The County of Peterborough Joint Services Steering Committee

To: Chair and Members of Committee

From: Randy Mellow, Chief of Paramedics

Date: June 12, 2014

Purpose

To provide Joint Services Steering Committee with an update on the Peterborough County/City Paramedic Service Response Time Plan Review

Recommendation

That Joint Services Steering Committee endorse the recommendation to maintain the current Peterborough County/City Paramedic Response Time Performance Plan

Financial Impact

There are no additional budget or financial implications resulting from endorsement of the recommendation in this report.

Overview:

In 2006, AMO and the provincial government established a joint Land Ambulance Committee. The mandate of the committee is to review key elements of the land ambulance service in Ontario. Those elements included interfacility transfer, training, funding, and response time standards.

The Response Time Standard Working Group, a sub-group within the committee, concluded that the current land ambulance certification standard regarding response times was out of date and in need of change. The original response times were based on a best efforts standard established in 1996. The Working Group concluded that "new medical evidence and measurement practices are now available to form new and local response time plans". The provincial government has approved a new Regulation (Reg. 267/08) which has given effect to these new response time plans.

According to the Land Ambulance Committee, the new standards are intended to provide for enhanced municipal flexibility and equity and are also patient outcome focused.

The standards establish the responsibilities of upper tier municipalities, designated delivery agents, and ambulance communication centers to define, set, and meet response time plans. These plans must be filed annually with the Ministry of Health and will be publicly available.

Provincial Land Ambulance Response Time Framework Responsibilities of the Municipal Sector:

Beginning in 2012, every upper tier municipality and delivery agent will:

- S Develop an annual response time performance plan;
- Ensure that this plan is continually maintained, enforced and where necessary, updated;
- S Provide each plan and each update to the ministry;
- Report to ministry on the response time performance achieved under the previous year's plan.

The response time performance plans developed by the municipal sector:

- Will include response time commitments for CTAS 1,2,3,4, and 5 patients. CTAS (Canadian Triage Acuity Scale {Chart 1 below}) is an international medical triage standard utilized by hospitals, ambulance communication services and paramedics to identify how urgently a patient requires medical care;
- Will recognize that the attendance of any person equipped to provide defibrillation (including a paramedic, fire fighter, police officer or other first responder) to a sudden cardiac arrest patient will "stop" the response-time clock:
- May include municipal public safety and prevention education and promotion campaigns that could contribute to meeting municipal response time performance plans, such as:
 - § Fire and Police Defibrillation
 - **§** High School CPR Programs
 - **S** Community-Based First Aid Programs
 - Public Health Safety and Prevention Programs, including programs to educate the public on the appropriate use of 9-1-1.

In providing performance reports to the ministry, each municipality must report on:

The percentage of times that sudden cardiac arrest patients received assistance from a person equipped to provide defibrillation (e.g., paramedic, fire, police, or other first responder) within six minutes from the notification of a call by an ambulance communication service.

- 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 minutes of the time notice is received respecting such services.
- The percentage of times that a paramedic arrived at the location of a patient determined to be CTAS 2, 3, 4, 5 within a period of time determined appropriate by the municipality.

Analysis:

Establishment of Response Time Plan:

When developing the first Response Time Plan in 2012, Administration completed a retrospective review applying the mandated targets of the new response time plan to the response time performance over the past several years, in an attempt to establish response time plan targets that are realistic and appropriate. Problems that arose in utilizing this data in 2012 continue to cause difficulty in assessing and projecting accurate response time targets. These issues include;

- Inconsistent data obtained through the ADDAS/ADRS dispatch data system;
- Data available for comparison is limited to current and previous year performance;
- Limited data available regarding defibrillator equipped arrival times (Fire or Public Access Defib);
- § Fluctuation of call volumes and Ambulance Offload Delay over the past several years;
- S Deployment plan and strategy adjustments to address growing response times:
- The mandated response time targets do not allow for individual benchmarks for urban, rural or remote regions within the Municipality. One set of targets must be set for the entire County.

Given the many variables affecting the response time, it was determined by PCCP Management that the most appropriate material to use to review and set the response time targets would be based on the response times achieved by PCCP in 2012 as a benchmark for 2013 with consideration of the known system pressures affecting Paramedic response. These targets are illustrated in Chart 2 below.

Chart 1 - 2013 Call Volume by Acuity Level

The following chart provides details of 2013 call volume data within the County and City of Peterborough for each CTAS category.

Level of Acuity	Medical Description	2013 Call Volume	
Sudden Cardiac	Patient experiencing pre-hospital	102	
Arrest	cardiac arrest		
CTAS 1	Conditions that are threats to life or	170	
	limb (or imminent risk of deterioration)		
	requiring immediate aggressive		
	interventions.		
CTAS 2	Conditions that are a potential threat to	3618	
	life limb or function, requiring rapid		
	medical intervention or delegated acts.		
CTAS 3	Conditions that could potentially	3946	
	progress to a serious problem requiring		
	emergency intervention.		
CTAS 4	Conditions that are related to patient	905	
	age, distress, or potential for		
	deterioration or complications would		
	benefit from intervention or		
	reassurance within 1-2 hours		
CTAS 5	Conditions that may be acute but non-	318	
	urgent as well as conditions which may		
	be part of a chronic problem with or		
	without evidence of deterioration		

Chart 2 - 2013 Response Time Based on Acuity:

The following chart provides details of 2013 Response Time Plan and actual 2013 and 2014 response time data within the County and City of Peterborough for each CTAS category.

Level of Acuity	Time (min:sec)	2013 Response Time Plan Target	2013 Actual Percentile	2014 Percentile to Date
Sudden Cardiac Arrest	6:00	50%	51.96%	58.82%
CTAS 1	8:00	66%	55.86%	63.01%
CTAS 2	10:00	65%	72.48%	74.29%
CTAS 3	10:00	65%	75.20%	75.91%
CTAS 4	10:00	65%	79.67%	78.55%
CTAS 5	10:00	65%	76.34%	77.10%

Conclusion:

As mandated by legislation, PCCP on behalf of the Municipality must continually review, update as necessary and report on the Response Time Performance Plan and achievements. The department continues to do so within the following framework:

- A review of historic response time performance in comparison to patient acuity;
- Consideration of call volume trends;
- Impact of significant and persistent Ambulance Offload Delay pressures;
- An evaluation of current performance related to cardiac arrest save rates:
- With consideration that targets represent achievable standards that build on PCCP's strong overall performance.

PCCP remains committed to continual analysis of performance and seeks system improvement opportunities, however; current operating conditions and trends suggest that the proposed response time targets are both reasonable and attainable. As such, PCCP administration is recommending no changes to the current Response Time Performance Plan.

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Performance review will continue following the framework mentioned above in preparation for a further report that will be brought forward to Council to seek approval for the mandatory update of the 2015 Response Time Performance Plan in October of this year.

Respectfully submitted,

Original signed by

Randy Mellow

Chief of Paramedics