bakal, Satchel Krawchuk, Nguyen Xuan Thanh, Eldon Spackman, Patrick McLane, Paul Ronksley, Stafford Dean, Kerry A. McBrien, Laura McDougall, Grant Innes, Eddy S. Lang. COVID-19-Related Non-Pharmacologic Interventions are Associated with Significant Reductions in Acute Care Visits for Other Virally-Triggered Respiratory Illnesses
- Tess Loch, Zoe Polksy, Jason Elzinga, Eddy Lang, Catherine Patocka. Understanding the Emergency Physician Leader Role: A Realist Evaluation
- Tess Loch, Ian Drennan, Jason Buick, Danielle Mercier, Peter Brindley, Mark MacKenzie, Thilo Kroll, Kate Frazer, Matthew Douma. Family-Centred Cardiac Arrest Care: A Pan-Canadian Emergency Medical Services Qualitative Document Analysis By Survivor and Family Co-Investigators
- Urouj Rashid. Refractory Ventricular Fibrillation Management in Calgary's Adult Emergency Departments

# 2022 Awards, Grants and Achievements

CFPC Resident Research Award for: Rudecki A and Lin K. ED utilization of COVID-19 patients. University of Calgary. Family Medicine Forum 2022, Toronto.

ESCN Summer Studentship Award for: Jacob J, Rashid U, Lee C, and Lin K. Utility of Computed Tomography with Angiography for Risk Stratifying Vertigo Patients in a Canadian Emergency Department Setting. University of Calgary. 2022.

CAEP-CanVECTOR Research Abstract Award for: Lin K, Xu K, Daoust R, Taylor J, Rosychuk R, Hau J, Davis P, Clark G, McRae A, Hohl C. Diagnostic Accuracy of Age-Adjusted D-Dimer Pulmonary Embolism Among Emergency Department Patients with Suspected SARS-CoV-2 Infection: A Canadian COVID-19 Emergency Department Rapid Response Network Study. University of Calgary. CAEP 2022, Quebec City.

Best Medical Student Abstract Award for: Vorobeichik A, Yaphe H, Feldmann A, Lang E. Impact of a Supervised Consumption Site on Opioid-Related Emergency Health Care Usage at the Society of Academic Emergency Medicine Western Regional Conference in 2022.

Dunne, C. Junior Investigator Award (\$5,000), *Canadian Association of Emergency Physicians (CAEP) 2022*

DEAR Fund Award (\$8000) Goumeniouk N, Skeith L, Metcalfe A, Lang E, King J, Le Gal G. Evaluating diagnostic strategies for suspected venous thromboembolism among postpartum individuals who present to urgent medical attention. The DEAR Fund Committee 2022

Zaver, F. Masters in Medical Education, University of Calgary Cumming School of Medicine Jan 2022

Zaver, F. Emirates Society of Emergency Medicine Conference 2022. Mentorship Program: Effective Tools – Career Development & Professionalism track

## Dr. Grant Innes

Principal Investigator: *Impact of Emergency Department Opioid Prescribing on Substance Misuse & Health Outcomes*. CIHR Project Grant. 2021-2023.

### **\*\*Administrative and Advocacy work:**

**March 2022-March 2023:** Strategic co-lead (along with Dr. Aleks Chochinov, University of Manitoba, and Dr. David Petrie, Dalhousie University) for the Future of Emergency Medicine Task Force, an initiative of the Canadian Association of Emergency Physicians. Otherwise known as EM-POWER (Emergency Medicine: Patient care, Organizational, and Workforce Ecosystem Redesign) this group is developing EM and system level strategies to reshape the future course for Emergency Medicine in Canadian Healthcare.

**March -Dec, 2022:** Consultant to the Ministry of Health and Government of Nova Scotia. Tasked to develop a provincial healthcare accountability framework and implementation plan (Final report available on request).

**2021-22:** Chair, Data Safety and Monitoring Board, “Buprenorphine/naloxone (Suboxone) micro-dosing in emergency departments: A novel method of opioid agonist therapy initiation. Randomized clinical trial. Vancouver-based trial led by Dr. Jessica Moe.

**2020-22:** Member, Alberta COVID-19 Scientific Advisory Group

**2020-2022:** Member, Steering Committee, CCEDRRN (Canadian COVID-19 ED Rapid Response Registry Collaboration)



## Dr. Eddy Lang

Acute care Use by Patients with Inflammatory Arthritis Conditions: Health System Impact and Solutions for Ensuring Appropriate Ambulatory Care Access. PI: Barabe, Cheryl C. Co-I: Barber, Claire; Elliott, Meghan; Holroyd, Brian; Homik, Joanne; Katz, Steven; Kelling, Stephanie; Lang, Eddy; Lin, Katie; Luca, Nadia; McLane, Patrick. Project Grant. CIHR. =2021-09. Collaboration with rheumatology

Knowledge to Action in Pediatric Emergency Care during the COVID-19 Pandemic. PI: Klassen, Terry. Co-I: Aregbesola, Alex; Costello, Carrie; Freedman, Stephen; Hartling, Lisa; Jabbour, Mona; Knisley, Lisa; Lang, Eddy; MacPhee, Shannon; Reid, Sarah; Scott, Shannon; Sinclair, Douglas. Project Grant. CIHR. 2021-11 2 years

Developing and Testing Educational Materials and Simulation Training Scenarios to support Indigenous directed Anti-Racism Efforts in Emergency Departments. PI: McLane, Patrick; Austen Wiebe, Valerie J; Altabbaa, Ghazwan; Bill, Lea; Roach, Pamela Marie. Co-I: Bartel, Reagan M; James, Ashton; Kashuba, Sherri; Lang, Eddy S; Louis, Eunice J; Barnabe, Cheryl C; Healy, Bonnie A; Henderson, Rita I; Holroyd, Brian R; Oster, Richard T; Rittenbach, Kay. Project Grant. CIHR. 2021-10 1 year

# Clinical and Education Teaching Accomplishments

## Academic Promotions for 2022:

Dr. Amanda Schreiner as Clinical Assistant Professor

Dr. Hilary Ambrose as Clinical Assistant Professor

Dr. James Andruchow as Clinical Associate Professor

Dr. Mandeep Sran as Clinical Assistant Professor

Dr. Melanie Sohn as Clinical Assistant Professor

Dr. Niloofar Taghizadeh as an Adjunct Assistant Professor (cross-appointment)

## Awards

### CAEP Awards

- Dr. Bruce MacLeod - Helen Karounis Memorial Award for Professionalism in Emergency Medicine
- Dr. Heather Patterson - CAEP Medical Journalism Award Winner

[See all CAEP Awards here](#)

### PARA Well-Being Award

- Dr. Sarah McPherson

### 2022 RGH MSA Physician Recognition Awards

- Dr. Christine East - Innovation Award
- Dr. Nancy Zuzic - Advocacy & Action Award

### Clerkship Teaching Awards from Class of 2021

The Class of 2021 at the Cumming School of Medicine recently selected faculty for teaching awards. As per usual there was no shortage of EM representation.

**The following received “Honour Roll” recognition:**

- |                   |                        |
|-------------------|------------------------|
| • James Andruchow | • Jonathan Lubin       |
| • Mike Betzner    | • Heather Patterson    |
| • Chris Bond      | • Nicolas Pompa        |
| • Stefan DaSilva  | • Mandeep Sran         |
| • Christine East  | • Braden Teitge        |
| • Bretton Hari    | • Stephanie VandenBerg |
| • Grant Kennedy   | • Charles Wong         |
| • Ayesha Khory    | • Natasha Wright       |
| • Patricia Lee    |                        |



### The following received “Gold Star” recognition:

- Don Bethune
- Ana Gomez
- Aaron Johnston
- Katie Lin
- Brenda Nakashima
- Dennis Nesdoly
- Stuart Rose

### The following residents also got recognition:

- Miles Hunter
- Bobby Johnston
- Yang (Steven) Liu
- Dana Stewart

Thanks to ALL of you for your ongoing contributions to education at the Undergraduate level and congratulations to the award recipients!

## Clinical Teachers in the Department of Emergency Medicine

Within the Cumming School of Medicine, the Emergency Medicine group is one of the highest rated departments for clinical teaching. 13.5% of preceptors within our department received an Associate Dean's Letter of Excellence for Clerkship Teaching.

A particularly big shout out to those colleagues who achieved awards based on their direct teaching hours:

Platinum (40 hours)	Gold (30 hours):	Silver (20 hours):	Bronze (10 hours)
Dr. Ryan Chuang	Dr. Carly Hagel	Dr. Marta Broniewska	Dr. Sean Crooks
Dr. David Fu		Dr. Haley Cochrane	Dr. Cody Dunne
Dr. Kari McFarlane		Dr. Jame Keess	Dr. Sean Fair
Dr. Erik Saude		Dr. Mark Scott	Dr. Jesse Kao
Dr. Ian Wishart		Dr. Kelli Sherlock	Dr. Patricia Lee
		Dr. Duncan Simmons	Dr. Kasia Lenz
			Dr. Jonathan Lubin
			Dr. Stan Mayer
			Dr. Scott Wakeham
			Dr. Justin Wong

## Clinical Pharmacology and Toxicology Accomplishments

The AHS Section of Clinical Pharmacology and Toxicology is very pleased to announce that we have a record number of applicants (7) for our fellowship program in Clinical Pharmacology and Toxicology at the University of Calgary. This will be for a start date of July 1, 2023.

This is a fantastic accomplishment for our young program, which was approved in 2017 and accepted our first fellow in 2018. Two of our graduating fellows (Steve Liu and Riley Hartmann) are now taking call for PADIS.

A big thanks to our program director, Eric McGillis, for helping market the program across the country!

## Fundraisers

### Calgary Emergency DOAP Team Fundraiser

The Peter Lougheed, South Health Campus and Rockyview General Hospital Emergency Departments organized a DOAP team fundraiser in December 2021. A grand total of \$7400.00 was raised for the DOAP Team which is a much appreciate service provided to clients in Calgary. The PLC ED Team would like to extend our sincerest gratitude for the overwhelming support for the DOAP Team fundraiser. The success of this fundraiser directly reflects how valuable the DOAP team is to the Calgary Emergency Departments.

## New Positions

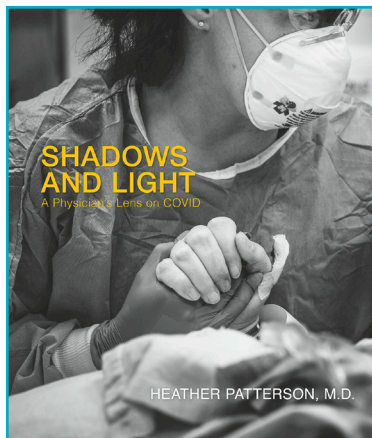
Dr. Brad Ganberg - Physician Lead, Integrated Operations Centre. [Read announcement here](#)

Dr. Ashlea Wilmott - Medical Director, RAAPID South. [Read announcement here](#)

Dr. Adam Cheng - Vice-Chair of the Education, Implementation and Teams (EIT) Task Force of ILCOR (International Liaison Committee on Resuscitation)

## Publications

Dr. Heather Patterson, with permission from AHS and individual consent, photographed Calgary's in-hospital pandemic experiences for over 18 months. Her project was widely publicized and resulted in multiple publications and collaborations nationwide. Her book, [Shadows and Light: A physician's lens on COVID](#), published in Sept 2022 by Goose Lane Editions, has been well received. After her Calgary book launch, hosting 300 guests and a photography exhibit, she continued to speak internationally as part of her book tour. She is honoured to celebrate and share the exceptional work of her friends and colleagues.



### Shadows and Light: A physician's lens on COVID

Through a chronological visual story of the people who have experienced the pandemic first-hand, Dr. Patterson shares how she found hope and a renewed sense of purpose in the resilience of the human spirit and the inspiring fortitude of Canada's pandemic heroes. Intimate images of healthcare workers, support staff, patients and families, shed light on the compassion, teamwork, and even joy that can be found amidst tragedy. The images and stories highlight love and loss, kindness and grace, and the importance of authenticity during an epidemic of burnout, delivering a message that is relevant and critically important during our current health-care crisis.

### Opinion: The faces of perseverance in our children's hospitals

The Globe and Mail by Dr. Heather Patterson: <https://www.theglobeandmail.com/opinion/article-kids-hospitals-health-care-photos/>



**The Department of Emergency Medicine gratefully acknowledges and thanks everyone for their contributions to this report.**

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