York Region

Office of the Commissioner
of Health Services

November 29, 2004

The Honourable George Smitherman
Minister of Health and Long-Term Care
10th Floor, Hepburn Block
80 Grosvenor Street
Toronto, ON M7A 2C4

Dear Minister Smitherman:

Re: EMS Dispatch Inefficiencies

York Regional Council fully supports the goal of the provincial government to improve health care access to Ontarians. It is for this reason York Regional Council felt it important to share information presented to them on November 18, 2004 through a Health and Emergency Medical Services Committee report entitled *Request for RFP to Improve York Region EMS Response Times*.

The report detailed the differences between performance based EMS systems and the dispatch model currently employed by the provincial dispatch centres. It was felt that you may find this information useful as you and your team contemplate how best to improve patient outcomes and services across the province.

As you are aware, the key functions of the current provincial ambulance dispatch centres are to receive and process telephone calls, provide instructions to callers and information to responders, dispatch and coordinate EMS resources, and request assistance under Tiered Response Activation Criteria with other Public Safety Agencies. However, in today's environment, best practice EMS dispatch centres have further expanded roles for EMS dispatchers to include more detailed call screening, telephone interrogation, and pre-arrival instructions to callers such as cardiopulmonary resuscitation (CPR). Today's dispatchers need training (initial and ongoing), tools (protocols and appropriate technology/equipment) and feedback (a sound quality improvement process). Outside of the City of Toronto, the current provincial system has very little or none of these key components.

A performance based dispatch centre enables emergency calls to be more effectively and efficiently managed by utilizing a detailed call screening process. The following table compares EMS dispatch operations call processing times which utilize best practices, and those that do not.

Call Processing Time
2003

	Call Processing Standard for Emergency Calls*	Actual Time (90th Percentile)
Performance Based Dispatch Model		
Nova Scotia (operated by the Province of Nova Scotia)**	1 minute	1 minute 15 seconds
Toronto CACC (operated by Toronto EMS)	2 minutes	1 minute 50 seconds
Level of Effort Dispatch Model		
Ottawa CACC (operated by Ottawa Paramedic Service)***	2 minutes	1 minute 45 seconds
Mississauga CACC (MOHLTC)	**2 minutes**	**2 minutes, 41 seconds**
Georgian CACC (MOHLTC)	**2 minutes**	**2 minutes 54 seconds**

* Time of Call to First Unit Assigned
** Nova Scotia achieves Canada's best reported call processing standard for emergency calls
*** Prior to the City of Ottawa operating the CACC, call processing time for 90th Percentile was 2 minutes, 49 seconds.

Based on the call processing results identified in the table above, it is estimated that a reduction of over one minute on the call screening process alone can be achieved in York Region. It should also be noted that as of July 2004, the province's Mississauga Central Ambulance Call Centre (CACC) no longer provided dispatch services in York Region. Since this change has taken place, the province's Georgian CACC's actual call processing time (90th Percentile) has increased to 3 minutes, 15 seconds.

Due to the improved call interrogation sequence, performance based dispatch centers also have much more success in identifying calls that require an Advanced Care Paramedic. This results in fewer ambulances responding to life threatening emergency calls that are, in fact, non-life threatening calls. When multiple vehicles are ineffectively dispatched to non-critical situations, valuable EMS resources are depleted. As a result, patients suffering life threatening problems must wait longer for time sensitive treatment. Using a performance-based model, it is estimated that York Region EMS would reduce the number of EMS life threatening emergency responses that require the application of lights and sirens by approximately 40%. The information in the following table demonstrates this point.

Emergency Call Prioritization
2003

	Total Emergency Calls	Prioritized as Requiring ACPs
Performance Based Dispatch Systems		
British Columbia Ambulance Service (Lower Mainland)	233, 983*	77, 365 (33%)
Calgary EMS	67, 587	28, 796 (43%)
Toronto EMS	242, 647**	120, 029 (49%)
Level of Effort Based Dispatch Systems		
Ottawa EMS	70,852	49,283 (70%)
York Region EMS	**50, 257**	**41, 007 (82%)**

* British Columbia Ambulance Service Data is based only on calls processed using newly implemented Advanced Medical Priority Dispatch system

** Based on Units that actually went "en-route" to emergency calls

With a performance based dispatch model, performance is measured against standards set for such things as response time, level of life support service provided, outcomes from medical treatment, etc. The standards relate more to the quality of patient care, which is the goal of this provincial government. A level of effort dispatch model emphasises defining staffing levels, equipment requirements, and expenditure levels. With this approach the concern is focused on managing resources and controlling costs.

It is our hope that in the province's quest for an improved and responsive health care system, EMS and land ambulance services are not overlooked, but are instead part of the solution to efficient, effective health care. Implementing a performance based dispatch model in Ontario would not only seem to be a feasible solution, but one that would reap immediate benefits to all residents requiring emergency medical care.

Should you have any questions or wish to discuss this issue further, please do not hesitate to contact me directly at (905) 830-4444 ext. 4011.

Sincerely,

Dr. K. Helena Jaczek MD,CCFP,MHSc,MBA,CHE
Commissioner of Health Services
and Medical Officer of Health