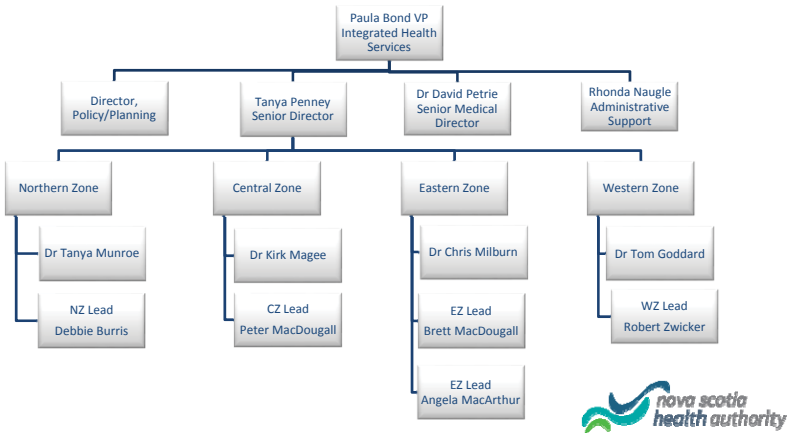
Emergency Program of Care

nova scotia health authority

IWK Health Centre

NOVA SCOTIA Health and Wellness

Emergency Program of Care



nova scotia health authority

We Are EPoC (and Epic!)

Vision and Guiding Principles

Vision

- One responsive, effective and integrated network of emergency health care, with many access points, and a single collective mission

Mission

- To improve patient outcomes by ensuring that all Nova Scotians have timely access to high quality emergency health care

Values

- **Readiness**: robustness, responsiveness, resilience, adaptability, agility
- **Value:** evaluation, patient and population outcomes, cost-effective, stewardship
- **Systems thinking:** integration, inter-dependence, collaborative, inter-professional / trans-disciplinary problem solving

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nova scotia health authority

NSHA and IWK Emergency Program of Care Health Services Strategic Plan

Vision	Mission	Values
One responsive, effective and integrated network of emergency health care; with many access points, and a single collective mission.	To improve patient outcomes by ensuring that all Nova Scotians have timely access to high quality Emergency Health Care	**Readiness**: robustness, responsiveness, resilience – "anybody/anything/anytime", adaptability, agility **Value (Patient outcomes/costs):** evaluation, pt and population outcomes, cost effectiveness, stewardship **Systems thinking:** integration, inter-dependance, collaborations, inter-professional / trans-disciplinary

STRATEGIC DIRECTION #1
Network Integration: Siting, Sizing, Synergizing and optimizing health human resources

Goal #1	Goal # 2	Goal # 3	Goal # 4	Goal # 5
Categorization of EDs and other system access points should be formalized with operational implications, and system accountabilities.	Categorization recommendations should involve hazard analysis methodology in determining proposed levels of care and possible alternative mitigation strategies	Siting, sizing, and synergizing within the Emergency Program of Care requires integrating the strategic plans of EHSNS, as well as with that of the broader Health Services Planning process.	Optimize utilization and integration of all health care professionals as part of the EM patient care team	Establish and implement a systematic approach to providing continuing education, team based care models and improving use of clinical best practices in patient care
Actions	**Actions**	**Actions**	**Actions**	**Actions**
• Definitions should be based on the literature and national guidelines • Collaborate with ICU, Peri-OP and Trauma Programs to establish mutually supportive leveling	• Develop a 'formula' to consistently measure the likelihood and magnitude or risk considered in relation to the capability of the ED/facility (vs alternative mitigation strategies) • Distance from the closest hospital will be an over-ride consideration (too far increases level, too close decreases)	• Improved telemedicine links (hub and spoke design with level 3/4s to closest level 2) • Improved planning of patient transitions / interfaces with other Programs of Care	• Physician Resource Plan should recognize board certification in EM (credentialing aligned with national recommendations, definitions, etc) • Creative hub and spoke partnering/supporting for staffing and scheduling • Improve Physician Emergency Medicine competencies / credentialing, as well as their accountabilities, and	• Roles/responsibilities, purpose, and integration; inter-professional team based care • Implement a common platform to support access to best practice guidelines, care directives, clinical order sets, patient education media • Establish a provincial strategy that support

3 Strategic Directions:

1. Design an integrated provincial network with appropriate sizing, siting and synergizing
2. Provide exceptional emergency care through standardization, monitoring and continuous quality improvement
3. Optimize patient flow across the continuum of services to improve care quality and operational efficiency

4. Establish a governance and accountability structure that optimizes the balance between site level operational decision making and improvements and system level coordination and strategic adaptations.

Scope	Problem Statement and Current State	Future State Opportunities
Strategic Direction 1: Network Design and Integration: Siting, Sizing, Synergizing and optimizing health human resources	Currently there are assumptions, but no formal definitions or operational criteria to describe the level of ED response capacity in the system, and therefore rational and evidence based discussions about an integrated network are compromised.	**Categorization** (siting and sizing) of EDs should be formalized with operational implications, system accountabilities and consideration of other system access points.
	The interface between primary care and the Emergency Department lacks consistency and there are some problems with patient information transitions (in both directions). Home and continuing care requires better system integration.	Better **Horizontal integration** of "the patient care journey" for the person with an unexpected illness or injury that does not require hospitalization
	There are still some inconsistencies in availability of specialist and subspecialist scheduling on-call coverage for Emergencies (at the site, regional, and provincial level). EHSNS is not always aware of changes in interfacility transports this entails.	Better **Vertical integration** of "the patient care journey" for the person with an unexpected illness or injury that does require secondary, tertiary, or quaternary care/hospitalization
	Inconsistent education, maintenance of competence, and utilization of paramedics, nurses, physicians and other health care providers skill sets/scopes of practice. The physician resource plan doesn't recognize board certification in Emergency Medicine	**Optimize human resource utilization** and integration of all health care professionals as part of the Emergency Medicine (EM) patient care team.

OVERVIEW

By Ricardo Martinez and Brendan Carr

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Creating Integrated Networks Of Emergency Care: From Vision To Value

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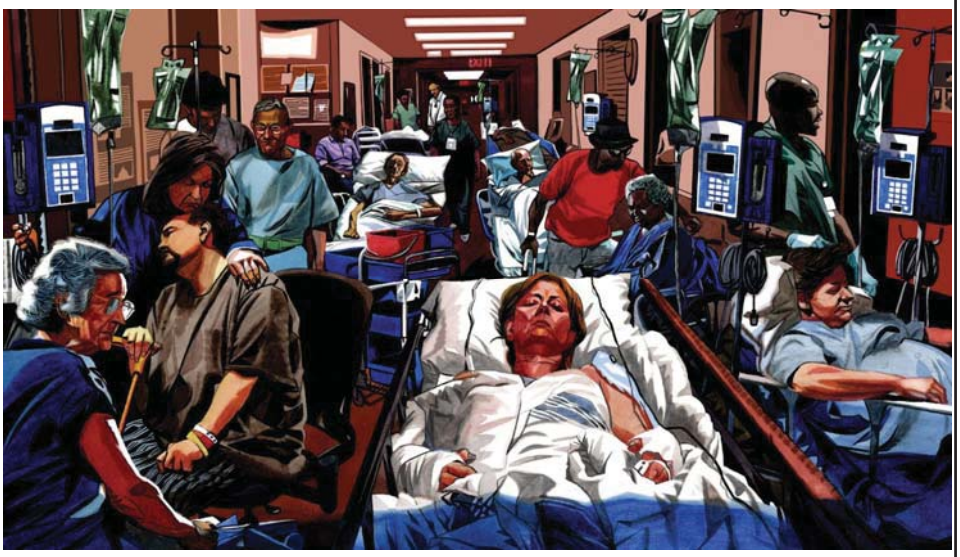
Brendan Carr is an assistant professor of emergency medicine and epidemiology at the Perelman School of Medicine, University of Pennsylvania, in Philadelphia.

ABSTRACT Emergency care is an essential component of the care delivery system in the United States, but it received little attention during the debates about health care reform. As a result, US emergency care remains outdated and fragmented. We provide an overview of efforts to regionalize emergency care in the United States, and we both identify challenges to change and recommend next steps in five domains: people, quality and processes, technology, finances, and jurisdictional politics. We offer a commonsense approach to increasing the value of emergency care delivery by developing regionalized integrated networks of emergency care that take advantage of emerging changes in the health system and are designed to meet time-sensitive patient needs.

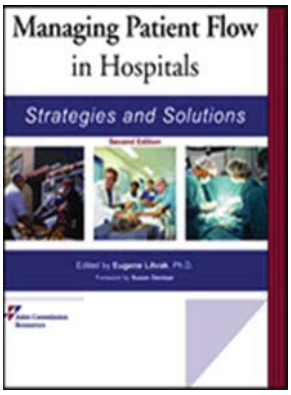
trategic Direction 2: xceptional emergency are through tandardization, onitoring, and ontinuous quality mprovement	There currently is not a provincial level forum to regularly discuss, share ideas/successes, and move towards a standardized and coordinated approach to quality improvement and patient safety in EDs across the province	Have a **Provincial Emergency Quality and Standards** Committee which is integrated with zonal operational structures to establish high quality standardized practices throughout the emergency care system.
	Currently, there is not trans-provincial or standardized reporting of important operational and patient oriented metrics to understand the functioning and quality of care in NS EDs. Patient outcomes / improvement science expertise is lacking.	**Quarterly reporting** of key process indicators and outcomes (when available) for all sites and zones
	Early start on standardizing EM quality and processes across the province. Some standards from the better care sooner initiative are excellent, some need modification, and some may not add value to the system.	Support the existing **provincial ED standards** and continue to evolve/modify/improve the standards.
	A challenge of EM systems of care is that the lower the volumes and acuities of ED patients, the more important maintaining skills through other means becomes important (e.g. simulation, distance education, telemedicine support).	Establish a provincial strategy that supports **maintenance of competence**, and ongoing professional training for front-line providers.

Quality, Standards, and Patient safety: Q+S committee

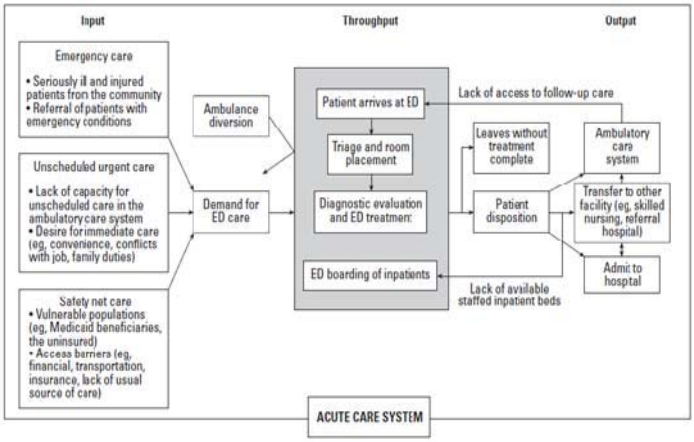
Strategic Direction 3: Hospital and System patient flow and efficiency	The ED length of stay of admitted patients in the adult level 1 ED, and many level 2 EDs far exceeds provincial and national targets. This leads to prolonged wait times, ambulance off-load problems and, increased morbidity and mortality	**Patient wait times** are in the top third of performers of the nationally accepted CAEP benchmarks.
	"You can't fix what you can't measure". Ongoing operational efficiencies and quality initiatives require reliable real time data accumulation and analysis - this is only available in a small number of EDs in the province.	An **emergency department information system (EDIS)** is available in all level 1 and 2 EDs to monitor patient flow and inform planning
	Same day / same week access to primary care physicians and some specialists is limited which can direct complex (but not acute), on-going care to the ED as "safety net". ***Unscheduled, but low acuity pts in the ED ***do not*** cause ED access block	Work with primary care and specialists **to improve same day / urgent access** alternatives for appropriate patients
	The ED is the default "safety net" for adult protection patients, and many social services crises "placement" situations which can utilize ED beds for days (sometimes weeks) at a time - this is not "the right pt, in the right place, at the right time".	Improve **non-ED alternatives for the complex co-morbidity patient**, the frail elderly, and long term care residents who do not have an acute worsening of their medical condition



Hospital and System flow: ED Information Systems



Input, Throughput, Output Model:



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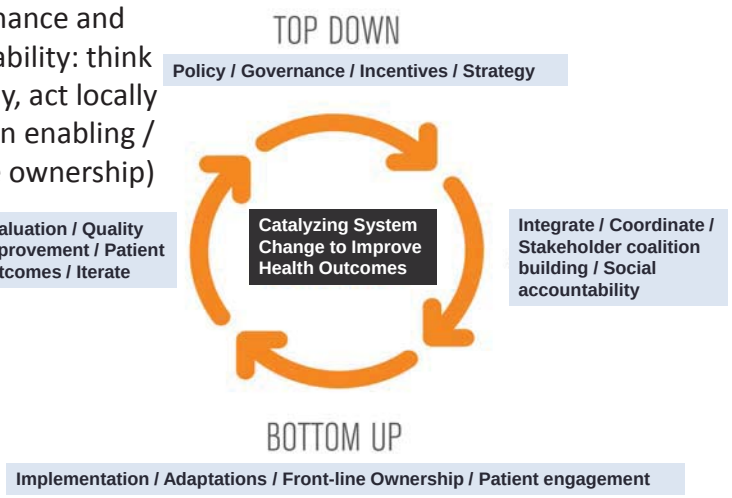
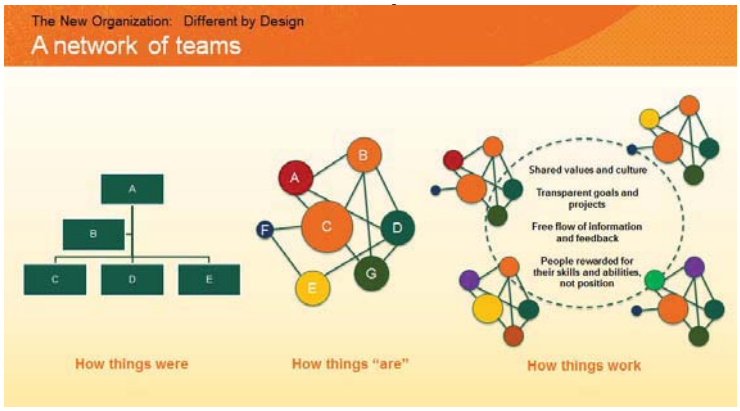
Strategic Direction 4: Establish a governance and accountability structure that optimizes the balance between site-level operational decision-making & improvements, and system level coordination	Conceptually the ED and EHSNS systems are building towards a more Integrated Networks of Care model, but at this point, the leadership and governance structure has not been formalized, so practically, who makes what decisions is unclear	EM care must be **planned as a single Integrated Network**, but will respect and enable local management
	.Implementation, coordination, and corrective/innovative iterations of this plan will require a provincial level steering and strategy committee which does not exist at this time	Have a **Provincial Steering and Strategy committee** overseeing the implementation, evaluation, and iterative improvements of the EPoC strategic plan
	The leadership and accountability framework for the EPoC (and the rest of the NDHA/IWK) is in evolution - role clarity, reporting lines, and influence maps need to be established, and a mechanism to iteratively improve them over time, created.	Have a detailed **leadership and accountability structure** to support the Emergency Program of Care.
	In some cases, physicians (and other providers) have not been accountable for their responsibilities to support the needs of the system, and likewise the "system" has not met its responsibilities to support the needs of the providers (in service of pts)	Physicians are **accountable t**hrough performance based service agreements and NSHA/IWK/DHW is **accountable** to maintain standards and support the necessary infrastructure.

Governance and Accountability: think holistically, act locally (top down enabling / front line ownership)

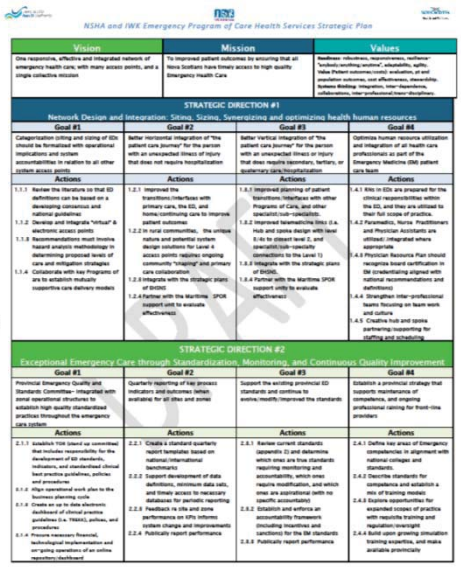


Governance and Accountability: provincial EPoC steering and strategy



Top 5 Successes

1. Collective Vision and Mission with Strategic Plan
2. Engagement → Integration
    1. Internal
    2. External
3. CPG's/Policies
4. Provincial/Zone Site committee structures
5. **First province to have a all inclusive & fulsome report on CAEP benchmarks



NSHA and IWK Emergency Program of Care Health Services Strategic Plan

Vision	Mission	Values
One responsive, effective and integrated network of emergency health care, with many access points, and a single collective mission	To improved patient outcomes by ensuring that all Nova Scotians have timely access to high quality Emergency Health Care	Excellence, robustness, responsiveness, resilience, kindness, caring, sensitive, adaptability, agility, Value (Patient outcomes/costs) evaluation, at and population outcomes, cost effectiveness, stewardship, Systems thinking, integration, inter-dependence, collaborations, inter-professional/inter-disciplinary.

STRATEGIC DIRECTION #1

Network Design and Integration: Siting, Sizing, Synergizing and optimizing health human resources

Goal #1	Goal #2	Goal #3	Goal #4
Categorization (siting and sizing of EDs should be formalized with operational implications and system accountabilities in relation to all other system access points	Better Horizontal integration of "the patient care journey" for the person with an unexpected illness of injury that does not require hospitalization	Better Vertical integration of "the patient care journey" for the person with an unexpected illness or injury that does require secondary, tertiary, or quaternary care/hospitalization	Optimize human resource utilization and integration of all health care professionals as part of the Emergency Medicine (EM) patient care team
Actions	**Actions**	**Actions**	**Actions**
1.1.1 Review the literature so that ED definitions can be based on a developing consensus and national guidelines 1.1.2 Develop and integrate "virtual" & electronic access points 1.1.3 Recommendations must involve hazard analysis methodology in determining proposed levels of care and mitigation strategies 1.1.4 Collaborate with key Programs of are to establish mutually supportive care delivery models	1.2.1 Improved the transitions/interfaces with primary care, the ED, and home/continuing care to improve patient outcomes 1.2.2 In rural communities, the unique nature and potential system design solutions for Level 4 access points requires ongoing community "shaping" and primary care collaboration 1.2.3 Integrate with the strategic plans of EHDNS 1.2.4 Partner with the Maritime SPOR support unit to evaluate effectiveness	1.3.1 Improved planning of patient transitions, interfaces with other Programs of Care, and other specialist/sub-specialists 1.3.2 Improved telemedicine links (i.e. Hub and spoke design with level 4/4+ to distant level 2, and specialist/sub-specialty connections to the Level 1) 1.3.3 Integrate with the strategic plans of EHDNS 1.3.4 Partner with the Maritime SPOR support units to evaluate effectiveness	1.4.1 RNs in EDs are prepared for the clinical responsibilities within the ED, and they are utilized to their full scope of practice. 1.4.2 Paramedics, Nurse Practitioners and Physician Assistants are utilized; integrated where appropriate 1.4.3 Physician Resource Plan should recognize board certification in EM (credentialing aligned with national recommendations and definitions) 1.4.4 Strengthen inter-professional teams focusing on team work and culture 1.4.5 Creative hub and spoke partnering/supporting for staffing and scheduling

STRATEGIC DIRECTION #2

Exceptional Emergency Care through Standardization, Monitoring, and Continuous Quality Improvement

Goal #1	Goal #2	Goal #3	Goal #4
Provincial Emergency Quality and Standards Committee– integrated with zonal operational structures to establish high quality standardized practices throughout the emergency care system	Quarterly reporting of key process indicators and outcomes (when available) for all sites and zones	Support the existing provincial ED standards and continue to evolve, modify/improved the standards	Establish a provincial strategy that supports maintenance of competence, and ongoing professional training for front-line providers
Actions	**Actions**	**Actions**	**Actions**
2.1.1 Establish TOR (stand up committee) that includes responsibility for the development of ED standards, indicators, and standardized clinical best practice guidelines, policies and procedures 2.1.2 Align operational work plan to the business planning cycle 2.1.3 Create an up to date electronic dashboard of clinical practice guidelines (i.e. TRAKU), policies, and procedures 2.1.4 Ensure necessary financial, technological implementation and on-going operations of an online reporting dashboard	2.2.1 Create a standard quarterly report templates based on national/international benchmarks 2.2.2 Support development of data definitions, minimum data sets, and timely access to necessary databases for periodic reporting 2.2.3 Feedback re site and zone performance on KPIs informs system change and improvements 2.2.4 Publically report performance	2.3.1 Review current standards (appendix 2) and determine which ones are true standards requiring monitoring and accountability, which ones require modification, and which ones are aspirational (with no specific accountable) 2.3.2 Establish and enforce an accountability framework (including incentives and sanctions) for the EM standards 2.3.3 Publically report performance	2.4.1 Define key areas of Emergency competencies in alignment with national colleges and standards. 2.4.2 Describe standards for competence and establish a mix of training models 2.4.3 Explore opportunities for expanded scopes of practice with requisite training and regulation/oversight 2.4.4 Build upon growing simulation training expertise, and make available provincially

Top 5 Challenges

1. Boarding / ED → Hospital → Systems Flow
2. EDIS in all Level 2 EDs (you can't fix what you can't measure)
3. Rural ED closures / Categorization (siting, sizing, synergizing)
4. Health Human Resources issues (Recruit/Retain, PRP/residency positions, Maintenance Of Competence, max scopes of practice)
5. Connections, Communication, and IT support

ADMINISTRATION SERIES • SÉRIE SUR L'ADMINISTRATION

Sorry—we're full! Access block and accountability failure in the health care system

Grant Innes, MD

The Accountability Crisis:

In the face of demand capacity mismatch a program / queue can:

1. Improve efficiency and appropriateness, and lobby for more resources (difficult) or…
2. Block inflow and leave pts in the queue (default response)
3. Solution for one program is a problem for another program
4. Shifts care to downstream programs less capable of providing it
5. Displaces consequences of access failure to remote parts of system
6. Leaders capable of assessing/addressing root causes are protected from having to do so
7. And leaders in impacted areas are incapable of doing (because they have no authority)

Table 4. Quotes that exemplified responses from high-performance, low-performance, and improver hospitals.

Performance accountability	High	Everybody had their part and was expected to report…on what they were going to do, changing their behavior.—Hospital 5, quality director
	Improver	One of the first things we did was give all the individual providers their feedback, individually, on their ED [lengths of stay], their door-to-doc times. And we also showed where they ranked amongst their peers. And we would give this to them every month and then also a quarterly summary. And I would meet with them individually for the outliers to identify issues why they were kind of outlying and not being as efficient as some of the other providers. We could identify hurdles and barriers and try and break those down. So I think that was also a major impact in our ED throughput.—Hospital 9, ED director
	Low	It's one of those things where sometimes you're, like, trying to turn the *Queen Mary* with a rowboat. Unfortunately,…some people view it in terms of dictating their practice. But we get pushback like that.—Hospital 3, nursing supervisor


EMERGENCY
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