CITY OF HAMILTON

COMMUNITY AND EMERGENCY SERVICES DEPARTMENT

Hamilton Paramedic Service Division

TO:	Chair and Members Emergency & Community Services Committee
COMMITTEE DATE:	November 23, 2015
SUBJECT/REPORT NO:	Community Paramedic Program (CES15060) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Michael Sanderson 905-546-2424 Ext. 7741
SUBMITTED BY: **SIGNATURE:**	Joe-Anne Priel General Manager Community and Emergency Services Department

RECOMMENDATION

That the Paramedic Service complement be adjusted by decreasing 1 FTE Paramedic Supervisor position and increasing the Community Paramedic positions by 2.0 FTEs with no additional levy impact.

EXECUTIVE SUMMARY

In the 2015 budget process, Council approved a three phased Paramedic Service staffing enhancement including a total of 31 Full Time Equivalent staff with a gross fully annualized cost at the end of the process of $3,570,955 (net levy impact $1,785,478).

Phase 2 of this enhancement, scheduled for November 2015, included the addition of one (1) full time supervisor, at a total annualized cost of $133,300 for wages and benefits (net levy impact $66,650) to ensure staff supervision and further improve hospital offload delay management activities.

Report CES15059 outlined the impact of the staffing enhancements to date and the operational performance results. After careful review, staff have concluded that the allocation of an additional full time supervisor to improve hospital offload delay management is not warranted at this time. Therefore staff are recommending that the funding for one (1) full time equivalent approved for the supervisory position be instead utilized to support, up to two (2) full time equivalent paramedic positions for the Community Paramedic program.

On August 27, 2014 the Ministry of Health and Long Term Care (MOHLTC) notified the City that our grant application in the amount of $300,000 for initial development of a Community Paramedic program was approved. This approval restricted the grant funding to the approved project and required that it be completed by July 31, 2015.

Subsequent correspondence with the MOHLTC resulted in the program being extended to October 31 2015 to provide a full year of project operation.

The objective of the project was outlined as being: "*for the recipient to build on the existing Community Referral by EMS (CREMS), Community Health Assessment by EMS (CHAP EMS) and Social Navigator Paramedic (SNP) programs to establish an Expanded Role Community Paramedic that will enhance the delivery of community, social and health services to patients seen by Hamilton EMS. The Expanded Role Community Paramedic will accomplish this by providing scheduled home visits that include an overall health assessment to evaluate health risk factors, provide community care referrals and system navigation, and be an advocate for patients outside of the emergency setting, all within the patient's familiar surroundings (i.e. the patient's home*)."

On November 3 2015 the MOHLTC provided a further one time grant of $122,500 to enable continuation of the demonstration project to March 31, 2016.

The Community Paramedic program has proven to be a valuable community and health care resource which also mitigates against the growth of our service demand and reduces some unnecessary patient transport to hospital. Allocation of the currently earmarked supervisory enhancement funding, in conjunction with other third party funding resources, would provide continuity of the Community Paramedic program.

Alternatives for Consideration – See Page 6

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial:
The requested funding in the amount of $133,300 gross (net levy impact $66,650) for one full time supervisor is already included in budget enhancement approvals for 2015. The repurposed funding will be used in conjunction with other third party funding to provide up to two (2) full time equivalent paramedic positions in the Community Paramedic program.

The wage and benefit cost for two full time Community Paramedics will be approximately $198,000 for the 2016 calendar year. The MOHLTC grant funding covers the first quarter of the year leaving a balance of $148,500 to fund the positions through to December 31, 2016. The gap to be funded by partner agencies to maintain the two positions for the year is $15,500. Discussions with partner agencies indicate this support is very likely.

For 2017, the funding gap requiring partner support is approximately $65,000. If partner funding is not secured prior to the 2017 budget process the gap will be addressed at that time.

Staffing:
One full time equivalent position was previously approved as a supervisor and will be shifted to a Community Paramedic position. A second full time equivalent position for the 2016 fiscal year will be required to be allocated. Continuation of the second full time position into the 2017 fiscal year will be dependent on partner third party funding.

Legal:
There are no legal implications associated with Report CES15060.

HISTORICAL BACKGROUND

Community Paramedic programs, intended to reach out in a proactive manner to citizens at increased risk of requiring use of ambulance and health care resources, and to mitigate the use of those resources, is an emerging trend.

While the City of Hamilton has engaged to a small extent in these activities through the Community Health Assessment by Paramedic (CHAP) program and the Community Referral by Emergency Medical Services (CREMS) these programs have, for the most part been managed without dedicated staff.

The Social Navigator program, with one paramedic assigned full time to work with Hamilton Police Service and various other social agencies focussed on mitigating resource use, and recidivist behaviour, by special high risk population clients has demonstrated some reduction in use. Currently this single position is funded through the Neighbourhood Initiatives program with equivalent matching funds being provided through the MOHLTC 50-50 funding support.

In 2014, the Province announced they would be supporting the expansion of community paramedicine programs to improve access to home care and community support services for seniors and other patients with chronic conditions. They invested a total of $6 million provincially through grant funding, with a maximal grant to any one applicant of $300,000 to support the expansion and development of community paramedicine initiatives across the province. These programs allow paramedics to apply their training and skills beyond the traditional role of emergency response.

Hamilton Paramedic Service (HPS) submitted a proposal to develop, implement, and evaluate a Community Paramedic Program with the goal of enhancing the delivery of community, social and health services and decrease 911 calls by patients identified as frequent users or at risk of relying on paramedic and emergency department services.

HPS was successful in that grant application which provided full 100% grant funding to train and deploy two full time Community Paramedics, access any required equipment, and to complete an outcome evaluation of the program.

Contingent on further funding our next steps include a plan to focus on streamlining relationships and processes to enhance access to the program. Some of the initiatives that we have already begun will be completed over the next 6 months including:

- Continuation of stakeholder meetings to forge enhanced relationships with other providers in Primary Care, Acute Care, Public Health, Police Services and Community care.
- Development of a streamlined process that further leverages specific strengths of providers. This process will explicitly address both health care and health (social determinants of health) needs.
- Completion of the development of a consolidated community paramedicine electronic chart.
- Development of a formal project plan, ongoing quality improvement, evaluation plan, and knowledge translation plan aligned with health quality outcome best practice guidelines and indicators.

The original grant funding from the MOHLTC was to develop and evaluate a program to improve outcomes, mitigate against ambulance and hospital use, and to develop longer term funding platforms in conjunction with partner agencies such as hospitals, Healthlinks programs, Community Care Access Centre, and the LHIN who are also benefitting from the program. While funding was originally provided to support the program to the end of October 2015 this has now been extended to the end of March 2016.

In the absence of ongoing funding from either the MOHLTC, or from our partner agencies who are directly benefitting from the impact of this program, we will not be able to support it beyond March 2016.

The wage and benefit costs for two full time equivalent Community Paramedic positions is $198,000. These costs for the first quarter of the 2016 fiscal year are already funded by MOHLTC grant funding leaving a balance of $148,500 required to run the program through to the end of 2016. Repurposing of the currently approved supervisory enhancement funding in the amount of $133,300 leaves a balance of $15,500, or approximately one month operating costs, to be secured through partner funding. We anticipate from discussions with partner agencies that this funding will be forthcoming.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

There are no policy or legislated requirement issues

RELEVANT CONSULTATION

Extensive consultation on the development and implementation of the Community Paramedic project was undertaken for the original submission with support for the program being expressed by:

- Local Health Integration Network (LHIN) for Hamilton, Niagara, Haldimand, Brant (HNHB)

- HNHB Community Care Access Centre (CCAC)
- Hamilton Health Sciences Corporation
- St. Joseph's Healthcare Hamilton
- Emergency Services Steering Committee, HNHB
- HNHB Nurse Led Outreach Team (Hosted by Shalom Village)
- Hamilton Central Health Links
- Hamilton East Health Links
- Hamilton West Health Links
- McMaster University, Department of Family Medicine and Family Health Team
- CityHousing Hamilton
- Hamilton Police Service, Social Navigator Program
- Centre for Paramedic Education and Research (CPER)

ANALYSIS AND RATIONAL FOR RECOMMENDATION

The goals of the program were to enhance patients experience in accessing community, social and health services as well as decrease their reliance on paramedic and emergency department services.

The program accomplished this by providing scheduled patient visits by a trained community paramedic in the patients' home. An overall health assessment and interview was performed to evaluate the patients' health risk factors and community care needs. In addition, health care and health system education was delivered if needed and system navigation was provided. All visit findings or care/service plans were shared with the patients' primary care provider (i.e. family physician) and community paramedics were advocates for their patients outside of the emergency setting to ensure they were not left to fall through the cracks of the system.

The program identified and enrolled known patients who were frequent systems users, in this case patients known to have been transported by ambulance to hospital five (5) or more times in the preceding 12 month period. Inclusion criteria was varied as the system developed and experience was gained to ensure maximal utilization of available staff.

The program also accepted referrals for patients categorized as being at risk of using either paramedic or emergency department services. These referrals came from our frontline paramedics and a number of key community partners including local emergency departments, Central Ambulance Communications Centre, Catholic Family Services, City of Hamilton Housing, Health Links and the HNHB Community Care Assess Centre. Program exclusions, such as residents in long term care facilities, were defined.

Using a three home visit model, the Community Paramedic (CP) assessed the patient, collected information, proposed a plan of action for the patient, implemented the plan and finally transitioned the patient out of the program. The patient plans often included

community service referrals, joint services visits, communicating finding and suggested plans with the patient's primary care provider, and in addition, educating the patient on the use of paramedic and emergency department services and identified health risks. In many cases the CP was the healthcare advocate for the patient and helped the patients navigate the local social and health services.

Electronic patient records were developed and maintained by the CP after each patient encounter. Patient notes were kept in a Microsoft Word document and the patient assessment information was collected in Microsoft Excel. A team of researchers from McMaster University has been contracted within the provided MOHLTC funding to perform the data analysis including Hamilton Paramedic Service call data, hospital ED and hospital admission data on all of the consented patients. This evaluation is ongoing and will continue until 12 months past the last patient was transitioned from the program.

The program identified 282 patients who were frequent users, contacts via the CREMS program, and through various community partner referrals. A number of these were excluded using various criteria such as declined participation, availability of other health or social service supports, or other reasons.

The remaining 89 patients were enrolled and signed consent to participate in the program. On average, each client received 2.5 visits and 193 assessments were completed by the CP in the patients' home or dwelling. Of the consented patients there was a 55% - 45% female to male distribution with the majority in the 65 to 84 age group. For this frequent caller group we noted a 59.9% decrease in paramedic service transports, an average drop of ten paramedic responses per patient in this frequent user population.

Utilizing a client feedback survey we observed a reported very positive impact on the patients enrolled into the program in all explored dimensions. Most importantly, the program was successful in ensuring that the majority of the patients' needs were met and that the care was delivered at the right time and in the right setting, usually the patients' place of residence.

No direct adverse outcomes have been identified as result of the program.

As part of our program evaluation and outcome measures, the data was compiled and is in the process of evaluation by McMaster researchers, on patient usage of paramedic services, emergency department presentations and hospital admissions. While the full results are not yet available, the preliminary results of the paramedic service usage data are looking very good at this time

When considering the 60% drop in paramedic transports for the small frequent user population, and extrapolating this over one year, this represents a reduction of 57% (or 188) of 911 calls from the frequent users. Our evaluation further noted that patients in

this category had a significantly higher than average offload delay period, approximately 3.2 hours.

From a hospital perspective, with an average cost of a hospital stay being $5,149 and assuming a conservative 60% discharge rate, the total systems savings are significant. Much of these savings are broader health care and social service savings as opposed to reduced costs for the Paramedic Service.

Preliminary results for the Community Paramedic program are very promising. Even more exciting are the lessons learnt from this project and the potential to link silos together and provide a more holistic approach to dealing with complex high use populations, those challenged by lower socioeconomic status, those with challenges related to mental health and addictions, and those who are marginalized and have difficulty accessing health care.

ALTERNATIVES FOR CONSIDERATION

The alternative for consideration would be to reduce the April 8, 2015 (GIC Report 15-004 – Budget) approved Budget enhancement in the amount of $133,300 which would have a net levy savings of $66,650.

Pros: Reducing the budget enhancement by $133,300 is a savings.

Cons: The Community Paramedic Program, which has been demonstrated to reduce the growth in service demand by mitigating the frequency of ambulance responses to frequent users, and to reduce the transport of these frequent use patients to hospital, would remain wholly unfunded. Starting the program up again at a later date would still require funding and result in a duplication of the start-up activities and relationship development that the MOHLTC initial funding has provided to us.

ALIGNMENT TO THE 2012 – 2015 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

Strategic Objective

1.5 Support the development and implementation of neighbourhood and City wide strategies that will improve the health and well-being of residents.
1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

Strategic Objective

2.3 Enhance customer service satisfaction.

APPENDICES AND SCHEDULES ATTACHED

None