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Request for Decision

Provincial Emergency Response Time Standard for Emergency Medical Services Annual Update

Recommendation

THAT the City of Greater Sudbury endorse the response time targets as recommended in the report dated March 4, 2014 from the Chief of Fire and Paramedic Services regarding Provincial Emergency Response Time Standard for Emergency Medical Services Annual Update;

AND THAT the Chief of Fire and Paramedic Services report back annually to the City of Greater Sudbury on the Service's performance in achieving the 2014 established response time targets and make any recommendations for change for the following year.

Signed By

Report Prepared By
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Digitally Signed Mar 4, 14

Recommended by the Department
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Executive Summary

The following table (Figure 1) is the recommended Response Time Performance Plan for the City of Greater Sudbury Emergency Services in 2014.

2014 Emergency Services Response Time Performance Plan		
Level of Acuity	**Time**	****Percentile %**
Sudden Cardiac Arrest	6 minutes (set by MOHLTC)	70%
CTAS 1	8 minutes (set by MOHLTC)	80%
CTAS 2	10 minutes (set by municipality)	85%
CTAS 3	15 minutes (set by municipality)	85%
CTAS 4	15 minutes (set by municipality)	85%
CTAS 5	15 minutes (set by municipality)	85%

** Percentile target is set by the municipality. Figure (1)

Background

On September 25, 2012, City Council carried the recommendation (CC2012-320) brought forward by the Community Services Committee to endorse and recommend that the Chief of Emergency Services report back annually to the Community Services Committee on the Services' performance in achieving the established response time targets and make any recommendation for changes for the following year.

The Ambulance Act mandates every Service provider in Ontario must prepare and submit an annual performance plan targeting response times for our municipality; furthermore, each Service provider must report back annually to the Ministry of Health and Long-Term Care (MOHLTC) on compliance with the established response times plan as set out in *Regulation 257/00* under the *Ambulance Act*.

Response Time Performance Plan Framework

The new Regulation is an improvement to the previous 1996 Response Time Standard as it now provides target levels for Service providers to meet that are based on the acuity of the patient. Previously, Service providers only had to report back their global response time for emergency life threatening (Code 4) calls dispatched. This was despite no medical evidence to support the old standard and the majority of these calls returned as a non-urgent priority. Moving forward, there has been a significant change in the collection and reporting of response times within Ontario. The previous standard only took into account the amount of time it took to arrive at the scene. Now, Service providers must conduct a retrospective analysis of the data and report their response times according to how sick the patient was at time of Paramedic arrival.

The Regulation also sets out multiple response time targets based on medically relevant categories. These categories use a standardized triage tool by all Paramedics, Nurses and Doctors within the emergency field across Ontario. The Framework further allows Service providers to determine their percentile performance within their plan in order to tailor each response plan to best meet the needs of each individual Municipality. The Provincial Regulation allows for Service providers to set target times and modify annually by the Municipality.

The timeline for submission of our Response Time Plan to the MOHLTC is October 1 of each year and by no later than March 31 the following year (commencing in 2014) report to the MOHLTC on the previous year's response time performance. It should be noted that each year starting in 2014, the MOHLTC will be posting the results of every Land Ambulance Service Provider Response Time Performance Plan for the public.

Reportable Call Criteria

The legislation requires all Land Ambulance Services to build their own response time performance plans using the specific reportable call criteria as outlined within the Regulation.

1. The percentage of times that a person equipped to provide any type of defibrillation has arrived on-scene to provide defibrillation to **sudden cardiac arrest patients within six (6) minutes** of the time notice is received. (Community Response – Any bystander, emergency responder or Paramedic with a defibrillator will stop the clock).
2. The percentage of times that an ambulance crew has arrived on-scene to provide ambulance services to sudden cardiac arrest patients or other patients categorized as **CTAS 1 within eight (8) minutes** of the time notice is received respecting such services.
3. The percentage of times that an ambulance crew has arrived on-scene to provide ambulance services to patients categorized as ***CTAS 2, 3, 4, and 5 within the response time targets set by the upper-tier municipality*** or delivery agent under its response time plan established under *Subsection*

(2). O. Reg. 267/08, s. 1 (2); O. Reg. 368/10, s. 1 (2).

Canadian Triage Acuity Scale (CTAS)

The Canadian Triage Acuity Scale (CTAS)[2] is a standardized assessment tool to accurately identify a patient's need for care based on their acuity. The current legislation in Ontario requires Land Ambulance Service providers to ensure all Paramedics document a patient's CTAS level on contact; Services then have to collect and report that data. CTAS is based on a five-level scale with Level 1 (Resuscitation) representing the "sickest" patients and Level 5 (Non-urgent) representing the least ill group of patients.

CTAS Level	Return Priority	Description
SCA **Community Response**	**Code 4 (Lights & Sirens)**	**Resuscitation** – considered threats to life or limb Anyone equipped with a defibrillator can stop the 6 minute response time for a Sudden Cardiac Arrest (SCA). Examples – Paramedic, Fire, Police, First Response team or any bystander equipped with a defibrillator.
CTAS 1	**Code 4 (Lights & Sirens)**	**Resuscitation** – considered threats to life or limb
CTAS 2	**Should be Code 4**	**Emergent**– Potential threat to life or limb
CTAS 3	**Could be a Code 3**	**Urgent** – Potential to progress to a serious problem requiring emergency interventions
CTAS 4	**May be a Code 1**	**Less Urgent** – Conditions that relate to a patient's age, distress, potential for deterioration or complications that would benefit from intervention or reassurance.
CTAS 5	**May be a Code 1**	**Non-Urgent** – Conditions that may be acute but non-urgent including conditions which may be part of a chronic problem with or without evidence of deterioration.

The Canadian Triage & Acuity Scale for Ontario Paramedics, MOHLTC

Figure (2)

Results for 2013 Response Time Performance Plan

The table below (Figure 3) is a combination of the 2013 Response Time Plan for CGS Emergency Services, and the actual 2013 results indicated in the actual column. Further breakdown illustrates the total percentage of each of the reportable criteria for Emergency Services.

In 2013, CGS Paramedics responded to more than 35,000 requests for service within or around the City of Greater Sudbury and area. Given the vast size of the City's geography; the Service's response time performance can be negatively impacted by the location of the call.

Emergency Services Results for 2013 Response Time Performance Plan				
Level of Acuity	**Time**	**Approved Response plan**	**Actual**	**Breakdown**
Sudden Cardiac Arrest	**6 minutes (set by MOHLTC)**	**70%**	**67%**	**0.95%**

CTAS 1	**8 minutes (set by MOHLTC)**	**80%**	**73%**	**1.4%**
CTAS 2	**10 minutes**	**85%**	**87%**	**33%**
CTAS 3	**15 minutes**	**85%**	**97%**	**47.7%**
CTAS 4	**15 minutes**	**85%**	**97%**	**13%**
CTAS 5	**15 minutes**	**85%**	**97%**	**3.9%**
*SCA calls are a subset of CTAS 1 calls; therefore, are also included in the CTAS 1 category. Data Source - MOHLTC via ADDAS & ES via iMedic				**Total 100%**

Figure (3)

2013 Performance Analysis	
Sudden Cardiac Arrest	• The benchmark for Sudden Cardiac Arrest established in 2013 was 70%; the actual percentage achieved was 67%. • Sudden Cardiac Arrests accounted for less than 1% of all calls in 2013; this small volume (116 calls) means only a small number of responses over the six minutes can have a significant impact with the plan's performance. • The 2013 response time is not a direct reflection of just Sudbury EMS, but rather a community response as anyone with a defibrillator can stop the clock. • Response times are measured from time the Paramedic Crew is notified to arrival on scene or any first responder or bystander with a defibrillator arrives on scene. • When responding from the station, Paramedics have two-minutes in which to collect call information and get mobile, leaving only four (4) minutes for travel time. • Only 64% of households are within a four (4) minute drive time of existing Emergency Services Stations that has a Paramedic or Fire Fighter able to immediately respond. • Due to the vast geography of the City, Paramedics face the challenge of distance in responding to Sudden Cardiac Arrest in six (6) minutes to those areas considered rural or remote.
CTAS 1	• The benchmark established in 2013 for a CTAS 1 call was 80%; the actual percentage achieved was 73%. • CTAS 1 calls accounted for less than 2% of all emergency calls in 2013. • When responding from the station Paramedics have two-minutes in which to collect call information and get mobile, leaving only six (6) minutes for travel time. • Paramedic response to outlying areas continues to be a challenge, with only 76% of households within a six minute drive time from our stations. • The CTAS 1 category includes both Sudden Cardiac Arrests and other calls reflecting the most acutely ill or injured patients who require aggressive treatment and resuscitation by a Paramedic. • Only a Paramedic can stop the eight (8) minute response for a CTAS 1 call.
CTAS 2	• The benchmark established in 2013 for a CTAS 2 call was a ten (10) minute response 85% of the time. • The Service exceeded our target with an actual percentage achieved of 87%. • CTAS 2 calls accounted for 33% of the emergency calls in 2013. • CTAS 2 patients are acutely sick and injured; some examples are strokes, heart attacks, and closed head injuries requiring emergency transport to hospital. • Only a Paramedic can stop the ten (10) minute response for a CTAS 2 call.

CTAS 3-5	• The bench marks established in 2013 for a CTAS 3, 4 & 5 calls was fifteen (15) minutes 85% of the time. • The service exceeded our target with an actual 97% achieved for CTAS 3, 4 and 5 categories. • CTAS 3, 4 & 5 calls accounted for 65% of the total emergency call volume in 2013. • CTAS 3-5 patients are suffering from moderate to mild illnesses and injuries, including abdominal pain, simple fracture or soft tissue injuries. • Only a Paramedic can stop the fifteen (15) minute response for CTAS 3, 4 & 5 calls.

Summary

Globally, in 2013 Sudbury Paramedics achieved the mandated response time 95% of the time or better. However, Emergency Services continues to explore opportunities to improve our response times moving forward. In the Spring of 2013, EMS undertook a review of our System Status Plan (resource deployment and utilization plan) and implemented deployment changes realigning resources during peak times. The changes resulted in a reduction of double dispatching of resources and increased an extra transport ambulance during peak call times. Furthermore, the Service continues to develop and monitor key performance indicators to assist and guide system improvements aimed at improving effective and efficient deployment strategies.

Recommendation

The Chief of Fire and Paramedic Services recommends that the Community Services Committee endorse the 2014 Response Time Performance Plan, recognizing that Sudbury Emergency Services continues to look for efficiencies to improve all aspects of response within the City of Greater Sudbury and may bring forward future recommendations for change.