



INFORMATION REPORT

TO: Chair and Members Emergency & Community Services Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: January 18, 2012	
SUBJECT/REPORT NO: Hamilton Emergency Services – Funding for One Additional Paramedic for McMaster University Medical Centre (HES12001) (City Wide) (Outstanding Business List Item)	
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SIGNATURE:	

Council Direction:

At its meeting of April 7, 2011, the General Issues Committee provided the following direction to staff:

8.4 2011 Requested Program Enhancements (Hamilton Emergency Services)

That staff be directed to bring a report back before June 30, 2011 with additional information and statistics, including the actual results now that the ABC is finished, how much offloading funding will assist, etc.

Information:

SECTION 1 – The potential impacts of the Hamilton Health Sciences Access to Best Care (HHS ABC) program on Hamilton Emergency Medical Service (EMS)

March 10, 2009, staff presented to City Council the results of the “Third Party Review Report on Additional Costs to EMS Resulting from Hamilton Health Sciences Access to Best Care Plan (HES09002) (City Wide)”. The key conclusions of the third party consultant regarding the potential impacts on Hamilton Emergency Medical Service

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(EMS) that would coincide with the implementation of the HHS ABC program were as follows:

1. “an increase in travel time and hospital off-load time components of the total ambulance task time for the ambulance transports that will be diverted to other hospitals after the MUMC change”.
2. Changes in community behaviour were not anticipated to have an impact on ambulance utilization. It was not expected that there would be an increase in persons calling for an ambulance to get to the hospital; especially citizens living west of McMaster University Medical Centre (MUMC).

In addition to these items, staff previously had been requested by Council to consider the potential impact in the following areas:

1. The potential for increased ambulance offload (transfer of care time) in the three (3) remaining adult emergency departments.
2. The potential for increased paramedic response time, in particular west of MUMC.
3. The potential of adverse medical outcomes for adult patients picked up by paramedics west of MUMC and being in transit to one of the three (3) remaining adult hospital emergency departments.

The following observations have been made by the Hamilton Paramedic Service to answer the questions noted above (see Tables 1 & 2):

Table 1

Potential Issue	Summary Impact	Comments
1. Predicted increase in travel time to other adult hospital emergency departments (Hamilton General, St. Joseph’s, and Juravinski)	Yes	The travel time has increased to the sites by approx. 3 minutes 30 seconds and it is estimated it would take ~ 5 minutes to return and it affects an approximated 5435 calls per year.
2. More persons using paramedic services, and particularly west of MUMC.	Yes & Yes	Since May 2011 there is an average increase of 253 EMS calls per month. In Flamborough, Dundas and Ancaster the call volume increased by 12% (96 new calls/month). In other areas of the City the call volume increased by 4%.
3. Increased Ambulance Hospital Offload Times at the 3 adult emergency departments.	Yes	Overall ambulance hospital offload time increased. All 3 adult sites increased and times decreased at MUMC (Table 2).

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4. Increased Paramedic Response Times City-wide and west of MUMC.	Yes & No	Paramedic response times increased City-wide while they were maintained west of MUMC post the August 2011 introduction of a Paramedic Response Unit 24h 7 days in that area.
5. Adverse outcomes of added ambulance travel time to the other 3 adult sites.	No	The paramedic managers are not aware of any adverse outcomes from adult destination MUMC bypass.

Table 2 – Paramedic Hospital Emergency Department Time

Sites	Average Time at the Hospital Emergency Department	
	7 months before MUMC change (Sept/10 to Mar/11)	7 months AFTER MUMC change (Apr/11 to Oct/11)
St. Joseph’s, Hamilton General, Juravinski	57:50 minutes	63:30 minutes
MUMC	59:13 minutes	37:13 minutes
4 Hospitals Combined	58:09 minutes	61:39 minutes

Summary of the Potential Impacts of the HHS ABC Program

Throughout 2011 the Hamilton Paramedic Service experienced new demands on the service in the duration and the frequency of calls and this continued after the conversion of the MUMC site to a pediatric only Emergency Department.

While there has been some increase in paramedic response times City-wide, the Hamilton Paramedic Service has been able to maintain emergency response time west of MUMC following the conversion of that site to a pediatric only emergency department.

In order to continue to protect the paramedic service performance it will be necessary to continue to pursue improvements in the hospital offload process and proactive emergency department diversion strategies such as Community Referrals by EMS (CREMS) and the Social Navigator pilot project. While the City of Hamilton explores these projects and the impact of the added resources approved by City Council, our community partners and the health care system continues to adapt to the HHS ABC program.

The next section of this report is an update on the impact of the pilot project approved by City Council on July 7, 2011 as Item 22, and amended, of General Issues Committee Report 11-023, July 29, 2011.

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SECTION 2 - Results of City of Hamilton Council Directed Pilot Interventions

Senior Level Meeting & Finances

- Staff was directed to convene meetings with the municipal and provincial representatives, the Local Health Integration Network (LHIN) and the local hospitals. To date staff has met with the LHIN CAO and the Vice Presidents of the hospitals to explore opportunities to enhance the effectiveness and oversight of the ambulance hospital offload mitigation strategies. An executive steering committee of senior City staff, senior hospital representatives, the Ministry of Health and Long-Term Care (MOHLTC) is being established with the first meeting scheduled in January 2012. The meeting including the elected officials will be convened in 2012.
- Staff was directed to seek out additional provincial funding opportunities to offset any additional costs related to Council directed enhancements.

Staff has secured additional Dedicated RN Offload funding of \$173,000 from the provincial government and it is plausible that this new funding will be increased threefold for the period of April 2012 to March 2012. The Dedicated RN Offload project receives 100 percent provincial funding. As a result of this new influx of funds City Council, during the 2012 budget process, will have an opportunity to discuss this new support and consider deferring the addition of one ambulance 12 hours a day, 7 days and the associated expense of ~\$583,000 to the 2013 budget deliberations.

Staff continue to lobby the provincial government to fund the remaining cost of the Council referred enhancements including; one Paramedic Emergency Response Unit, Vehicle Attendant, and, an EMS Offload Supervisor. A meeting with senior MOHLTC officials regarding provincial grant funding is tentatively scheduled in January 2012.

Council Directed Pilot Projects

Council directed staff at the July 7, 2011 as Item 22, and amended, of General Issues Committee Report 11-023, July 29, 2011 to implement a pilot project to assist in offsetting any impacts of the HHS ABC program on the Hamilton Paramedic Service and report back to Council on the outcomes. The pilot project interventions and the preliminary results are noted in the following section.

a. 24-HOUR 7-DAY WEEK PARAMEDIC EMERGENCY RESPONSE UNIT

This vehicle was put in place in August 2011. The objective of this vehicle was to “stop the clock” and contain or reduce the response times in the western sections of the City. Based on the results of August, September and October, despite sustained increases in call volume and an increase in the overall time in the hospital emergency departments,

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the response time of the first paramedic on scene in the western areas has been contained or has improved (see Table 3).

Table 3

Area	July 2011 Paramedic Response Time 9 out of 10 calls First EMS Vehicle	November 2011 Paramedic Response Time 9 out of 10 calls First EMS Vehicle
City-Wide	10:29 minutes	10:36
Ancaster	11:49	11:40
Dundas	10:05	08:21
Flamborough	17:26	17:31

In addition to containing the 90th percentile paramedic response, worthy of note is the improvement observed in reducing the frequency that the first paramedic emergency response time is greater than 20 minutes in the areas west of MUMC. Table 4 highlights these results since August 2011 when that vehicle was introduced. In the three (3) areas of the City that would derive the greatest direct benefit from the Paramedic Response Unit these events decreased, while in the other areas of the City the frequency of these events increased.

Table 4

Area	Average Number of times per month the first paramedic on scene is > 20 minutes	
	Jan 2011 to August 2011	August 2011 to Nov 2011
Other 3 areas combined Hamilton, Stoney Creek, Binbrook	2	3
Ancaster	1	0
Dundas	1	0
Flamborough	5	4

b. ONE VEHICLE STATION ATTENDANT

The temporary staff for this position started their orientation on November 7, 2011. Hamilton EMS will be able to provide preliminary observations in the first quarter of 2012 related to the intended benefits. Having this position did assist Hamilton EMS in the response to MOHLTC Service Review recommendations regarding infection control procedures and to ensure that equipment and supplies are readily available to staff.

c. ONE OFFLOAD SUPERVISOR – COMMUNITY INITIATIVES

This position began September 6, 2011. In the first three months the Paramedic Supervisor assigned to this role has identified areas for improvements in the offload process. Internally, the Hamilton Paramedic Service is seeking to increase the frequency that paramedic crews are assigned two patients so that one ambulance can be re-deployed. In the initial stages of this project pairing patients increased from five (5) time per week to 12 pairings per week, highlighting the potential for this intervention to expand resource capacity and assist with other related matters such as extended paramedic shifts and paramedic meal break coverage. As this program continues the Hamilton Paramedic Service will be investigating the coordinating function that this position can play in expanding community initiatives that promote diversion strategies to reduce or contain EMS call volumes and hospital emergency department utilization for primary care health. The hospitals have been asked to consider expanding the categories of patients that the Dedicated Offload Nurse accepts and to implement other strategies that may decrease the ambulance offload time and tabled with the hospital executives in 2011.

The evaluation of the various components of the Council approved HHS ABC mitigation project continues and further updates will be provided to Council.

SUMMARY OF REPORT – Sections 1 and 2

In general, the Hamilton Paramedic Service has observed most of the changes in the system as predicted by the third party consultant regarding the potential influences that could follow the implementation the conversion of MUMC to a pediatric only emergency department.

The Hamilton Paramedic Service has experienced; an increase in the transport time for the paramedic to take patients to other sites; an increase in the ambulance hospital offload time at the three (3) adult sites; and, an increase in the utilization of paramedic services as a means to get to the hospital. Throughout 2011 the Hamilton Paramedic Service has experienced increased service demands.

Following direction given by Hamilton City Council on July 7, 2011 the Hamilton Paramedic Service staggered the implementation of the pilot interventions that would assist in mitigating any potential effects of HHS ABC program. The Paramedic Emergency Response Unit introduced in August 2011 has assisted the community to improve paramedic response time performance west of MUMC. The Paramedic Offload Supervisor introduced in September 2011 requires more evaluation to verify its benefits. The Vehicle Station Attendant position started in November 2011 and there have been some rapid infection control and equipment supply process improvements.

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Hamilton EMS will continue in 2012 to confer with all levels of the local hospital front line staff and senior officials to explore ways to reduce the hospital emergency transfer of care time while engaging the elected officials in mechanisms to fund any approved Paramedic Service enhancements with the objective to minimize impacts on the municipal tax levy. Staff will provide further performance updates on the potential impacts of the HHS ABC program throughout 2012 and mitigation strategies.