

“Fire-medics” and Top Quality Emergency Medical Services

Briefing Note

The Ontario Professional Firefighters Association (OPFFA) has raised a proposal to expand the role of firefighters in emergency medical services, particularly focusing on moving into providing symptom relief medications.

We have serious concerns with any proposals to expand the role of firefighters in responding to medical emergencies. While we have a variety of concerns, we would like to take this opportunity to flag concerns regarding the impact on health care quality and on costs.

Quality of care: With increasing demands from the public, paramedic services have rapidly evolved over the last several decades.

Prior to 1997, the scope of practice for paramedics in Ontario did not include symptom relief medications and semi-automatic external defibrillation. Graduates of approved ambulance and emergency care programs who successfully completed Ministry of Health certification were issued an Emergency Medical Care Assistant (EMCA) certificate. Following the change in scope in 1997, the title of the credential was changed to Advanced Emergency Medical Care Assistant (AEMCA) to recognize the inclusion of symptom relief and defibrillation in the approved training programs and the provincial certification exam. As a result, an Ontario paramedic, of any level, must hold AEMCA qualifications. AEMCA qualifications require the completion of a paramedic program from an approved college. Following that, you must pass a provincial examination set by the Ministry of Health and Long-Term Care (MOHLTC) to receive certification as an Advanced Emergency Medical Care Assistant. This training is augmented by mandatory continuing education and annual certification.

A Primary Care Paramedic (PCP) is an individual who meets the qualifications for employment set out in section 6(1) of Regulation 257/100 made under the Ambulance Act and who is authorized by the medical director of a base hospital program to perform the controlled acts

referred to in Schedule 1 of Regulation 257/100. The controlled acts that may be performed are symptom relief drug administration (glucagon, oral glucose, nitro-glycerin, epinephrine, salbutamol and ASA 80 mg form) and semi-automated external defibrillation.¹ A PCP may perform:

- patient assessments,
- airway management,
- administer oxygen by demand, by bag-valve-mask or basic mechanical ventilation,
- 12 lead ECG interpretation,
- provide Cardio-Pulmonary-Resuscitation (CPR) and
- basic trauma care (e.g. spinal and wound care, limb immobilization/traction).
- Autonomous IVs.

An Advanced Care Paramedic (ACP) is a qualified Primary Care Paramedic who has successfully completed an Advanced Care Paramedic training program (i.e. an additional year of post-secondary training) approved by the MOHLTC Emergency Health Services Branch Director and has passed an Advanced Care Paramedic examination set or approved by the Director. ACPs are required to do additional continuing education beyond what is required by PCPs. They must also be authorized by the medical director of a base hospital to perform the controlled acts referred to in Schedule 2 of Regulation 257/100 of the *Ambulance Act*. This includes responsibilities beyond those performed by the Primary Care Paramedic, such as manual defibrillation and endotracheal intubation. Advanced Care Paramedics have the PCP skill set and are qualified to perform and/or use:

- advanced airway management including oral and nasotracheal intubation,
- laryngoscopy and removal of foreign body obstruction using forceps,
- basic field mechanical ventilation,
- synchronized cardioversion.²

¹ As of this year cardiac monitors are now fully manual not semi-automated. The difference is paramedics have to print out a rhythm strip and interpret it while the semi-automated defibrillator is interpreted by the cardiac monitor.

² List of Controlled Acts that may be performed by an Advanced Care Paramedic or, if authorized, a Primary Care Paramedic under provincial regulation 257/100:

- Administration of the drugs referred to in item 1 of Schedule 1, in addition to any other drug approved by the Director on the recommendation of one or more medical directors of base hospital programs
- Semi-automated external cardiac defibrillation
- Peripheral intravenous therapy
- Endotracheal intubation
- Non-automated external cardiac defibrillation and monitoring

So, all paramedics must pass provincially determined tests and meet provincially set standards to practice paramedicine. Paramedics perform more controlled acts than any other health care professional except physicians.

Unlike most other employment relationships, it is not just local employers which oversee paramedics. The provincial government through the Ministry of Health and Long-Term Care frequently discipline paramedics, including removing their right to practice as paramedics. The province *also* appoints base hospital physicians who have the right to limit or remove the right of paramedics to practice or to require that paramedics undertake additional training. The MOHLTC is reportedly still considering whether to regulate paramedics through a regulatory body. In all likelihood this would be yet another layer of regulation and oversight.

The Ministry of Health and LTC is responsible for setting ambulance, equipment and patient care standards, and for monitoring and ensuring compliance with those standards. The Province certifies and reviews land ambulance operators under legislated regulations and standards. The certification and review programs utilize peer review every three years. The review contains many characteristics of accreditation, inspection and compliance review. The Ministry continues to be responsible for land ambulance communications services and base hospital programs in support of the land ambulance program. The Province operates a peer based operational review program for base hospitals and Central Ambulance Communication Centres. Paramedic call reports are audited by base hospitals for compliance with legislated patient care standards and delegated medical acts. The Province also operates an Investigation, Complaint and Regulatory Compliance program.

The *Ambulance Act* contains standards for Land Ambulance Service Certification, Ambulance Service Communicable Disease, Ambulance Service Documentation, Patient Care, and Transportation, as well as Basic and Advanced Life Support Patient Care Standards. The provincial government has recently passed regulations under the *Act* that will require public reporting of land ambulance response times.

In sum, the provincial government plays a major role overseeing paramedics and EMS services in Ontario. Put simply, all of these requirements, oversight, and quality control are missing for fire trucks and firefighters.

The fire union proposal calls for “fire-medic” instructors to undergo 16 hours of train the trainer instruction. Upon successful completion of this training, they would train and certify *a quarter* of the current suppression firefighters in each pilot project site utilizing a self-study manual and a 20-hour course, while being paid.

The proposal to let firefighters with 20 hours of training (from instructors with 16 hours of training) to respond to emergency medical calls (and even let paramedics leave the scene of the

emergency) is like playing Russian roulette with the public. Even for the minority of firefighters who would receive some training this amounts to a dramatic reduction in expertise. Symptom relief skills should only be provided by a fully certified and current paramedic, not by those like firefighters who are focused on a completely different profession — even those few that receive the proposed 20 hours of training.

The consequences of an increased fire role will likely be serious. Paramedics treat patients in emergency situations where lives are often in peril. The drugs the firefighters propose to administer can have significant negative consequences if administered inappropriately. The firefighter proposal that they can continue to work on patients while paramedics move on to top priority calls raises serious potential for tragic miscommunication, an occurrence that is almost certain to happen in emergency situations sooner or later. We note that the firefighters do not even propose to forgo their 24 hour shifts to take on this work.

Directly contrary to the OPFFA proposal, paramedics are not allowed to leave patients except when a medical professional with more skills is available to take over, and certainly not to a firefighter.

While the trend for decades has been to increase the qualifications and skills of emergency responders, firefighter response dramatically reverses that trend and raises serious concerns about patient safety. Governments that move to implement such measures must be prepared to answer for this policy when serious problems occur.

Costs: The firefighters tie their proposal to claims about response time. First we note that firefighter claims about response time are not borne out by our own experience. We often arrive on the scene at approximately the same time as firefighters. Second, the OPFFA focus on providing symptom relief is simply not relevant to time sensitive calls. Third, there are better ways to improve response time. Community paramedicine is a case in point — by focusing on prevention for the population most at risk of needing emergency medical services, there is significant potential to reduce not just 911 calls and the response time by fully qualified professionals, but also other downstream health care costs.

Fourth, the OPFFA brief itself suggests that firefighters already respond to many more calls than the less than two percent of calls that are time sensitive.

The OPFFA brief reports for the years 2009-2013 the total number of calls that they have taken and the number of “medical/resuscitator” calls that they have taken. It indicates that [1] a large percentage of fire calls are already medical/resuscitator calls; [2] the total number of fire calls has fallen — by 29,618 calls annually or by 7.1% over four years; [3] most of this loss (although not all) has been in the area of medical/resuscitator calls — they have fallen by 27,094 calls or by 13% over four years; [4] even after such losses, fire is still responding to over 180,000 medical/resuscitator calls.

ONTARIO FIRE DEPARTMENT RESPONSE DATA:

| Year | Total Calls | Medical/ Resuscitator Calls | Percent of Total |
|--------------|--------------------|--|-----------------------------|
| 2009 | 484,625 | 207,706 | 42.86% |
| 2010 | 482,617 | 206,822 | 42.85% |
| 2011 | 486,027 | 212,786 | 43.78% |
| 2012 | 462,542 | 196,189 | 42.42% |
| 2013 | 455,007 | 180,612 | 39.69% |
| Total | 2,370,818 | 1,004,115 | 42.35% |

Source: OPFFA fire-medic brief

We note that even after having lost 13% of their medical/resuscitator calls, fire is still responding to at least five or six times more calls than there are time sensitive calls. Fire is responding to many more calls than those that require a time sensitive response. Indeed, as there is no evidence that firefighter response is of any use for many time sensitive calls, this likely understates the issue.

Not surprisingly, then, municipalities have been rapidly reducing their reliance on fire for medical response. Given that they are already responding to many more calls than time sensitive calls, more such change may be merited, especially as response protocols improve. Moreover, government and fire departments have done an excellent job in reducing fires.

We are strongly opposed to the layoff of firefighters (and, as far as we know, there have been no firefighter layoffs in Ontario). But we do not believe it is good public policy to put in place policies that will stop the rational distribution of work and that require unnecessary costs for municipal governments.

The firefighter proposal cannot reduce the need for paramedic response to all emergency medical calls. It will however require more fire trucks and will hamper the rational redistribution of municipal resources. Moreover, in workplaces around the world, additional skills typically lead to additional wages, as it should be. We expect that higher wages will be the ultimate result for municipal governments that upgrade firefighter skills. These factors will lead to extra or un-needed capital and operational costs for fire services — despite the OPFFA's claims.

This is particularly the case as the Ontario Municipal Benchmarking Initiative (OMBI) studies demonstrate that fire vehicle costs per hour of operation are 50% higher than the costs of ambulance service. Putting a fire vehicle in operation for a year (24/7) costs about \$900,000 more for the taxpayer than an ambulance.

Finally, we note that most firefighting departments are operated by lower tier municipal government — a level of government that is not responsible for emergency medical services. So not only will this proposal drive up municipal costs, it will drive up costs for a level of government that isn't even responsible for emergency medical services!

We would like to respectfully urge the government to focus on providing top quality emergency medical services, avoid creating extra financial burdens for municipal governments, and instead encourage the rational distribution of work to continue.

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