The Future of EMS in Canada: Defining the New Road Ahead

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We would like to thank the following sponsors for making this paper possible:
Foreword

[Message from President Tom Sampson and Steering Committee Chair/Past President Steve Rapanos]

[A call to action]
Executive Summary

The Emergency Medical Services Chiefs of Canada (EMSCC) have developed this paper in order to examine the current state of Emergency Medical Services (EMS) in Canada; identify and articulate appropriate objectives, roles, and vision for EMS in the future; and outline the public policy support that will be required for successful implementation of the redefined vision.

Current State of EMS in Canada

Although EMS is beginning to move beyond traditional roles, emergency transport and inter-facility transfer remain the primary responsibilities ascribed to EMS in Canada. EMS occupies an ambiguous position within the health care continuum, as some roles are similar to those of emergency response units (fire and police) while other roles are more comparable to those of primary health care providers (physicians and nurses). This role ambiguity, accompanied by disparities in funding, training, and responsibilities between EMS regions, provides evidence of opportunity for enhanced regional coordination and creation of a nationally endorsed vision of EMS delivery within Canada.

A Vision for EMS in the Future

Creating a vision for EMS in the future hinges on strengthening EMS foundations today, building the EMS of the future, and preparing for the complexities of tomorrow. This process will drive progress in the following areas:

- EMS will seek to become a mobile comprehensive health care service by becoming more involved in meeting the needs of the community in non-traditional areas such as injury prevention and control, public education, community health and wellness, emergency preparedness, and standardization of training and research procedures.

- Enhanced collaboration and integration with other health care providers and community groups including emergency departments, doctors, nurses, clinics, and social services to enable research into best practices, coordinated emergency response capabilities, and more efficient utilization of health care resources.

- Funding arrangements should encourage best practices, incorporate preparedness-based funding, and provide equitable, adequate, and stable funding to all EMS regions.

- Standardized EMS training should be based on an updated and universally-accepted National Occupation and Competency Profile (NOCP) in order to enable credential portability, which will minimize potential human resource issues affecting EMS in Canada.

- Leadership development will be enhanced through credential, seniority, and benefit portability as well as continued development of flexible career pathways and graduate-level education specific to health care administration.

Call to Action: Public Policy Support and Recommendations

Achieving the specified vision for EMS in the future will require the support, participation, and commitment of public policy makers. EMS leadership, leaders of other health care organizations, and public policy makers must work together to implement the strategic directions articulated throughout this document.
1.0 Introduction

Context

Although there is no common definition of emergency medical services (EMS), it is recognized that EMS integrates aspects of both health care and public safety services and reaches into areas including medical direction, clinical care, public education, prevention programs and research/evaluation. In Canada, over two million patients are treated by EMS annually. To put this statistic in context, more than five percent of Canada’s population will use EMS on an annual basis. Compound or exponential growth in the number of annual EMS patients, combined with an enhanced role in disaster management, pandemic response and other such special operations, requires that EMS re-examine its current state, outline future objectives, and devise an approach for achieving the redefined vision.

EMS in Canada is at a crucial point in its evolution. Demographic and health care trends point to the increasing importance of EMS and emergency medicine to Canadians. EMS has the potential to increase the level of care it provides through greater training and enhanced technology. In addition, EMS has significant resources and knowledge that should contribute more to health care reform by easing staffing and emergency department space shortages through an expanded scope of practice, using its reserve capacities, and increasing the amount of mobile health services such as augmenting home care and other primary care areas. Finally, EMS should play a critical role in health promotion through educational initiatives in injury prevention, CPR training, and public safety.

In short, EMS is increasingly an essential health service in Canada and must continue to evolve with other health care professions. Creating a national policy framework for this continued evolution is the core purpose of this document.

Objective and Process

The intent of this paper is two-fold: a) to advance the mission and purpose of the EMSCC by aligning EMS leadership in pursuing a common strategic picture of EMS of the future, and b) to provide policy-makers with an understanding of how all orders of government may enable this strategic picture.

Seminal papers, published in the United States and the United Kingdom in recent years, have sought to offer prescriptions on improving EMS in those jurisdictions. Readers of this paper will notice that while this document is rich in description, there are comparatively few individual system-focused recommendations. This paper seeks to influence public policies that will enable EMS to reach its full potential in serving the health care and public safety needs of Canadians. In the pages that follow is a general description of EMS today, and where EMS should be tomorrow. Each province and territory, and indeed every community within each jurisdiction, has a unique context and specific method for delivering EMS services. This paper articulates the nationally-focused, strategic public policies that need to be implemented, changed, or enhanced in order to change the way Canadians think about EMS. The EMSCC invites EMS leaders and policy-makers to explore these issues in pursuit of connecting with our communities in a new strategic context.
Acknowledgements

The EMSCC wishes to thank the many individuals, both inside and outside of the field of EMS, who provided valuable insights and perspectives in the preparation of this report. They include the:

- EMSCC Steering Committee (Steve Rapanos, Michael Sanderson, Michael Nolan, and Tom Sampson).
- 18 leaders in EMS and in government who were interviewed as part of this project (please refer to Appendix A).
- 65 leaders in EMS, health care professional groups, government and public administration, and other areas who responded to the EMSCC’s online survey in Spring 2006 (please refer to Appendix B).
2.0 Serving the Needs of Canadians: A Current State Overview of EMS in Canada

This section describes the “current state” of EMS in Canada. Please note this section is a general description of EMS, and specific items may not be applicable to all jurisdictions or EMS systems in Canada.

EMS and Health Care

The traditional role of EMS has focused on emergency transport and inter-facility transfers for both emergency and non-urgent situations. EMTs and paramedics have typically focussed on providing life support in order to stabilise the patient’s condition for rapid transport to the hospital. Demands for these conventional EMS services are anticipated to increase due to demographic trends, including an aging population.

Concurrently, numerous trends are increasing the importance of EMS to the health of Canadians. As EMSCC has stated in a previous position paper, “…concentrating expensive surgical/truma and other specialty procedures in large urban or regional hospitals, the ‘aging’ of Canada’s population, the shortage of rural physicians, and the reality that few family physicians provide evening and weekend medical care for their patients…” are trends that provide evidence of the increasing importance of EMS in health care delivery. The public’s increased reliance on EMS, combined with a shortage of health care professionals, has resulted in EMS often going beyond their traditional role to be used as an alternative staffing source in emergency departments and nursing homes. Perhaps the expansion beyond traditional EMS roles is best exemplified by the health care system support initiatives on Long and Brier Islands in Nova Scotia. The islands lack immediate access to doctors and nurses, so EMS has assumed non-traditional roles in the realm of primary health care, such as administering flu vaccinations on the islands. EMS is in a position to pursue an expanded role in support of the overarching health care system in isolated areas like Long and Brier Islands.

In health care systems where the respective accountability for emergency departments and EMS reside in two different areas, the burden of triage wait times has predominantly shifted to EMS, requiring EMTs and paramedics to stay with their patients while they wait to be admitted for care. This overloads EMS, leading to ‘red alerts’ (the term used to describe situations where no ambulances are available) and increases the costs of EMS (through needing a surplus of ambulances and staff to compensate for the extra time spent waiting in the emergency departments).

EMS as a Profession

EMS occupies a unique role in the range of community-based emergency services (i.e. fire and police) and other health care professions (i.e. physicians, nurses, etc). Comparatively speaking, EMS is a very young profession and is still developing its own identity in response to the public’s constantly changing needs. EMS now offers much more than emergency transport as the training, skill sets, and responsibilities of EMS personnel have evolved and expanded to occupy a larger role in health care while still performing their traditional functions.

EMS is currently striving to leverage their capacity in the design and range of services in the health care system. To do this, they are furthering their training and scope of practice, working
on matching their skills with the appropriate responsibilities, and working towards achieving full recognition of their capabilities amongst policy makers and other health care professions. However, EMS is frequently excluded from health care planning committees or not considered when important health care governance and operational decisions are made. This is largely the result of a lack of awareness about EMS, and is exacerbated by the fact that EMS is often municipally or privately run instead of being governed as an integral part of the health care system.

As a profession, EMS has human resources challenges in the areas of staffing and career development. EMS systems across the country face an aging workforce and high retirement rates. Some EMS jurisdictions also face relatively high staff turnover due to:

- Occupational risks including post-traumatic stress disorder, risk of assaults, motor vehicle crashes, back injuries and falls.
- Lack of full recognition as members of the health care delivery team.

EMS personnel are limited in their ability to move between provinces because training and certification for paramedics are provincially administered. The lack of a national registry hinders credential portability which is important for career mobility and enabling career development. In addition, while most provinces have the same titles for different practitioner levels, the actual length of training varies considerably between provinces (e.g. from thirteen weeks to two years), which makes credential portability difficult to achieve. The Paramedic Association of Canada (PAC) has introduced the National Occupancy Competency Profile (NOCP) to standardize professional responsibilities and essential skills in communication, health and safety, assessment and diagnostics, therapeutics, integration and transportation, but this has yet to be nationally recognized and implemented by each province and territory.

Most EMS jurisdictions do not dedicate adequate time and resources to leadership or career development efforts designed to develop the next generation of EMS leaders. This may limit the career development and progression of EMS professionals and contribute to potential retention issues. This leadership gap also limits the ability of the profession to advance itself in concert with other health care professions. Recognizing the leadership gap exists may allow EMS to look at creating formalized leadership programs designed to develop talented managers capable of advancing the EMS profession.

**Governance**

EMS governance structures evolved independently in each province and territory and continue to differ between provinces and even within the provinces. Generally, the provincial or territorial health care ministry oversees EMS governance, setting policy and standards in the areas of training, certification, and backbone services such as a communications and dispatch networks.

Operating EMS is generally a task of regional health authorities, municipalities, or private contractors. In the past twenty years, there has been a general shift towards more systematized governance of EMS, with accountability for EMS often transitioning from municipalities or private companies to regional health authorities or provincial governments. For example, the Province of New Brunswick recently announced that it would be buying-out all private contractors and centralizing service under a single provider.

Most EMS systems are administered by a collaboration of administration that includes the system’s Chief, civil service representatives from the designated level of government with
accountability for EMS, and medical direction or advice in the form of a physician who acts as the Medical Director.

**Funding**

With few exceptions, EMS is not funded as an essential health service. Instead, EMS is funded through a municipal tax levy, provincial subsidies, user charges, third party insurance, and/or a combination of funding sources.\(^{xii}\)

This unique funding arrangement is a challenge for EMS, since inconsistent funding impedes proactive long-term strategic planning efforts. Stated another way, there is an opportunity to pursue more consistent and predictable funding formulae in order to enable more consistent service delivery, long-term planning, and an enhanced research and innovation capacity. More consistent and predictable funding will enable longer term initiatives that have the potential to significantly reduce overall health care costs.

User fees are established in various ways from a standardized low fee after reimbursement for residents of the province, to being calculated based on a flat fee plus a mileage charge, to being individually determined by the company that was contracted to provide EMS.\(^{xii}\) Some provinces have programs in place to assist selected groups of individuals with the cost of ground and air ambulance trips (for example, seniors and residents with low incomes).\(^{xiii}\) Generally, user fees mean that EMS is funded per person transported to the emergency department. This gives EMS a financial incentive to bring all calls to the emergency department, when it may actually be clinically appropriate to assess, treat, and release the patient or transfer the patient to another health care agency such as a social service facility, mental health organization, or walk-in clinic.

Many Canadians are unaware that ambulance services are not covered, or are only partially covered, by provincial health insurance and are surprised at finding out there is usually an additional user fee. Many EMS leaders feel that patient billing may cause some segments of the population not to call EMS in times of genuine medical emergencies out of a desire to avoid the fee; user fees may impede access to EMS for many Canadians.\(^{xiv}\)

**Operations**

EMS operations are generally the responsibility of regional health authorities, municipalities, or private contractors. EMS practitioners usually practice under the licence of an emergency medicine physician, who is ultimately responsible for the care provided under EMS. The authority and duties that accompany the position of Medical Director vary considerably across jurisdictions, with the Medical Director sometimes merely acting in an advisory capacity and other times having direct, hands-on oversight over EMS operations.

EMS operations vary widely across Canada and range from sophisticated operations with a large staff of highly trained professionals, small ‘mom and pop’ shops, and small groups of on-call volunteers with First Aid, basic CPR, and defibrillator training. Every province, however, is challenged by rural or remote areas where EMS is less accessible and/or less developed.

**Quality, Standards and Accreditation**

The level of care offered by EMS depends on the qualification of the paramedics, who range from basic ambulance attendants to knowledgeable, multi-skilled emergency medicine providers.\(^{xv}\) Across Canada, four different practitioner levels generally exist:
1) Emergency Medical Responder (EMR).
2) Primary Care Paramedic (PCP).
3) Advanced Care Paramedic (ACP).
4) Critical Care Paramedic (CCP).\textsuperscript{xvi}

The level of care the paramedic is able to provide ranges from basic CPR and first aid (also known as emergency medical response; typically volunteers) to advanced skills in the interpretation of patient laboratory and radiology data and implementing invasive and pharmacological treatments (CCP).\textsuperscript{xvii} Some research suggests that EMS primary care can minimize time spent in the Intensive Care Unit, avoid additional complications, and reduce the probability of ongoing long-term pressure on the health care system.\textsuperscript{xviii}

However, EMS does not currently possess the research base and data collection capability required to systematically evaluate and provide guidance regarding improvement of overall level of care. An improved research and data collection capability would allow for national errors reporting and information sharing. In turn, this enhanced data collection and analysis could lead to the development of national standards, benchmarks, and protocols for areas such as chest pain, shortness of breath, trauma, time on scene, and inter-facility transfers. Objective standards and protocols in these areas and other similar areas is a critical success factor in the provision of higher quality care.

While there are mixed opinions about the linkage between response time and quality of care, establishing universal guidelines for response time may have the potential to enhance the level of EMS service delivery. Currently, EMS jurisdictions utilize a wide range of response time measures including time from the original call to the time official help first reaches the patient, time from original call to time of the first care delivered, or time of original call to time EMS personnel are first deployed.\textsuperscript{xx} Inconsistent response time measures between jurisdictions lead to difficulties in benchmarking response time, setting truly national standards, or meaningfully quantifying response time improvement.

In addition, geographic considerations are a major determinant of the level and standard of care provided by EMS. According to the Canadian Association of Emergency Physicians, “Seventy percent of trauma deaths occur in Canada in rural areas, even though only 30% of Canadians live there.”\textsuperscript{xx} Aside from the vast distances and sparse population in rural and remote Canada, these areas often lack health care services that urban Canadians take for granted. In these areas, EMS is clearly positioned to play a larger role in augmenting health care, especially in areas such as paramedicine and primary health care.

With the exception of hospital based EMS systems, which may be accredited as part of the hospital accreditation program, there is currently only one EMS system in Canada with quality accreditation (Nova Scotia). The province received its accreditation though an American agency, since Canada does not have its own accreditation system.

\textbf{Research and Technology}

In Canada, the volume of EMS research is constrained by funding considerations, lack of a central data repository, and underdeveloped technology infrastructure. While improving EMS research is an important issue that will have an impact on the continued development of the Canadian health care system, EMS research continues to be under-funded and neglected.\textsuperscript{xxi} Research is hampered by the absence of a federal EMS agency to pursue grants, collect data,
conduct research, and coordinate national errors reporting. The result is that data collection is very uneven and varies depending on the individual service or jurisdiction. This inconsistency often creates an insufficient base for research and no common definition of the role of EMS in emergency medicine innovation. The lack of research restricts EMS’ ability to link itself to patient outcomes and prove its value in the health care system.

In some cases, outdated technology can limit the ability of EMS to offer assistance in nearby jurisdictions, since radio and dispatch systems are often not compatible. Investment in new technology could enhance communication systems and augment the amount and level of home care and health care monitoring provided by EMS. In addition, new technology is capable of providing paramedics with a patient’s health history on scene while also offering a detailed outline of treatment and assessment steps, thereby improving the emergency care received by the patient. While this technology exists, it is costly and rarely available to most EMS systems. However, investment in updated technology could increase the effectiveness of EMS and the standard of care it provides.

Public Education and Health Promotion

Across Canada, EMS is widely known and recognized for its primary role in emergency medicine transport in the case of emergencies and inter-hospital transfers. 9-1-1 is the standard number to access emergency care across Canada and the vast majority of Canadians are covered under, and are aware of, the number. However, the public’s image of EMS is predominantly shaped by the media including television programs designed for entertainment, not education. More importantly, planned and evaluated EMS public education initiatives that pro-actively target injury prevention and public safety remain sporadic and EMS’ enormous potential is not being leveraged in this area. In small and medium sized communities, paramedics have a tremendous opportunity to operate injury prevention programs while standing by for emergencies.

Another important public education emergency medicine initiative is CPR training for the public. When a bystander, who is often the first on the scene of a cardiac arrest, performs CPR, the victim’s chance of surviving a sudden cardiac arrest is significantly enhanced. Currently, the Advanced Coronary Treatment (ACT) Foundation of Canada is working to establish CPR training programs in high schools. Education initiatives by EMS personnel could empower regular Canadians to save lives and increase the effectiveness of EMS.

Initiatives that teach seniors, who are EMS’ most high-risk and frequently served demographic, how to ‘accident-proof’ their homes are also infrequently utilized. This puts EMS in the position of being reactive instead of proactively preventing injuries through health and safety promotion. This will become increasingly important as Canada’s population ages and the baby boomers dramatically increase the number of seniors using EMS. Ambulance use after the age of 65 dramatically increases and much of it could be prevented. Opportunities for EMS to change and adapt to Canada’s changing demographic profile should be pursued.
3.0 The Future of EMS in Canada

The complex nature of EMS means that the EMSCC’s vision for EMS in the future is not a simple one. Presented in the pages that follow is a comprehensive description of the strategic direction of where EMSCC believes EMS should be headed.

The value of EMS in the future is linked to the provision of primary health care at the point where citizens need it, providing services according to the scope of practice determined and required by each community. EMS is now, and needs to continue to demonstrate that it is, increasingly a critical part of the core fabric of the communities it serves. Indeed, the mobile infrastructure and ability to link traditional institutional health services with community care is at the heart of EMS. In this manner, EMS of the future will focus on prevention and wellness, will be care oriented, and will earn and enhance the confidence of the community it serves in that EMS will be there at the right place, at the right time, with the right service.

In short, EMSCC believes that the future of EMS in Canada is at the centre of community, providing primary health care in a mobile setting. The following “Star of Life” diagram illustrates this vision:

Articulating a vision of EMS in the future will provide a framework for influencing public policy in a manner that is consistent with achieving this desired future state of EMS in Canada. There are several key strategic directions that will enable positive and controlled movement toward the desired future state. These strategic directions are summarized below and explained throughout this section.

- Enable EMS to offer coordinated, mobile, and community-defined health, safety, emergency and disaster management services. Pursuing technological and mission-related linkages with other health care providers and community groups, while assuming an expanded role in the primary health care arena, will further this objective.
Ensure the financial foundations for quality EMS. Adhering to key funding principles – funding best practices; preparedness-based funding; equitable and adequate funding; and stable, predictable, and sustainable funding – will provide a framework for ensuring appropriate funding arrangements are developed and maintained by EMS in Canada.

EMS will be accountable to the public it serves and embrace systematic improvement to keep pace with an ever-changing, complex environment. Improving data collection and analysis capabilities within the health care and EMS systems will enable EMS to better identify and pursue systematic development of rigorous, fact-based, and proven EMS protocols and clinical pathways. Technological collaboration and enhanced partnership within the health care system will enable this vision.

Training and education will be robust to enable 1) “the paramedic of the future” and 2) “the EMS leader of the future.” Aligning training programs with a uniformly accepted National Occupancy Competency Profile will enable credential and benefit portability in order to enhance standardization of quality EMS provision.

Ensure the development of EMS leadership capacity. Graduate-level programs specific to health care administration, management development programs, credential portability and flexible career pathways, and focussed secondment opportunities will be essential tools in helping EMS manage human resource issues spawning from an aging workforce.

EMS must prepare for the complexities of tomorrow by continuing to redefine and carve-out an expanded role in the health care landscape. A more comprehensive and inclusive approach, focussed on mobilized primary health care in addition to traditional emergency services, is required.

Articulating and outlining the strategic direction of EMS is an important step in the evolution of EMS in Canada. EMS is currently an essential health and public safety service, but steps need to be taken in the coming months and years to position EMS to meet the increasingly complex needs of the communities it serves. The pages that follow describe the EMSCC’s vision for EMS in the future, which is comprised of three major components:

- Strengthening EMS Foundations Today.
- Building the EMS of the Future.
- Preparing for the Complexities of Tomorrow.

### 3.1 Strengthening EMS Foundations Today

Traditional EMS services include pre-hospital care, inter-facility transfers, and response to public safety emergencies. A concerted effort on the part of EMS leaders to strengthen the foundations of EMS is required to obtain and solidify the public support required before the profession can move beyond its traditional scope and role.

**A) EMS Will Define and Embrace a Clear Core Identity**

EMS is a relatively new field with a much shorter history than other areas such as policing, fire, and medicine. The identity of EMS has often been defined by others, such as emergency systems, public safety systems, fire systems, and hospital systems. Over the past few decades, however, a distinct body of knowledge and skill set has emerged. Given these developments, it is important for EMS to establish and embrace its own clear core identity, which at its heart is the mobile infrastructure and ability to link traditional institutional health services with community care.
B) A Systems Approach for Governance

Various governance models exist all across the country, and every jurisdiction has a unique perspective on the governance aspect of EMS. What is clear, however, is that while EMS is adaptable to the needs of the local communities it serves, a greater “systems approach” emphasis will ensure that EMS provides the most effective service at the desired levels within the resources of any given community. In essence, public policy makers should move away from the traditional approach of treating EMS as a “silo,” and instead view EMS as both part of a larger system comprised of a community’s primary health care and public safety needs. In this manner, far more effective methods for delivering a community’s desired suite of health care and public safety services within a given level of resources can be attained.

For example, a systems approach can assist in applying public funds in a way that encourages shared ownership of emergent and urgent care across the health care system. For this, there needs to be mechanisms for shared accountability by hospital and EMS systems for efficient offloading of patients in emergency departments. Although this will not prevent an overflow of patients in the emergency department, it will deter scarce EMS resources from being tied up unnecessarily.

A systems approach may also enhance the role that EMS can play in providing health care services, particular those in primary health care, to Canadians. All EMS systems have some form of medical oversight by virtue of a Medical Director or Medical Advisor. Opportunities to enhance EMS’ role in the provision of health services can be identified by partnering more closely with the medical community.

Finally, a systems approach will assure Canadians that, in the event of a mass casualty incident (i.e. natural disasters, terrorist incidents, etc.), EMS will be a strong partner in ensuring their safety. Greater coordination between EMS and other emergency services organizations, based on appropriate governance and legislative foundations, can be realized through such an approach.

On April 20, 2006, the New Brunswick government announced that it would move to a single-operator system for all ambulance services in the province. The plan will consolidate services currently provided by a range of organizations including private companies, health regions, municipalities, non-profit groups, and First Nations.


Key Public Policy Point: A systems approach will allow scarce public resources to be used more effectively and efficiently. A new public policy direction to ensure EMS is part of a “system” of health and public safety is required.
C) Ensure Appropriate Funding Principles

In general, EMS is currently funded through a combination of municipal tax levies, provincial subsidies, user charges, and third party insurance. In order to maintain and build upon the existing strengths of EMS systems across the country, EMS leaders and funders such as municipal and provincial governments need to engage in a dialogue about funding principles that should be applied in the future:

1) Ensure Alignment Between Funding Incentives and Best EMS Practices: In the current funding model, used in most Canadian jurisdictions, a portion of funding is dependent on a patient user fee for emergency transport to the hospital. This provides a financial incentive for EMS to bring all patients to the emergency department in order to collect payment regardless of whether this is the effective or clinically appropriate means of delivering care. In order to prevent unnecessary pressure on already overworked emergency departments, financial incentives should be focussed upon rewarding appropriate treatment and care, not trips to the emergency department.

Research conducted in the United Kingdom supports this idea, since it reports that only 10% of patients calling 999 (the equivalent of 911) actually have life threatening emergencies. Many of these callers actually had an urgent primary health care or social services need that could have been dealt with through channels outside of the emergency department.xxvi

Instead, new funding mechanisms need to be implemented in order to compensate EMS for making choices, which are clinically appropriate and based on local protocols and best practice. This may involve transporting patients to a greater range of appropriate facilities such as walk-in clinics, social service organizations, mental health organizations, and other primary care providers. In addition, in a case where non-transport is clinically appropriate, EMS units should be rewarded, not penalized, for pursuing on-site treatment. This change would enable the patient to be seen by the most appropriate clinician while minimizing the flow of traffic to the emergency department.xxvii

EMS should receive compensation for assessing, treating and diagnosing patients if their conditions fall under EMS’ scope of practice. This will allow some patients to be cared for in their homes while others can receive mobile primary and secondary care at the hands of EMS. If follow-up treatment is required, EMS can schedule the necessary appointments with the patient’s general practitioner or bring the patient to the appropriate facility as required. EMS can also take advantage of this direct patient interaction by providing appropriate advice on future injury prevention and health care education as required.xxviii Aligning the funding model to support best practices has the practical advantage of minimizing increases in overall health care costs and spending.

“Quote”

Funding should not be contingent on the decision to transport or not to transport to a specific location. A paramedic should only be considering a patient’s medical needs, not what would maximize the services financial position.

EMSCC Online Survey Respondent, Spring 2006
2) **Preparedness-Based:** The overall cost of EMS for a particular geographic area is multi-faceted and includes the costs of all the infrastructure and activities required to provide service. For example, communication systems, vehicle/equipment acquisition and maintenance, personnel training and continuing education, first response and ambulance operations, medical direction, and licensing and regulation activities all contribute to EMS costs. Therefore funding for EMS should, in part, be preparedness-based (i.e. the costs of maintaining a suitable state of readiness). In turn, this will allow EMS to provide a comprehensive model of care, which can be proactive, rather than reactive in responding to a community’s current and future needs.

3) **Equitable:** Just as the role of EMS will adapt to meet the needs of the community it serves, community differences regarding the service area size and population-based need for EMS services should be recognized and funded accordingly. EMS funding should also depend on the service area complexity, utilisation, and quality standards (i.e. level of care and response times). It may cost more to provide EMS in rural communities where EMS is the main health care provider so the role for EMS is more complex and more frequently utilized. Moreover, the cost of EMS will vary depending on if it is offered in a rural, small city, or large urban area. Funding should be also adjusted for geographic disparities. The funding formula should ensure that cost differentials between urban and rural areas are taken into account.

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Canada is a geographically diverse country with both high density urban areas and vast low density rural & remote areas. Recognizing that it is financially impractical to place an ambulance station every 8 minutes apart, resource and funding allocation needs to balance high volume areas with geographical distances. Basing funding solely on volume is dangerous and a disservice to those who live in remote / rural Canada.

EMSCC Online Survey Respondent, Spring 2006
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4) **Adequate:** EMS funding should reflect the actual costs of providing the services and should be indexed to inflation and growth to account for demographic factors. What is adequate funding should be determined based on a more comprehensive model of EMS and include necessary investments like research and management training. Public funding should also contribute their share to funding EMS regardless of the organization responsible for service delivery. This will help ensure that user fees are reasonable and that the quality of service delivered does not significantly vary depending on the financial resources of the community being served.

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On February 21, 2006, the Ontario government announced it would more equitably distribute the cost burden of ground ambulance funding, with an additional $300 million in expense accruing to the province instead of the municipalities over the upcoming three years. The shift is aimed at achieving a 50-50 sharing of the cost of municipal ground ambulance services.

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5) **Stable, Predictable and Sustainable:** Additionally, funding for EMS must be stable, predictable and sustainable. Instead of being based on an annual budget that limits
future planning, EMS should receive core and multi-year funding so that EMS can plan health care initiatives, invest in technology, build on training, etc. As well, EMS should receive innovation funding for collaborative initiatives that align with policy priorities.

**Key Public Policy Points:** Funding methods should:
- Enable paramedics to effectively meet the current and future clinical needs of patients and their communities.
- Reflect the actual cost of service delivery.
- Recognize the costs to EMS systems of “being prepared,” allowing EMS to proactively respond to a community’s needs.
- Recognize the population density and geography of each community served by an EMS system.
- Be stable, predictable, and sustainable to allow for optimized planning and enhanced innovation.
- Require EMS systems to publicly account for its use of public funds.

**D) Demonstrating High Accountability and Transparency for EMS**

As an important public service, EMS systems need to be transparent to the public including evaluation and reporting requirements. A Canadian system of accreditation should be developed that recognizes excellence in EMS and allows for different contexts including remote, rural or urban systems. An American accreditation organization already exists (and through which Nova Scotia has been granted accreditation), but no similar Canadian accreditation system exists. A Canadian accreditation system, besides being specifically developed to suit domestic EMS systems, would also foster EMS excellence by encouraging EMS systems, both publicly and privately operated, to pursue accreditation.

Finally, data collection, followed by research, is needed to evaluate the value of EMS and its contribution to public health including its effect on the length of patients’ hospital stays, ability to decrease the number of emergency room visits, role in providing better patient care etc.

*The Commission on Accreditation of Ambulance Services (CAAS) has certified only one EMS service in Canada: EMC Medical Inc. of Nova Scotia. As CAAS states on its website, “Accreditation assures your patients that the service has met the Commission's high standard for quality patient care and that the service stands ready to care for their families if needed.” No Canadian accreditation system has yet been developed.*

http://www.caas.org

**Key Public Policy Point:** EMS systems should demonstrate high accountability and transparency for quality EMS services through:
- Public reporting.
- The development of a Canadian accreditation system.
- Data collection.
- Paramedicine research and evaluation.
E) Consistent Training and Education: Enabling Credential Portability

EMS needs to work on improving the consistency of EMS education across the provinces, which will aid in enabling national credential portability. Currently, while most provinces have the same titles for different practitioner levels, the actual length of training varies considerably between provinces (e.g. from thirteen weeks to two years for PCP training) and leads to a wide disparity in skill set and ability between paramedics who, on paper, have the same title. Though the place and manner of education for EMS personnel will continue to vary between provinces, there should be increased coordination between EMS educational programs to develop a robust, recognized national curriculum. This will standardize training in accordance with certification level across the provinces. Additionally, equivalent provincial certification exams should be developed in each province, and coordinated by a national registry for EMS professionals. This will ensure a paramedic has met national standards that are consistent with those of his or her colleagues at the same level, providing Canadians with the assurance of relatively comparable service level and quality consistency across the country.

A key step in the development of EMS as a profession is national credential portability. Although PAC has developed the NOCP, this has yet to be adopted by each province and territory and hinders the mobility of EMS professionals as well as discourages them from investing in further training. The NOCP should be updated and reviewed as necessary with the help of the Canadian Medical Association and then put in place through the necessary enabling provincial legislation and/or regulation. This key development will put EMS on par with other health care professionals such as physicians, nurses, dieticians, etc., and give EMS personnel full recognition as professionals in the health care delivery system. In a practical sense, credential portability will minimize administrative issues associated with transferring human resources between jurisdictions, which will contribute to enabling coordinated and timely mass response capabilities for situations created by natural disasters, terrorist attacks, and pandemics.

"Quote"

Standards should be adopted by all. Government should endorse the NOCP and make them mandatory.

EMSCC Online Survey Respondent, Spring 2006

"Quote"

The ideal approach would be to create a national credential for paramedics through a national certification/examination process similar to that followed by medicine, nursing and other health professions. Such a national system of credentialing would facilitate common standards in education and portability for practitioners.

EMSCC Online Survey Respondent, Spring 2006

Key Public Policy Point: All provinces and territories should endorse and adopt the National Occupancy Competency Profile, enabling consistency in training and education approaches, a higher standard of training and education, and national credential portability.
3.2 Building the EMS of the Future: Building a New Policy Framework

Overall, the past five years in Canada have seen significant advancements in EMS, which is already among the world’s best systems. EMS’ full potential, however, to play an improved and increased role in Canada’s health care and public safety systems remains untapped. For EMS to fulfill this potential, EMS must pursue systematic improvement, enhanced linkages and partnerships in health care and public safety, and enhanced training and improved career development.

A) Systematic Improvement

To enable systematic improvement, EMS needs to develop consistent methods for measuring the quality of care that EMS systems provide and establish national benchmarks to uphold and improve on that quality of care. (As always, keeping in mind the diverse nature of EMS jurisdictions any standards developed should adequately reflect the differences between remote, rural and urban Canada.)

Developing comprehensive and meaningful measures of the care EMS provides means going well beyond merely tracking response times, which is only one aspect determining the quality of care EMS provides. It is particularly inappropriate to judge EMS’ response to non-life threatening emergencies based on response time. xxxi Instead, EMS needs to develop appropriate clinical standards and patient outcome evaluators that will consistently capture every aspect of the quality of care that EMS provides. This will lead EMS to strive to provide better care, not just more efficient care.xxxii

This requires that there be a national consensus from EMS leaders and Medical Directors about what data is necessary to collect, as well as consistent methods for its collection. Moreover, the data should be shared in a national data repository; this will enable consistent data collection, facilitate analysis, and reduce the administrative costs of data collection. Finally, EMS data must also be linked to and integrated with hospital and other data sets, so EMS must develop collaborative relationships for EMS research with other EMS systems, medical schools, other academic institutions, etc.

Technological linkages and integrated data sharing between EMS and other health organizations will require large-scale investment in supporting technology. The scale of investment and need to coordinate multiple organizations means that policymakers within the government will be required to lead and sponsor research and data collection initiatives. The appropriate systems will enable enhanced data collection, data-sharing, best practices research, and patient outcome reporting.

In addition to assessing the technological requirements, it will also be important to ensure that potential research barriers are minimized. Legislation such as Alberta’s Freedom of Information and Protection of Privacy Act is designed to protect an individual’s personal information and right to privacy. xxxiii Privacy legislation may limit the amount and type of data that can be collected by EMS research initiatives, so it will be necessary to ensure that data systems are capable of protecting personal data and aggregating data in a way that is in accordance with legislation. Negotiating access to information will in large part be dependent upon the ability of the EMS to provide evidence of its ability to protect private information. For example in Alberta, the Health Information Act allows for the sharing of aggregate-level health data, which enables research and evaluation of health care practices and protocols including EMS.
When system architecture is in place and sufficient data is available, EMS should develop a national research agenda that identifies and pursues priorities for EMS research based on the goal of developing clinical standards and patient outcome evaluators. Critical to the success of fulfilling the research agenda is sufficient funding to conduct the research. This has two requirements: a) policy makers must support and facilitate EMS research and b) an EMS representative body should pursue existing research grants to put towards EMS research.

As well, the success of EMS to complete the research will depend on either EMS’s capacity to conduct the research or their success in collaborating with experienced professional health care researchers to lead the research on their behalf. To begin with, EMS may need to consult with outside expertise in order to facilitate their research agenda; however a parallel development to the data collection should be developing EMS educational curricula to include research principles, methodology and the importance of conducting EMS-related systems research. EMS’ education systems needs to create an atmosphere where all EMS personnel appreciate the necessity of EMS research to create a scientific basis for EMS patient care; moreover all individuals responsible for EMS’ organization should be to some extent involved with EMS research.

Once developed, these clinical and outcome indicators will be used to evaluate and report on the total care provided by EMS. This will provide external accountability, stimulate internal quality improvement and can provide the basis for the development of national standards and/or benchmarking. As well, this research will help EMS evaluate and prove the efficacy, effectiveness, and cost-effectiveness of EMS and specific interventions and treatments.

The Ontario Municipal Benchmarking Initiative is a service excellence program for municipal governments in that province. Among many other activities is an initiative to study measures for ambulance services.

http://www.ombi.ca/index.asp

The right service to the right patient at the right time approach is key to the delivery of healthcare services in an efficient, cost effective and timely manner. It is only through research and innovation that EMS will be able to realize its professional responsibility to the patient.

EMSCC Online Survey Respondent, Spring 2006

Key Public Policy Point: A new systems approach will be required to achieve the future state of EMS. This new approach will underpin continual, systematic improvement and enable:

- The development of comprehensive performance measures for EMS services.
- Enhanced data collection and research capabilities.
- Continual improvement and development of emergency care protocols and clinical pathways.
B) EMS Will Enhance its Role in the Health Care System and Develop Strategic Partnerships

Enhancing Linkages to Health Care

EMS is the first part of a continuum of service delivery for urgent and primary health care needs. However EMS does not occur in a vacuum; it is affected by a community’s health care needs, demographics and trends from the outside environment. Moreover, it connects with the community’s overall health care system, and particularly, their emergency department, to provide seamless delivery in patient care. Inter-dependencies between the health care services have created a need for EMS to foster strong linkages with other EMS stakeholders, including other health care professionals, health care regions, and emergency departments. Expressed another way, it is imperative for EMS to develop linkages with other health care providers, but it is equally important that other health care services acknowledge and accept EMS as a critical partner in the provision of health care services within the health region. Strong working relationships with health care service providers will enhance the effectiveness of the EMS.

In many EMS jurisdictions, this will require strengthening ties between governance models as EMS is often municipally run, whereas all other health care services are delivered through the health care region. It also requires that ambulance services participate in health care decision making on par with other health care professionals, including playing a full and active part in emergency care networks, and chairing networks where appropriate. As well, EMS should work with other health care professionals to develop teams with unique skill sets based on the community’s needs.

EMS systems also need to become increasingly integrated with other health care providers and networks, including but also beyond the emergency department. The entire spectrum of emergency response organizations and health care providers, including EMS, should cooperate to develop an integrated, seamless, and coordinated ground and air response system. The integrated approach should be designed to create a single point of contact (call and dispatch centre), for all emergent medical needs and crisis or disaster management situations. Enhanced linkages and interoperability of systems between and among police departments, fire departments, family physicians, pharmacists, nurses, EMS responders, after-care, rehabilitation services, social services, community services, and emergency departments on a local, regional, provincial, national, and international level will ensure that both ground and air emergency response capabilities are used to effectively provide coordinated, timely, and appropriate treatment.

Technology will enable, but not create, this vision of integrated emergency response. Once again, policy makers will be called upon to champion technological improvement because of the need for coordinating investment and functionality requirements between many health care organizations. While technology can enable the integrated response system, unwavering commitment and effort from the relevant health organizations will lead to the realization of the vision for an integrated emergency response system.

The potential benefits of a common technological framework for data sharing, interoperability of systems, and enhanced communication within the health care and emergency response network are undeniably substantial. A single point of contact would provide a linkage between the first responder, regardless of which emergency organization (fire, police, health care) they represent, and the appropriate health care organization. The ability to convey appropriate instructions or direct the patient to the most appropriate care provider would result in more effective and efficient EMS provision. A broader spectrum of acceptable transport and treatment options would allow EMS to provide patients with primary, social, or emergency care
tailored to their unique situation. Furthermore, EMS could alleviate some pressures on the health care system by taking a proactive role in initiating the appropriate follow-up care for patients in non-emergency situations.

"Quote"

We should have our own identity but we should foster and maintain partnership with other health care agencies. We all have our own niches but together we can move mountains.

EMSCC Online Survey Respondent, Spring 2006

Key Public Policy Point: Evolving the role of EMS in health care will require the inclusion of EMS leaders in the governance of health care systems.

Partnerships with Other Bodies

One component of advancing EMS will be the development of strategic partnerships and linkages with other organizations on a regional, provincial, national, and international stage. These partnerships and linkages may assist in strengthening the professional development and growth of EMS.

In particular, the EMSCC will pursue strategic partnerships with other bodies such as PAC, which represents the majority of paramedics across Canada and has a similar mandate to advance the EMS profession. Areas for collaboration include:

- Collaborate on knowledge transfer and sharing of best practices.
- Work towards consistency in training for paramedics across Canada and enable national credential portability.
- Advance the science behind EMS through data collection, research and increased collaboration.
- Develop leaders in EMS.
- Raise the profile of EMS.

"Quote"

EMS is a unique and highly specialized profession that does not fit fully into any system. Forging a national EMS identity and providing leadership will be one of the primary goals of the EMSCC. I would also encourage the EMSCC to work in partnership with the Paramedic Association of Canada in developing a national vision for EMS.

EMSCC Online Survey Respondent, Spring 2006

EMSCC will also develop its linkages with other health care professional organizations such as the Canadian Medical Association, the Canadian Association of Emergency Physicians, the Canadian College of Health Service Executives, the National Emergency Nursing Association, and the National Nursing Association. These linkages will contribute to:

- Shared governance and leadership in health care systems.
- Developing flexible career pathways between EMS and similar health care professions.
Building innovative, multi-disciplinary health care teams with skill sets that best respond to a community’s needs.

- Developing standards for clinical care outcomes by linking EMS data and research with the hospital’s data repositories, and research.
- Providing linkages to the most appropriate care provider including clinics, the emergency department, social service agencies, etc.

EMSCC will also develop its linkages with other public safety professions such as the Public Safety and Emergency Preparedness Canada, the Canadian Forces, the Canadian Association of Chiefs of Police, the Canadian Association of Fire Chiefs, etc. Nationwide cross-jurisdictional partnerships between major public safety units will enable the formation of an integrated emergency management planning and response unit that will be capable of effectively responding to pandemics, terrorist incidents, natural disasters, and other emergency situations.

EMSCC will develop strategic partnerships to develop and promote education and injury prevention initiatives with organizations such as the ACT Foundation, the Canadian Patient Safety Institute, the Trauma Association of Canada, etc. These will contribute to greater citizen and community engagement through programs such as CPR training initiatives and other public education initiatives.

Lastly, EMSCC will develop strategic partnerships to develop and promote EMS research and education with organizations such as the Public Health Agency of Canada and the Emergency Health Services Research Consortium. These linkages will contribute to:

- Greater levels and quality of EMS research.
- Enable access to data and research databases maintained by stakeholders.
- Collaboration in development an “EMS research agenda.”

In April 2005, the British Columbia Ambulance Service and Ambulance Paramedics of British Columbia contributed $270,000 to launch a CPR training program. The program, delivered in partnership with the Advanced Coronary Treatment Foundation, has resulted in 5,900 students in grade 10 learning CPR skills.


Key Public Policy Point: EMS leaders must become far more innovative in pursuing strategic partnerships with other bodies.

C) Enhanced Training and Career Development to Enable the “Paramedic of the Future” and the “EMS Leader of the Future”

Training and Education

The health care environment surrounding EMS is characterized by increased public demand, building pressures on the medical community and system, and an internal drive to expand the
role of EMS in the health care system. These environmental considerations support education, learning, and development initiatives aimed at matching the EMS skill set to new and growing areas of responsibility. Particularly, as a “community-defined” scope of practice is embraced, it will be crucial to ensure their competencies are on par with the professional standards expected by their community.

EMS personnel should be trained in a greater range of competencies that enable them to assess, treat, refer or discharge an increasing number of patients while maintaining quality requirements for emergent or urgent care. This will require expansion of the NOCP framework and corresponding updates to the training curriculum and scope of education for paramedics. Traditional paramedic and technician training are still heavily focused on resuscitation and trauma management while a large part of EMS’ current role consists of providing primary and secondary patient care. Training programs should be designed to provide EMTs and paramedics with the skills required to appropriately handle both traditional and non-traditional cases and situations. This redesign will require collaboration between EMS personnel and training institutions to ensure training is compatible with the expanded role of EMS.

In addition, a multi-disciplinary approach to training would be valuable. Leveraging cross-training opportunities between health care support and service providers would result in training synergies, which would increase the knowledge-base of many health care providers including EMS staff; and ultimately, enhance the overall quality of health care service provision.

As EMS care continues to evolve and become more sophisticated, the training of EMS personnel needs to be enhanced. This means EMS personnel should work to increase their personal certification, EMS systems need to invest more in training and development, and that EMS educational programs and standards should be established and expanded upon. Standardized education and credentials, similar to that of nurses and physicians, will be a necessary first step toward fostering the professionalism and legitimacy of EMS within the spectrum of health service providers. Furthermore, enhanced professionalism and standardized education are precursors of a migration toward self regulation, medical accountability, and standards of conduct for EMS personnel. While self-regulation is a “stretch” or long-term goal, EMS must strive to take its position alongside physicians, nurses, and pharmacists as an essential, professional, front-line health care practitioner. In the interim, individual communities should decide what level of medical advice will be sought from EMS personnel.

Education and degree programs for paramedics deliver training aligned with the National Occupational Competency Profiles for Paramedics designed by the Paramedic Association of Canada. These programs give practitioners specific skills as well as the ability to work with other health care professionals in a multidisciplinary environment.

At the same time, recognizing the variety in EMS systems and the broad nature of EMS’ responsibilities, different levels for EMS practitioners should continue to exist with EMS personnel encompassing a wide variance in their skill development. For instance, much of remote Canada depends on volunteers for much of their EMS system; it is realistic to expect that most of them will not have extensive training. On the other hand, rural Canada, which typically depends heavily on EMS for a wider variety of care due to a lack of rural physicians and nurses and a longer distance to the hospital, will probably have the greatest need for skilled EMS practitioners who can provide mobile primary health care. In urban centres, teams of EMS personnel should be composed with a variety of skills that can respond as needed depending
on the urgency and complexity of the call and/or responsibility. Inter-facility transfers, in particular, are a traditional responsibility of EMS, but are an inefficient use of highly skilled paramedics. Therefore if no other complications exist, this duty should be delegated to paramedics with basic training in order to best utilize all resources. In summary, training, education, and career advancement opportunities must be designed to support the needs of the community and the longer term goal of standardized training and education.

Key Public Policy Points: The training of the “paramedic of the future” and the “EMS leader of the future” will require:
- Training and education will give paramedics the competencies required to meet “community-defined” scopes of practice.
- A layered system of education should promote transferability of EMS credentials. Previously completed EMS training and credentials should be recognized by related technical and degree programs.

Career Development and Management Training

Demographic trends in Canada suggest that an aging workforce will give rise to human resource shortages in fields like EMS in the near future. EMS needs to enable flexible career pathways within the ambulance service and across health care in order to prepare for these emerging human resource challenges.

EMS services are regionally-based, somewhat fragmented, and characterized by only a small degree of coordination between regions. This fragmentation between regions has limited, impeded, and discouraged seniority and benefit portability between EMS regions. The inability to transfer seniority, vacation entitlement, and pension benefits between regions discourages employees from exploring career progression alternatives within other EMS regions. This situation undermines the ability of EMS to train, develop, and retain its employees and future managers, which could eventually restrict future growth and expansion of the quality and range of EMS services offered. Seniority and benefit portability across EMS regions is an essential step toward enabling the desired future state of EMS services in Canada.

Interdisciplinary and bridging programs should provide avenues for EMS providers to enhance their credentials or transition to other health care roles while also allowing other health care professionals to acquire EMS field provider credentials. A career ladder should be developed with connections to parallel fields that allow EMS personnel to use accumulated knowledge and skills in a variety of EMS-related positions. This will involve recognition of transferable skills to other health care professions and vice versa for other health care professionals who wish to move to EMS.

EMS must define and enhance career tracks. This includes ambulance clinicians being able to practice in a wide variety of settings as part of their career. This type of job rotation or flexibility, will give EMS professionals a broader skill and knowledge set, increase their job satisfaction and facilitate options for more experienced EMS professionals. This is important as EMS is a physically demanding profession that also includes occupational risks such as: post-traumatic stress disorder, assaults, motor vehicle crashes, back injuries and falls.

Finally, both administrative and clinical leadership must be reinforced and developed to create well-managed EMS organizations. Besides knowing how to effectively manage a large and complex service, and being familiar with all components of EMS, EMS leaders need to know the scientific basis of EMS practice including the basic principles of clinical research, and the
importance of ongoing EMS research. This means that EMS leaders need to be developed through higher level EMS education programs that incorporate learning objectives regarding research, quality improvement, and management. Creating effective leadership will require investment in human resources aimed at providing graduate-level opportunities to study the field of health promotion, leadership, and organizational systems. EMS needs to develop higher level EMS education programs with affiliated academic institutions and should invest in, and receive funding for, adequate training for its leaders. Academic research and expertise regarding best practices in health care management and administration will also help advance operational efficiency within EMS.

In addition to more opportunities for higher education, management training programs should be developed that identify and groom the future generation of EMS leaders. This will contribute to continued success and growth in the field of EMS while aiding and encouraging ambulance clinicians in their professional development by increasing the opportunities that exist within EMS. Moreover, EMS leaders need a forum for knowledge transfer and shared best practices that connect EMS jurisdictions from across the country. One such forum already exists in the EMSCC; this needs to be continued and built on.

Lastly, it is important to recognize that an EMS background is not always necessary for a management role in EMS. Other professionals with strong health care and management backgrounds, and who are able to face and welcome a steep learning curve, should be considered suitable for EMS management positions.

Key Public Policy Points:
- Flexible career pathways must be created to ensure the continued development of leadership capacity in EMS.
- Investment in leadership development will be key to building the capacity to lead the strategic evolution of EMS.

### 3.3 Preparing for the Complexities of Tomorrow

While EMS will always continue to maintain core service excellence, once EMS is properly strengthened and prepared, EMS can play a much larger role in filling some of the community’s existing health care needs. From making the necessary changes and investing in the future of EMS today, EMS will be a great future asset by offering a wide scope of practice and training that can mould itself to the needs of a particular jurisdiction. Finally, EMS can continue its development by new innovations and ideas for EMS.

**A) EMS Will Continue to Maintain Core Service Excellence**

While EMS will seek to expand its role in providing health care, it will remain equally committed to its traditional responsibilities in the areas of pre-hospital care. It is essential that EMS prioritize and continue to improve on their role in emergency response including providing triage, treatment and transportation to patients to the emergency department. As well, EMS will
retain other traditional responsibilities such as inter-facility transfers as these are important and necessary community services that will continue to help define the identity and role of EMS. As such, the role of EMS will not be expanded to the detriment of their responsibilities in public safety. This will most likely mean that some EMS jurisdictions will have more reserve capacity to expand beyond their traditional role than others, depending on their call volume and the population and size of the area they serve.

Toronto EMS is the largest municipal ambulance service in the country, serving 3.5 million people over a 650 square kilometres service area. The service prides itself on being “one of the most comprehensive pre-hospital emergency care systems in the world.”

http://www.toronto.ca/ems/overview/overview.htm

All EMS jurisdictions, however, should continue to focus on improving the quality of their traditional services including the speed and quality of call handling, ambulances’ response times, and the ability of EMS personnel to stabilize patients with immediately life-threatening conditions. As a part of improving the delivery of traditional services, EMS should review how they provide traditional services and make any necessary adjustments needed to maximize cost-effectiveness and human resources efficacy.

Finally, EMS may need to make adjustments in how they perform inter-facility transfers. These adjustments have two considerations: a) the skill level of transport teams should match the needs of the patients involved, and b) transport of individuals not requiring sophisticated equipment or supervision should not consume resources which are more urgently required available elsewhere. Adjustments should focus on achieving the most efficient use of resources while remaining conscious of the importance of high quality service provision.

Innovative programs such as the British Columbia Infant Transport Team (ITT) can become useful models for developing more efficient and specialized transport programs. ITT is a joint initiative supported by various health care organizations within British Columbia in order to provide efficient, coordinated, and advanced transport services in complicated neonatal, pediatric, and maternal stabilization and transport cases. The collaboration of appropriate health care providers leads to efficient high-quality transport service provision.

Similarly, a ground-breaking pilot program in the Kootenay Boundary Region of British Columbia allows members of the Critical Care Transport Team to use idle time by assisting in the emergency department, intensive care unit, or operating room when there are no medical transport emergencies. This dual role as primary health care provider and medical emergency transport responder increases EMS efficiency and enables regions with smaller populations to justify specialized programs such as Critical Care Transport Team. This type of innovation and coordination between health care providers can not only improve transport services, but also facilitate specialized and enhanced health services within the community.

"Quote"

EMS should be responsive to the needs of the legitimate patients who require its services whether in a first response role or inter-facility transfers. A failure to do so will lead to the role of EMS being diminished and will lead to the creation of parallel services to replace EMS, with additional cost to the consumer and the taxpayer.

EMSCC Online Survey Respondent, Spring 2006
**Key Public Policy Point:** While maintaining core service excellence, EMS must pursue innovation and new models of service delivery to meet community-defined needs. Collaboration of EMS, community organizations such as primary health care providers, social service agencies, and public safety groups will enable innovative initiatives that have the potential to improve the level of health care within a community.

B) **Shape and Embrace Community-Defined Scopes of Practice: Respond to Community Health Care, Public Safety, Disaster and Emergency Response Management Needs**

One of EMS’ greatest assets is its ability to adapt to a particular community’s need. While EMS will also offer its traditional services, with smart decisions and necessary investments in training, technology and development of the profession, EMS has great potential to play an expanded role in health care and public safety, which will require collaboration between EMS and other health care and community organizations. The provinces and territories will also need to adopt “community-defined” scopes of practice that enable EMS to respond to the needs of local communities.

EMS can play an enhanced role in health care by helping to ease rural staffing and facility shortages and decreasing emergency department wait times by leveraging reserve capacity. EMS’ reserve capacity comes from EMS being able to take on additional responsibilities in between waiting for emergency calls and from the training of EMS personnel. The first part of EMS’ reserve capacity will vary largely on the volume of calls in their jurisdiction. For this reason, EMS systems in remote or rural areas of Canada will have greater potential for reserve capacity due to a low call volume where some busy, EMS systems serving densely-populated communities may be completely occupied just responding to emergency calls.

*Quote*

*Paramedics are a very valuable and often underutilized health resource. The need for community and primary health resources continues to increase, and paramedics are very capable of assuming larger roles in these areas. There needs to be more emphasis on the ability for paramedics to assess, treat and make sound clinical decisions about transports about that could reduce the burden placed on emergency departments. Paramedics need strong ties with the health care system in order to maintain medical competence.*

*EMSCC Online Survey Respondent, Spring 2006*

Secondly, many EMS personnel are highly trained and similar in capabilities to a registered nurse. (In fact some professionals who now work in paramedicine are also licensed or registered nurses). Continued development of paramedicine degree granting programs will ensure a high level of EMS training and three years of education and skill development. These types of initiatives, aided by future improvements in EMS training including enhanced and more consistent training, will further EMS’s ability to take on additional roles and responsibilities in a community’s health care system in many different capacities.

For example, EMS has the potential to provide an increasing range of community-based primary and secondary health care services using its mobile infrastructure. By providing an increasing
range of assessment, treatment and diagnostic services, EMS will be able to care for some patients on the spot, with no transportation required. Or, EMS can diagnose the patient and bring him or her to the most appropriate health care facility. Another option is for EMS to give the patient initial treatment and to schedule the patient with their own general practitioner later in the week. These developments would allow EMS to become ‘primary health care on wheels.’ More people could receive treatment outside of the emergency department and some patients could probably avoid entering the health care system for further treatment altogether. EMS’ ability to become “primary health care on wheels” is particularly valuable in rural areas where there may be greater difficulty accessing traditional secondary care services due to a lack of, or the distance to, hospitals or clinics.

A small community in Nova Scotia, Long and Brier Islands, looked to ambulance services to resolve their health care needs. Located two hours away from a hospital, the community established a 24 hours per day, 7 days per week ambulance base at an abandoned clinic. In 2003, there was a decrease of 23% in the number of Island residents needing to attend the emergency department compared to 2002 levels.


As well, EMS can become involved in community health monitoring and in providing care closer to home through home care visits and treatments. EMS is well-placed to undertake many types of home visits on behalf of general practitioners or community health nurses and can participate in data collection and linking it to the appropriate health care agencies.

Additionally, EMS should assume expanded responsibility for proactive health promotion. EMTs and paramedics should seize opportunities to work in conjunction with other primary care providers to provide advice on self-care and injury prevention for frequent users of EMS services, such as asthmatics and diabetics. Where appropriate, EMS can contribute to public education and injury prevention initiatives such as public CPR training in partnership with fire and police and organizations like ACT.

Finally, EMS has the potential to take on expanded roles and responsibilities in public education and emergency preparedness. EMS can participate in injury and safety initiatives alongside police and fire departments. Moreover, EMS can assist governments tasked with emergency management both in the preparation and planning as well as being a ready and mobile task force in the case of a natural disaster or emergency such as a hurricane, pandemic, or terrorist attack. EMS, among the first responders to any public emergency, can also leverage that position to facilitate trend reporting to recognize phenomena such as pandemics, faulty equipment/vehicles, upswings in illness etc.

"Quote"

Our status within the public safety role is something that continues to grow every year. Although we need to continue to grow and push the limits as healthcare practitioners, our role on the front lines with things such as man made/natural disasters, rescues, terrorism, emergency calls etc. requires that we enhance our public safety role as well.

EMSCC Online Survey Respondent, Spring 2006
EMS can offer health care systems diverse and far-reaching possibilities. Enhanced technology aid them in maximizing their effectiveness in expanded roles in health care and/or public safety. Important technologies that should be adopted include new digital radio systems (which will enable interoperability between EMS jurisdictions, especially in times of severe emergencies and pandemics) and electronic patient records (which will provide paramedics with “on the spot” medical information about a patient and lead to more targeted and effective clinical care).

**“Quote”**

*EMS is a very adaptable component of the health care system and expanding its mandate should be the first priority. We have so many skilled providers who want to do as much as they can for Canadians. It is also important that the other areas of health care realize exactly what we do and that may be accomplished by proving that EMS is an integral part of the "health care team".*

*EMSCC Online Survey Respondent, Spring 2006*

**Key Public Policy Point:** EMS leaders should pursue opportunities to provide enhanced types and levels of health care including public health safety and education, emergency response preparedness, disaster management, and pandemic response capability in order to respond to community-defined scopes of practice.
4.0 A Call to Leadership: The Magnitude of the Journey Ahead

[Conclusion]
Re-state the Call to Action

“EMSCC believes that the future of EMS in Canada is at the centre of community, providing primary health care in a mobile setting.” These words summarize a complex but critically important vision that EMS leaders across the country believe in. In areas such as emergency medical response, community health, emergency preparedness, injury prevention and control, training and research, and public education, EMS can serve the needs of their local communities. The magnitude of the journey ahead will require tremendous leadership, from both public policy makers and from EMS leaders.

The following table outlines the key public policy recommendations described in this report. The EMSCC invites EMS leaders and policy-makers to explore these recommendations as we seek to connect with our communities in our new strategic context.

**Table of Key Public Policy Recommendations**

<table>
<thead>
<tr>
<th>Strategic Direction</th>
<th>Key Public Policy Recommendation</th>
<th>Policy Maker Actions</th>
<th>EMS Leadership Actions</th>
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<tbody>
<tr>
<td>Enable coordinated, community-defined health and public safety services</td>
<td>A systems approach will allow scarce public resources to be used more effectively and efficiently. A new public policy direction to ensure EMS is part of a “system” of health and public safety is required.</td>
<td>Support the development of a Canadian system of accreditation that recognizes and promotes excellence in EMS.</td>
<td>Collaborate with health care system stakeholders to develop coordinated response for health emergency management and leadership.</td>
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<td>Enforce existing legislation and develop performance standards in private sector contracts.</td>
<td>Move toward a mobile health care model built on the delivery of proactive public health and safety initiatives, emergency health management, and emergency response coordination as needed within the community.</td>
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<td>Consult, include, and involve EMS in all health care initiatives to allow EMS to become recognized as a key partner in overall health care management.</td>
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<td>Support joint leadership between medical directors and EMS.</td>
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| Ensure the financial foundations for quality EMS | Funding methods from all public sources should:  
- Enable paramedics to effectively meet the current and future clinical needs of patients and their communities.  
- Reflect the actual cost of service delivery.  
- Recognize the costs to EMS systems of “being prepared,” allowing EMS to proactively respond to a community’s needs.  
- Recognize the population density and geography of each community served by an EMS system. | Develop a new preparedness model for funding EMS based on the dependent variables such as population density, geography, utilisation and quality standards. | Work with policy makers to help devise new ways of funding EMS based on care provided by EMS personnel. |
<p>| | | Innovate new ways of funding EMS based on care provided by EMS personnel. Create a funding system with positive incentives for the health care system that offers a range of transport and treatment options. | Coordinate with policy makers to determine each EMS’ service delivery area’s needs. |
| | | Prepare accountable and transparent budgets and bills for service provided. | |</p>
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<tr>
<th>Strategic Direction</th>
<th>Key Public Policy Recommendation</th>
<th>Policy Maker Actions</th>
<th>EMS Leadership Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Be stable, predictable, and sustainable to allow for optimized planning and enhanced innovation.</td>
<td>▪ Mitigate increases to overall health care costs by investing in proactive value-added EMS health care management initiatives.</td>
<td>▪ Agree on a national consensus from EMS leaders and Medical Directors about comprehensive and inclusive performance measures.</td>
<td>▪ Drive and influence policy with regard to national EMS coordination.</td>
</tr>
<tr>
<td>▪ Require EMS systems to publicly account for its use of public funds.</td>
<td>▪ Support widespread technological improvement and innovation.</td>
<td>▪ Establish comprehensive best-practice protocols, standard operating procedures, and benchmarks for patient care delivery and new realities (homeland security, pandemic response, etc.).</td>
<td>▪ Design, manage, and formalize the tasks and roles of a national EMS Institute.</td>
</tr>
<tr>
<td>▪ EMS will be accountable to the public it serves and embrace systematic improvement to keep pace with an ever-changing, complex environment</td>
<td>▪ Enable national data-sharing capability between EMS providers and between EMS providers and other health care organizations.</td>
<td>▪ Pursue initiatives that encourage collaboration between medical and health care professions, first responder agencies, emergency agencies, public safety organizations, regulatory bodies, and the EMS leadership.</td>
<td>▪ Discuss and agree on a national process for rigorous data collection, including the identification of key data areas.</td>
</tr>
<tr>
<td>▪ A new systems approach will underpin continual, systematic improvement and enable:</td>
<td>▪ Support, encourage, and fund the development of a national EMS institute to:</td>
<td>▪ Pursue opportunities to work collaboratively with other medical and health care professions, other emergency agencies (fire police departments), public safety organizations, and regulatory bodies.</td>
<td>▪ Actively pursue collaborative research partnerships.</td>
</tr>
<tr>
<td>▪ The development of comprehensive performance measures for EMS services.</td>
<td>▪ Coordinate EMS data collection and research.</td>
<td></td>
<td>▪ Conduct research that evaluates EMS and its role in public health, safety and prevention, emergency response, etc.</td>
</tr>
<tr>
<td>▪ Enhanced data collection and research capabilities.</td>
<td>▪ A national data repository.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Continual improvement and development of emergency care protocols and clinical pathways.</td>
<td>▪ Benchmark and national standards.</td>
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</tr>
<tr>
<td></td>
<td>▪ Errors and trend reporting.</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>▪ Develop a Canadian accreditation model.</td>
<td></td>
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<tr>
<td></td>
<td>▪ EMS systems should demonstrate high accountability and transparency for quality EMS services through:</td>
<td></td>
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<tr>
<td></td>
<td>▪ Public reporting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ The development of a Canadian accreditation system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Data collection.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Paramedicine research and evaluation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Direction</td>
<td>Key Public Policy Recommendation</td>
<td>Policy Maker Actions</td>
<td>EMS Leadership Actions</td>
</tr>
<tr>
<td>---------------------</td>
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<td>------------------------</td>
</tr>
</tbody>
</table>
| Training and education will be robust to enable the “paramedic of the future” and the “EMS leader of the future” | The training and education of the “paramedic of the future” and the “EMS leader of the future” will require:  
- Training and education will give paramedics the competencies required to meet “community-defined” scopes of practice.  
- A layered system of education should promote transferability of EMS credentials. Previously completed EMS training and credentials should be recognized by related technical and degree programs. | • Recognize NOCP equivalencies in legislation to minimize practice entry barriers.  
• Support the periodic cyclical review of the NOCP guidelines to ensure currency and relevancy. | • Enhance and expand internal training programs and secondment/exchange opportunities to maximize growth and learning.  
• Work with education programs to ensure appropriate and practical curricula are maintained to support EMS practitioners and future health care management.  
• Adapt human resource planning initiatives (recruitment, retention, career counselling, career development) to meet corresponding community-defined needs. |
| All provinces and territories should endorse and adopt the National Occupancy Competency Profile, enabling consistency in training and education approaches, a higher standard of education and training, and national credential portability. | | • Recognize the NOCP.  
• Standardize education programs and credentials across the country. | • Devise and implement a standard national certification exam.  
• Standardize education programs and credentialing requirements across the country.  
• Establish a national registry for EMS personnel. |
| Flexible career pathways must be created to ensure the continued development of leadership capacity in EMS.  
Investment in leadership development will be key to building the capacity to lead the strategic evolution of EMS. | | • Create portability and employee exchange or secondment opportunities across systems.  
• Support focussed secondment opportunities for development, growth, and learning. | • Develop an EMS management training program.  
• Collaborate with educational institutes to develop a greater breadth and depth of graduate programs in EMS leadership and management  
• Develop our leadership capacity, develop effective relationships with policy makers, promote the EMS identity |
<table>
<thead>
<tr>
<th>Strategic Direction</th>
<th>Key Public Policy Recommendation</th>
<th>Policy Maker Actions</th>
<th>EMS Leadership Actions</th>
</tr>
</thead>
</table>
| Ensure the development of EMS leadership capacity | EMS leaders must become far more innovative in pursuing strategic partnerships with other bodies. | Financially support strategic partnerships between EMS leaders and other bodies. | ▪ Explore opportunities to develop and strengthen strategic partnerships with health agencies, social agencies, emergency response organizations, and other important community organizations and businesses.  
▪ Provide a supportive environment for EMS personnel by ensuring compensation, benefits, health and safety, and employment standards are met or exceeded. |
| EMS must prepare for the complexities of tomorrow | While maintaining core service excellence, EMS must pursue innovation and new models of service delivery to meet community-defined needs. Collaboration of EMS and community organizations such as primary health care providers, social service agencies, and public safety groups will enable innovative initiatives that have the potential to improve the level of health care within a community. | Support efforts to optimize EMS’ contribution to both health care and public safety. | ▪ From a clinical and operational perspective, improved sharing of research and best practices will foster knowledge transfer between EMS units.  
▪ Conduct EMS research on clinical patient outcomes.  
▪ Develop an accreditation system for ambulance service providers.  
▪ Standardize reporting mechanisms and establish national benchmarks differentiating between remote, rural and urban. |
| EMS leaders should pursue opportunities to provide enhanced types and levels of health care including public health safety and education, emergency response preparedness, disaster management, and pandemic response capability in order to respond to community-defined scopes of practice. | | ▪ Support communities as they define EMS’ scope of practice through legislative change.  
▪ Encourage development of an open and receptive health care system where all partners, including EMS, contribute to and shape the future of health care in Canada.  
▪ Actively pursue collaborative relationships with stakeholders in areas such as public safety, emergency management, pandemic response, social services, and mental health services.  
▪ Increase EMS’ role and capacity in emergency management.  
▪ Begin trend reporting based on the role of the first on the scene responder.  
▪ Take actions to raise the public profile of EMS. |
5.0 Conclusion – Summary of Key Public Policy Points

EMS systems are bending—and in some cases breaking—under the strain of rising costs, reduced subsidies and increasing service expectations. The quest to improve performance while achieving savings usually involves complex financial, political, and medical issues, and the scientific evidence to help guide the process is often scant.

Jay Fitch, Ph.D
IQ Report, Volume 37, Number5

The abovementioned quotation captures the essence of the complex operating environment and strategic challenges facing EMS in Canada. However, this document simplifies, outlines, and brings clarity to the future goals and strategic direction of EMS in Canada. Furthermore, this document can be used as the basis for devising an action plan for achieving the specified strategic direction. A clear picture of the future will help EMS to become a mobile health care delivery service, fully integrated with and recognized by other health care organizations, and driven by the specific needs of the communities in which EMS operates.

In order to achieve this redefined and expanded role within the Canadian health care system, EMS will require public policy support. EMS leadership must seek to shape, influence, and drive policy development that will enable the future vision of EMS in Canada. The following table provides a concise summary of the policy framework necessary for supporting and enabling the continued progress and development of EMS in Canada.

<table>
<thead>
<tr>
<th>Key Public Policy Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
</tr>
<tr>
<td>A systems approach will allow scarce public resources to be used more effectively and efficiently. A new public policy direction to ensure EMS is part of a “system” of health and public safety is required.</td>
</tr>
<tr>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Funding methods should:</td>
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<tr>
<td>- Enable paramedics to effectively meet the current and future clinical needs of patients and their communities.</td>
</tr>
<tr>
<td>- Reflect the actual cost of service delivery.</td>
</tr>
<tr>
<td>- Recognize the costs to EMS systems of “being prepared,” allowing EMS to proactively respond to a community’s needs.</td>
</tr>
<tr>
<td>- Recognize the population density and geography of each community served by an EMS system.</td>
</tr>
<tr>
<td>- Be stable, predictable, and sustainable to allow for optimized planning and enhanced innovation.</td>
</tr>
<tr>
<td>- Require EMS systems to publicly account for its use of public funds.</td>
</tr>
<tr>
<td><strong>3</strong></td>
</tr>
<tr>
<td>EMS systems should demonstrate high accountability and transparency for quality EMS services through:</td>
</tr>
<tr>
<td>- Public reporting.</td>
</tr>
<tr>
<td>- The development of a Canadian accreditation system.</td>
</tr>
<tr>
<td>- Data collection.</td>
</tr>
<tr>
<td>- Paramedicine research and evaluation.</td>
</tr>
<tr>
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<tr>
<td>4</td>
</tr>
</tbody>
</table>
| 5 | A new systems approach will be required to achieve the future state of EMS. This new approach will underpin continual, systematic improvement and enable:  
  – The development of comprehensive performance measures for EMS services.  
  – Enhanced data collection and research capabilities.  
  – Continual improvement and development of emergency care protocols and clinical pathways. |
| 6 | Evolving the role of EMS in health care will require the inclusion of EMS leaders in the governance of health care systems. |
| 7 | EMS leaders must become far more innovative in pursuing strategic partnerships with other bodies. |
| 8 | The training of the “paramedic of the future” and the “EMS leader of the future” will require:  
  – Training and education will give paramedics the competencies required to meet “community-defined” scopes of practice.  
  – A layered system of education should promote transferability of EMS credentials. Previously completed EMS training and credentials should be recognized by related technical and degree programs. |
| 9 | Enhanced career development and management training opportunities should lead to:  
  – Flexible career pathways must be created to ensure the continued development of leadership capacity in EMS.  
  – Investment in leadership development will be key to building the capacity to lead the strategic evolution of EMS. |
| 10 | While maintaining core service excellence, EMS must pursue innovation and new models of service delivery to meet community-defined needs. Collaboration of EMS and community organizations such as primary health care providers, social service agencies, and public safety groups will enable innovative initiatives that have the potential to improve the level of health care within a community. |
| 11 | EMS leaders should pursue opportunities to provide enhanced types and levels of health care including public health and safety education, emergency response preparedness, disaster management, and pandemic response capability in order to respond to community-defined scopes of practice. |
## Appendix A: EMS Leadership Interviews

Selected leaders in the EMS field were interviewed in the development of the future state vision outlined in this document:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title &amp; Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Rapanos</td>
<td>Past President, EMSCC / DSMUC and Chief, City of Edmonton Emergency Medical Services</td>
</tr>
<tr>
<td>Tom Sampson</td>
<td>President, EMSCC / DSMUC and Chief, City of Calgary EMS</td>
</tr>
<tr>
<td>Ken Luciak</td>
<td>Treasurer, EMSCC / DSMUC and Director, Emergency Medical Services, Regina Qu'Appelle Health Region</td>
</tr>
<tr>
<td>Fred Plateel</td>
<td>Director, EMSCC / DSMUC and Chief Executive Officer, BC Ambulance Service</td>
</tr>
<tr>
<td>Dave Dutchak</td>
<td>Director, EMSCC / DSMUC and President &amp; Chief Executive Officer, M.D. Ambulance Care Ltd. Saskatoon</td>
</tr>
<tr>
<td>Anthony DiMonte</td>
<td>Director, EMSCC / DSMUC and Chief, Ottawa Paramedic Service</td>
</tr>
<tr>
<td>Bruce Farr</td>
<td>Director, EMSCC / DSMUC and Chief, Toronto Emergency Medical Services</td>
</tr>
<tr>
<td>Don Hunt</td>
<td>Director, EMSCC / DSMUC and Director, Regional Ground Ambulance, Emergency Services and Ambulatory Care, Peace Country Health</td>
</tr>
<tr>
<td>Michael McKeage</td>
<td>Director, EMSCC / DSMUC and Director of Operations, Emergency Medical Care Inc., Nova Scotia</td>
</tr>
<tr>
<td>Wes Shoemaker</td>
<td>Director, EMSCC / DSMUC and Chief, Fire and Paramedic, City of Winnipeg</td>
</tr>
<tr>
<td>Howard Snodgrass</td>
<td>Director, EMSCC / DSMUC and Regional Manager, Emergency Medical Services, Palliser Health Region</td>
</tr>
<tr>
<td>Brad Meekin</td>
<td>Director, EMSCC / DSMUC and General Manager, York Region Emergency Medical Services</td>
</tr>
<tr>
<td>Richard Armstrong</td>
<td>Director, EMSCC / DSMUC and Director, Durham Region Emergency Medical Services</td>
</tr>
<tr>
<td>Michael Nolan</td>
<td>Director of EMS, County of Renfrew</td>
</tr>
<tr>
<td>Michael Sanderson</td>
<td>Regional Director, BC Ambulance Service</td>
</tr>
<tr>
<td>Darlene Bouwsema</td>
<td></td>
</tr>
<tr>
<td>Marilyn Pike</td>
<td>Senior Director, Emergency Health Services, Government of Nova Scotia</td>
</tr>
<tr>
<td>Rosalind Smith</td>
<td>Special Advisor to the Assistant Deputy Minister, Acute Care, Government of Ontario</td>
</tr>
<tr>
<td>Dr. Joseph J. Fitch, PhD</td>
<td>President, Fitch and Associates</td>
</tr>
</tbody>
</table>
It should be noted that the responses received from these EMS leaders may not necessarily reflect those of their home organizations.

The following interview protocol was used to interview selected leaders in the EMS field in informing the future state vision outlined in this document.

- **Current Role**
  - What is your history with EMS? What is your current role?

- **Vision for EMS**
  - What is your vision of EMS in the year 2020? What is required to achieve this vision?
  - What is the gap between the current state of EMS and your future vision for EMS?
  - Given the future state vision for EMS, what should the future ‘star of life’ look like?

- **Demographics**
  - In light of the aging of Canada’s population, what differences or changes do you envision for EMS in 2020? What challenges will exist for EMS?
  - What key changes in EMS, EMS’ role in health care, and health care overall will be necessary to prepare for this increase in demand?

- **Public Policy and Funding**
  - Given your vision for EMS in 2020, what future public policy framework should exist to support Canadian EMS? Funding model?
  - In order to achieve this vision, what two to three key changes about existing ambulance policy and funding structures need to be made?

- **Medical Oversight and Integration with Health Care**
  - What is the role of medical oversight and direction in your vision for EMS?
  - What role would you like to see EMS play in health care emergency medicine in 2020? Public safety?
  - Given this vision, what two to three key changes will make this role possible?

- **Quality, Standards, and Accreditation**
  - What, if any, national standards for levels of care, do you think EMS systems should adopt by 2020? How should EMS jurisdictions be held accountable to that standard of care?
  - In 2020, how should the quality of EMS care be evaluated?
  - Given your vision concerning the level of care provided by Canadian EMS, what two to three changes would make this possible?

- **EMS as a Profession**
  - From your vantage point, what should the vision for EMS as a profession be by 2020? What does this mean for EMS personnel in terms of training, compensation, professional challenges and risks, organizational structure, etc.
  - In your vision for EMS in 2020, what level of public awareness should EMS have and how is this awareness achieved? What education does the public have about EMS and emergency prevention and preparedness?
  - How can these be achieved? What key changes will make this possible?

- **Closing**
  - Do you have any further thoughts, observations, or suggestions you would like to share with us today?
Appendix B: Online Survey Respondents

Selected EMS leaders and stakeholders were invited to respond to an online survey in the development of the future state vision outlined in this document:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe Acker</td>
<td>Deputy Chief, Edmonton EMS</td>
</tr>
<tr>
<td>Dr. Andrew Affleck</td>
<td>Base Hospital Medical Director, Region 6 Ontario</td>
</tr>
<tr>
<td>Donna Allain</td>
<td>SERHA Ambulance</td>
</tr>
<tr>
<td>John Ash</td>
<td>Manager, City of Ottawa Emergency Management</td>
</tr>
<tr>
<td>Dale Backlin</td>
<td>Chair, Saskatchewan College of Paramedics</td>
</tr>
<tr>
<td>Corey Banks</td>
<td>EMS, Division Manager, Eastern Health, St. John’s, NL</td>
</tr>
<tr>
<td>Dennis Brown</td>
<td>Senior Manager, Emergency Health Services Branch, Ontario Ministry of Health and Long-Term Care</td>
</tr>
<tr>
<td>Jim Brown</td>
<td>President, Paramedic Association of New Brunswick</td>
</tr>
<tr>
<td>Ed Cain</td>
<td>EHS Nova Scotia</td>
</tr>
<tr>
<td>Hal Canham</td>
<td>Medical Director Paliser Health Region</td>
</tr>
<tr>
<td>Brian Cole</td>
<td>Director, St. John Ambulance Community Services</td>
</tr>
<tr>
<td>Carmen D’Angelo</td>
<td>Manager of Emergency Services, County of Oxford</td>
</tr>
<tr>
<td>Kristian Davis</td>
<td>Renfrew Victoria hospital</td>
</tr>
<tr>
<td>Dennis Desjardins</td>
<td>EMT-1 Grand Falls Ambulance Service</td>
</tr>
<tr>
<td>Steve Donaldson</td>
<td>Deputy Chief Calgary EMS</td>
</tr>
<tr>
<td>Margaret Dukes</td>
<td>Associate Director, Accreditation, Canadian Medical Association</td>
</tr>
<tr>
<td>Peter F. Dundas</td>
<td>Director, Ambulance &amp; Emergency Programs, Peel Regional Paramedic Services</td>
</tr>
<tr>
<td>Andrew Easton</td>
<td>Paramedic</td>
</tr>
<tr>
<td>Mike Eddy</td>
<td>President, Canadian Association of Fire Chiefs</td>
</tr>
<tr>
<td>Brian Feist</td>
<td>Edmonton EMS Superintendent</td>
</tr>
<tr>
<td>Eric Glass</td>
<td>Chairman - Paramedic Association of Manitoba</td>
</tr>
<tr>
<td>Yves Goudreau</td>
<td>Director of EMS</td>
</tr>
<tr>
<td>Barb Goulet</td>
<td>Edmonton EMS Superintendent</td>
</tr>
<tr>
<td>Name</td>
<td>Title and Organization</td>
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<tr>
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</tr>
<tr>
<td>Edgar Goulette</td>
<td>MHSQA</td>
</tr>
<tr>
<td>Steve Hanley</td>
<td>Manager, Air and Dispatch Services: Province of New Brunswick</td>
</tr>
<tr>
<td>Chris Harris</td>
<td>President, Paramedic Association of Newfoundland and Labrador</td>
</tr>
<tr>
<td>Richard Hildebrand</td>
<td>Lethbridge Fire and Emergency Services</td>
</tr>
<tr>
<td>Chris Hood</td>
<td>Executive Director, Paramedic Association of New Brunswick</td>
</tr>
<tr>
<td>Tom Jahelka</td>
<td>President, Alberta College of Paramedics</td>
</tr>
<tr>
<td>Brian Johnson AEMCA ACP EMT-P</td>
<td>Director Ontario Paramedic Association</td>
</tr>
<tr>
<td>Jim Kashman</td>
<td>Deputy Fire Chief City of St. Albert Fire Service</td>
</tr>
<tr>
<td>Joe Kowal</td>
<td>Manager Communications, Winnipeg Fire Paramedic Service</td>
</tr>
<tr>
<td>Brian Longeway</td>
<td>President, Paramedic Association of Canada</td>
</tr>
<tr>
<td>Maureen MacDonald</td>
<td>Manager of Health, Safety and Emergency Programs, NAIT</td>
</tr>
<tr>
<td>Bruce McAlear</td>
<td>Operations Superintendent</td>
</tr>
<tr>
<td>Ian McClelland</td>
<td>Toronto EMS, Duty Officer</td>
</tr>
<tr>
<td>Justin Maloney</td>
<td>Medical Director, Ottawa Base Hospital Program</td>
</tr>
<tr>
<td>Libby Maskos</td>
<td>Quality, Development and Research Supervisor, Atlantic Health Sciences Corporation, Emergency Medical Services</td>
</tr>
<tr>
<td>Trevor Maslyk</td>
<td>Superintendent, Edmonton EMS</td>
</tr>
<tr>
<td>Brad Mason</td>
<td>Director, Taber Emergency Services</td>
</tr>
<tr>
<td>David Morhart</td>
<td>Deputy Minister of Public Safety, Province of British Columbia</td>
</tr>
<tr>
<td>Paul Morhert</td>
<td>Paramedic Association of Canada</td>
</tr>
<tr>
<td>Ernie Mothus</td>
<td>Ambulance Paramedics of B.C.</td>
</tr>
<tr>
<td>Joe Nicholls</td>
<td>EMS Chief, Greater Sudbury EMS</td>
</tr>
<tr>
<td>Jim Nicholson</td>
<td>Deputy Chief, Calgary EMS</td>
</tr>
<tr>
<td>Craig O’Callaghan</td>
<td>Superintendent, Edmonton EMS</td>
</tr>
<tr>
<td>Kevin O’Keefe</td>
<td>Superintendent, Edmonton EMS</td>
</tr>
<tr>
<td>Robert Patrick</td>
<td>Retired</td>
</tr>
<tr>
<td>Pierre Poirier</td>
<td>Executive Director, Paramedic Association of Canada</td>
</tr>
<tr>
<td>Name</td>
<td>Title and Organization</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>John Prno</td>
<td>Director, Region of Waterloo EMS</td>
</tr>
<tr>
<td>Thomas Raithby</td>
<td>Consultant, MHSQA</td>
</tr>
<tr>
<td>Grant Ross</td>
<td>ACP paramedic - BCAS</td>
</tr>
<tr>
<td>Brian Schwartz</td>
<td>Director, Sunnybrook Osler Centre for Prehospital Care</td>
</tr>
<tr>
<td>Rick Stanger</td>
<td>Deputy Chief, Calgary EMS</td>
</tr>
<tr>
<td>Darren Sandbeck</td>
<td>Executive Director, Foothills Regional EMS</td>
</tr>
<tr>
<td>Rob Sharman</td>
<td>Operations Superintendent City of Edmonton - EMS</td>
</tr>
<tr>
<td>Rick Trombley</td>
<td>Ontario Paramedic Association</td>
</tr>
<tr>
<td>Diane Verreault</td>
<td>Paramedic Association of Quebec</td>
</tr>
<tr>
<td>J. Albert Walker</td>
<td>Chair - Canadian EHS Research Consortium</td>
</tr>
<tr>
<td>Karen Wanger</td>
<td>Regional Medical Director, BC Ambulance Service</td>
</tr>
<tr>
<td>Ian Watson</td>
<td>Region Manager, Atlantic Health Sciences Corporation Regional EMS</td>
</tr>
<tr>
<td>Tara Watson</td>
<td>Manager, Northern Carleton Ambulance, NB &amp; Secretary-Treasurer, PAC</td>
</tr>
<tr>
<td>Dr. Michelle Welsford</td>
<td>Medical Director, Hamilton Health Sciences Base Hospital Program</td>
</tr>
<tr>
<td>Stu Williams</td>
<td>Superintendent, Edmonton EMS</td>
</tr>
<tr>
<td>Government of Canada</td>
<td>Public Safety and Emergency Preparedness Canada</td>
</tr>
</tbody>
</table>
Appendix C: Spring 2006 EMSCC Online Survey

The following questions were posed in the online survey prepared by EMSCC for selected leaders in EMS, government, and professional bodies in Spring 2006:
### 12. Demonstrating Accountability for High Quality EMS Services

1. a) Comparative benchmarking and reporting mechanisms. Examples include common terminology and methods for data capture.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>80.6%</td>
<td>50</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>17.7%</td>
<td>11</td>
</tr>
<tr>
<td>Neutral</td>
<td>1.8%</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Respondents</strong></td>
<td><strong>62</strong></td>
<td></td>
</tr>
</tbody>
</table>

 skewed this question | 3

2. b) Enhanced para-medicine research and evaluation. Examples include national data collection, emergency medicine research and errors reporting/prevention.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Total</th>
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 skewed this question | 3
The Future of EMS in Canada: Defining the New Road Ahead

3. c) A Canadian accreditation regime for EMS systems.

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10. Promoting and Advancing EMS as a Profession

1. 10a) One component of advancing EMS will be the development of strategic partnerships and linkages with other professional bodies. These partnerships and linkages may assist in strengthening the professional development and growth of EMS.

EMSCC / DMEUC should pursue the development of effective partnerships and linkages with other professional bodies.

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(chipped this question) 6
14. Enhancing EMS Leadership Capacity

1.1) In recent years, EMS leadership and management programs have been initiated in pursuit of building EMS leadership capacity. There is an opportunity in the future to expand the accessibility of these programs nation-wide.

Credentialed EMS leadership and management programs should be developed and available across the country.

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Total Respondents 81

(skipped this question) 4
Appendix D: End Notes

All referenced websites were accessed in March and April, 2006.


viii TkMC Independent Research & Interviews

ix http://www.paramedic.ca/nocp

x http://www.theglobeandmail.com/servlet/story/LAC.20060421.AMBULANCES21/TPStory/?query=new+br

unswick+ambulance


xii http://www.health.gov.sk.ca/ph_br_ae_emer_transp.html


xiv TkMC Independent Research

xv TkMC Independent Research

xvi TkMC Independent Research

xvii TkMC Independent Research


xix TkMC Independent Research & Interviews


xxiv http://www.actfoundation.ca/

xxv Planning for EMS in 2010, p.2

xxvi Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.8

xxvii Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.18
xxviii Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.22

xxx TkMC Independent Research & Interviews

xxi Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.33

xxii Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.33


xxiv Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.13

xxv Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p. 8

xxvi Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.43

xxvii Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.44

xxviii Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.46


xl Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.29

xli http://www.jibc.bc.ca/paramedic/programs/para_programs/itt.htm

xlii http://www.jibc.bc.ca/paramedic/programs/para_programs/itt.htm


xliv http://www.mhc.ab.ca/programs/info.php?program=33

xlv Taking Health Care to the Patient: Transforming NHS Ambulance Services. Department of Health, United Kingdom, p.22