

# Patients First: Expanding Medical Responses

Discussion Paper

November 2016

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# Introduction: Purpose and Scope

The ambulance system in Ontario is a key component in supporting the Ministry of Health and Long-Term Care's *Patients First: Action Plan for Health Care* by providing access to care.

The Ministry of Health, and Long-Term Care (MOHLTC) is leading the government's public consultations on the potential expansion of municipalities choosing to use the services of full-time firefighters who are also employed as paramedics with a Province of Ontario certified ambulance service, to provide patient care up to the Primary Care Paramedic level in tiered response conditions, and put in place the appropriate provincial oversight regime to ensure high-quality patient care. "Tiered response" is defined as the response of more than one emergency agency to an emergency medical incident.

Tiered response provides an additional access point to emergency services.

The number of patients transported by land ambulance is increasing year-over-year at approximately a 3.5% growth rate from 2009-2014.<sup>1</sup> Currently, Ontario's ambulance system transports approximately 1,000,000 patients.<sup>2</sup>

In response to this growing demand for ambulance services, the government is undertaking a multi-year modernization of the services that will improve patients' journeys, increase the availability of ambulances, improve response times and ensure sustainability. This will mean:

- More ambulances available for higher acuity patients by having a more accurate dispatch triage tool;
- Fewer responses required for lower acuity patients through dispatch diversion strategies;
- Patients receive the right care, faster, avoiding ambulance offload delays by creating alternate destination strategies; and,
- Enhanced evidence-based decision making by improving data collection and analytics.

The ministry is engaging targeted stakeholders to receive feedback into whether there is existing capacity for full-time firefighters to provide an additional access point for higher acuity patients (Canadian Triage and Acuity Scale - CTAS 1 patients that represent 1%

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<sup>1</sup> Ministry of Health and Long-Term Care, Computed Aided Dispatch (CAD) Database

<sup>2</sup> Ibid

of patients transported)<sup>3</sup>. This would be an optional model that municipalities can choose to implement at Councils' discretion based upon local decision and needs.

The purpose of this consultation is to gather the necessary information and evidence to determine the viability of the optional service of expanding medical responses and the necessary components of such a program:

Topic	Sample Question
Labour Agreement Impacts	<ul style="list-style-type: none"> <li>• What is the potential impact of the proposed model for front-line workers?</li> </ul>
Capacity of workforce	<ul style="list-style-type: none"> <li>• What may be required to build the capacity of your workforce to deliver on the proposed model?</li> </ul>
Municipal interest and readiness (early adopters)	<ul style="list-style-type: none"> <li>• Can your organization identify potential municipalities that may adopt the proposed model in the near future?</li> </ul>

Generally speaking, in Ontario, firefighters and paramedics have very different scopes of practice (roles and responsibilities), training backgrounds, and mandate that would require a further exploration of the proposal's impacts on patient outcome, municipal and provincial oversight and delivery, employment of emergency health service personnel, and overall impacts on legislation and funding of existing services.

When considering changes to land ambulance services, the ministry uses an evidence-based approach – any change to services must contribute to improving patient outcomes, financial sustainability and government priorities.

While legislative changes may be required should this model be implemented (e.g. to provide provincial regulatory oversight), legislative changes regarding responsibilities for service delivery (e.g. municipal Councils' responsibility to determine the services provided by fire departments) and the associated costs (e.g. the costs of services delivered by fire departments will continue to be the responsibility of the municipality) are out-of-scope of this discussion and consultation.

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<sup>3</sup> CTAS is a five-level triage scale with the highest severity level 1 and lowest severity level 5 used to assign a level of acuity in patients and more accurately define the patient's needs for care primarily based on the optimal time to medical intervention.

# The Consultation Process

The government is seeking advice and input through a combination of a discussion paper and voluntary, web-based survey for written feedback from employers and other technical experts. Questions like the ones above will be referenced in the survey.

As this optional service may impact numerous government levels (municipal, provincial), bargaining agencies, employers, physicians, and patients, all with diverse interests and positions, the government will be consulting with these groups to ensure that the proposed model benefits patients.

It is expected that there is a diverse range of stakeholders with differing interests and positions. The goal of consultation is to determine service viability and opportunities.

## Background on Ambulance Services

The ministry has legislated provincial accountability and must balance the broader health care system and integration with other health care providers - ensuring that patients receive the right care, at the right time, in the right place.

Ontario's current emergency health services system is designated to service the entire province and its more than 13.7M citizens. The system currently transports more than 1,000,000 patients each year.<sup>4</sup>

Under the *Ambulance Act* the ministry has the duty and power under legislation to:

1. Ensure a balanced and integrated system of ambulance service and ambulance communication services (land and air);
2. Provide, alone or with others, and fund ambulance dispatch services;
3. Establish and ensure compliance with standards for the management, operation, and use of such services;
4. Monitor, inspect, and evaluate ambulance services and investigate complaints relating to ambulance services; and,
5. Designate hospitals as base hospitals to provide certification, delegation of medical acts, continuing medical education and monitoring of Paramedics.

Under the *Ambulance Act*, municipalities are responsible for the costs and for ensuring the proper provision of land ambulance services in accordance with the needs of persons in the municipalities by:

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<sup>4</sup> Ministry of Health and Long-Term Care, Computed Aided Dispatch (CAD) Database

- Operating or selecting persons to provide land ambulance services;
- Entering into agreements for the management, operation and use of land ambulances;
- Ensuring the supply of vehicles, equipment, services, information, and staffing;
- Determining the appropriate level of service;
- Developing deployment plans for the delivery of service
- Ensuring the local emergency preparedness and response; and,
- Providing local administration and ensuring compliance with the Ambulance Act, regulations and standards.

The ministry provides:

- 50% of approved costs of providing municipal land ambulance services
- 100% of approved costs for dispatch
- 100% of approved First Nations ambulance services' costs
- 100% of the approved base hospital costs

The regulatory framework under the *Ambulance Act* only applies to certified ambulance services and the paramedics they employ and does not extend to patient care delivered by others (e.g. fire services). As a result, the Minister's duties and powers are restricted to the regulation of ambulance services and do not extend to others.

If others were to provide the same scope of practice, to the same patients, at the same scene as paramedics regulated under the *Ambulance Act*, there is an expectation that these would have a framework that is the same or similar to paramedics.

## Context: Current Role of Paramedics Versus Firefighters

In Ontario, health care services and patient care are provided by regulated practitioners such as physicians, nurses, and paramedics. Public safety services are provided by public safety officials such as firefighters and police.

Some of the key differences are noted below:

	Health Care	Public Safety
	Paramedics	Firefighters
Legislation Governing Services	<i>Ambulance Act</i>	<i>Fire Protection and Prevention Act (FPPA)</i>
Associated Provincial Ministry	Ministry of Health and Long-Term Care (MOHLTC) undertakes a monitoring/regulatory role, establishing	Ministry of Community Safety and Correctional Services (MCSCS) the Office of the Fire

	Health Care	Public Safety
	Paramedics	Firefighters
	patient care standards, certifying ambulance services operators and conducting investigations related to ambulance services	Marshall and Emergency Management (OFMEM) provides guidelines and training and administers the FPPA
Provincial Standards	There is regulated performance reporting (province-wide) for Emergency Medical Services (EMS)	There are no legislated provincial standards for the delivery of fire service programs, including first aid. Most fire services point to standards developed by the National Fire Protection Association (NFPA) headquartered in the USA
Municipal Responsibility for Services	50 upper-tier municipalities Municipalities are responsible for the cost and proper provision of land ambulance services in accordance with the needs of persons in the municipality	~ 400 lower-tier municipalities Municipalities are responsible for establishing the necessary level and type of fire protection services in accordance with their needs and circumstances
Funding	50-50 cost sharing initiative between the province and municipalities for ambulance services 100% provincial funding for ambulance dispatch services, approved costs for services in First Nations communities and territories without municipal organization	100% funded by lower-tier municipalities (provincial cost sharing for fire protection services does not exist)
Dispatch Services	EMS uses centralized dispatch services	Each fire service is responsible to establish alone or with others fire dispatch
Examples of Bargaining Units for Employees	CUPE (paramedics) CAW (paramedics) SEIU (paramedics) OPSEU (paramedics) Unifor (paramedics)	OPFFA (full-time firefighters)

While there are legislated provincial standards for the delivery of land ambulance services, there are currently no legislated provincial standards for the delivery of fire service programs, including first aid. No reference is made regarding medical responses by fire services under the *Fire Protection and Prevention Act*.

While upper-tier municipalities (i.e. regional government) have discretion to provide services based upon the needs of their municipality for land ambulance services, lower-tier municipalities (i.e. cities, towns) establish the necessary level and type of fire protection services based upon their needs.

Notification of medical calls is established through a tiered-response agreement that is negotiated between the upper-tier and the lower-tier municipalities.

Under the *Fire Protection and Prevention Act* (FPPA), municipalities are responsible for the delivery of fire protection services in their communities. Municipalities must determine the appropriate level of fire protection services, including public fire safety education, fire prevention services and fire suppression services for their community based on municipal circumstances.

A number of municipalities in Ontario, through their fire departments, respond to some medical calls based on the tiered response agreements with varying capabilities.

With the exception of CTAS 1 patients, medical evidence suggests that there is little if any benefit to tiered response; as such, some municipalities are decreasing the number of medical calls to which its fire service respond.

## Simultaneous Notification Pilots

One way the ministry is working on leveraging the capacity of full-time firefighters in medical emergencies is through the simultaneous notification pilots to determine if earlier notification to fire services on a sub-set of ambulance calls would improve patient outcomes.

In 2010, the Office of the Fire Marshal of Ontario requested that their fire dispatch services receive notification of critical incidents and medical emergencies simultaneously with emergency medical providers in order to improve fire service response times.

To examine the effectiveness of new data sharing processes and techniques, the ministry launched the 2014 Emergency Medical Services—Technology Interoperability Framework (EMS-TIF) project. This project completed its mandate to deliver three potential technology solutions to improve communications with ambulance and fire services via projects. One of these technologies was Simultaneous Notification, a system that automatically notifies a fire dispatch service to respond in the event of an emergency call for medical assistance, as determined by existing municipal tiered response agreements.

The other two projects are the Real Time View (RTV) and Bidirectional Data Sharing/Interoperability Capability:

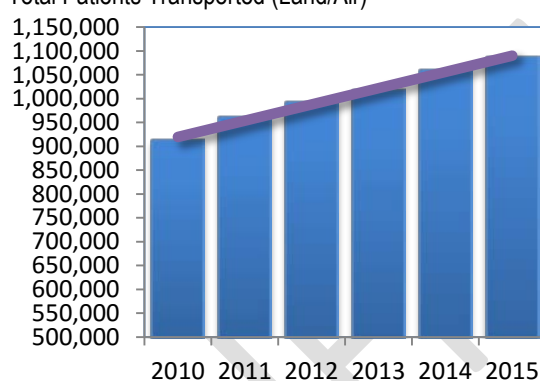
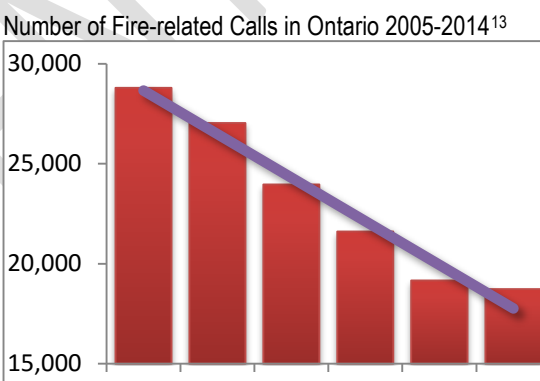
- **RTV** provides decision-support information in real time to assist paramedic service supervisors in on-scene support decisions, management of offload delays within the hospital emergency department and resource management decisions (proactive ambulance additions, paramedic overtime/meal breaks, etc.).
- **Bidirectional Data Sharing/Interoperability Capability** provides a technology capable of supporting the secure sharing of data between ministry ambulance dispatch systems and related municipal systems, such as an electronic patient care report (ePCR).

Currently, the ministry works with municipalities to assist with dispatch functions and currently dispatches more than 100 fire departments and provides tiered response notification to 290 fire departments to respond to medical emergencies along with paramedic services.



The government will use an evidence-based approach to determine the future direction of Simultaneous Notification.

## Overview of Capacity of Workforce

	Land Ambulance Services	Fire Services
Number of Workers	~8,000 municipal paramedics province-wide 22 dispatch centres across Ontario: 11 are ministry-operated 11 are operated under transfer payment agreements (6 hospitals, 4 municipalities, 1 private) <sup>5</sup>	30,000 firefighters in Ontario (~11,300 are full-time, ~19,300 volunteer, ~300 part-time) <sup>6</sup> Over 400 fire departments [municipal - 32 are full-time, 191 composite, 226 volunteer. Northern Fire Protection Program (NFPP) – 1 composite, 48 volunteer] <sup>7</sup>
Number of calls and percent change in calls	Approximately 1 million calls in 2014 <sup>8</sup> Number of patients transported by land ambulance is increasing year-over-year at approximately a 3.5% growth rate from 2009-2014 <sup>9</sup>  Total Patients Transported (Land/Air) <sup>10</sup> 	Fire services respond to more than 400,000 calls annually (461,830 in 2014) of which less than 19,000 were fire-related (4-5% of all calls). <sup>11</sup> There has been a 35% reduction in the number of fire-related responses since 2005. <sup>12</sup>  Number of Fire-related Calls in Ontario 2005-2014 <sup>13</sup> 
Average Cost Per Hour	2014 average cost per hour \$213 <sup>14</sup>	2014 average cost per hour \$331 <sup>15</sup>

<sup>5</sup> Ministry of Health and Long-Term Care, Human Resource Report from the Ambulance Services

<sup>6</sup> Ministry of Community Safety and Correctional Services

<sup>7</sup> Ibid

<sup>8</sup> Ministry of Health and Long-Term Care, Computed Aided Dispatch (CAD) Database

<sup>9</sup> Ministry of Health and Long-Term Care, Computed Aided Dispatch (CAD) Database

<sup>10</sup> Ibid

<sup>11</sup> 2013 and 2014 Ontario Municipal Benchmarking Initiative (OMBI) Report and Office of the Fire Marshal

<sup>12</sup> 2013 and 2014 Ontario Municipal Benchmarking Initiative (OMBI) Report

<sup>13</sup> Ibid

<sup>14</sup> Ministry of Health and Long-Term Care, Computed Aided Dispatch (CAD) Database

<sup>15</sup> 2013 and 2014 Ontario Municipal Benchmarking Initiative (OMBI) Report

# Paramedic Versus First Responder

Paramedics provide a medical response with provincial legislative standards (including protection of personal health information, legislated medical oversight, penalties for offences).

There are three levels of paramedic scope of practice in Ontario. The ministry is exploring the potential option to allow eligible municipalities to choose to allow full-time firefighters to provide care up to the first level (Primary Care Paramedic level):

- PCP: Primary Care Paramedic
- ACP: Advanced Care Paramedic
- CCP: Critical Care Paramedic

Emergency Medical Responder (EMR) is considered a basic level for medical responses and firefighters are typically trained to this level. EMRs are not permitted to perform as a paramedic as the paramedic scope of practice is dramatically expanded beyond that of the EMR level of training.

EMRs typically perform first aid, oxygen administration and automated external defibrillation (AED).

First aid is used to help an injured person until medical treatment is available (e.g. physician, paramedic).

First Aid patient assessments use an ABC principle:

- a) Airway - keep a path open for air to go from the mouth to the lungs. For example, turning an ill person on their side if they have vomited or a choking person with no airway can be helped with abdominal thrusts, sometimes called the Heimlich maneuver.
- b) Breathing - move air from the outside into the lungs. For example, blowing air into someone else's mouth while holding their nose shut and watching their chest rise from the air you blow in.
- c) Circulation (or Compressions) – CPR.

In Ontario, the *Fire Protection and Prevention Act* governs fire services and does not obligate fire services to respond to medical emergencies – and accordingly have no specific regulatory oversight under the *Fire Protection and Prevention Act* for this purpose (as ambulance services do under the *Ambulance Act*). In addition, unlike paramedics, firefighters are not a prescribed Health Information Custodian under the *Personal Health Information Protection Act*.

Paramedics are authorized to perform several controlled medical acts and complex medical care not currently provided by firefighters.

For instance:

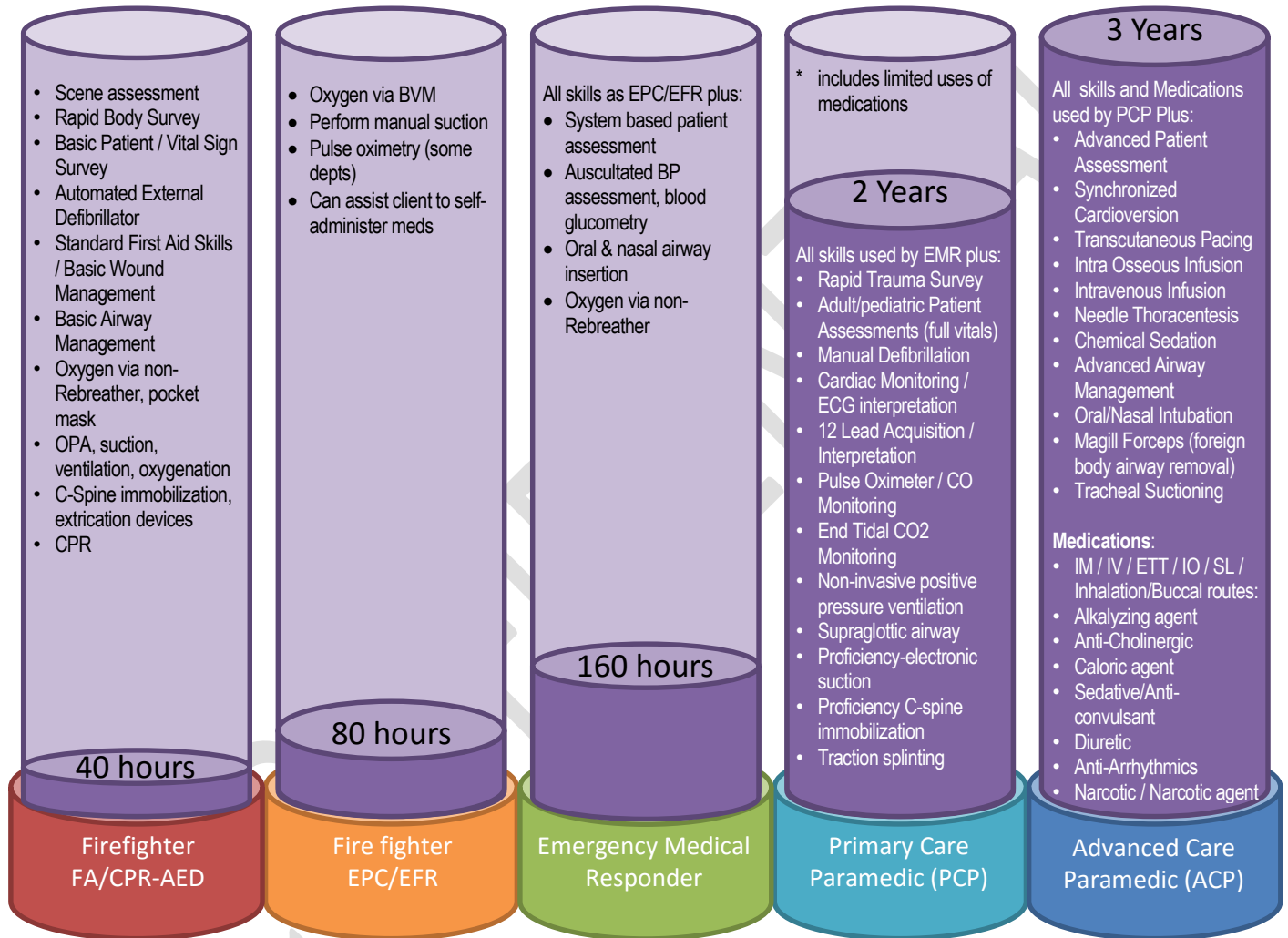
<b>Proficiency</b>
Cardiopulmonary Resuscitation - Health Care Providers (CPR-HCP)
12-Lead ECG
manual defibrillation
patient immobilization
blood glucose testing
oxygen therapy
pulse oxymetry monitoring
Initiate an Intravenous (IV) Line
Monitor IV with normal saline, Thiamine, multivitamin preparations and potassium chloride (KCL)

<b>Medication</b>
Naloxone (Narcan)
Glucagon
Acetaminophen (Tylenol)
Epinephrine (syringe administer)
Ketorolac (Toradol)
Salbutamol (Ventolin)
Glucose IV
Gravol IV
Dimenhydrinate (Gravol)
Nitroglycerine (spray)
Acetylsalicylic Acid (ASA)

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# Skills and Knowledge Guide for Pre-hospital Care in Ontario

The diagram below provides a general illustrative overview of the different skills and knowledge attained by firefighters and paramedics.



## Conclusion

The ministry recognizes and respects the important expertise that your organization brings to the table. Your contribution will help inform next steps as the ministry explores the viability of this optional service and opportunities to improve overall patient experience.

