Conseil des Services du District de
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District Services Board

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Report To:	Program Planning Committee
From:	Michael MacIsaac, Chief of EMS
Date:	September 22, 2010
Re:	New Ambulance Response Time Standard

RECOMMENDATION

That the Manitoulin-Sudbury DSB adopt the new ambulance response time standard as presented by the EMS Department which is in accordance with Ambulance Act, Response Time Performance Plans.

REPORT

Purpose

The purpose of this report is to provide the DSB Program Planning Committee with a final numerical response time strategy in time for submission to the Ministry of Health and Long-Term Care (MOHLTC) by October 31, 2010, as dictated in the Ambulance Act. Additionally this report should provide the DSB Program Planning Committee with information on timelines for future developments of this plan.

Background

For a full background on this topic this report should be taken in conjunction with the previous New Response Time Standard Issue Report presented at the June DSB Board meeting.

History

The EMS Department has been reviewing statistics regarding the new response time criteria over the past 6 months. The source of the statistics is the ADDAS database. Although true confidence in the ADDAS database is lacking we have no other alternative on which to base our new response time strategy. Even though the statistics are not 100% accurate, there should be enough valid data to create a good enough sample size to analyze.

It must be noted that in addition to its inaccuracy, data garnered from the ADDAS database is not truly reflective of what is being asked by the MOHLTC. The main issue is that the statistics in the new response time standard are to be reflective of patient presentation upon paramedic arrival. It wasn't until March of this year that the Central Ambulance Communication Centres (CACC's) started tracking the Canadian Triage and Acuity Scale (CTAS) of patients upon contact as opposed to CTAS of patient upon leaving scene. Therefore our statistical data, which was gathered from 2009, does not truly reflect what is being asked. It is however the best and only data that we have to utilize. In future years, with CACC tracking appropriately and with our Electronic Patient Charting program now in place, we should be able to gather accurate data.

There has been recent discussion over a possible delay of the new response time standard by one year due to the above noted inability of any Direct Delivery Agent (DDA) to utilize the ADDAS database to gather the appropriate statistical information on which to plan their new response time strategy. Regardless of whether the new response time standard is delayed by one year or not, we are preparing for submission as required under the current arrangement.

Method of Analysis

Call statistics from 2009 were evaluated as a provision of the most accurate and recent data. Figures were evaluated on the basis of the new MOHLTC response time reporting requirements. As such, the calls from 2009 were divided on the basis of Sudden Cardiac Arrest (SCA), CTAS 1, CTAS 2, CTAS 3, CTAS 4 and CTAS 5. These specified calls were evaluated on the basis of mean time, median time, and actual 90th percentile. Mean time is a strict average of the group of times. It is a simple calculation that can be sensitive to extremes when a smaller sample size is used. Median time is the middle time in the whole list of times. It means that half of the times are higher and half of the times are lower. The 90th Percentile time represents the time that at least 90 percent of the calls were responded to within. The results were as follows:

	# of Calls	Mean Time	Median Time	90th% Time
SCA	63	12m24s	11m26s	22m03s
CTAS 1	49	14m22s	13m04s	28m54s
CTAS 2	628	12m43s	11m03s	23m33s
CTAS 3	369	14m02s	11m26s	26m45s
CTAS 4	675	12m59s	10m32s	25m45s
CTAS 5	101	11m55s	9m48s	20m41s

Understanding that the *target percentage of time achieved* has already been set by the MOHLTC for SCA and CTAS 1 calls, further analysis of how we fared in 2009 was completed. In 2009 we achieved a 6-minute response time for SCA calls in the 22.5 percentile. Additionally in 2009 we achieved an 8-minute response time for CTAS 1 calls in the 31.2 percentile.

If we were to evaluate all CTAS 2-5 calls together we find 4500 calls with a mean time of 13m06s, a median time of 10m30s and a 90th percentile time of 25m14s. It must be noted that the great variance in number of calls further represents inaccuracy of data entered into the ADDAS system. Not all calls had a CTAS associated to them.

Through process of elimination, taking the grand total of emergency calls and subtracting strictly the CTAS 1 calls leaves you with the remainder which is all the CTAS 2-5 calls

MOHLTC Submission

For the calendar year of 2011, from January 1 to December 31:

i. Designated Delivery Agent (DDA) - SUDDEN CARDIAC ARREST

15 percent of the time, within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic, **Manitoulin-Sudbury DSB** will endeavour to have a responder equipped and ready to use an AED at the location of a patient determined to be in sudden cardiac arrest.

ii. EMS Designated Delivery Agent - CTAS 1

25 percent of the time, within 8 minutes from the time ambulance dispatch conveys the call information to the paramedic, **Manitoulin-Sudbury DSB** will endeavour to have a PARAMEDIC as defined by the Ambulance Act and duly equipped at the location of a patient determined to be CTAS 1.

iii. EMS Designated Delivery Agent - CTAS 2, 3, 4, 5

Manitoulin-Sudbury DSB will endeavour to have a PARAMEDIC as defined by the Ambulance Act and duly equipped at the location of a patient determined to be CTAS 2, 3, 4, 5 within a period of time determined appropriate by the DDA and noted below in Table 1, or as resources permit (level of effort):

CTAS 2, 3, 4, 5 EMS Delivery Agent Commitment

CTAS	Target time from paramedic received until on scene	% Target
2	**25 minutes**	**80%**
3	**25 minutes**	**80%**
4	**25 minutes**	**80%**
5	**25 minutes**	**80%**

Rationale for Submission

It cannot be overstated that the statistics we are reporting are truly best estimates at this point. The accuracy of the ADDAS database had been in question for some time now and the requirement for the CACC's to input CTAS at patient contact has only been in effect since March of this year. The reality is that at this point we have no other option but to evaluate the way we are. In future years there is expected to be proper reporting

requirements from the CACC's into the ADDAS database. Additionally, not only does our recently begun Electronic Patient Charting program establish an internal electronic database, it also requires that the paramedics complete the CTAS upon patient contact before submitting their documentation. As time progresses, reporting our response time strategy will become more and more accurate.

The approach that we have taken in reporting these first sets of numbers is to be quite conservative as noted in the previous issue report. Doing so allows us to grow and become more comfortable with the statistics that we are using without promising something to the communities that is impossible to deliver.

Timelines for Submission

The MOHLTC has set out some timelines regarding the new response time plan. It is suggested that every October 1st, the DDA's begin development of their response time plans for the next calendar year. On October 31st of each year each DDA is to submit their plan to the MOHLTC. The plans are to run by calendar year. Every March 1st beginning in 2012 each DDA is to submit performance reports to the MOHLTC detailing their actual responses for the previous year based on their plan. The legislation emphasizes that each DDA shall ensure that throughout the year the established plan is continuously maintained, enforced and evaluated and, where necessary, updated, whether in whole or in part. It is the intent of this department to evaluate the plan on an ongoing basis but to not alter the plan in year unless absolutely necessary. It is important to allow a plan to balance itself out over time, however if the plan is not meeting the appropriate needs it should be altered in year and the legislation allows such.

CONCLUSION

It is the desire of the EMS Department of Manitoulin-Sudbury DSB to submit to the MOHLTC our new response time plan as laid out on page 4 of this report. As indicated previously we will monitor the plan and its effectiveness and only pursue a change in the plan, in year, if absolutely necessary.

One last item to note is that at the time of producing this report there are some DDA's who are not preparing their submissions to their governing boards/councils as it appears as though the MOHLTC will introduce a one-year delay in this initiative for reasons as listed above. Regardless, should the delay not occur we are prepared to move forward using the Response Time Standards set out above.