



Canadian Association of Emergency Physicians

Addressing the Crisis in Canadian Emergency Departments

The significance of this meeting is profound. Its potential to save lives across Canada surpasses the impact of any individual on the front line of the emergency department.



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**We can handle
busy - it's
crowding that
kills**



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CAEP Representatives – Speakers



Michael Howlett MD CCFP(EM)

CAEP President

Emergency Physician Oshawa, ON (Lakeridge Health)

Dr. Michael K Howlett has been a member of CAEP since 2000, and a member of the Board of Directors since 2016, being elected President-Elect in 2020. He began his career in full-service family practice in 1987 in a rural practice in Nova Scotia. He took on leadership roles as Chief of Emergency Medicine at Colchester Regional Hospital (Truro) in 1992, and served as Section Chief for Emergency Medicine for Doctors Nova Scotia, and on the Board and Economics Committee of Doctors NS. He completed his Master of Health Service Administration and CCFP Emergency Medicine certification in 1997. He served on the Promotions Committee and Residency Training Committee for Dalhousie University Department of Emergency Medicine from 2000 to 2019, He relocated to Saint John New Brunswick as Horizon Health Network Saint John Area Clinical Academic Head of Emergency Medicine in 2009, to oversee the implementation of a new Academic Funding Plan in concert with the opening of the Dalhousie University NB medical school satellite campus, and the development of the integrated three year rural family medicine- emergency medicine program in NB. At the completion of his term in Saint John Dr. Howlett moved to Oshawa area and recently was asked to take on the Regional Medical Director and Chief, Department of Emergency Medicine in Durham Region.



Advocacy
Public Affairs Committee

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Elizabeth Shouldice MD CCFP(EM) MPH
Chair, CAEP Public Affairs Committee
Director, CAEP Board of Directors
Emergency Physician Ottawa, ON (Queensway Carleton Hospital)

Dr. Elizabeth Shouldice is an active member of the Department of Emergency Medicine at QCH (Queensway Carleton Hospital) and has been a physician at Recovery Care Bells Corners since 2018. Her medical journey began with a degree and family medicine residency from Dalhousie University in Halifax, after which she returned to her hometown of Ottawa to pursue a residency in emergency medicine. Joining the staff at QCH in 2008, she brought with her a strong interest in public health and health policy, eventually earning a Masters of Public Health from Johns Hopkins University in Baltimore, MD, in 2013. Dr. Shouldice's commitment to enhancing healthcare extends to extra training in substance use health and active involvement in health policy and prevention efforts, collaborating with organizations like the Canadian Association of Emergency Physicians and Meta:PHI. She serves as the Chair of CAEP's Public Affairs Committee. She is also the medical director of the paramedic programs at Algonquin College, highlighting her dedication to healthcare education and community well-being.



Aleks Chochinov MD FRCPC
Chair, EM:POWER Task Force on the Future of Emergency Care
CAEP Past President (2018-2020)
Emergency Physician Winnipeg, MB (St. Boniface Hospital)

Dr. Chochinov is a Professor in the Department of Emergency Medicine at the University of Manitoba, and Past President of CAEP. On a cold Winnipeg winter's day in 1998, he resuscitated the oldest reported survivor of prolonged cold-water submersion, which led to an abiding research interest in hypothermia and drowning. He recently completed his term as University Department Head but continues to practice clinically and engage in collaborative research. His current projects include an international collaboration examining transitions of care from the long-term sector to the ED and chairing CAEP's new Task Force on The Future of Emergency Medicine in Canada.

Accompanying Representatives:



Lynn Garrow, BSOCS (Criminology) MBA
(KELLOGG)
Executive Director
Canadian Association of Emergency Physicians



Christina Bova
Director, Member Engagement and Advocacy
Canadian Association of Emergency Physicians



Canadian Association of Emergency Physicians: Emergency Department Closures and Crowding Across Canada

Opening Remarks: Dr. Michael Howlett, CAEP President

Thank you for this invitation to discuss the state of Emergency Medicine in Canada. We were thrilled to present to your colleagues, the Deputy Ministers, in September and left the meeting hopeful. It was a productive, thoughtful discussion. The invitation to now present to you gives us even more hope that we can make a difference together.

We are the voice of emergency physicians from coast to coast to coast in Canada. We have experiences and knowledge to share that we believe will be helpful to you in pursuing sustainable solutions to improve health services not only in emergency departments but throughout the public healthcare system in Canada.

SLIDE 2 I'm Dr. Michael Howlett, President of CAEP and I am an Emergency Physician in Oshawa Ontario. I also practiced in Nova Scotia and New Brunswick for over thirty years. I'd like to introduce my colleagues who will be presenting to you today.

- Dr. Elizabeth Shouldice, Chair, CAEP Public Affairs Committee, Director, CAEP Board of Directors, Emergency Physician Ottawa, ON (Queensway Carleton Hospital). She has also practiced in the Canadian North and in rural Perth Ontario.
- Dr. Aleks Chochinov, Chair, for the EM:POWER Task Force on the Future of Emergency Care, our comprehensive report on how to move forward in Canada. He is a CAEP Past President (2018-2020), Emergency Physician Winnipeg, MB (St. Boniface Hospital)

SLIDE 3 Also joining us from the CAEP head office are Lynn Garrow and Christina Bova.

SLIDE 4 It's essential to recognize that the challenges faced by the emergency care system are multifaceted and complex. There isn't a one-size-fits-all solution or a quick fix that can address all the issues at once. Rather than looking for isolated band aids, we should focus on whole system change. This means creating an environment and infrastructure that fosters the emergence of evidence-based solutions over time. Dr. Chochinov will expand on this when he shares the recommendations of the EM:POWER Task Force.

SLIDE 5 The consequences of the crisis in emergency medicine have been growing rapidly for years now: capacity constraints, workforce shortages, expanding complex care needs, and challenges within vulnerable communities. Addressing this crisis requires a comprehensive approach to the root causes through healthcare system reform, workforce development, improved access to mental health services and care for the elderly frail, and targeted interventions to support vulnerable populations.



Framing: Dr. Elizabeth Shouldice, Chair, CAEP Public Affairs Committee & Member of the Board of Directors

Thank you for your attention and support. For me, taking action through advocacy feels far more effective than simply complaining. I'm not just an emergency physician; I'm a Canadian, like you, with a family who might someday require emergency care. I've been an emergency doctor since 2008, and I've witnessed significant changes in my job. Many of my colleagues are leaving, and it's becoming common to arrive for shifts with double-digit wait times and concern, and sometimes fear, about the patients in the waiting room who are there to seek medical attention without a clear and specific diagnosis or medical condition. They are often experiencing various symptoms or problems, but it's not immediately obvious to us what is causing these issues.

SLIDE 6 The crisis in emergency medicine, akin to the tip of an iceberg, has been caused by a variety of contributing factors, that are much like the unseen mass of ice lurking beneath the surface. These systemic issues intersect and create dysfunction in the ED, which is manifested by crowding, long wait times and poor patient outcomes.

SLIDE 7 We would like to highlight some of the most pressing challenges in emergency medicine.

SLIDE 8 However, it is important to understand that Emergency medicine requires the collective effort of trained professionals. When a vital team member such as an ED-trained nurse or physician, is lacking, the team experiences reduced efficiency, increased workload on remaining members, and potential disruptions in communication and decision-making, which can impact overall patient care and outcomes. The current shortage of both EM-trained nurses and physicians cannot be quickly addressed nor can it be solved by hiring nurses and physicians who are not EM trained.

SLIDE 9 Unplanned emergency department closures can disrupt access to essential healthcare services, strain neighboring facilities, and have broader implications for public health, disaster response, and a community's well-being.

SLIDE 10 Evidence shows prolonged wait times and care delays can result in poor patient outcomes, including potential fatalities. Swift, efficient care is essential for patient safety and well-being. In many departments, wait times have doubled or tripled. We know patients get sicker while they wait. And, worse yet, sometimes patients just give up and leave without receiving care.

The resources needed to support our system are no longer sufficient, and this is a sentiment echoed by colleagues across the country. Our departments, staffing levels, and physical space have far exceeded available resources, and the demand for mental health and addiction care has never been higher. Plus there are increasing demands for mental health and addiction care.

SLIDE 11 Long waits for inpatient beds in the emergency department can lead to significant issues. First, it results in ED overcrowding and extended wait times for new patients, compromising the quality and timeliness of care. Patients are often examined and treated by staff in unconventional spaces that lack



privacy. Secondly, it can strain ED resources, leaving healthcare professionals and staff overwhelmed and less able to manage patient flow effectively. Last, it can negatively impact patient satisfaction and outcomes as delays in transferring patients to inpatient beds can lead to delayed treatments and increased stress on both patients and healthcare providers. None of us would want to see our family members treated in the hallway or a closet and waiting for hours or days to get an in-patient bed.

I'd also like you to note that the photos on these slides were taken at hospitals in Canada this past spring. They truly reflect what you would see if you went to any emergency department in our country.

SLIDE 12 Numerous efforts have been made to bring positive changes to the emergency department. Regrettably, many of these initiatives are often grounded in addressing one major fallacy that many think causes emergency department disfunction. This is probably the biggest misconception of all.

SLIDE 13 We want you to know that if an emergency department was not crowded, we could easily handle busy times and unexpected surges. Simply put – it is ED crowding that is the biggest risk for Canadians needing emergency care.

How we can help: Dr. Elizabeth Shouldice

SLIDE 14 As advocates for the provision of high-quality emergency care, CAEP emphasizes the need for collaborative efforts between our two groups to address these challenges. We want to emphasize that as advocates for emergency medicine, we hold expertise in this field. We are not obstetricians or anesthesiologists (as examples), our specialization lies in emergency medicine and its complexity. It's crucial not to rely on input from other specialties unrelated to emergency medicine when determining the solutions for this national crisis.

Join us to move together with the following:

1. Immediate Action: Create a National Forum in Partnership with CAEP

This will provide an opportunity to share ideas on a national basis, produce a state of the union and a template to guide through the multitude of problems we face and a barometer by which we can, together, say with authority what needs changing and in what order based on evidence.

2. Future Directions

SLIDE 15 CAEP is committed to fostering ongoing dialogue, research, and collaboration to develop innovative and sustainable solutions to hospital crowding and ED closures. By working together, we can ensure that every Canadian receives timely and high-quality emergency care when they need it the most. The upcoming release of our EM:POWER report on the Future of Emergency Care in Canada will be integral for all stakeholders and help guide the repair of Canada's broken health care system.



Additional details and supporting evidence can be found in our background document and supporting materials.

And with that, I will hand things over to Aleks Chochinov to elaborate on the work of the EM:POWER Task Force.

EM:POWER Report on the Future of Emergency Care in Canada: Dr. Aleks Chochinov, Chair EM:POWER Task Force, CAEP Past President (2018 - 2020)

As we prepare for a post-pandemic world, worsening access block and a crisis of confidence in the ability of the healthcare system to fulfill its mission make it clear that we cannot simply return to old models and expect different results. Governments, health leaders and the medical community require more innovative, integrated, and effective approaches to health care delivery. Our patients deserve better and so do our colleagues, who are burning out and leaving in alarming numbers.

In response to these challenges, CAEP commissioned the EM:POWER Task Force, with an ambitious mission to propose a new framework for the future of emergency care within a redesigned healthcare ecosystem. This has been a multi-year process of framing core issues, then reframing them after repeatedly engaging with experts inside and outside our field, and other health profession societies. The report that will be released shortly is only the beginning of the change process. As one medical leader described it during our consultations, using a quintessential Canadian metaphor—this (report) is a snowball in our hands at the top of a hill, still small, but with tremendous potential energy. Release it and it could gather size and momentum from multiple sources, eventually becoming an irresistible force. And it will belong to all of us; no one will remember where it started, but it could start here.

EM:POWER, the acronym, starts with ‘EM’ (emergency medicine) ends with ‘ER’ (ecosystem redesign), and in the middle are Patients, Organizations and our Workforce.

The report starts with a preamble and then 30 key recommendations, derived from the 5 sections of the report. The first 5 recommendations are overarching health system recommendations.

I won't read each slide, but we will run through them as I elaborate on each of the sections.

SLIDE 16 Section 1 of the report asks the broad orienting questions: Where are we vis a vis EM care? How did we get here? Where is our destination? What is an ED and what should it be because it cannot be everything to everyone (aka, the universal health safety net).

SLIDE 17 Section 2 addresses ED closures in the context of overall emergency services planning. What is the right number of EDs? Is more better? Are there different emergency care access options that are as good, maybe better, maybe even cheaper, and better? What is the right number and type of providers on the ED team?



SLIDE 18 Section 3 focuses on ED crowding and system-wide access block as the main problem for Canadians seeking emergency care and primary symptom of health system dysfunction. It proposes an accountability framework, in which population needs are aligned with programs, commensurately resourced and then those programs are held accountable to performance measures on an ongoing basis.

SLIDE 19 Section 4 addresses disaster preparedness and system resilience in the face of surges. It defines a disaster as any situation where resources are overwhelmed relative to demand and, as such, applies to our EDs every day, in addition to anticipating the next pandemic. Disasters also result in excess morbidity and mortality and there is now not much doubt that thousands of excess deaths in Canada each year can be attributed, directly or indirectly, to ED overcrowding. That is a disaster.

SLIDE 20 Section 5 covers a spectrum of disruptive forces and trends in the global ecosystem that will reshape and reorient emergency care, research, and education in the decades to come. These include digital health/ advanced technologies, JEDI (justice, equity, diversity and inclusion), climate change, and lessons from other (higher performing) healthcare systems.

Lots of material for discussion, collaboration and hopefully, system improvement. We 'd be happy to share this work and answer questions, now, later today or in the future.

Closing: Dr. Michael Howlett

SLIDE 21 The Canadian Association of Emergency Physicians reaffirms its dedication to addressing hospital crowding and ED closures as critical issues affecting the healthcare system. Through collaborative efforts and evidence-based strategies, we aim to provide safer and more efficient emergency care for all Canadians. Speaking on behalf of our members, we would like to reaffirm our dedication to collaborating with you and sincerely hope you agree. We offer you our support and our expertise. Thank you again for the invitation and welcome your questions.



Canadian Association of Emergency Physicians: Official Statement Regarding ED Closures and Crowding Across Canada

The Canadian Association of Emergency Physicians (CAEP) acknowledges the critical issue of hospital crowding and its impact on unexpected emergency department (ED) closures* across the nation. As advocates for the provision of high-quality emergency care, CAEP emphasizes the need for collaborative efforts among stakeholders to address these challenges.

*CAEP would also like to clarify that unexpected closures include full departments (common in rural centres) as well partial department closures (common in large urban centres). Both have significant negative effects in their community.

1. Recognition of the Problem

Hospital crowding and subsequent ED closures pose substantial risks to patient care, safety, and overall healthcare delivery. These challenges can lead to compromised patient outcomes, increased wait times, and undue stress on healthcare professionals. Provincial governments and the Federal Government should declare the ED closures and increasing Access Block as an Acute Care medical emergency/crisis.

2. Causes and Contributing Factors

Various factors contribute to hospital crowding and ED closures, including but not limited to:

- Insufficient inpatient bed capacity especially in ED “outflow” areas such as acute care and ICU
- Insufficient resources in the overall system especially with the ever increasing and aging population
- Inadequate resources for timely patient assessment and treatment
- Limited access to primary care and community-based services that result in advanced presentations of serious illness leading to negative outcomes or admission for workups because there is no access to appropriate follow up
- Complex administrative processes affecting patient flow
- When a department closes either fully or partially no resources are redirected to help the other areas that then receive patients

CAEP would especially like to stress that low-acuity or what some deem “inappropriate” visits are NOT the cause of ED overcrowding. This is a common misconception that needs to be debunked.



3. CAEP's Position

The CAEP underscores the following key points in addressing hospital crowding and ED closures:

- **Coordinated mission:** Stakeholders including governments, healthcare institutions, healthcare providers, and community organizations must work collaboratively to develop and implement comprehensive solutions that address both short-term pressures and long-term systemic issues.
- **Optimize Access Points:** There must be optimization of the number, distribution, capability, connections, coordination, and workforce of emergency departments and other access points in the emergency care system.

Accountability: Patient care accountability frameworks should be implemented to define program expectations and performance targets, and to hold individuals, programs and organizations to account. Patient safety, quality of care, and timely treatment should remain the central focus in all efforts to manage crowding and ED closures.

- **Resource Allocation:** Adequate resources, including both financial and human resources, should be allocated to emergency departments to ensure efficient patient flow, timely assessments, and appropriate care delivery.
- **Data-Driven Solutions:** Evidence-based decision-making should guide the development and implementation of strategies to mitigate crowding. Regular data collection and analysis are essential to monitor progress and adjust interventions as needed.
- **Continuing adaptation and evolution:** Emergency care systems must continually improve their approach to knowledge creation, implementation, and integration, within and beyond medicine, to adapt to a changing world.

4. Immediate Action Steps:

To address the immediate challenges posed by hospital crowding and ED closures, CAEP recommends the following steps:

- Continued bidirectional communication between CAEP and provincial health systems regarding the crisis.
- Increase hospital bed capacity to match the demands of the population and enhance inpatient flow.
- Implement effective patient flow management strategies within hospitals to reduce bottlenecks.
- Enhance support for primary care services and expand access to community-based healthcare resources.
- Facilitate seamless communication and collaboration between EDs, hospital administration, and primary care providers.



5. Future Directions

CAEP is committed to fostering ongoing dialogue, research, and collaboration to develop innovative and sustainable solutions to hospital crowding and ED closures. By working together, we can ensure that every Canadian receives timely and high-quality emergency care when they need it the most. The upcoming release of our EM:POWER report on the Future of Emergency Care in Canada will be integral for all stakeholders and help guide the repair of Canada's broken health care system.

Conclusion

The Canadian Association of Emergency Physicians reaffirms its dedication to addressing hospital crowding and ED closures as critical issues affecting the healthcare system. Through collaborative efforts and evidence-based strategies, we aim to provide safer and more efficient emergency care for all Canadians.

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4. [Waiting to die: the hidden pandemic of ED crowding and excess mortality – Canadian Journal of Emergency Medicine \(CJEM\)](#) (Worrall, J, Atkinson, P)
5. Related Statement: [The Health Care Safety Net is Ripping](#)

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EM:POWER: if not us, who? If not now, when?

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Times are tough. As we prepare to turn the corner on the COVID-19 pandemic, the world faces serious, inter-dependent challenges to its environment, economy, geopolitical stability and health. All of these are inextricably linked, something to keep in mind as we contemplate the future of healthcare. By way of illustration, some experts believe that over the next 2 decades, over a billion *climate refugees* will relocate to cooler parts of the world, further stressing all our systems, challenging the notion of sovereignty over closed borders, compelling us to “shed some of our tribal identities and embrace a pan-species identity” [1]. This scenario poses an existential question: as evidence mounts that our global ecosystem is failing, how can humankind collaborate to make it through to the future and thrive as a species, especially when the pain and suffering are so unequally shared?

Looking at emergency care through a similar lens, we too face a clear and present existential threat and practice within an unstable ecosystem, in which it already feels like waves of *medical refugees* are landing on our shores. With the decline and fall of their primary care home, they present to EDs with more co-morbidities and in ever greater numbers. Those requiring admission often face siloed services, quotas, ‘closed borders’; so, they wait, and those behind them wait, with predictable results.

Commissioned by CAEP in 2021, the mandate of the EM:POWER* Task Force (*Emergency Medicine: Patient Care-Organizational-Workforce-Ecosystem Redesign) is to

propose a systems-based approach to the future of emergency care, where integrated networks with multiple access points—not just emergency departments—are responsive to patient needs and adaptive to changing conditions. Commitment to a common purpose, a new approach to workforce planning, transition to a Learning Health System [2] and accountability from the top down will be required to enable systems-level change. The ‘caps’ in EM:POWER also speak to bottom-up, front-line ownership, imparting a sense of agency to emergency medicine to catalyze meaningful change. If not us, who? Be it the environment, the economy, or healthcare, leading large-scale change [3] is never easy. It differs from the processes we are familiar with and defies the easy “fixes” [4] that are so tempting to political leaders and bureaucrats. We cannot act alone, so our task force is consulting broadly, engaging with leaders and organizations within and beyond medicine. Thus far, the response has been extremely encouraging.

“We don’t rise to the level of our goals; we fall to the level of our systems”—James Clear

The late Mikhail Gorbachev saw a failing system in the USSR decades ago, and launched a program of reform, widely known as glasnost (openness) and perestroika (re-design). He believed the way to a better future for his country was through increasing transparency, new ideas and empowering organizations and individuals outside their secretive bureaucracy. That courageous approach won him a Nobel Prize but not many friends in the halls of power.

Here in Canada, our secret is out—our health care systems are failing and this is having an overwhelming impact on emergency departments and the patients they serve. We experience it up close every day—packed waiting rooms, ambulance offload delays, treatment delays resulting in unnecessary harm, frustrated patients leaving before they are seen, and moral injury to our team of providers. Experienced nurses are leaving for more sustainable lives; staff shortages are causing burnout and, ultimately, ED closures. It is a vicious cycle of demand, dysfunction and delay, system-wide. Canada is next to last among OECD countries

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for access to family physicians, near last in acute care beds, and worst in terms of waits for specialists, elective surgery, and advanced imaging. As a consequence, Canadians have the highest rate of ED use in the first world and visits are rising rapidly [5].

Critically, our healthcare system is not a system in any cohesive sense, but rather a disconnected set of programs with countless loci of decision-making, and dynamic, often unpredictable responses to simplistic or ill-conceived plans. Governments and health administrators struggle with understanding complex systems, and often make decisions based on narrow assumptions that may be harmful to other patients and the system as a whole. COVID-19 is not a root cause of system dysfunction; it is more the last straw and another call to action. Reports and commissions addressing health system dysfunction date back decades. Despite these, the system has continued its seemingly inexorable decline, leading some to question its viability and core values.

The Canada Health Act [6] expresses those values in five foundational principles, but the promise of “reasonable access” for all Canadians to health services “without...barriers” is a long-lost ideal. The Romanow Report [7], which also articulated a value-based future for health care, supported system modernization and recommended a sixth foundational principle—accountability—which we will strongly promote, at all levels of governance. But large numbers of health providers with a solitary focus on individual patients do not make for an effective, responsive or sustainable system. A formal curriculum on Health Systems Science must therefore be a key component of the next generation of health sciences education, to complement basic and clinical sciences [8].

A redesigned healthcare ecosystem must have a clear purpose, to provide direction, coherence, and an overarching WHY to all that we do. This is well articulated by the *IHI's triple aim: improving patient experience, improving population outcomes, and optimizing value* (outcomes per dollar spent) [9]. We recommend the adoption of a quadruple aim, recognizing the vital importance of *readiness and resilience*. The two are linked—readiness is the preparedness to respond while resilience is the ability to recover. Both provider and system readiness/resilience are required to address the inevitable but unpredictable surges that occur during normal times, and to meet the unknown risks of the future. Without these, the other three aims are just empty words, and the system will buckle under unmet demand/capacity mismatches and a burned-out workforce, as our experience with COVID-19 has illustrated.

“What if there was a different starting point—the intended function of the system—and planners worked backward to determine the most suitable form for that function?” [10]

The primary function of emergency medicine is the assessment and treatment of unexpected, time-dependent illness and injury. However, our present workplace is incompatible with our prime directive and the myriad other functions we undertake in the midst of intractable access block. Emergency care in the future will be defined less by bricks and mortar, or geography, and increasingly by the range of competencies we offer to patients and other caregivers, even at great distances. New technologies and national licensure will even the playing field for acute care in historically underserved areas, allowing physically isolated providers to become part of a virtual team practice guided by emergency physicians, and patients to receive care by in their home environment, whenever possible.

But emergency medicine cannot achieve its present or future functions in the health system if it also must be the “safety net” for other specialties or sectors that are unable to fulfill their own mandates, be it through poor design, misunderstanding, or lack of accountability. Counterbalancing the paradigm of *sovereignty over closed borders* with a *common good* approach, in which resources are equitably allocated to those most in need—including those we have variously called boarders, orphans or refugees—will be a major step forward.

We all feel most comfortable and safe in a familiar environment. Physicians are very comfortable in the house of medicine, but it's really a neighborhood of houses, each one home to a specialty with its own professional identity, evaluating its own set of discrete patients and problems, in the way we have all been taught. Do not look now, but just outside our neighborhood the temperature is rising and there are already medical refugees at our doors. The effects of wildfires, floods and hurricanes are now directly impacting the health of our patients; socioeconomic inequity fuels other fires, even as burnout spreads amongst our own colleagues. If we are to create a better future for ourselves and our patients, we must start by agreeing on core values, accepting the interlinked responsibilities for patient, population and system health, and supporting our workforce. We must be literate in health systems science, establish truly integrated networks of care, and expand collaborative health services research. Leaders within complex health systems must show they are competent in these essential concepts, nurture innovation, be comfortable with uncertainty, but still insist on accountability.

These are the some of the ideas that are driving the EM:POWER Task Force and could contribute to a future framework for emergency care, in a redesigned system. Ultimately, it is hoped that this project will be a catalyst for other disciplines and organizations within healthcare to join with us to help plan a better future. If not now, when?

Declaration

Conflict of interest None of the authors has any conflict of interest to declare.

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DRAFT RECOMMENDATIONS



1

SHARED PURPOSE, COORDINATED MISSION

The emergency care system is embedded in the broader healthcare system and its many interdependent subsystems. We must all understand our shared purpose and guiding principles, then coordinate our mission.

2

ONE NETWORK, MANY ACCESS POINTS

The number, distribution, capability, connections, coordination and workforce of emergency departments and other access points must be optimized.

3

ACCESS BLOCK AND ACCOUNTABILITY

Health ministries should implement accountability frameworks to hold individuals, programs, and organizations to account for meeting defined expectations and performance targets.

4

DISASTER PREPAREDNESS

Ongoing, validated and adequately funded disaster preparedness must be integrated throughout healthcare systems and across jurisdictions.

5

ADAPTATION & EVOLUTION

To adapt to a changing world, emergency care systems must continually improve their approach to creating, implementing, and integrating knowledge within and beyond medicine.

SHARED PURPOSE, COORDINATED MISSION

The emergency care system is embedded in the broader healthcare system and its many interdependent subsystems. We must all understand our shared purpose and guiding principles, then coordinate our mission.

1. Canadian healthcare leaders, providers, and organizations should adopt the Quintuple Aim framework as the overarching goal of health system redesign.
2. Health-system planners should understand population needs, determine which services would best meet these needs, and resource them appropriately.
3. Provincial ministries of health should implement patient care accountability frameworks that incorporate accountability zones, program expectations and performance targets.
4. Health planning and design should be entrusted to an independent public entity at arm's length from government, to reduce the impact of election cycles on health system decisions.
5. Canadian policy-makers should learn from international health systems, while upholding publicly-funded health care and the Quintuple Aim.
6. Ministries of health and health authorities should assure all Canadians access to primary care, prioritizing those in greatest need. Reliable access to primary care will help emergency systems focus on their core mission.
7. Governments must support unified digital health integration to facilitate data access and information-sharing among patients, care providers, researchers, and communities.
8. Principles of Justice, Equity, Diversity, and Inclusion (JEDI) should be embedded in health care planning, delivery, and evaluation at all levels.
9. Provincial health ministries should catalyze system redesign by creating adaptive, integrated clinical care networks that prioritize patient and population needs.
10. When system factors compromise care, EM must engage with healthcare leaders to avoid simplistic responses to complex problems and to encourage system innovation.



ONE NETWORK, MANY ACCESS POINTS

The number, distribution, capability, connections, coordination and workforce of emergency departments and other access points must be optimized.

1. Provincial health ministries should establish Emergency Care Clinical Networks (ECCNs) to coordinate clinical service and HR planning, operational guidance, and quality improvement initiatives.
2. ECCNs should oversee categorization, standardization (facilities, equipment, required competencies) and integration of EDs and other emergency care access points.
3. ECCNs should establish and support team-based care, creating complementary roles and responsibilities in service of patient needs. Health ministries and authorities should provide the necessary funding for team-building, including regional simulation programs.
4. Emergency care systems should work with EMS agencies to implement and evaluate pre-hospital coordination centres and “expanded scope” EMS concepts.
5. Provincial governments should implement a needs-based, behaviourally influenced, iteratively updated physician resource planning model (e.g., Savage model).



ACCESS BLOCK AND ACCOUNTABILITY

Health ministries should implement accountability frameworks to hold individuals, programs, and organizations to account for meeting defined expectations and performance targets.

1. Healthcare leaders should use defined performance measures to monitor care gaps and determine whether these are best addressed through new capacity, enhanced efficiency, or reallocation of existing resources. Where the gap/root cause is capacity, they must advocate for new resources; where it is inefficiency or misallocation, they must facilitate change.
2. Facilities should implement demand-driven overcapacity protocols to be activated when pull systems are failing and access block is compromising care delivery. Overcapacity protocols should also bridge the hospital-to-community transition.
3. Provincial governments should immediately invest in aging-at-home options and alternate level of care (ALC) transition capacity to expedite hospital outflow, mitigate acute-care access block, and improve quality outcomes.
4. Hospitals must publicly report ED performance in relation to CAEP ED access and flow targets, as articulated in its 2013 position statement on overcrowding and access block.
5. The minister of health must hold all hospital/health authority CEOs accountable to bed occupancy levels of 85%, on average, to reduce the use of emergency departments as admitted-patient holding units.



DISASTER PREPAREDNESS

Ongoing, validated and adequately funded disaster preparedness must be integrated throughout healthcare systems and across jurisdictions.

1. All healthcare facilities must have a formally tested plan for surge capacity. Because a system that is near or at 100% occupancy cannot, by definition, cope with surges, the plan must include a constant level of bed redundancy. This redundancy must consist of real beds—staffed but unoccupied—as opposed to theoretical bed expansion above the existing census.
2. Competency in disaster response must be validated through structured cyclical auditing, established as a requirement for healthcare facility accreditation and integrated into routine evaluation.
3. Preparedness planning must be integrated and uniform across all levels of the health system and allow for mutual aid across all levels and jurisdictions.
4. Education and training in disaster preparedness should have dedicated annual funding to achieve and maintain competency.
5. All disaster planning must consider vulnerable segments of the population including those with special needs and challenges.



ADAPTATION & EVOLUTION

To adapt to a changing world, emergency care systems must continually improve their approach to creating, implementing, and integrating knowledge, within and beyond medicine.

1. CAEP, in conjunction with university departments and divisions of emergency medicine, should develop a pan-Canadian EM research network, to coordinate researchers and facilitate interdisciplinary collaborations that prioritize the most urgent and impactful patient and population needs.
2. Emergency physicians should embrace leadership and stewardship roles in digital health, to ensure that the best innovations are promulgated and that precious public resources are not diverted to non-value-added activities.
3. Emergency physicians, through their national and provincial organizations, must be knowledgeable in the population health effects and health system impacts of climate change events (e.g., wildfires, floods), and participate in public and professional education, and advocacy.
4. EM training programs should include public affairs, policy and advocacy in their teaching, as part of a health systems science (HSS) curriculum, to advance understanding of the broader context in which EM operates and nurture the next generation of systems change leaders.
5. EM training programs should address the impact of social identity in the health care setting and foster opportunities for productive interaction among specialties, to establish teamwork and shared goals as integral parts of professional identity development.





Waiting to die: the hidden pandemic of ED crowding and excess mortality

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More than 50,000 Canadian deaths have been attributed to COVID-19; however, the public is largely unaware of the excess mortality associated with Emergency Department (ED) crowding. The Royal College of Emergency Medicine [1] (RCEM) and The Economist [2] have recently published analyses of weekly deaths attributable to ED crowding in the United Kingdom (UK). Like Canada and other developed countries, the UK has experienced increased delays in moving admitted patients from the ED to the wards: 7% of patients wait 12 h or more, compared to 2% only a year ago. These reports place the number of deaths associated with this worsening crowding at 260 to 500 patients per week, nationally.

What is excess mortality? In epidemiology and public health, excess mortality refers to the number of deaths from all causes during a crisis, above the expected number of deaths in 'normal' conditions [3]. The advantage of an excess mortality analysis is that it does not require data on individual causes of death.

Even before the pandemic, studies from multiple countries found that ED crowding is associated with increased patient mortality [4–7]; a finding confirmed in a recent systematic review and meta-analysis [8]. Hypotheses for the cause of the increased mortality include delays in appropriate inpatient care while the patient is in the ED, increased medication errors, difficulties maintaining appropriate infection control, increased delirium in elderly patients, and compromised physician decision making due to workload and resource pressures.

Unfortunately, excess deaths caused by ED overcrowding continue to be under-recognized. Except in periodic, and well publicized, cases of ED waiting room deaths, [9] it is challenging to pinpoint overcrowding as the proximate cause of death in any single case. Patient safety reviews continue to focus on the particular features of medical and nursing care for a given patient, rather than the overall state of the hospital system.

If the data presented by The Economist are generalizable, then Canadians should be concerned; ED crowding statistics in Canada point to an even worse state of affairs than the UK. In Ontario, in the second half of 2022, the average admitted patient waited more than 20 h in the ED before moving to an inpatient bed [10]. Fewer than 25% of patients are moving upstairs within the government's 8-h target. Although Canada has less than 60% of the UK population, it is reasonable to assume the same factors contribute to excess mortality in our hospitals. If all other things are equal, the UK analysis implies that 8000–15,000 Canadian patients are dying unnecessarily each year as a direct result of hospital crowding.

It is remarkable that this excess death rate is rarely discussed in Canada. Physicians, politicians, and the media often describe hospital crowding and prolonged wait times for ED patients as an inconvenience, but not a killer. Furthermore, it remains a persistent myth that a significant contributor to the problem is ED attendances by low-acuity patients, who do not really need to be there. Diversion of low-acuity patients will not solve ED crowding [11], but the myth serves as a convenient distraction from the real issue—long waits for admitted patients to move to inpatient units. Healthcare leaders (and our physician colleagues) often assume rising ED volumes, lack of staff, and lack of inpatient beds mean that crowding is a straightforward problem of resource mismatch. Another UK analysis suggests, however, that uncoordinated hospital processes, and inefficient bed management are more important factors [12].

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ED crowding has become normalized in Canada. A culture of acceptance and helplessness seems to persist among clinicians and hospital administrators. It is a moral imperative that this silent crisis is better studied, and that the number of excess deaths that occur as hospital and ED occupancy rises is accurately quantified, tracked and reported. For emergency physicians, there is an opportunity and obligation to refocus our advocacy on the excess mortality associated with ED crowding. We, therefore, challenge the emergency medicine community to coordinate a national public awareness campaign, highlighting these preventable deaths.

To find the allies we need among other physician groups, nurses, administrators, and the broader public, we must be clear that the harms of ED crowding are visited on patients throughout the hospital and the wider system. Without clear accountability and accurate risk assessment within the system, it is inevitable that the well-meaning attempts to shorten wait times for elective care could, if we are not careful, also shorten lives [9]. While we may hope to reduce wait times for minor problems, and to make the ED a nicer place to work, we must focus on our principal goal: to save lives.

Declarations

Conflict of interest The authors declare they have no financial conflicts of interest.

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Emergency department overcrowding and access block

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EXECUTIVE SUMMARY

Emergency department overcrowding (EDOC) is defined as a situation where the demand for emergency services exceeds the ability of an emergency department (ED) to provide quality care within appropriate time frames.^{1,2} ED overcrowding has been a key issue in Emergency Medicine in Canada for more than 20 years. Despite increased political, administrative, and public awareness, EDOC situations continue to rise in frequency and severity.³ Patient suffering, prolonged wait times, deteriorating levels of service, adverse patient outcomes and the ability to retain experienced staff in an ED are all ill effects of this ongoing problem.

Contrary to popular perceptions, ED overcrowding is not caused by inappropriate use of ED's, or by high numbers of lower acuity patients presenting to the ED; the inability of admitted patients to access in-patient beds from the ED is the most significant factor causing EDOC in Canadian hospitals.

Despite its importance, there currently are no national benchmarks in place to determine severity (and thus identify the factors causing poor performance). Through this position statement, CAEP will put forth recommended national benchmarks (targets) for ED performance to help address the issue. The suggested targets are as follows:

i. *Time to physician initial assessment (PIA):*

- Median of 1 hour, 90th percentile of 3 hours.

ii. *Time (to transfer) to in-patient bed:*

- Median of 2 hours, 90th percentile of 8 hours

iii. *ED LOS:*

- **CTAS IV/V discharged patients** – median of 2 hours, 90th percentile of 4 hours;
- **CTAS I-III discharged patients** – median of 4 hours, 90th percentile of 8 hours;
- **Admitted patients (all CTAS levels)** – median of 8 hours, 90th percentile of 12 hours.

It is CAEP's belief that adoption of national benchmarks (*see recommendations for further details*) will provide goals for each province or territory to strive to achieve, and a mechanism for comparing their progress to their peers. We understand that depending on their circumstances and current situation, individual hospitals may find these targets difficult to reach while others may be performing at or above these targets, but we believe all will benefit from a set of common metrics and benchmarks.

EDOC is a public health concern whose root causes extend beyond the walls of Canada's ED's. It reflects a need for solutions and interventions at multiple levels within the health care system. Solutions outlined within this position statement will reflect this need while not minimizing the most important factor causing EDOC – delays in securing beds for patients admitted through the ED.

CAEP POSITION

1. The primary problem arising from EDOC is a block in the provision of health care required by patients presenting to the ED within an appropriate time and

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in an appropriate place. This results in a diminished access to health care or “Access Block” (AB).^{*} Access Block often results from system capacity and efficiency issues that lie outside of the ED.

EDOC is associated with increased mortality and worse outcomes for patients assessed in a crowded ED whether admitted or discharged.^{5,6} It has been studied extensively and can be conceptualized using the *input-throughput-output* model where a comprehensive, jurisdictional approach is required to address factors impacting flow outside the ED; in the community, in the rest of the acute care hospital, and in the post-acute continuing care sector. A summary of the evidence on interventions and strategies to reduce overcrowding has been published.^{7,8} Comprehensive approaches to EDOC from a system perspective should include:

- a. Transparent and easy access to valid and reliable data to measure performance⁹ using nationally standardized definitions as per the Canadian Triage and Acuity Scale (CTAS), Canadian Emergency Department Information System (EDIS) National Working Groups, and the National Ambulatory Care Records System (NACRS) database;
- b. Establishment of performance targets and benchmarks for key ED and in-patient intervals;
- c. Timely public reporting of performance targets along with success on achieving the benchmarks;
- d. Financial incentives (pay-for-performance initiatives) should be explored for hospitals and providers to improve performance;
- e. Coaching and education for hospitals on best practices to improve processes related to flow within the ED along with overall hospital flow, using evidence based repositories;
- f. Attention to community access to long-term care must become a local, provincial and national priority;
- g. Attention to:

- i. Acute care capacity (target maximum below 95% occupancy rates);
 - ii. Alternative Level of Care (ALC) levels in acute care settings (target maximum 5% occupancy rates);
 - iii. Adequate capacity in the Long-term Care (LTC) and post-acute care sector;
 - iv. Community and home care supports for vulnerable groups such as the frail elderly.
2. Use of standard intervals for performance monitoring and public reporting is important to allow cross-jurisdictional comparisons of performance. With the starting time being the time of registration or triage, intervals or performance metrics should include:
 - a. “**Waiting Times**” – Intervals that are strictly waiting:
 - i. Time to physician initial assessment (PIA) – is the total time from initial registration/triage to first being seen by an MD;
 - ii. Time for transfer of care for Emergency Medical Services (EMS) arrivals: “ambulance offload time” – time from arrival until care accepted by ED;
 - iii. Time to consultation: ideally, time elapsed between the consult request to arrival of consulting physician;
 - iv. Time to transfer to in-patient bed for admitted patients: time from admit decision to actual transfer/departure to the ward.
 - b. “**Care Times**” – Intervals that include care and waiting combined:
 - i. Total Length of Stay in the ED (ED Length of Stay, or ED LOS);
 - ii. Time from arrival to consult request (for patients receiving consults this includes the emergency physician’s process time and often the time for diagnostic imaging to be performed (and reported) and lab turnaround times);
 - iii. Consult request to disposition decision (for patients receiving consultation this is the consultant’s process time).
 3. The format for public reporting is crucial. Key principles include:
 - a. **Segregate populations:** Differentiate between patients requiring admission to hospital and

^{*}For consistency, the term EDOC is utilized within this paper to specifically refer to the ED manifestations of Access Block. The transition to the use of Access Block has been recently encouraged, to reinforce the concept and understanding that EDOC is a form of Access Block with roots and causes that frequently lie outside of the ED. To remain consistent we have chosen to continue to utilize the abbreviation EDOC to describe Access Block that manifests within the ED.⁴

those who can be safely discharged from the ED.

- b. **Report Non-aggregated Data:** EDOC is primarily a problem of academic centres and high volume urban centres. Aggregating regional or provincial data will obscure significant local problems. Performance of individual facilities must be reported separately.
 - c. **Format of metrics:** For internal performance monitoring, reporting of metrics at the 90th percentiles has advantages and is recommended for health care professionals and system administrators. On the other hand, public reporting requires the use of medians which are better understood by the public and patients. Averages have problems in skewed data sets and should be avoided.
4. Targets are an important component of performance improvement. Very little evidence exists to guide the setting of targets for ED wait times, but targets should be determined using best existing evidence in conjunction with expert consensus. Ideally the targets should be aligned across jurisdictions to allow performance comparisons. Without objective measures and system access benchmarks it can be difficult to quantify the level of Access Block within a hospital, region or province. Worse, without gauging success at achieving targets over time, it can be very difficult to assess whether system adjustments designed to improve flow are accomplishing their intended effect. At a minimum it is recommended that targets be established for the following parameters, and, based on existing provincial goals and expert consensus, the suggested targets are as follows:
 - i. **Time to physician initial assessment (PIA):**
 - Median of 1 hour, 90th percentile of 3 hours.
 - ii. **Time (to transfer) to in-patient bed:**
 - Median of 2 hours, 90th percentile of 8 hours.
 - iii. **ED LOS:**
 - **CTAS IV/V discharged patients**
 - median of 2 hours, 90th percentile of 4 hours;
 - **CTAS I-III discharged patients**
 - median of 4 hours, 90th percentile of 8 hours;
 - **Admitted patients (all CTAS levels)**
 - median of 8 hours, 90th percentile of 12 hours.
 5. It is important to keep in mind that “wait times” are different than “length of stay.” The wait times are the intervals where a patient is waiting for something (i.e., care from a health care provider or assignment to a bed). Length of stay markers measure the time it takes for a patient to receive care, including assessment and treatment. While the experience of waiting and receiving care can be intimately intertwined in an ED visit, they are frequently confused. It is important to provide clarity when publishing and discussing these numbers, as spending a total of 8 hours in an ED including assessment, complex diagnostics and treatment (ED LOS) is considerably different from waiting 8 hours in an ED waiting room awaiting assessment by a physician (time to PIA).

INTRODUCTION

ED overcrowding is a complex, multi-dimensional health services problem which is conceptualized using the input-throughput-output model.^{4,10,11} While media attention has highlighted input factors and inappropriate use of the ED across Canada, the primary and definitive cause of ED overcrowding is hospital overcrowding (also known as “Access Block”).⁴ Hospital overcrowding can also be conceptually organized with the same model: input (e.g., elective and ED admissions); throughput (in-patient services and flow), and output (e.g., discharge, community care resources, access to LTC).

BACKGROUND

CAEP published its first position paper on ED Overcrowding (EDOC) in 1994 with a revision in 2009. The first paper identified and defined the issue of EDOC which helped to propel Emergency Department Wait Times onto provincial forums as well as causing ED wait times to be included on the national Wait Time List supported by the Canadian Medical Association (CMA). Having identified EDOC as a growing health care concern, the second position paper stressed the system-wide origins of EDOC and recommended wait time targets to improve patient care as well as stressing the fact that Access Block solutions must occur on a system wide basis. Since the

last position paper in 2009, change has rapidly occurred in Canada and internationally. At a provincial level, several provinces have taken steps to look at and address ED wait times. Over time, there has been a growing appreciation of the multi-factorial causes of EDOC, and a system-wide approach to addressing Access Block has now been generally accepted.

The main factors causing long ED wait times and EDOC penetrate almost every level of the Canadian health care system. Consequently, there has been a shift away from focusing solely on overcrowding alone and processes within the ED to adopting language that better describes the true causative factors of EDOC and the Access Block that patients are experiencing at multiple levels.

On the input side, changes occurring in primary care have also resulted in Access Block that can contribute to EDOC. Patients without a primary care provider (PCP) may turn to the ED as their only access to health care, while other patients may have a PCP that cannot accommodate semi-urgent bookings, so they often turn to the ED for urgent attention. This creates a situation where more patients utilize the EDs, and worse, a larger proportion of these patients have missed opportunities for preventative care and thus present with illnesses that are further advanced. In addition, the age of patients presenting to the ED and the complexity of their problems has increased. Consequently, in many EDs, there is an increased need for investigations, advanced imaging and consultation, further extending the length of stay and contributing to overcrowding. Finally, utilization of ED's for episodic care and chronic conditions also creates a need for better communication between EDs and PCPs to help coordinate the overall care of patients.

On the output side, ALC patients can have a significant impact on EDOC by occupying acute care spaces that could be utilized by newly admitted ED patients. In addition to the reduced bed capacity that results from high ALC levels, the patients waiting ALC placement are not receiving the appropriate ALC care in the optimal place which can impact on their outcomes and experience - and thus their needs have to be addressed as part of the solution.

This position paper will serve to update the previous position papers to reflect these changes. The goal of this update is to add recent experience and scientific literature to the discussion in the hopes of creating a document that can be used when trying to address the multi-layer causes of EDOC.

PROBLEM DEFINITION

Delays in emergency care can occur at a variety of levels. As outlined in the Executive Summary, the inability for admitted patients to access in-patient beds from the ED is the most significant factor causing EDOC in most busy Canadian hospitals. Although ED input pressures can contribute to EDOC in some communities, specifically where a lack of timely access to a PCP is a significant factor for patients, the vast majority of the time the system bottlenecks are located “down-stream” from the ED and occur on the output side of patient flow. Problems associated with flow of admitted patients out of the ED and into the hospital, and then ultimately back out into the community, can arise from several factors. At different times in different hospitals/communities the problems can be based on numerous capacity and efficiency limitations and may include:

- Suboptimal utilization of acute care beds including access to diagnostics;
- A shortage of acute care bed capacity - actual bed numbers may be inadequate and/or beds may be blocked for budget or other reasons including presence of ALC patients;
- ED staffing shortages (including physicians);
- Staffing shortages and other inefficiencies affecting physicians/consultants and programs providing inpatient services;
- Limited community care resources - both home care and post-acute care resources such as long term care or rehabilitation services;
- Lack of integration of community and hospital-based resources;
- Poor communication between acute care facilities and PCPs when patients are ready for discharge but require timely follow-up;
- Confusion on who is accountable for the patient at different times in the patient's care.

With the shortage of hospital beds and recurring issues with acute care capacity, hospitals increasingly face a situation where more patients require admission than there are beds to accommodate them. The current approach to dealing with Access Block due to hospital crowding involves delaying the outflow of admitted patients into appropriate inpatient areas; resulting in an excessive and unsafe use of EDs to inappropriately “warehouse” admitted patients, both stable and unstable, for long periods of time. This “boarding” of admitted

patients within the ED results in EDOC and thus creates delays in seeing new patients presenting to the ED.

Surveys have shown that patients attempt multiple other options prior to accessing the ED.¹² Moreover, patients of lower acuity and urgency do not occupy acute care stretchers, require little nursing care, and typically have brief treatment times. The myth of “inappropriate use” should be permanently dispelled, and administrators and politicians should be encouraged to avoid attributing EDOC to ambulatory patient ED health services access. While patients discharged home are not the cause of ED overcrowding, process improvements for this group can decrease their waiting, and improve their experience. All Canadian ED’s should commit to continuous quality improvement to ensure they are keeping up with best practices and optimizing ED resource use and patient experience. Improving and optimizing care delivery within every ED should be an ongoing priority for all hospitals, but this optimization process will not be able to address the down-stream output bottlenecks that are the root causes of EDOC.

Given the near universal and recurrent issue in Canada of in-patient bed limitations, EDOC is a direct consequence of hospital overcrowding, which in turn is a major contributor to Access Block.¹³ In Canada, the problem of EDOC is most critical at trauma, tertiary care, teaching, and high-volume hospital EDs.³ The consequences of EDOC are, however, similar across the emergency care system; referring hospitals and ambulances are unable to access secondary and tertiary care ED facilities in a timely fashion. For instance; despite having adequate acute care capacity locally, peripheral hospitals often experience Access Block in the form of delayed transfer to definitive care for their patients. This form of Access Block is an important issue for rural physicians and their patients, when physicians are unable to transfer patients requiring a higher level of care to urban receiving facilities which are frequently overwhelmed.

Pressures on ambulance services can occur when EDs are gridlocked with admitted patients and paramedics are unable to transfer patient care to ED staff in a timely fashion. Ambulance offload delays or, in uncommon cases, ambulance diversion are both examples of Access Block where EDOC impacts and delays access to pre-hospital care. While EDOC can compromise care for the EMS patient waiting to be off-loaded to an ED care space, it can also lead to staffing pressures for EMS services and result in longer response times for new calls. This in turn compromises

the safety of patients experiencing emergencies in the community as the Access Block moves upstream.

Access Block can also occur within hospitals on multiple levels. Within the ED when inpatients occupy ED stretchers for prolonged periods of time they block access to these care spaces by ill and injured patients in the waiting room and increase waiting times for newly arriving patients. For the inpatients housed in the ED, the care provided is not equivalent to that on a ward and thus there is Access Block to appropriate inpatient care. Within many Canadian hospitals, elective surgery cases have been delayed or cancelled in an effort to deal with hospital and ED overcrowding, and in doing so patients awaiting scheduled surgery experience Access Block. On the inpatient wards, as hospital overcrowding increases, nursing workloads that are often perceived as dangerous result and provider/patient satisfaction decreases when over capacity protocols (OCP) are initiated.

In 2009, Canada had only 1.7 acute care beds per 1,000 Canadians, ranking 33rd out of 34 Organisation for Economic Co-Operation and Development (OECD) countries (OECD average was 3.4/1,000).¹⁴ The lack of acute care beds in Canada means that most hospitals frequently operate at unsustainable occupancy rates of higher than 95%, a level at which regular bed shortages, periodic bed crises, and hospital overcrowding are inevitable.¹⁵⁻¹⁷ Functioning at capacities above 95% occupancy does not allow for flexibility in the system to accommodate the natural peaks in patient volumes and admissions that will periodically occur.

Acute care bed capacity can also be significantly affected by patients who occupy acute care beds but who actually require an “alternate level of care” (e.g., long term care, rehabilitation etc.) and yet cannot access this care because of shortages in community resources and post-acute bed capacity. These patients account for the occupancy of up to 20% of acute care hospital beds, and thereby contribute to ED overcrowding and Access Block by preventing the admission of emergency patients to hospital beds.¹⁸ The majority of patients in ALC status are elderly; with life expectancy increasing and the population aging this bottleneck will escalate if the problems are not addressed.

As can be seen, the problem of Access Block in general, and more specifically the growing concern of EDOC, is a multifaceted issue and no one single intervention will be effective. Any attempts to address EDOC will require a system-wide approach that will need to take into account input factors (improved

primary care access and improved ongoing care for patients with chronic conditions), throughput issues and ED optimization, along with addressing output bottlenecks and the flow of admitted patients (from acute care capacity and efficiency improvements all the way back out to the community and to post-acute care capacity).

RECOMMENDATIONS

The following recommendations have been generated from evidence-based documents with input from CAEP experts' opinions and consensus.

i **Establish national benchmarks for key intervals in the ED experience and report them publicly:**

CAEP recommends the establishment of national benchmarks for key intervals in the experience of patients receiving care within the ED. In order to encourage transparency, and to ensure this issue remains in the forefront of the public's attention, these targets and individual non-aggregated hospital performance measures should be publicly reported. All benchmarks must be measurable and be linked to an accountability framework in order to adequately assess performance. Reliable, complete, and accurate data must also be collected in every ED so that progress can be measured and interventions evaluated.

For public reporting the median is best understood by lay people and reflects the typical patient experience. The 90th percentile targets should also be measured and reported as they better reflect majority experience and are a better tool for identifying existing delays and for judging process improvement, and can be used for incentives such as pay for results programs.

It is predicted that hospitals across the country will be at varying levels of performance initially, but

patients can expect us to work towards a common standard of service. In general, expecting improvements of 5-10% per year towards these targets are reasonable.

Currently, there are many different targets in place across Canada – see Table 1 – CAEP urges provinces to meet and agree on common targets and reporting standards so Canadians can know how their community compares to others across the country.

1. **Time to PIA:** This is the interval from triage or registration until the patient is seen by an MD. This is the interval that most patients would intuitively think of as their “wait time” on an emergency visit, and correlates to “left without being seen” rates, overall patient satisfaction and total ED length of stay.

CAEP recommends a target of one hour at the median and 3 hours at the 90th percentile.

2. **Time to In-patient Bed:** This is the interval from admission decision until a patient departs to the ward. It is the other key waiting interval and reflects bed availability at the time of admission, as well as hospital administrative efficiencies in assigning beds and arranging transfer of care and transportation. Admitted patients wait in uncomfortable circumstances in the ED for long periods of time, and this should be avoided in an optimally resourced and well-functioning health care system.

CAEP recommends a target of 2 hours at the median and 8 hours at the 90th percentile.

3. **Overall length of stay in the ED (EDLOS):** This is the time from arrival at triage or registration until departure home or transfer

Table 1. Variation in Emergency Department wait-time targets (as of November 2011)

	Admits	High Acuity Discharges	Low acuity discharges
Nova Scotia	8 hours 90 th %-ile	8 hours 90 th %-ile	4 hours 90 th %-ile
Quebec	12 hour (mean)	8 hours (mean) * * applies only to stretcher patients.	
Ontario	8 hours 90 th %-ile	8 hours 90 th %-ile	4 hours 90 th %-ile
Manitoba		N/A	
Saskatchewan		N/A	
Alberta	8 hours 90 th %-ile		4 hours 90 th %-ile
British Columbia	10 hours 75 th %-ile	4 hours 75 th %-ile	2 hours 75 th %-ile

Courtesy of the Health Quality Council of Alberta.

to the ward. It reflects total patient experience, including care and waiting. In some cases, better care will require a longer stay, which is partly reflected in the varying target times by acuity/disposition.

- a. **Low acuity discharged patients (CTAS IV or V on arrival):** CAEP recommends a target of 2 hours at the median and 4 hours at the 90th percentile;
 - b. **High acuity discharges (CTAS I-III on arrival):** CAEP recommends a target of 4 hours at the median and 8 hours at the 90th percentile;
 - c. **Admitted patients:** CAEP recommends a target of 8 hours at the median and 12 hours at the 90th percentile.
- ii **Link ED length of stay (ED LOS) benchmarks to incentives and infrastructure investment:** ED LOS benchmarks must be linked with incentives and infrastructure investment for meaningful change to be achieved. The UK and Ontario have achieved significant reductions in ED wait times following the adoption of jurisdiction-wide targets for ED LOS.¹⁹ This was coupled with financial incentives, accountability measures, and tackling delays in access to inpatient beds, specialist doctors, and diagnostic investigations.
- iii **Mandate a national ED repository of visit data:** It is a national conundrum that ED visit data are not all held and reported from one central resource. Only Alberta and Ontario contribute all ED visit data to the National Ambulatory Care Records System (NACRS) database maintained by the Canadian Institute of Health Information (CIHI). Transparent and easy access to valid and reliable data to measure performance, using nationally standardized definitions as per the CAEP CTAS and CEDIS National Working Groups, should be a provincial and federal priority.
- iv **Optimize bed management and proactively plan bed capacity:** In addition to increasing the absolute number of acute care beds, inpatient bed capacity can also be improved by optimizing bed management. Effective bed management strategies should smooth the degree of variability in the numbers of admissions and discharges. Areas of focus for better

management include; discharge planning, surgical smoothing, admission procedures, capacity planning, operational planning, and hospital policies for bed availability priorities and bed use. Hospital overcapacity protocols, along with expedited discharges and formalized discharge processes, will improve overall hospital flow and mitigate EDOC.

OTHER POTENTIAL SOLUTIONS

Several strategies have been used to address Access Block/EDOC including:

i. **INPUT Solutions:**

1. **Improve Primary Care Access:** Investing in a robust primary care system ensuring all Canadians have reasonable access to a PCP with a focus on prevention and healthy living. Improved and extended access to a PCP, with increased after-hours access and semi-urgent appointments, would possibly prevent patients from becoming ill and thus requiring hospital care.
2. **Improve EMS Coordination:** Consideration should be given to improve EMS offload processes. Utilization of Ambulance Offload Nurses in Ontario has shown some impressive success in addressing Access Block for pre-hospital patients. Ontario provided funding for nurses specifically to take over care of patients arriving by ambulance from paramedics at peak periods of the day – even if no stretcher is available (suitable areas for this to take place are found in the ED waiting/arrivals area or adjacent to the ED). Paramedics are then able to get back on the road. Alberta has also used EMS consolidation processes to address EMS Access Block. In some hospitals multiple EMS patients are consolidated together and cared for by one EMS provider to facilitate the rapid return of ambulance crews back out into the community.

ii. **THROUGHPUT Solutions**

1. **Engage in process improvement:** Management techniques such as “LEAN” have shown that many hospital and ED processes can be simplified and improved.²⁰
2. **Invest in improving staffing of our EDs:** Most ED’s are staffed to average patient flow demands. Queuing at specific times of the day,

days of the week, and during specific seasons is surprisingly predictable. Volume-based staffing that ensures adequate physicians, nurses, allied health workers, and alternate care providers (e.g., NP's, PA's, GEM nurses, Social Workers, PT's and OT's, Discharge Planners etc.) are present when required, should be part of the staffing plan. Note that a critical volume of ED visits, likely above 30,000 is needed to ensure efficient use of extra resources.

3. **Match staffing to patient demand:** Many ED's can do a better job of scheduling their existing resources by analyzing patient arrival patterns. Recent randomized controlled trial evidence also suggests that altering shifts can be studied using both quantitative and qualitative results.²¹ Alternatively, employing staff on administrative functions has been shown to increase overall ED efficiency.²²
4. **ED Information Systems (EDIS) are basic ED infrastructure:** EDIS or patient tracking systems, can assist with moment to moment management of patient flow and resource use, and can also provide data capture to inform management decisions and assist with compliance with obligations regarding reporting of data.⁹ EDIS systems that are aligned with our strategies and incorporate our definitions and targets can allow for real time collection and distribution of performance measures to support transparency on local performance perturbations and support better management of performance at all levels – from unit to hospital to regional to system wide.
5. **Utilize medical directives:** When combined with an appropriate approval process, education and implementation program and ongoing monitoring, medical directives can speed care for selected patients on arrival to the ED.
6. **Utilize Fast Track Areas:** Many alternatives such as dissuading ED use through media campaigns and diversion of patients to walk-in clinics have been proposed; however, most evidence suggests these are ineffective strategies.^{23,24} Overall, while the evidence is poorly coordinated, there appears to be support for the role of fast-track areas in most high-volume, urban EDs. These data likely don't apply to smaller, rural hospitals. Several reports conclude that the operation of an ED fast-track system appears to be efficient, operationally cost-effective, safe, and improves patient satisfaction with care.^{8,25} The author of the most comprehensive report concluded that: 1) fast-tracks were safe and did not appear to provide lower quality of care; 2) because they require less resources, fast-track areas are cost-effective; and 3) the quality of the literature in this area would be considered "weak".²⁵
7. **Utilize "Rapid Assessment Zones (RAZ)":** Many EDs have had success with organizing and staffing specific areas to meet specific patient population needs. "Fast Tracks", or ambulatory or minor treatment areas, service patients with low risk of admission who have no need for a stretcher. They can be cared for in non-traditional care spaces, frequently only needing to be in a stretcher for a very brief examination period followed by treatment and wait periods in comfortable chairs that take up less ED space and resources. Rapid assessment zones or RAZ's can be utilized for the initial assessment of intermediate acuity patients who are stable enough to wait in a chair, but require a stretcher for assessment and/or intimate examinations/procedures.²⁶
8. **Establish formalized "Intake" Policies and Processes:** Intake is a formalized process where patients who have complaints that cannot be evaluated within a short triage process, can be moved to a rapid assessment area where a physician can do a more formal assessment and streamline the patient to the appropriate care space within the ED. Typically patients with CTAS level 3 complaints, undifferentiated abdominal pain as an example, can be assessed in an intake area of the ED, investigations can be initiated rapidly, and the patient can then be more streamlined into the appropriate acute care space, or to the Fast Track/minor treatment environment to complete their care.
9. **Establish SSU's, CDU's and/or Observation Units, and or MAU's:** In some settings, carefully designed and monitored Short Stay Units, Clinical Decision Units and/or ED Observation Units, or Medical Assessment

Units decrease EDOC and improve overall patient flow and care. In general the higher the ED volume and admissions the greater the positive effect of these types of units. Recent evidence from implementation of CDUs in Ontario suggest the benefit may be less than previously reported.²⁷

10. **Dedicated ED Satellite labs:** Given the delays associated with ordering laboratory testing in the ED that have been identified in the medical literature,²⁸ it might be reasonable to expect that improvements in laboratory times would have dramatic influence on overall LOS. Based on the available evidence summarized in the HQCA Report, the effect of point-of-care testing on turn-around times is supported by relatively strong evidence, whereas its positive effect on LOS is supported by limited evidence. Overall, the best evidence would suggest a 60 minute reduction in length of stay using a dedicated satellite ED lab, although actual results will vary locally depending on baseline turn-around times and the tests available.⁷
11. **Utilize Better Teaching Practices:** The traditional approach to teaching- often with initial assessment by a junior and consequent delayed decision making - can be an impediment to flow. We need to find ways to preserve the teaching experience while remaining patient centred and preserving access and quality.

iii. Output Solutions:

1. **Implement overcapacity protocols:** Access block and EDOC are symptomatic of demand exceeding capacity in hospitals and requires system-wide solutions. Access Block and EDOC can be addressed immediately, with existing resources, through mechanisms to improve patient flow. CAEP recommends the rapid implementation of overcapacity protocols as part of comprehensive surge strategies so that all hospitals have an organized approach to deal, in the best manner possible, with situations of demand exceeding capacity. While the evidence for this intervention is weak,²⁹ implementing overcapacity protocols effectively shares the responsibility for already stabilized and admitted patients with all wards in the hospital, instead of just 'warehousing' them in the

emergency department. Overcapacity protocols should be implemented at times of peak inpatient pressures where ED patient care is compromised. While these are not a permanent solution for Access Block or EDOC, they represent a mechanism to temporarily "decompress" the ED. As other strategies lead to better baseline performance the frequency with which these protocols would be required will diminish.

2. **Formalized Hospital Wide Flow Policies and Processes:** One approach to improving flow is to create a Hospital LOS committee to continually monitor and optimize patient flow and to appropriately minimize LOS. These committees would need to be led by senior administrators with local decision making authority. The goal of these committees would be to aggressively addresses factors directly associated with hospital LOS such as:

- Most Responsible Physician (MRP) designation – which is particularly important in complicated patients with multiple services involved in their care;
- Designated discharge planners;
- Inpatient lab and radiology priorities;
- Monitoring and improving consultant times;
- Improved discharge planning through formalized Evidence Based Guidelines and benchmarks;
- Improving communication with primary care providers;
- Facilitating specialist follow-up;
- Assessment of readmission rates and addressing areas of concern for continuing quality improvement;
- Creation of outpatient/ambulatory care clinics to promote early discharge;
- Earlier involvement of CCAC (home care).

Measures designed to help hospitals achieve ED length of stay benchmarks must be appropriate to the local context. There will not be a "one size fits all" solution. Access Block and EDOC must be dealt with urgently through collaborative action between the provincial governments, health authorities, hospital administrators, community care access organizations, front-line emergency physicians, and all hospital staff in order to effect the necessary changes needed for safe access to emergency care and improved patient flow.

CONCLUSIONS

Access Block and EDOC represent a public health emergency. Crowded EDs are associated with poorer outcomes including increased mortality for patients seen during crowded periods. Access Block and EDOC is the result of complex multi-layer problems requiring engagement at all levels of the health care system. The accountability for patient care extends well beyond the walls of the ED and the hospital with an increased emphasis on both primary care access and meeting the needs of ALC patients. Incentives need to be aligned with desired behaviours, performance needs to be tracked and reported, and senior executives need to demonstrate leadership and be held accountable. There are now domestic and international examples of jurisdictions that have successfully mitigated this problem. The time to act is now; there is no longer any excuse for delay.

Further information on ED overcrowding and local/provincial progress and successes can be obtained from the Canadian Association of Emergency Physicians at www.caep.ca.

GLOSSARY OF TERMS

Access Block - refers to the situation where patients in the emergency department (ED) requiring inpatient care are unable to gain access to appropriate hospital beds within a reasonable time frame, or anywhere else patients needing care are unable to obtain it in a timely fashion appropriate to their need.

ALC: Alternative Level of Care - are patients who no longer require hospital care but cannot be discharged due to a lack of beds and/or resources in the community. In short, ALC patients are not receiving the right care in the right place. They are often referred to as “Bed Blockers” as they prevent more acute patients from receiving a required bed, but we should remember they are also not having their needs met either.

CAEP: The Canadian Association of Emergency Physicians - CAEP is the meeting place for emergency physicians! CAEP’s mission is to promote the interests of emergency physicians and the specialty of emergency medicine in Canada by advocating for emergency physicians and their patients, connecting emergency physicians, providing leading emergency medicine education and a forum for research in emergency medicine.

CDU: Clinical Decision Units - is an observation unit in or adjacent to the emergency department. It is designed to provide appropriate physician and nurse staffing and diagnostic/treatment capabilities to allow extended care for select patients, usually up to 24 hours, in a safe, effective and comfortable environment.

CEDIS: Canadian Emergency Department Information Systems - is a working group that develops resources, tools and definitions to promote improved data gathering and reporting in ED’s.

CTAS: Canadian Triage And Acuity Scale - is a tool that enables Emergency Departments (ED) to prioritize patient care requirements at arrival in a standardized fashion. CTAS levels correlate with resource requirements including admission rate but are not designed for this purpose and should be used with caution for anything other than triaging of patients.

ED: Emergency Department - an area within the hospital designed to respond immediately to patients suffering from serious medical problems.

EDIS: Emergency Department Information System - A computer program for tracking patients arriving and departing to ED’s and assist in ED management.

EDOC: Emergency Department Overcrowding - defined as “a situation where the demand for emergency services exceeds the ability to provide care in a reasonable amount of time.”

EMS: Emergency Medical Services - ambulance services; a mobile medical service dedicated to providing out-of-hospital acute medical care, transport to definitive care, and other medical transport to patients with illnesses and injuries which prevent the patient from transporting themselves.

GEM nurse: Geriatric Emergency Management Nurse - provides advanced gerontological expertise in the care of the frail elderly seen in the ED who are at risk of suffering adverse events, loss of independence and admission to hospital or long-term care.

LTC: Long Term Care - a facility able to provide a variety of services which help meet both the medical and non-medical needs of people with a chronic illness or disability who cannot care for themselves for an indefinite periods of time (eg a “nursing home”).

MAU: Medical Assessment Unit - provides a service for the rapid assessment and treatment of a wide range of medical conditions. It improves the

efficiency in the admission process for unplanned patients by providing assessment, care and treatment for a designated period (usually 48 hours) prior to transfer to a medical ward or home where appropriate. The patients stay on an inpatient ward is eliminated or drastically reduced for appropriate patients when this model of care is used.

NACRS: National Ambulatory Care Records System - contains data for hospital-based and community-based emergency and ambulatory care (for example, day surgery and outpatient clinics).

NP: Nurse Practitioner - A nurse practitioner (NP) is a nurse with a graduate degree in advanced practice nursing.

OLD: Off Load Delay - is a state when an ambulance transports a patient to a hospital and paramedics must wait with the patient until hospital staff assumes responsibility for care of the patient.

PA: Physician's Assistant - is a healthcare professional who is trained to practice medicine as part of a team with a physician.

PCP: Primary Care Provider - is a health care practitioner who sees patients at their own request for preventative care or for common medical problems. In Canada, this person is usually a family doctor; however, increasingly in North America, this person may also be a nurse practitioner, a Pediatrician, or an Internist.

PIA: Physician Initial Assessment - The first contact with a physician after arrival at an ED.

RAZ: Rapid Assessment Zones - An area in an ED to facilitate efficient care of patients with moderate acuity. These patients typically are well enough to wait in a chair in an internal waiting area adjacent to the exam areas, but require a stretcher for assessment or intimate examinations. These zones allow privacy while increasing stretcher productivity.

SSU: Short Stay Units - provide an alternative to traditional inpatient services for patients with short anticipated hospital stays. See MAU, there is overlap in these concepts.

Target - refers to a designated benchmark for key performance metrics.

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Without more acute care beds, hospitals are on their own to grapple with emergency department crises

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In this issue of *CMAJ*, Yao and colleagues present findings from British Columbia, showing that visits to emergency departments for most reasons returned to baseline levels by the summer of 2021, following a dramatic decrease in the early months of the COVID-19 pandemic, and have since shown a sustained increase.¹ Emergency departments are seeing patients of higher acuity, more visits for mental health and substance use and more patients requiring hospital admission. Use of emergency departments increased at rates higher than population growth, and May to August were the busiest months.¹

These results confirm that Canada's emergency departments are in a crisis that will continue to build, as recently discussed in *CMAJ*.² Hospitals do not operate safely when occupancy rates exceed 90% for many days in a row,³ and many Canadian hospitals have been exceeding 100% occupancy for months on end.⁴ Quality of care decreases, staff retention becomes problematic and overcrowding of emergency departments, a symptom of the problem, is assured.³ Given federal and provincial leaders' inertia over increasing acute care capacity, hospital leadership, staff and physicians are left without system-level supports and will remain in a perpetual state of crisis management to mitigate harms to patients and staff.

Given higher rates of patients requiring admission,¹ lack of acute care hospital beds⁵ and hospitals regularly operating beyond capacity,⁴ boarding of admitted patients in emergency departments will continue. Although the federal government recently issued one-time health care transfers, intended to relieve immediate pressures on the health care system and alleviate pressures on emergency departments,⁶ the money came with no requirement that provinces increase the number of staffed hospital beds, the root cause of overcrowding in emergency departments.^{7,8}

Although it may seem that hospital-based efforts would be futile when there are no hospital beds left for use, concerted efforts initiated by senior hospital administrators have been shown to facilitate patients' disposition from the emergency department.³ Highly visible involvement of hospital leaders, including regular, in-person conversations with emergency department staff, confirms that

emergency department crowding is everyone's burden to share and improves staff morale, especially when crowding is severe.³ Position statements and recommendations from the Canadian Association of Emergency Physicians in 2001, 2013 and 2023 insist that hospitals implement demand-driven overcapacity protocols when crowding of emergency departments is compromising care delivery.⁹⁻¹¹ Such protocols take an all-hands-on-deck approach to decompress an emergency department but are rarely used in Canadian hospitals despite overcapacity thresholds being regularly and severely exceeded, perhaps because applying an emergency solution on a chronic basis is unsustainable.¹²

To help mitigate extreme levels of crowding, other strategies include extending hours during which procedures and consults in hospitals are available. As Canadian hospitals are routinely operating at more than 90% occupancy, the additional hours during which an admitted patient waits for a test or procedure that may facilitate their discharge represent time spent by another patient in a waiting room chair. Extending the availability of hospital services, such as diagnostic imaging and specialist consultation, into evenings and weekends has been shown to decrease inpatient lengths of stay and may prevent need for hospital admission.³

Using the emergency department as the gateway to facilitate care or planned admission is not a patient-centred option, as patients with nonemergent conditions sit in crowded waiting rooms and have extended lengths of stay. Hospitals can establish pathways for patients to access urgent but nonemergent diagnostic testing, receive anticipated red blood cell transfusions and have planned hospital admissions without involving the emergency department.

Why is it permissible for patient-to-provider ratios to exceed safe thresholds in the emergency department but not in other areas of the hospital? As an alternative to boarding in the emergency department, boarding of patients in inpatient hallways has proven effective, is preferred by patients and decreases both emergency department and inpatient stays.^{3,13} Further, to equalize ratios, hospitals in the United States have developed care models whereby admitted patients boarding in the emergency department are cared for only by nurses and physicians from the

admitting service, even while they remain in the emergency department.¹⁴ Although such strategies may encounter resistance and do not solve the underlying problem of lack of hospital beds, care provided by the admitting service either in the emergency department or in a hallway on an inpatient unit are superior options for boarding emergency department patients.^{3,12,13}

The pressure cooker environment of crowded emergency department waiting rooms and the increase in emergency department visits related to substance use contribute to escalating rates of violence experienced by emergency department staff.^{1,15} Emergency department doctors and nurses say violence directed toward them is one of the biggest contributors to them leaving the field,¹⁶ and half of emergency department nurses are physically or verbally abused in any given week.¹⁷ Emergency department personnel cannot be expected to simultaneously provide life-saving care, de-escalate people who threaten harm and protect themselves.¹⁸ By embedding dedicated and integrated security personnel and mental health clinicians who are trained in trauma-informed de-escalation strategies in the emergency department, 24 hours a day, hospitals could decrease violence, enable safer care provision and retain staff.¹⁹

Deputy ministers and ministers of health should arrange a site visit to a Canadian emergency department on one of the last remaining evenings or weekends of the summer and hear first-hand experiences from emergency department patients and providers. Their experiences will no doubt underscore the urgent need for more acute care beds and for retaining, training and hiring hospital personnel to staff them.

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CAEP position statement on violence in the emergency department

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Definition

Workplace violence occurs when a person is physically or verbally abused, threatened, intimidated, harassed or assaulted in her or his employment. In Canada, employees have the right to a safe work environment, and it is the duty of the employer to provide it [1].

Nature and magnitude of the problem

The problem of workplace violence in the emergency department (ED) is grave. Healthcare providers have an estimated fourfold higher rate of workplace violence and fully half of such attacks occur in the ED [2–9]. Studies suggest that 43% of hospital nurses will be sexually harassed or assaulted

this year [4] including over 50% of those working in the ED [10–15]. Over half of ED nurses are physically or verbally abused in any given week [10, 11]. The Canadian Federation of Nurses Unions (CFNU) reported in 2017 that “the number of violence-related lost-time claims for frontline health care workers has increased by almost 66% over the past decade, three times the rate of increase for police and correctional service officers combined” [8]. It is shocking that the risk of violence for a doctor or nurse working in a Canadian emergency department is increasing so dramatically and intolerable that it be left to rise unabated. The level of ED violence can reasonably be expected to continue to increase in the future due to the changing ED population, the prevalence of guns and paucity of services available to those prone to violence due to underlying medical, substance abuse or mental health disorders.

The increasing trend noted by the nursing profession is echoed by emergency physicians. Nearly 70% of emergency physicians say that ED violence has increased in the past five years, with 25% reporting it has increased greatly [16]. This high level of ED violence is undoubtedly a contributing factor in the already high ED physician burnout rate [17–19]. ED violence negatively affects both the quality of care which can be offered and the financial cost to the health care system [20]. In Ontario alone, ED violence costs \$23.8 million annually [21].

The increasing pattern of violence against health care workers is disturbing not only because of its prevalence but also because of the culture of silence surrounding it and lack of effective mitigating action, despite its incredibly high human and financial cost. The CFNU's recent poll highlighted that, although violence in the ED is common, few people report the incidents and fewer still seek help from their unions. Many assume it is an occupational hazard they must accept and yet, not surprisingly, two thirds (66%) of nurses have thought of leaving their job in the past year [8]. The unhealthy work environment contributes

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to nurse absenteeism, which is higher than all other occupations. In 2016, the annual cost of absenteeism due to illness or disability was at least \$989 million” [8]. ED violence costs Canadians billions of dollars annually, money which could otherwise be spent constructively on necessary health and social services.

Changing the prevailing culture

The prevailing culture in the hospital system has implied that ED violence is part of the job, an inherent risk that it is futile to try to address [22]. The Canadian Association of Emergency Physicians (CAEP) seeks to change this perception and increase ED safety for physicians, hospital staff and patients. CAEP finds the level of ED violence unacceptable, the dearth of available mitigation techniques dangerous, the lack of effective recourse neglectful and callous, and the wasted human and financial resources unconscionable.

The most important component of any violence prevention program is a clear commitment by management. CAEP expects unequivocal support from hospitals and regional health authorities for workplace safety. Explicit, written policies and procedures to prevent ED violence must be implemented and adhered to, along with safe physical spaces and the provision of counselling and support of ED violence victims. Although physicians are not normally entitled to the benefits of regular hospital employees, in the event of workplace violence they should be fully supported.

Policies related to violence in the ED should: [1].

- (1) Be developed by management and front-line representatives.
- (2) Apply to management, employees and patients.
- (3) Define workplace violence in precise, concrete language.
- (4) Provide clear examples of unacceptable behaviour and working conditions.
- (5) State in clear terms the organization’s view toward workplace violence and its commitment to the prevention of workplace violence.
- (6) Precisely state the consequences of making threats or committing a violent act, and outline concrete protocols and options that are available at the moment. This should include roles and notifications (i.e. security, police, management, etc.)
- (7) Outline the process by which preventive measures will be developed.

- (8) Mandate the reporting of all incidents of violence.
- (9) Outline the confidential process by which employees can report incidents and to whom.
- (10) Assure no reprisals will be made against reporting employees.
- (11) Outline the procedures for investigating and resolving complaints including the right to recompense for time taken off work to deal with the physical, emotional or legal effects of the violence for all health-care professionals.
- (12) Describe how information about potential risks of violence will be communicated to employees.
- (13) Make a commitment to provide support services to victims of violence including all health-care professionals.
- (14) Offer a confidential Employee Assistance Program (EAP) to allow all health care professionals to seek help.
- (15) Make a commitment to fulfill the violence prevention training needs of different levels of personnel within the organization.
- (16) Specifically address the measures which can be taken when an individual who has acted violently in the past presents to the ED for treatment.
- (17) Commit to monitor and regularly review the policy.
- (18) State applicable regulatory requirements.

In addition to the above policies, CAEP advocates for the following [23–32]:

- (1) The development of a national safety standard to be developed in conjunction with security experts and other partners which outlines best practices, benchmarks and comprehensive plans for improved safety and security in EDs. Hospital administrators should be obligated to meet these standards within an urgent timeframe. The standards should include
 - (a) Providing for improved environmental design for Canadian EDs to prevent the dangers of isolation without limiting privacy. Restricting access to the ED has been shown to prevent violence.
 - (b) Providing for improved security measures for all Canadian emergency departments. Where feasible a visible security-presence is desirable. Alarm systems should also be explored.
 - (c) Developing guidelines and protocols for Code Silver: Active Shooter situations [33–40].

(d) Training for all staff to recognize aggressive and escalating behaviours and de-escalation training for all emergency staff.

(e) Equipping staff with appropriate medical protocols for the control, restraint and sedation of (potentially) violent patients as clinically appropriate.

- (2) Better community access for mental health and substance use disorder patients.
- (3) Support of initiatives to better understand and mitigate the barriers to reporting violence in the ED.

Multiple causes, zero tolerance

Violence in the ED has many antecedents, including poverty, racism, substance use, gang and personal violence. The violent patient may be exhibiting manifestations of delirium from a myriad of acute medical causes, or dementia. Inadequate community resources for those with mental health disorders and addictions have been a major contributor, as well. We believe the violent patient deserves the same optimal care expected by any patient and their individual medical and social circumstances must be considered in their ultimate care plan. Violence in the ED is more often than not a symptom rather than a personality trait; thus, we urge caution with respect to a ‘zero tolerance’ policy in which patients with a history of violence are denied access to care. We do believe, however, that maximal administrative efforts must be made to provide health care workers and our patients a safe and secure work environment.

It is incumbent upon hospital administrations to make full and complete efforts to help address the rising incidence and increasing toll of ED violence. They must provide a respectful and collaborative environment in which all cases of violence are reported without fear or intimidation. They must commit to staff engagement with violence prevention, including mandatory de-escalation training. Improving staffing ratios and patient flow will help provide a more secure facility for both patients and staff.

Physicians and nurses in our EDs struggle to contend with increased violence and burnout, with fewer and fewer supports and resources, in an era of increasing funding cuts. It is the position of CAEP that the escalating human and financial burden of these cuts is not only detrimental to society, but also violates the rights of healthcare workers to a safe work environment that will allow them to provide appropriate care to the public. In addition to the preservation of human dignity, skill and security, there is the potential for great financial savings in addressing ED violence nationally. It is thus imperative to meaningfully address the epidemic of

violence in Canadian emergency departments and, for any delay in that regard, there should indeed be zero tolerance.

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