Committee Report

To: Warden McQueen and Members of Grey County Council

Committee Date: February 27, 2020

Subject / Report No: PSR-CW-04-20

Title: Response Time Performance Plan Results for 2019

Prepared by: Kevin McNab

Reviewed by: Kim Wingrove, Kevin Weppler

Lower Tier(s) Affected: All Lower Tiers

Status: Recommendation adopted by Committee as presented per Resolution CW58-20; Endorsed by County Council March 12, 2020 per Resolution CC35-20;

Recommendation

1. That Report PSR-CW-04-20 be received; and


Executive Summary

The County sets the response time performance targets each October for the upcoming calendar year. The County is required to report annually to the Ministry of Health by March 31st of each year on the response time performance achieved under the previous year’s plan.

For the 2019 calendar year, the County met all response time criteria other than the response time target set for CTAS 2. This is the fourth year in a row that the County was under the response time target for CTAS 2 call types.

For the 2020-year, Paramedic Services will undergo a change of deployment modelling to match resource allocation during peak call timeframes.

Background and Discussion

The County of Grey Paramedic Service is committed to continuous improvements in performance and this is reflected in the response time targets that are developed and
implemented annually. This report provides the results of the County’s 2019 response time performance.

The County sets the response time performance targets each October for the upcoming calendar year. The County is required to report annually to the Ministry of Health by March 31st of each year on the response time performance achieved under the previous year’s plan. In 2012 the County determined the original response time performance targets based upon response times that the paramedic service was achieving at that time.

Response Time Targets

There are six set criteria that are 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:

CTAS Level: The ‘Canadian Triage & Acuity Scale’ is used to assign a level of acuity to a patient. Acuity refers to the gravity of the situation – the potential for death and/or irreversible illness. CTAS is a tool that more accurately defines the patient’s need for care. Assignment of the CTAS level is to be based upon not only the presenting complaint identified on the initial assessment made by the paramedic, but also on their examination findings, and response to treatment.

CTAS I: requires resuscitation and includes conditions that are threats to life or imminent risk of deterioration, requiring immediate aggressive interventions (for example, cardiac arrest, and 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 breathing problems, resolved seizure with normal level of alertness, moderate anxiety/agitation.
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 or reassurance, such as urinary symptoms, laceration requiring stitches, upper extremity injury.

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, minor bites, dressing change.

**Percentile Response Time Measurement**

An important measurement of how a paramedic system is performing is indicated in the time in which it responds to emergencies. The response time is measured from the time the crew is first notified until the paramedic radios that they arrived at the scene of the emergency. A percentile response time measurement is the percentage of calls where paramedics arrive at the scene of an emergency in a specified time frame. For example, if the response time performance plan was to arrive on scene within 15 minutes 90 % of the time and it was measured against 1000 calls, 900 calls would have to be under 15 minutes to meet the target.

**Response Time Performance 2019**

The 2019 response time performance for the County of Grey Paramedic Services is identified in the chart below. The chart also indicates an average of the yearly reported response times from 2016 to 2019.

<table>
<thead>
<tr>
<th>Call Type</th>
<th>Provider</th>
<th>Response Time Target</th>
<th>2019 Target</th>
<th>2019 Performance</th>
<th>4 Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden Cardiac Arrest (SCA)</td>
<td>Community Defibrillator or Paramedic Response</td>
<td>Six (6) minutes or less</td>
<td>40%</td>
<td>57.81%</td>
<td>44.10%</td>
</tr>
<tr>
<td>CTAS 1</td>
<td>Paramedic Response</td>
<td>Eight (8) minutes or less</td>
<td>60%</td>
<td>72.60%</td>
<td>66.35%</td>
</tr>
<tr>
<td>CTAS 2</td>
<td>Paramedic Response</td>
<td>Fifteen (15) minutes or less</td>
<td>90%</td>
<td>88.71%</td>
<td>89.13%</td>
</tr>
<tr>
<td>CTAS 3</td>
<td>Paramedic Response</td>
<td>Twenty (20) minutes or less</td>
<td>90%</td>
<td>97.16%</td>
<td>97.14%</td>
</tr>
<tr>
<td>CTAS 4</td>
<td>Paramedic Response</td>
<td>Twenty (20) minutes or less</td>
<td>90%</td>
<td>97.30%</td>
<td>97.03%</td>
</tr>
<tr>
<td>Call Type</td>
<td>Provider</td>
<td>Response Time Target</td>
<td>2019 Target</td>
<td>2019 Performance</td>
<td>4 Year Average</td>
</tr>
<tr>
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</tr>
<tr>
<td>CTAS 5</td>
<td>Paramedic Response</td>
<td>Twenty (20) minutes or less</td>
<td>90%</td>
<td>96.34%</td>
<td>96.41%</td>
</tr>
</tbody>
</table>

For the 2019 calendar year, the County met all response time criteria other than the response time target set for CTAS 2. This is the fourth year in a row that the County was under the response time target for CTAS 2 call types.

2019 90th Percentile All Code 4 Calls – 14:51
2019 Average Response Time Code 4 Calls – 7:43

Challenge of Meeting Targets in Rural Ontario

Across the Province call volumes for high priority life threatening calls make up a small portion of the overall call activity for paramedic services. Response to Sudden Cardiac Arrest and CTAS 1 calls make up less than 2% of the total call volumes performed by Grey County Paramedic Services. Provincial targets are designed for a 4 to 5 minute travel time to a sudden cardiac arrest call and a 6 to 7 minute travel time to a CTAS 1 call. The low population density and large geographical area make it difficult to meet response time target criteria outside of the urban areas where the ambulances are located.

The following charts indicate the percentage of the population living within and outside the response time targets based upon paramedic base locations within the County of Grey.

<table>
<thead>
<tr>
<th></th>
<th>Within Response Time</th>
<th>Outside Response Time</th>
<th>Response Time (accounting for 1 minute reaction time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCA</td>
<td>31.84%</td>
<td>68.16%</td>
<td>5 Min</td>
</tr>
<tr>
<td>CTAS 1</td>
<td>42.88%</td>
<td>57.12%</td>
<td>7 Min</td>
</tr>
<tr>
<td>CTAS 2</td>
<td>73.62%</td>
<td>26.38%</td>
<td>14 Min</td>
</tr>
<tr>
<td>CTAS 3-5</td>
<td>89.64%</td>
<td>10.36%</td>
<td>19 Min</td>
</tr>
</tbody>
</table>

Staffing Considerations

For the 2020-year, Paramedic Services will undergo a change of deployment modelling to match resource allocation during peak call timeframes.

Legal and Legislated Requirements

Land Ambulance Response Time Standard Reg 257/00 Part VIII
Upper tier municipalities are responsible, either directly or through selected operators, for ensuring that patient care and transport are carried out in accordance with applicable legislation, standards and procedures. They are also responsible for the supervision of staff, maintenance of vehicles and equipment and the provision of a quality assurance program.

Financial and Resource Implications
None

Relevant Consultation
☐ External:
☒ Internal: CAO, Finance

Appendices and Attachments
None