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EMS RESPONSE TIMES

The Health and Emergency Medical Services Committee recommends that:

1. The presentation by Brad Meekin, General Manager, Emergency Medical Services and Gord McEachen, Director of Operations providing an Overview of Emergency Medical Services be received.

2. The recommendations contained in the following report, February 19, 2004, from the Commissioner of Health Services be adopted with the following additional recommendations:

3. That following Regional Council approval, York Region Emergency Medical Services staff be directed to make today's presentation to the nine area municipal Councils requesting their endorsement of requests to the Minister of Health and Long Term Care regarding:

a) the examination of current Emergency Medical Services dispatch services
b) the impacts to resource deployment regarding transfer of care in hospitals
c) the provision of non-emergency transport services
d) the possibility of a provision for a consequence to the service provider for any abuse of the EMS system

and further,

4. That staff be directed to prepare a report highlighting potential response time reductions if York Region controlled its own EMS dispatch service.

1. RECOMMENDATIONS

It is recommended that:

1. Health and Emergency Medical Services Committee and Regional Council receive this report on York Region Emergency Medical Service's ambulance 90th percentile response times for life-threatening (Code 4) calls for information.

2. The Ministry of Health and Long-Term Care (MOHLTC) be requested to establish standards which allow for the timely transfer of patients from the care of paramedics to hospital emergency department staff to affect the immediate return of ambulances to active service.

2. PURPOSE

The purpose of the report is to provide Health and Emergency Medical Services Committee and Regional Council with an update on ambulance response times in York Region.

3. BACKGROUND

In January 2000, The Regional Municipality of York assumed responsibility for land ambulance service from the MOHLTC. Part III of the *"Land Ambulance Certification Standards"* published by the MOHLTC in April 2000 states that in order to be certified or re-certified to operate a land ambulance service that person, among other certification criteria, must establish and maintain a 90th percentile response time performance standard for priority four emergency calls that is no longer than the 90th percentile response time standard for priority four emergency calls set by the operator who provided land ambulance service in the area in 1996. The Regional Municipality of York's response time standard is 11 minutes, 39 seconds.

Ambulance response time is a key indicator for system performance. The time required to respond to a medical emergency is a crucial factor in determining survival outcome.

Table 1 reflects The Regional Municipality of York's 90th Percentile Response Times for 1996 and 1999 to 2003.

Table 1
90th Percentile Response Times – The Regional Municipality of York

Year	Legislated Response Time (min:sec)	90th Percentile Response Time (min:sec)
1996*	None	11:39
1999*	None	11:55
2000	11:39	11:27 (–0:12)
2001	11:39	11:49 (+0:10)
2002	11:39	11:29 (–0:10)
2003	11:39	12:19 (+0:40) **

* Denotes years ambulance services not operated by The Regional Municipality of York

** Data source – MOHLTC; ARIS link as of January 19, 2004. Data subject to change by the MOHLTC.

Table 2 reflects The Regional Municipality of York's 90th percentile response times for 2003 and the impact of SARS.

Table 2
90th Percentile Response Times – SARS Impact

Pre-SARS January – February/03	SARS March – June/03	Post-SARS July – December/03
12:11	12:37	12:09

As reflected in Table 2, SARS had an impact on York Region EMS' response times. However, SARS had a more significant impact on a change in paramedic practices related to personal protective equipment. It should be noted that without the impact of SARS, York Region EMS' response times still reflect an increase over 2002.

Table 3 reflects The Regional Municipality of York's 90th percentile response times in comparison to four GTA Regions.

Table 3
90th Percentile Response Times – GTA Regional Comparison

Region	Legislated Response Time	90th Percentile Response Time (min:sec) 2002		90th Percentile Response Time (min:sec) 2003	
		A*	B**	A*	B**
A	9:32	11:12	(+1:40)	11:42	(+2:10)
B	9:46	11:07	(+1:21)	10:46	(+1:00)
C	10:48	10:22	(–0:26)	10:46	(–0:02)
D	10:32	10:01	(–0:31)	10:12	(–0:20)
York Region	11:39	11:29	(–0:10)	12:19	(+0:40)

* Column A – Denotes the 90th percentile response times for each Region in 2002 and 2003.
** Column B – Denotes the difference between the legislated and the 90th percentile response times.

As reflected in Table 3, four of the five regions represented experienced an increase in response times from 2002 to 2003. In accordance with the special grant funding related to the MOHLTC's Response Time Accountability Agreement, York Region EMS is required to notify MOHLTC staff of response time increases. Several meetings were held throughout 2003 to highlight response time increases and funding shortfalls. A meeting was held in January 2004 with the GTA Regional Manager of the Emergency Health Services Branch, MOHLTC, where it was communicated that response times continue to increase and that additional funding is required to offset health care system pressures.

4. ANALYSIS

Factors such as health care system pressures, transfer of care/ambulance redirection and ambulance communications negatively influence the ability of York Region EMS to maintain balanced emergency coverage and response time reliability throughout the Region.

4.1 Health Care System Pressures

GTA hospitals have experienced financial and staffing pressures that have resulted in reduced resource availability within hospitals. These issues are clearly demonstrated every day with the disposition of patients in emergency department hallways and examination rooms awaiting hospital admittance.

On June 18, 2003, a letter was sent to the Honourable Tony Clement, the then Minister of Health and Long-Term Care, by the Regional Chair. The letter outlined a request for 100% funding for the costs related to health care system pressures that directly impact EMS response times and EMS resource availability. A response was received by the Regional Chair on August 29, 2003 acknowledging York Region's concerns and stating that additional funding would not be considered at that time.

In an effort to address the health care system pressures and their affect on ambulance services, York Region EMS is facilitating an EMS/Hospital/Stakeholders Steering Committee. The objectives of this committee are to improve communications, share data and information and to discuss and implement local strategies that will improve patient movement in the local hospital environment.

4.2 Transfer of Care/Ambulance Redirection

York Region EMS has seen an increase in the number of ambulance patients waiting to be transferred to hospital care once arriving at GTA hospitals. Currently there is not a provincial-wide standard to allow for the timely transfer of care from paramedics to hospital staff. The determining factor on which patient is seen first by hospital staff is the length of waiting time the patient has experienced.

This delay in transfer of care, in combination with the hospital's inability to move patients out of the emergency department, has resulted in York Region EMS ambulance patients increasingly being redirected to hospitals outside of York Region. Subsequently, York Region EMS requires more time to complete hospital transfers increasing response times throughout the Region.

4.3 Ambulance Communications

4.3.1 Dispatch

The Regional Municipality of York does not operate or control the dispatch process. The MOHLTC retained this critical function when land ambulance services were downloaded to regional municipalities.

Once a request for emergency medical assistance is received, the MOHLTC ambulance communicator utilizes a pre-defined screening and interrogation process to identify the nature of the medical emergency and the required response. This process uses approximately 30 call determinants and is over 15 years old.

In contrast, other EMS performance-based providers, such as the City of Toronto, use industry standard communications systems that are commercially available, have over 300 call determinants and provide the ability to customize emergency response based on resource availability. In addition, a quality assurance process is built into the system and ensures ambulance communication system performance is continually monitored and evaluated. The current provincial dispatch system has no such quality assurance measures or compliance reporting mechanism available to municipalities. The dispatching of York Region EMS resources by two communication centres located in Mississauga and Barrie remain an obstacle to achieving system optimization and affecting operational efficiencies.

The Regional Municipality of York continues to pursue operational control of ambulance communication and has submitted two proposals to the MOHLTC since 2000. MOHLTC officials acknowledged receipt of these proposals and expressed interest in further exploration; however no formal meetings or discussions have occurred to date.

4.3.2 Call Incident Locating

A key component of emergency response for all emergency services is the timely identification of the incident location. Emergency service personnel must identify the location of the incident and the most appropriate route to the scene. Today's performance-based EMS models utilize digital Geomatic Information System (GIS) mapping technology in emergency vehicles.

Currently, the MOHLTC provides all land ambulance operators with map books for their municipality and surrounding areas. The same information is provided to and utilized by the Central Ambulance Communication Centers to dispatch York Region EMS ambulance resources. Since 2000, York Region EMS has received one map book upgrade from the MOHLTC for The Regional Municipality of York.

Due to the unprecedented growth experienced in the Region, EMS staff require more updated mapping references. Since January 2000, The Regional Municipality of York's Geomatics Division of the Planning and Development Services Department has provided mapping reference books to EMS which have continued to be updated on a regular basis. EMS staff routinely utilize this resource instead of the outdated MOHLTC map book.

4.4 Funding/Resources

The current provincial funding allocations to The Regional Municipality of York is approximately 32% which falls substantially short of the 50% promised by the provincial government when the services were transferred in 2000.

On January 27, 2004, on behalf of the Ontario Regional and Single Tier CAOs' group, Michael Garrett, York Region CAO, communicated with the Deputy Minister of Health and Long-Term Care. The letter expressed concerns regarding the lack of provincial funding for land ambulance in Ontario and requested that the province honour their 50% funding commitment made at the time of the land ambulance transfer. There has been no formal response to this letter to date.

4.5 York Region EMS Strategies

York Region EMS has implemented a deployment plan that maximizes ambulance resource availability during peak periods of call activity. This plan is used by the Central Ambulance Communication Centers and monitored for compliance by EMS management staff.

The MOHLTC dispatch process is often not updated in a timely manner and ambulances are directed to hospitals incapable of receiving additional emergency patients. In order to address this issue, York Region EMS deploys designated operations staff to monitor hospital emergency department patient flow. This strategy ensures that ambulances are being accurately directed to hospitals capable of receiving emergency patients.

4.6 Relationship to Vision 2026

York Region EMS supports the Vision 2026 goals of Responding to the Needs of Our Residents and Supporting a safe, caring and healthy community by continuing to provide and support high quality emergency services. The ability to maintain and reduce ambulance response times is critical to achieving the Vision 2026 goals.

5. FINANCIAL IMPLICATIONS

Lost unit hours due to hospital off-load delays and hospital redirection outside The Regional Municipality of York in 2002 resulted in approximately $1.0 million in non-productive time. It is anticipated with the impact of emergencies such as SARS, the provincial power black-out, in addition to current health care system pressures, these costs may increase to approximately $1.6 million for 2003. It is anticipated that the cost for non-productive time in 2004 will continue to be significant.

6. LOCAL MUNICIPAL IMPACT

Health care system pressures outside the control of York Region EMS continue to negatively impact on local ambulance response times and resource availability.

7. CONCLUSION

Health care system pressures continue to negatively impact response times in York Region. Currently and increasingly, patients are subject to delays and redirection to

alternative hospitals once paramedics have provided treatment and transportation. Without adequate funding and additional resources, response times in York Region will continue to rely on systems which York Region EMS is unable to influence or control.

York Region EMS continues to work with our stakeholders in developing strategies to reduce the impacts of health care system pressures on EMS response times.

The Senior Management Group has reviewed this report.