Staff Report

To Committee of the Whole
Service Area Public Services
Date Monday, July 4, 2022
Subject Paramedic Service Response Performance 2021 and Performance Plan 2023

Recommendation

1. That the Response Time Performance Plan for 2023 be set as recommended by staff.
2. That Council advocate to the Minister of Health expressing concerns over the Ambulance Offloading Delays at hospitals throughout the Province, and the need for more funding and solutions to alleviate the delays.

Executive Summary

Purpose of Report
To provide a report on the performance of the Guelph Wellington Paramedic Service against the 2021 Response Time Performance targets as set by City of Guelph Council, and to advise of the proposed Response Time Performance Plan (RTPP) for the Paramedic Service for 2023, and to inform Committee of significant pressures that may affect the service’s ability to meet the targets for 2022 as set by Council in 2021.

Key Findings
In 2021 Guelph Wellington Paramedic Service (GWPS) was unable to fully meet the targets and compliance rates as set by City Council. Causes included pressures from increased call volumes, the ongoing pandemic, and the relatively new pressure of hospital offload delays.

Financial Implications
There are no direct financial implications from this report. The Paramedic Master Plan in connection with the actual response time results will be used to demonstrate the recommended timing of expanded paramedic services required to meet response time targets during the budget process.

Report
Response times to emergency calls are an important key indicator for Paramedic Services. Patient outcomes can be directly related to those times, and overall community satisfaction and perception of the service delivered can also be affected by the time it takes for an ambulance to arrive at the scene of an emergency.
Response times to emergency calls are affected by the location of the nearest available ambulance to the site of an emergency. GWPS uses a complex deployment model to move available ambulances to predetermined locations as other ambulances are assigned to calls. As fewer ambulances become available, the locations are wider spread and response times increase. GWPS has used computer modelling to ensure that the most appropriate station and deployment locations are being utilized.

Council determines the desired response times for the service for the upcoming year by October 31, and the actual annual performance results are reported to the Provincial Ministry of Health by March 31 of the following year.

The purpose of setting response time targets is to provide the residents of our area with a reasonable expectation of ambulance response times in their community, and to provide some accountability and transparency around the provision of the Paramedic Ambulance Service.

Performance targets are set in the form of a Response Time Performance Plan (RTTP), which establishes a target response time and compliance level to that target for each of five (5) categories of medical emergencies. The categories are based on the severity of the patient’s illness or injury and are defined based on the Canadian Triage Acuity Scale (CTAS), which is a score shared by hospitals and other services across Canada.

The five levels of CTAS include:
CTAS 1 – requires resuscitation (i.e. cardiac arrest)
CTAS 2 – requires emergent care (i.e. major trauma)
CTAS 3 – requires urgent care (i.e. mild shortness of breath)
CTAS 4 – requires less urgent care (i.e. minor trauma)
CTAS 5 – requires non-urgent care (i.e. sore throat)

There is a sixth response time that measures the time to deliver a cardiac defibrillator to the scene of a Sudden Cardiac Arrest (SCA). This can include Public Access Defibrillators, Fire departments, or other allied agencies arriving first. Actual response times, especially with public access defibrillators, are often difficult to capture consistently. This time is set by the Ministry of Health at six (6) minutes, but the expected compliance rates to that target are set by Council.

**Performance in 2021**

As indicated in the chart below, GWPS was not able to fully meet or exceed all the targets set by Council for responses in 2021. One challenge that affected service delivery was a significant increase in the number and duration of hospital offload delays experienced at the Guelph General Hospital. An offload delay occurs when paramedics arrive at the Emergency Department and hospital staff are unable to assume care for the patient within 30 minutes, requiring that paramedics stay at the hospital caring for the patient for an extended period. Offload delays at the Guelph General Hospital were historically relatively rare and related to an exceptional surge in call volumes or other specific events. Beginning in late August
of 2021 offload delays became a more frequent occurrence and involved multiple
teams of paramedics, causing fewer ambulances to be available in the community
and increasing the response times to emergency calls. In 2021, GWPS paramedics
cared for patients in offload delay for more than 4,900 hours. This includes a
dramatic increase in delays lasting greater than 90 minutes, increased by over
300% from 2020.

Other factors that affected response times in 2021 included an increase in call
volumes by 14% over 2020. A similar pattern of increasing call volumes is being
experienced by most paramedic services in Ontario and internationally. In addition,
paramedics continue to be required to take extra time on scenes and after calls
because of the COVID pandemic – donning additional Personal Protective
Equipment (PPE) and utilizing enhanced cleaning practices.

The table below illustrates Council’s approved RTPP for 2021, and GWPS’s
compliance with its response time targets. The Paramedic Service was required to
report these results to the Ontario Ministry of Health by March 31, 2022.

<table>
<thead>
<tr>
<th>CTAS Category</th>
<th>Response Time Target</th>
<th>2021 Target Compliance as approved by Council (October 2020)</th>
<th>2021 Actual Compliance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>8 minutes</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>(set by MOH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td>10 minutes</td>
<td>75%</td>
<td>76%</td>
</tr>
<tr>
<td>Level 3</td>
<td>15 minutes</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Level 4</td>
<td>15 minutes</td>
<td>90%</td>
<td>87%</td>
</tr>
<tr>
<td>Level 5</td>
<td>20 minutes</td>
<td>90%</td>
<td>94%</td>
</tr>
<tr>
<td>Sudden Cardiac</td>
<td>6 minutes</td>
<td>65%</td>
<td>52%</td>
</tr>
<tr>
<td>Arrest</td>
<td>(set by MOH)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The RTPP is a good retrospective measurement of performance but is less useful as
a planning tool. The Service needs to attempt to arrive at all calls as quickly as
possible because the severity of the patient’s condition, or their CTAS level, cannot
be verified before a paramedic arrives.

**Response Time Improvement Strategies**

In addition to the dynamic deployment methodology for the available ambulances
mentioned earlier in this report, staff continue to make efforts to improve response
times to emergency calls. The Community Paramedicine Program provides non-
emergency services to high-risk individuals in the community to reduce the
incidents of emergencies occurring, in addition to ensuring that these individuals
receive the most appropriate care and avoid hospitalizations, thus reducing the strain on the hospital system. There is evidence that this program is having some success in achieving these goals.

Staff have also taken advantage of recent changes to Provincial legislation that allows paramedics to transport some patients to alternate destinations instead of the Emergency Department. Although the number of patients being diverted is relatively small, this change reduces the number of people presenting to the hospital, improving patient flow, and reducing offload delays.

Council has assisted in maintaining response times by approving incremental enhancements to the paramedic service over several years to address the increasing call volumes. An additional 12 hours of paramedic ambulance service, seven days per week was approved for 2022 and added in January.

Finally, staff have utilized information from an earlier consultant’s report and computer mapping to determine the appropriate location and establish a permanent paramedic station in the downtown core of Guelph, located at the corner of Gordon and Fountain Streets. This location will allow responses in a more timely manner to a high volume of calls in the downtown Guelph area. Further future improvements in response time may be realized through an agreement with the County of Wellington in which the County will build paramedic stations in locations identified in that report. Unfortunately, the timing of those projects has been delayed for several years.

**Recommendations for the 2023 Response Time Performance Plan**

Staff predict a continued increase in emergency call volumes in 2023. The resulting pressures are expected to be offset to some degree by the staffing enhancements added in 2022 and by the relocation of the downtown Guelph paramedic station. With the pressures of increased call volumes, staff do not predict a significant improvement in response times.

The impact of hospital offload delays is more difficult to predict and outside of the control of City staff. The timing and duration of periods of high incidents of offload delays cannot be predicted, and it is not possible to adjust staffing patterns or deployment plans to fully compensate for this pressure.

Given this uncertainty, staff recommend maintaining the current RTPP targets and compliance rates for 2023:
## Canadian Triage Acuity Scale Levels

<table>
<thead>
<tr>
<th>Canadian Triage Acuity Scale Levels</th>
<th>Response Time Target</th>
<th>Compliance Rate Recommended to Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTAS Level 1</td>
<td>8 minutes (set by the Province)</td>
<td>65%</td>
</tr>
<tr>
<td>CTAS Level 2</td>
<td>10 minutes</td>
<td>75%</td>
</tr>
<tr>
<td>CTAS Level 3</td>
<td>15 minutes</td>
<td>90%</td>
</tr>
<tr>
<td>CTAS Level 4</td>
<td>15 minutes</td>
<td>90%</td>
</tr>
<tr>
<td>CTAS Level 5</td>
<td>20 minutes</td>
<td>90%</td>
</tr>
<tr>
<td>Sudden Cardiac Arrest</td>
<td>6 minutes (set by the Province)</td>
<td>65%</td>
</tr>
</tbody>
</table>

Guelph Wellington Paramedic Service will continue to strive to meet or exceed these targets and compliance rates using best practices in deployment strategies and practices.

### Financial Implications

The response time performance is a key data set that supports budget investment and is a measurable goal of the Strategic Plan. The Paramedic Master Plan in connection with the actual response time results will be used to demonstrate the recommended timing of expanded paramedic services required to meet response time targets over this period.

### Consultations

The Response Time Performance Plan will be provided to the Ontario Ministry of Health, where it will subsequently be posted on their website. It will also be posted on the City’s website: [Guelph Wellington Paramedic Services](#).

The County of Wellington will be provided with a copy of this report. Staff will be present at their Social Services Committee meeting to explain the RTPP Standards.

### Strategic Plan Alignment

The creation of a Response Time Performance Plan is part of Building our Future and ensuring that we continue to build strong, vibrant, safe, and healthy communities that foster resilience in the people who live here.

### Attachments

None

### Departmental Approval

None

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