

To:	Warden Halliday and Members of Grey County Council
Committee Date:	March 08, 2018
Subject / Report No:	PSR-CW-03-18
Title:	Response Time Performance Plan Results for 2017 and Analysis of Call Volumes and Response Times Over the Past 11 Years
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Reviewed by:	Kim Wingrove, Kevin Wepler
Lower Tier(s) Affected:	All Lower Tiers
Status:	Recommendation adopted by Committee as presented per Resolution CW74-18; Endorsed by County Council March 8, 2018 per Resolution CC34-18;

Recommendation

1. That Report PSR-CW-03-18 be received for information; and
2. That the 2017 Paramedic Service response time performance results be submitted to the Ministry of Health and Long Term Care by March 31, 2018.

Executive Summary

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

For the 2017 calendar year the County was under the response time targets set for CTAS 2 and Sudden Cardiac Arrest call types. This is the second year in a row that the County was under the response time target for CTAS 2 call types.

In 2017 the total patient call volume increased 9.8% with code 4 emergency calls increasing by 11.4%. The 2017 service volume for patient carrying calls now matches the number of calls being completed when the original response time targets were developed for the County in 2012. To meet response time targets in the setting of continual yearly increases in call volumes will require additional resources, changes in targets or system service delivery.

By maintaining balanced emergency coverage, reducing responses to non-emergency calls, spreading of resources from days to nights and incremental increases in staffing the service has been able to reduce and maintain response times to code 4 emergency calls in the area of the 15 minute mark 90% of the time over the past 11 years.

The Ministry of Health and Long-Term Care (MOHLTC) is embarking on a journey to enhance and modernize the province’s emergency health services (EHS) system. The province is investing in a new medical dispatch system that will help triage and prioritize 911 calls for paramedic services. Recent updates to the Ambulance Act will allow paramedics to assess patients and make decisions to manage those patients in new ways, under appropriate medical delegations and where deemed safe and appropriate to do so.

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 2017 response time performance as well an additional analysis of response times by Lower Tier Municipality, increasing call volumes and the service’s response time performance over the past 11 years.

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.

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 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 2017

The 2017 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 for the previous 5 years.

Call Type	Provider	Response Time Target	2017 Target	2017 Performance	5 Year Average
Sudden Cardiac Arrest	Community Defibrillator or Paramedic	Six (6) minutes or less	40%	38.33%	46.19%

Call Type	Provider	Response Time Target	2017 Target	2017 Performance	5 Year Average
	Response				
CTAS 1	Paramedic Response	Eight (8) minutes or less	60%	68.42%	63.56%
CTAS 2	Paramedic Response	Fifteen (15) minutes or less	90%	88.87%	89.85%
CTAS 3	Paramedic Response	Twenty (20) minutes or less	90%	96.64%	97.25% (20 min) 99.87% (30 min)
CTAS 4	Paramedic Response	Twenty (20) minutes or less	90%	96.35%	96.91% (20 min) 99.60% (30 min)
CTAS 5	Paramedic Response	Twenty (20) minutes or less	90%	94.58%	96.03% (20 min) 99.47% (30 min)

For the 2017 calendar year the County was under the response time targets set for CTAS 2 and Sudden Cardiac Arrest call types. This is the second year in a row that the County was under the response time target for the CTAS 2 call type. In 2015 due to the previous above target performance the County improved the response time targets for arrival at CTAS 1 calls in 8 minutes from 50% to 60%. For CTAS 3 to 5 the response time commitment was also improved by reducing the time to respond from 30 minutes to 20 minutes 90% of the time.

Challenge of Meeting Targets in Rural Ontario

Across the Province call volumes for high priority life threatening calls (CTAS 1) 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 geography makes it difficult to meet response time target criteria outside of the urban areas where the ambulances are located.

The following chart details the 2017 response time performance broken down by Lower Tier Municipalities within the County of Grey.

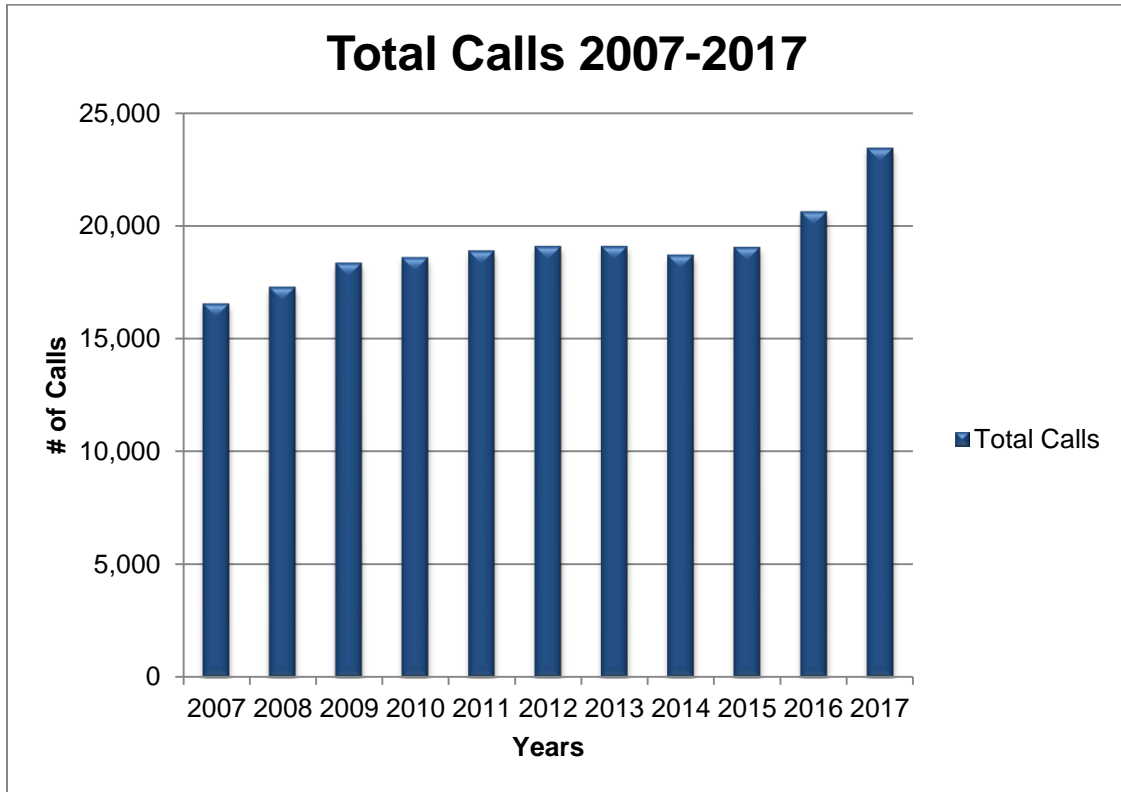
Municipality	SCA 6 Min - 40%	CTAS 1 8 Min - 60%	CTAS 2 15 Min 90%	CTAS 3 20 Min 90%	CTAS 4 20 Min 90%	CTAS 5 20 Min 90%
Service 2017	38.33	68.42	88.87	96.64	96.35	94.58
Blue Mountains	0	37.50	91.03	98.04	93.55	96.30
Chatsworth	0	40.00	54.55	80.49	73.33	88.24
Georgian Bluffs	33.33	45.00	83.10	98.96	100	100
Grey Highlands	0	37.50	66.18	89.27	89.19	82.14
Hanover	66.67	100	99.31	100	100	100
Meaford	22.22	46.15	93.17	98.17	90.63	95.45
Owen Sound	83.33	95.65	97.03	99.55	99.35	100
Southgate	33.33	25.00	88.24	92.44	95.45	88.24
West Grey	33.33	35.71	89.26	98.63	100	93.33

It is recognized by staff that The Township of Chatsworth's overall response times are consistently lower than the other Lower Tier Municipalities within the County. It is anticipated that the building of the new Chatsworth Base will help reduce response times however, the occupancy will not occur until the late summer of this year. The full realization of improved response times will occur in 2019. In the interim to help reduce response times the service will be performing mobile coverage in the Chatsworth area on weekends and holidays throughout the summer.

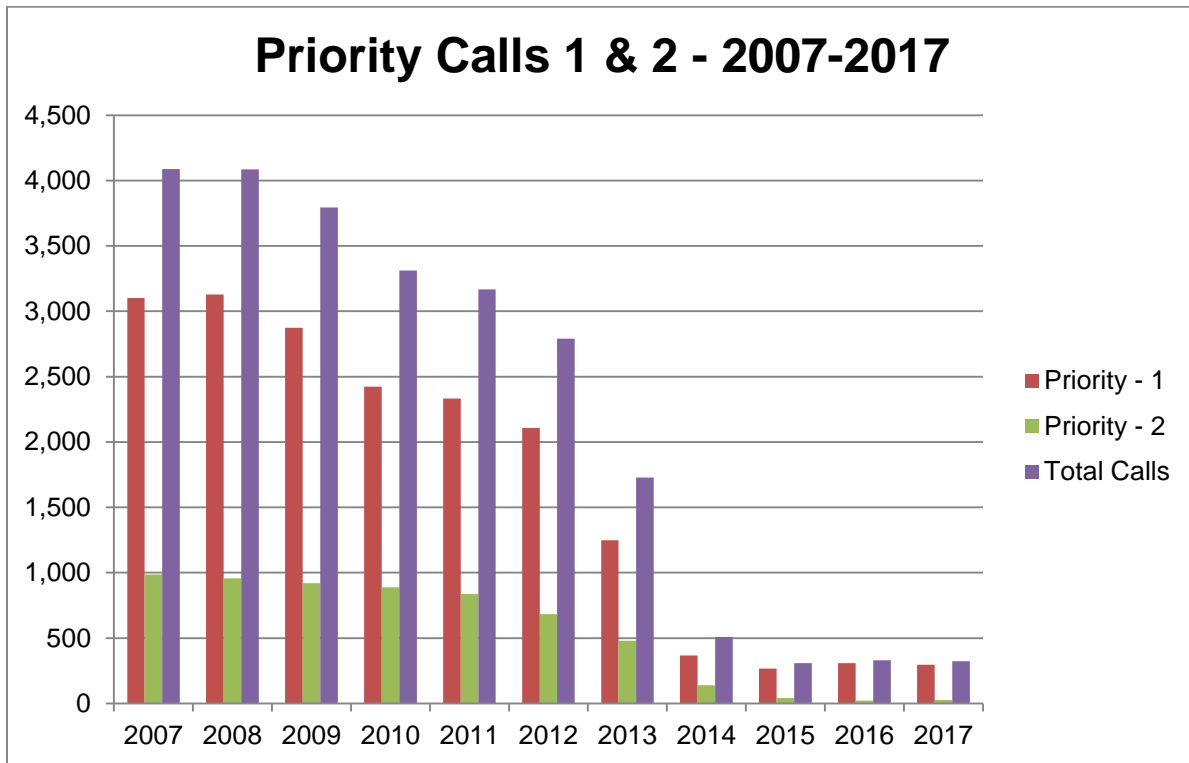
Increasing Emergency Call Volumes

It is important to recognize that call volumes have been increasing at an average of 6.6% for code 3 and 4.9% for code 4 calls annually over the past 10 years. In 2012 the total volume for non-emergency and emergency calls peaked at a total of 11,372. Non-emergency call volumes at that time were 2,790. Since 2012 paramedic services has concentrated its ability to respond to emergency calls while reducing its ability to respond to non-emergency calls. In 2017 the non-emergency call volume was 323 while the emergency call volume was 11,030 for a total of 11,353 calls. In 2017 the total patient call volume increased 9.8% with code 4 emergency calls increasing by 11.4%. The 2017 service call volume now matches the number of calls when the original response time targets were developed for the County in 2012. To meet response time targets in the setting of continual yearly increases in call volumes will require additional resources, changes in targets or system service delivery.

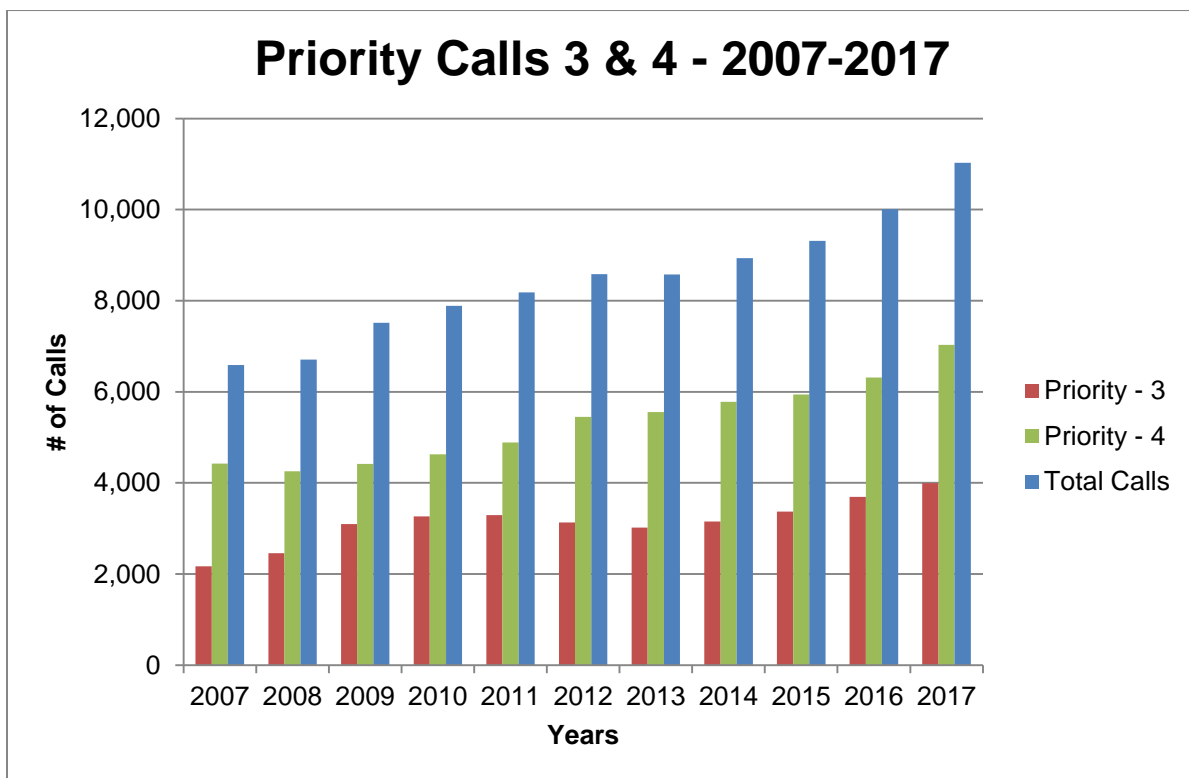
Total Call Volumes by Year Code 1,2,3,4 and 8 the Past 11 Years



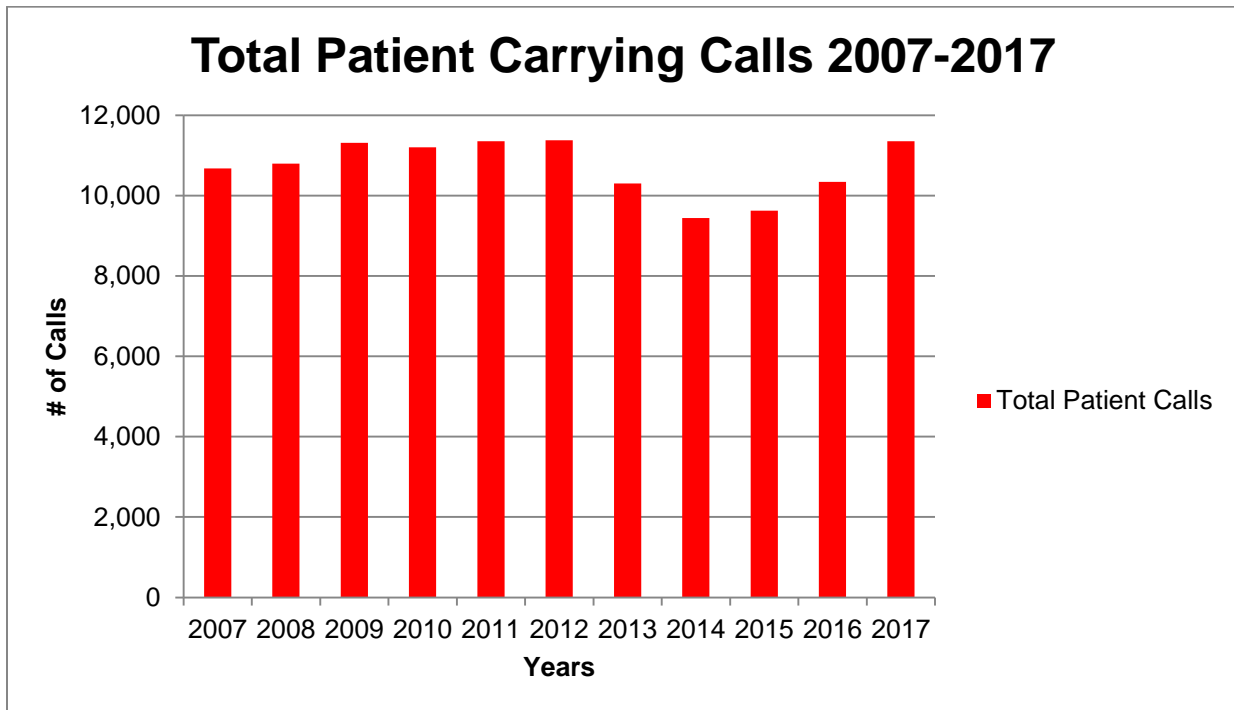
Non-Emergency Call Volumes the Past 11 Years



Emergency Call Volumes the Past 11 Years



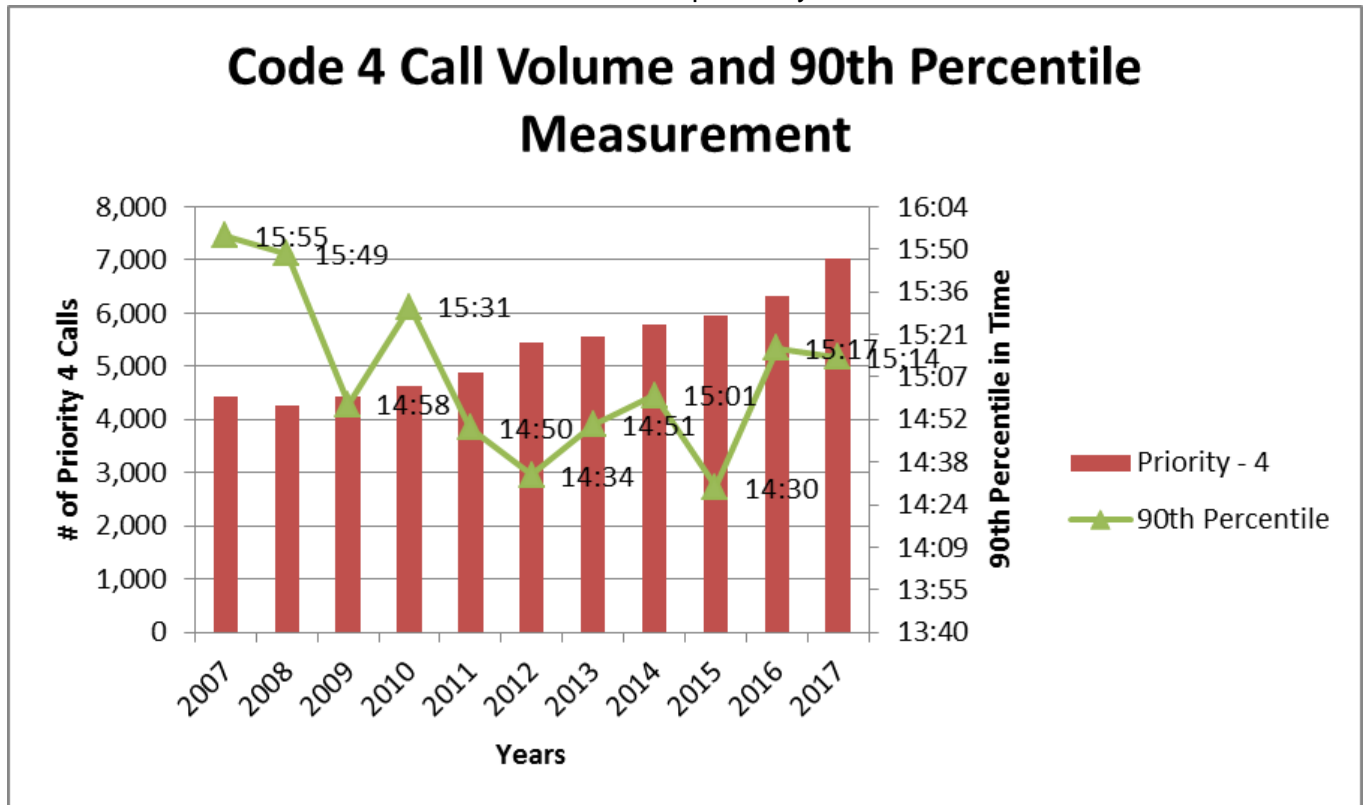
Total Patient Call Volumes the Past 11 Years



Historical Analysis of Code 4 Calls and 90th Percentile Response

In 2004 when the County assumed the direct delivery of the paramedic service there were 12 ambulances on shift during weekdays, 9 ambulances on weekend days and 5 ambulances on nights. The response time reported to the Ministry of Health from September to December of that year was 17:00 minutes. To improve response times the service instituted guidelines for minimum emergency coverage and balanced emergency coverage. Over the years the service also reduced its ability to complete non-emergency calls and concentrated on its core responsibility of responding to emergency calls. In 2011 due to increasing call volume an additional 12 hour ambulance was added in The Town of The Blue Mountains on weekends and holidays during ski season. In 2013 an 8 hour per day ambulance was taken off of the Monday to Friday shift and with the addition of 2 FTE paramedics a 12 hour night ambulance was added to Dundalk. In 2015 an additional 8 hour per day ambulance was combined with two additional FTE paramedics to add an additional 12 hour night ambulance to Craighleith. Today there are 10 ambulances on shift during the day Monday to Friday, 9 ambulances on weekend days and 7 ambulances on nights. By maintaining balanced emergency coverage, reducing responses to non-emergency calls, spreading of resources from days to nights and incremental increases in staffing the service has been able to reduce and maintain response times to code 4 calls in the

area of the 15 minute mark 90% of the time over the past 11 years.



Addressing Increasing Call Volumes and Response Time Performance

Enhancing Emergency Services Ontario

The Ministry of Health and Long-Term Care (MOHLTC) is embarking on a journey to enhance and modernize the province’s emergency health services (EHS) system. The purpose is to improve and sustain quality coordinated care across the patient’s journey to accessing care.

The province is investing in a new medical dispatch system that will help triage and prioritize 911 calls for paramedic services. This new system is expected to be in place in the first site by March 2018. This system will better prioritize calls based on patient need and redirect low acuity patients to locations other than emergency departments in instances where it would be safe and appropriate to do so.

Recent updates to the Ambulance Act will allow paramedics to assess patients and make decisions to manage those patients in new ways, under appropriate medical delegations and where deemed safe and appropriate to do so. Options include providing some forms of treating and referring the patient to continuing care (e.g., primary, home and/or community-based) or releasing the patient, without the need for transport to the emergency department. Consideration can also be given in the use of vehicles other than ambulances, for instance “emergency response vehicles”, for use by services to respond to low acuity calls in a Treat & Refer/Treat & Release model where patient transport is not deemed required. Previously,

paramedics were bound by law to transport patients to hospital facilities only. Providing more flexibility will allow patients to receive the most appropriate care while reducing unnecessary trips to emergency departments. This approach will also assist in having ambulances available to respond to emergencies by not having their services tied up on low acuity calls.

Staffing Considerations

Once operational the Chatsworth base will be staffed utilizing a 12 hour shift from the Owen Sound base as well an 8 hour shift from the Durham base. This will allow for 124 hours of staffing at this location each week. To allow for full 24 hour coverage 7 days a week at the Chatsworth base it would require an additional 44 hours of staffing (4576 hours annually).

The community paramedic program is currently staffed 5 days a week on a 12 hour shift. The primary role of this position is to treat patients with chronic diseases within their home. If the community paramedic is the closest vehicle to an emergency call they will first respond in the capacity of a primary care paramedic until an ambulance arrives. Once the Chatsworth base is operational the community paramedic will work out of that base allowing for first response at the beginning and end of each shift. An option to increase first response coverage is staffing the community paramedic vehicle 7 days a week. Staff will continue to work with the Southwest LHIN to advocate for funding of the community paramedic program for 7 days a week coverage.

Legal and Legislated Requirements

Land Ambulance Response Time Standard Reg 257/00 Part VIII

Financial and Resource Implications

None

Relevant Consultation

- External:
- Internal: CAO, Finance

Appendices and Attachments

None