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RESPONSE TIME PERFORMANCE PLAN DEVELOPMENT FOR YORK REGION EMERGENCY MEDICAL SERVICES

The Community and Health Services Committee recommends:

1. **Receipt of the presentation by Norm Barrette, Chief and General Manager, Emergency Medical Services; and**

2. **Adoption of the recommendations contained in the following report dated October 27, 2011, from the Commissioner of Community and Health Services.**

1. RECOMMENDATIONS

It is recommended that:

1. Council approve the work plan outlined in this report to develop a Response Time Performance Plan for York Region Emergency Medical Services.

2. Staff report back to Council at key milestones throughout 2012 with a preliminary analysis of response time options, with a draft response time plan, and with a final Response Time Performance Plan.

2. PURPOSE

This report will provide Regional Council with the framework and work plan for developing and approving an Emergency Medical Services (EMS) Response Time Performance Plan for The Regional Municipality of York. A Council-approved plan is required by the Ministry of Health and Long-Term Care by October 2012 in order to meet the requirements under the *Ambulance Act*.

3. BACKGROUND

Historic response time standard will be replaced with a municipally-set response time plan

Response times refer to the time elapsed between a paramedic crew being notified by ambulance dispatch and the arrival of the paramedic crew at the scene of the emergency.

As part of the downloading of land ambulance services to municipalities in 2000, the Ministry established response time standards based on response times achieved in 1996 for urgent calls in the entire service area. These historic standards became the ongoing required response time for each municipality.

Since 2000, there has been growing concern among EMS providers that the 1996 benchmark does not provide a consistent evidence-based framework for determining response time standards. To address these concerns, the Ministry and EMS providers worked together to establish a different approach.

In 2009, this work resulted in amendments to provincial legislation which introduced a new framework for land ambulance response time standards and reporting. As a result of the new legislative provisions, the historic 1996 standards were replaced by municipally-set response time standards and targets. These standards and targets will be developed by municipalities as part of a required Response Time Performance Plan (response time plan).

The new response time plan provisions require the Region to:

- No later than October 1st in each year after 2011, establish a response time plan for the next calendar year.

- Ensure that throughout the year, the plan is continuously maintained, enforced and evaluated, and where necessary, updated in whole or in part.

- Provide a copy of the response time plan to the Ministry by October 31 of each year and a copy of any plan, updated in whole or in part, no later than one month after the plan has been updated.

- No later than March 31 in each year after 2013, report the results of the previous year's response times against the response time plan provided to the Ministry.

4. ANALYSIS

KEY CHANGES TO EMS RESPONSE TIME STANDARDS

Response time plan requirements will be based on the patient's initial acuity level as first assessed by paramedics

The new legislative requirements fundamentally change the way response time standards and targets are determined. Currently, paramedics are assigned to respond to 9-1-1 calls by the provincial dispatch system using the Dispatch Priority Card Index (DCPI). Paramedic responses, upon which current standards are based, are coded as either

"prompt" (no emergency warning systems) or "urgent" (use of emergency warning systems).

Under the new regime, municipalities will utilize the Canadian Triage Acuity Scale (CTAS) to set response time standards and targets. The CTAS is a five-level assessment tool used in hospital Emergency Departments to determine the severity of a patient's condition. The CTAS scale is from 1 to 5 with 1 being the most critical level and 5 being the non-acute. CTAS more accurately defines a patient's need for timely care and will be determined by the paramedic after arrival on the scene.

The drawback of introducing CTAS in the response time plan requirements is that the provincial dispatch system categorizes EMS responses into only two priorities, as mentioned. The provincial dispatch priority system is therefore not aligned with the CTAS framework. As a result, a high number of the responses assigned to EMS are dispatched as urgent, but upon patient assessment by paramedics, the patients have a low CTAS acuity.

Table 1 outlines CTAS levels and the standard set for hospital arrival time to physician assessment. The table also identifies the distribution of EMS responses based on CTAS levels.

Table 1
Canadian Triage Acuity Scale Levels and Percent of EMS Response Distribution

CTAS Level	Condition (Examples)	Acuity Level	% of EMS Responses	Regional Council to Set Response Time Targets
1	Cardiac arrest, major trauma, severe respiratory distress	High	2%	Regional Council will set a response time performance target – this may be in the form of either of the following: • time on average (for example: an average of 8 minutes) or • percent of responses in a specified time (for example: 75% of responses in 10 minutes or less)
2	Altered mental state, head injury, overdose, stroke		24%	

3	Moderate pain or trauma, vomiting	Moderate	42%	Regional Council will set a response time performance target – this may be in the form of either of the following: • time on average (for example: an average of 15 minutes) or • percent of responses in a specified time (for example: 75% of responses in 20 minutes or less)
4	Minor trauma, abdominal pain, psychiatric emergency	Non-Acute	11%	
5	Sore throats, minor trauma, re-visits		6%	
Transport Refused			15%	Not Applicable

Response time performance will be set for each CTAS level

The Region will be required to establish response time standards and targets for each CTAS level 1 to 5. Performance will be assessed on the percentage of times that EMS meets these standards and targets. In addition, the Region will need to meet the following Ministry reporting requirements:

- The percentage of times that a **person** equipped to provide any type of defibrillation has arrived on the scene of sudden cardiac arrest patients, within six minutes of the time that notice is received.

- The percentage of times that an **ambulance crew** has arrived on the scene to provide ambulance services to sudden cardiac arrest patients or other CTAS 1 patients, within eight minutes of the time notice is received.

YORK REGION EMS IS WORKING TO DEVELOP RESPONSE TIME PLAN BY OCTOBER 2012

The Association of Municipal Emergency Medical Services of Ontario (AMEMSO) has produced recommendations to assist municipalities in developing consistent response time plans

There are a number of challenges faced by all municipalities in developing response time plans. They include:

- Limitations in provincial data to support CTAS analysis of current response times
- Defining standards for urban, rural and remote areas
- Continuing provincial responsibility of ambulance dispatch centres

- Inconsistency between CTAS levels and provincial dispatch codes

Although these challenges are partly beyond the control of EMS providers, they will impact on response time performance. Through AMEMSO, a committee representing 27 EMS providers, including York Region EMS, has been tasked to identify a consistent approach to both addressing these challenges and developing response time plans.

The AMEMSO committee recently released a report recommending that provider response time standards reflect current response times to CTAS level 1 and 2 calls, and that CTAS guidelines for hospital physician assessment be used as a template for setting CTAS 3, 4 and 5. The committee also recommends that the standards should be set based on the entire service area. Definitions for urban, rural and remote service areas are being developed to enable more detailed performance evaluation. It is also anticipated that AMEMSO will continue work with the Ministry to address inconsistencies between CTAS and dispatch codes.

York Region EMS will draw upon existing data capturing CTAS levels to develop response time performance options and follow the AMEMSO recommendations to develop the Regional response time plan.

Consultancy work is underway to develop a 10-year master plan for York Region EMS stations and resourcing tied to response time performance results

To provide an accurate analysis of the resource requirements to support response time performance, York Region EMS has retained Operational Research and Health (ORH) to provide a ten-year Resources and Facilities Master Plan. ORH is a UK-based consultancy firm with experience in analytical and modelling techniques in the emergency services sector. The Master Plan will help guide Council decisions on future EMS growth and delivery, particularly to address expected increased call volumes as a result of York Region's growing and aging population.

The Master Plan will also provide the foundation and tools to support the development of annual response time plans. The work being completed by ORH Limited will identify the optimal paramedic response station locations, and the number of ambulances and staffing resources required to support the response time targets.

York Region EMS will report back to Council at key milestones over the next year to review options and approve a response time plan

Table 2 highlights the EMS work plan to develop and have a response time plan approved by Council by October 2012.

Table 2
Response Time Plan – Key Steps

Date to Council	Milestone	Council Decision
Winter 2012	Consultant report on Ten Year EMS Master Plan Identify potential response time standards and targets	Review options – response time standards and targets Provide direction on draft plan developments
Spring 2012	Draft response time plan	Review draft plan Confirm response time standards and targets
September 2012	Final response time plan	Approve plan

Response time plan supports Community & Health Services Multi-Year Plan

A response time plan will contribute to optimizing the health of the community by providing high quality and fiscally sustainable options to meet growth related pressures, key principles and goals of the Community & Health Services Multi-Year Plan (MYP). A response time plan will also provide a starting point to explore innovation in the delivery and scope of paramedic practice to address community need for both emergency and non-emergency care. The issue of expanded scope of practice or transport diversion is an action in the MYP and is a concurrent report being presented to the Community & Health Services Committee on November 9, 2011. There is great potential that this type of service innovation will help contribute to improved outcomes for patients, reduce incidents of off-load delays, and better use finite health care resources.

Link to Key Council-approved Plans

This report directly contributes to supporting the 2011-2015 Strategic Plan objective to *optimize the health of the community for all ages and stages through health care delivery, protection, prevention and promotion*, supporting the completion of the indicator of success "Consistently meet regulated response time standards for paramedic services."

As well, this report contributes to supporting the Plan objective to *continue to prioritize new capital infrastructure projects to support managed growth to optimize community benefit*, supporting the indicator of success, "Development and approval of Master Plan for EMS Stations."

5. FINANCIAL IMPLICATIONS

Consultant costs for the master planning work currently underway totals $111,150 plus applicable taxes. These costs were anticipated within the Multi Year Plan and were approved within in the 2011 operating budget for EMS, funded on a one-time basis from the Social Assistance Reserve fund.

6. LOCAL MUNICIPAL IMPACT

A response time plan will provide a consistent approach to setting response time standards and performance measurement across all nine local municipalities.

7. CONCLUSION

York Region is required to develop and approve an EMS Response Time Performance Plan, including Regionally-set response time standards and targets, by October 1, 2012 as a result of provincial changes to Ontario Regulation 257/00. This is a new approach to EMS planning and reporting. This report highlights the key changes involved and the steps EMS is undertaking to develop the plan over the next year.

For more information on this report, please contact Norm Barrette, Chief and General Manager at Ext. 4709.

The Senior Management Group has reviewed this report.

Response Time Performance Plan Development for York Region Emergency Medical Services

Presentation to Community and Health Services Committee

Norm Barrette

November 9, 2011

Response Time Performance Plan Development

Overview

- Key Changes
- Understanding Patient Acuity Levels and Plan Requirements
- Implications of Dispatch Process
- Next Steps

Annual Planning Requirements

- Ambulance Act Regulation requires beginning in October 2012, every upper tier municipality will:
  1. Develop an annual response time performance plan;
  2. Ensure that this plan is continually maintained, enforced and where necessary, updated;
  3. Provide each plan and each update to the Ministry of Health and Long Term Care;
  4. Report to the Ministry on the response time performance achieved under the previous year's plan.

Key Changes

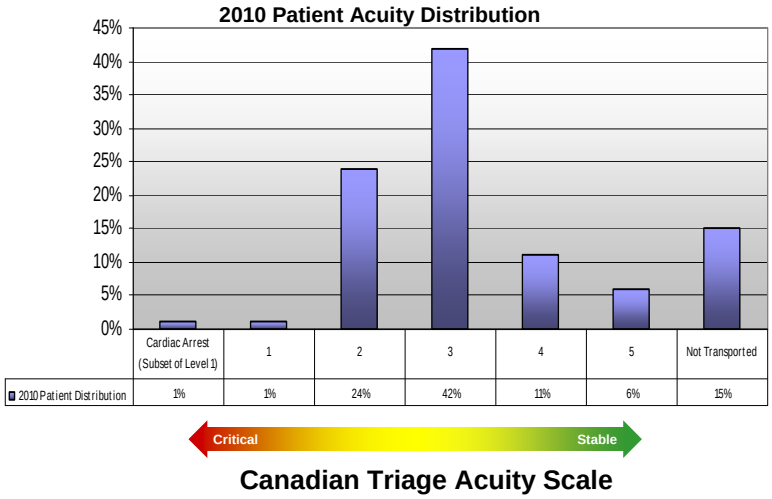
Historic Response Time:

- **Based on dispatched priority set by the provincial call triage system**
- **90th percentile of all "urgent" responses in the Region**

New Response Time Performance Plan:

- **Based on the actual patient acuity upon initial assessment by Paramedics**
- **Combination of targets set by the Ministry and targets to be set by the Region**

Understanding Patient Acuity



Response Plan Requirements

- **Region to Set:**
  - Response time commitments for **CTAS 1, 2, 3, 4, and 5 patients**
- **Ministry Set Reporting:**
  - **Percentage of time any person equipped to provide defibrillation** (including a paramedic, first responder or public access defibrillator) to a **sudden cardiac arrest arrives within six minutes**
  - **Percentage of CTAS 1 within eight minutes**

Dispatch Process Remaining Unchanged

Paramedic Assessed Acuity Levels

- CTAS 1 (2% of Patients)
- CTAS 2 (24% of Patients)
- CTAS 3 (42% of Patients)
- CTAS 4 (11% of Patients)
- CTAS 5 (6% of Patients)

15% of Patients Not Transported

Provincial Dispatch Priorities

- Code 4 – Urgent (70% of 911 Calls)
- Code 3 – Prompt (30% of 911 Calls)

Only two response time target groupings are operationally possible

Next Steps

- Work is underway to develop 10-year master plan that is designed to ensure response time performance
- The Master Plan will:
  - Provide an accurate analysis of resource requirements to support response time performance options
  - Identify optimal paramedic response station locations, resources and staffing
  - Guide decisions on future growth requirements

Next Steps

- Winter 2012 – Present to Committee Consultant Report on 10-Year Master Plan Options
- Spring 2012 – Present to Committee the Draft Response Time Plan
- September 2012 Present to Committee the Final Response Time Plan