

## Report EMSR-TAPS-15-14

**To:** Chair Barfoot and Members of the Transportation and Public Safety Committee  
**From:** Mike Muir, Director of Paramedic Services  
**Meeting Date:** August 7, 2014  
**Subject:** 2015 Response Time Target Performance Plan  
**Status:** Recommendation adopted by Committee as presented per Resolution TAPS99-14; Endorsed by County Council September 2, 2014 per Resolution CC120-14;

### Recommendation(s)

**WHEREAS the County of Grey is required to submit annual Response Time Plans to the Ministry of Health and Long-Term Care related to ambulance response time targets;**

**NOW THEREFORE BE IT RESOLVED THAT Report EMSR-TAPS-15-14 be received;**

**AND THAT the 2015 Response Time Plan outlined in the report be submitted to the Ministry of Health and Long-Term Care on or before October 1, 2014.**

### Background

Grey County Paramedic Services (GCPS) is required under current legislation to submit annually a Response Time Plan to the Ministry of Health and Long-Term Care (MOHLTC) related to ambulance response time targets within the County. The 2014 submission will cover the 2015 operational year.

#### *Response Time Targets*

There are six set criteria that will be measured under the Response Time Target Plans. Five of the performance targets are measured by response times related to patient presentation as indicated by the Canadian Triage and Acuity Scale (CTAS) however,

one of the six criteria is based on community response to patients in cardiac arrest. The response time targets and criteria are described below:

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.
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 plan established under subsection (2). O. Reg. 267/08, s. 1 (2); O. Reg. 368/10, s. 1 (2).

CTAS is described as:

1. **CTAS I:** severely ill, requires resuscitation
2. **CTAS II:** requires emergent care and rapid medical intervention
3. **CTAS III:** requires urgent care
4. **CTAS IV:** requires less-urgent care
5. **CTAS V:** requires non-urgent care

**CTAS I:** requires resuscitation and includes conditions that are threats to life or imminent risk of deterioration, requiring immediate aggressive interventions (for example, arrest, major trauma or shock states).

**CTAS II:** requires emergent care and includes conditions that are a potential threat to life or limb functions, requiring rapid medical intervention or delegated acts (for example, head injury, chest pain or internal bleeding).

**CTAS III:** requires urgent care and includes conditions that could potentially progress to a serious problem requiring emergency intervention, such as mild to moderate asthma, moderate trauma or vomiting and diarrhea in patients younger than two years.

**CTAS IV:** requires less-urgent care and includes conditions related to patient age, distress or potential for deterioration or complications that would benefit from intervention, such as urinary symptoms, mild abdominal pain or earache.

**CTAS V:** requires non-urgent care and includes conditions in which investigations or interventions could be delayed or referred to other areas of the hospital or health care

system, such as sore throat, conditions related to chronic problems or psychiatric complaints with no suicidal ideation or attempts.

### *Grey County Paramedic Services Response Time Plan*

The response time plans identified in the chart below are based on historical response time data collected over the past three years. Also included is a half year (January 2014 to June 2014) analysis of current system performance against the reported targets.

The January 2014 – June 2014 performance is reflected in the chart below:

<b>Target</b>	<b>Call Type</b>	<b>Provider</b>	<b>Response Time Target</b>	<b>2014 Target</b>	<b>2014 Performance</b>
1.	Sudden Cardiac Arrest	Community Defibrillator Response	Six (6) minutes or less	40%	42.86%
2.	CTAS 1	Paramedic Response	Eight (8) minutes or less	50%	61.45%
3.	CTAS 2	Paramedic Response	Fifteen (15) minutes or less	90%	90.09%
4.	CTAS 3	Paramedic Response	Thirty (30) minutes or less	90%	99.64%
5.	CTAS 4	Paramedic Response	Thirty (30) minutes or less	90%	99.94%
6.	CTAS 5	Paramedic Response	Thirty (30) minutes or less	90%	99.19%

Although the 2014 targets are currently being met, staff are reluctant to suggest that changes to the response time targets based on the half year analysis of system performance be made. It is recommended that any adjustments to the targets be made after a full year (2014) of data is collected and analysed.

It is anticipated that the 2015 response time targets will continue to be achievable however, should there be an unanticipated change in the service's ability to meet those targets, the legislation allows for mid-year adjustments.

The following table provides the 2015 response time targets recommended for Grey County Paramedic Services:

Target	Call Type	Provider	Response Time Target	Percentage of Time Achieved
1.	Sudden Cardiac Arrest	Community Defibrillator Response	Six (6) minutes or less	40%
2.	CTAS 1	Paramedic Response	Eight (8) minutes or less	50%
3.	CTAS 2	Paramedic Response	Fifteen (15) minutes or less	90%
4.	CTAS 3	Paramedic Response	Thirty (30) minutes or less	90%
5.	CTAS 4	Paramedic Response	Thirty (30) minutes or less	90%
6.	CTAS 5	Paramedic Response	Thirty (30) minutes or less	90%

### *Detailed Description of Response Time Targets*

#### **Sudden Cardiac Arrest**

The Community Defibrillator Response to sudden cardiac arrest targets the percentage of times that a defibrillator will be at a patient's side in a cardiac arrest call situation within a six (6) minute timeframe as set by the Ministry of Health and Long-Term Care. This percentage of calls and how the clock stops is determined not only when an ambulance arrives to the patient's side but also includes any time a first responder also arrives (fire fighters and/or civilians at sites equipped with defibrillators). This patient is also determined to be part of the CTAS 1 Target. Calls of this nature have been dispatched as Code 4 (lights and siren) and will continue to in the future. The target of 40% is representative of the rural nature of paramedic services delivery in Grey County, difficult driving conditions during inclement weather and increased driving distances. Grey County has implemented the Public Access Program to assist with meeting this target and will have over 100 automated external defibrillators located throughout the County by the fall of 2014.

## **CTAS 1**

Paramedic response to CTAS 1 calls target the percentage of times that an ambulance responds to patients presenting with life threatening injuries or illnesses in eight (8) minutes or less as set by the Ministry of Health and Long-Term Care. Calls of this nature have been dispatched as Code 4 (lights and siren) and will continue to be in the future. This is an ambulance only target but does include ambulance response to patients suffering from sudden cardiac arrest.

## **CTAS 2**

Paramedic response to CTAS 2 calls target the ambulance responds to patients presenting with serious injuries or illnesses in fifteen (15) minutes or less measured as a 90<sup>th</sup> percentile. This target has been set by the County based on the historical data related to emergency call response in Grey County. Calls of this nature have been dispatched as Code 4 (lights and siren) and will continue to be in the future.

## **CTAS 3**

Paramedic response to CTAS 3 calls target the ambulance responds to patients presenting with moderate injuries or illnesses in thirty (30) minutes or less measured as a 90<sup>th</sup> percentile. This target has been set by the County based on the historical data related to emergency call response in Grey County. Calls of this nature have been dispatched as Code 3 (no lights and siren) and will continue to be in the future.

## **CTAS 4**

Paramedic response to CTAS 4 calls target the ambulance responds to patients presenting with non-serious injuries or illnesses in thirty (30) minutes or less measured as a 90<sup>th</sup> percentile. This target has been set by the County based on the historical data related to emergency call response in Grey County. Calls of this nature have been dispatched as Code 3 (no lights and siren) and will continue to be in the future.

## **CTAS 5**

Paramedic response to CTAS 5 calls target the ambulance responds to patients presenting with very minor injuries or illnesses in thirty (30) minutes or less measured as a 90<sup>th</sup> percentile. This target has been set by the County based on the historical data related to emergency call response in Grey County. Calls of this nature have been dispatched as Code 3 (no lights and siren) and will continue to be in the future.

## *Variables Affecting Performance*

There a number of variables that affect the County's ability to meet the response time targets set above. Some are in the control of the County and some are outside of the control of the County. The following list identifies those factors:

### **Accuracy of Data**

The accuracy of the data utilized in setting the targets and then measuring performance against those targets is reliant on the Ministry of Health Ambulance Dispatch Data Access Services (ADDAS) dispatch data. The accuracy of this data has been called into question in the past and although attempts to correct the data are ongoing, the long term viability of a reliable data set has not been established.

### **Community Response to Sudden Cardiac Arrest Data Capture**

The ability to capture Community Response to patients suffering from sudden cardiac arrest is limited to obtaining response time data from allied agencies or locations where Public Access Defibrillators are located. It is anticipated that Grey County fire services will provide response times if requested, however there are a number of agencies responding from outside of Grey County that may or may not be prepared to share their response time data.

### **Call Volumes**

The nature of emergency medical services in rural Ontario dictates that call volumes for high priority life threatening calls make up a small portion of the overall call activity for the service. Community Response to Sudden Cardiac Arrest and CTAS I calls make up less than 5% of the total call volumes performed by Grey County Paramedic Services. This low call volume response unfairly disadvantages rural paramedic services when compared to larger urban centres as response times in those communities closely match the targets set by the MoHLTC. This is not the case in rural Ontario where call volumes are lower and response distances greater.

### **Dispatch Priority do not match CTAS Priority**

The call priority set by the Provincial dispatch system is different from the CTAS call types. There is no direct relationship between these two very different systems. There have been a number of requests to have the two systems line up however, there are no plans currently underway to do this.

## **All Paramedic Service is not the Same**

The MoHLTC will be posting the results of each municipality's performance against its own targets, however the targets chosen by the municipalities may be diametrically different. In addition, the posting of both rural and urban paramedic service performance on the same page may unfairly paint an unfavorable picture on the rural services. It would be beneficial to have similar municipal paramedic services posted together to separate urban from rural service providers.

## Financial / Staffing / Legal / Information Technology

### Considerations

The implementation of the Response Time Performance Plans will have no immediate effect on budgets, staffing, legal or information technology issues.

### Link to Strategic Goals / Priorities

Goal 2 – Enabling Healthy and Resilient Communities: The implementation of the new response time target plans will allow the County to annual review and if necessary, implement improvements to paramedic services delivery in an evidence based, patient centered and economically responsible manner.

Respectfully submitted by,

Mike Muir  
Director of Paramedic Services