The County of Peterborough Joint Services Steering Committee

To: Chair and Members of Committee

From: Bob English, Chief, Emergency Medical Services

Date: September 20, 2012.

Subject: Dedicated Nurse Program Business Case Submission

Funding for Peterborough County/City EMS – 2012-13

Recommendation: Received For Information Only

Financial Impact: MOHLTC 2012-13 Funding

Executive Summary:

This report is for JSSC information only. The business case was submitted in June to the MOHLTC for consideration. Recently we were advised that our business case was approved by MOHLTC and increased funding dollars will be provided in the 2012-13 fiscal year.

The County of Peterborough, being responsible for ensuring the proper provision of land ambulance services within the County and City of Peterborough, has been identified as one of several Upper-Tier Municipalities and Designated Delivery Agents (UTM/DDAs) affected by significant and persistent ambulance off-load delay pressures. In 2008 the impact of this off-load delay situation was examined and, through a memorandum of understanding with the Ministry of Health and Long Term Care (MOHLTC), temporary funding was provided to the County of Peterborough on the condition that the County enter into an agreement with the local hospital to provide a nurse within the Emergency Department (ED) who would be solely dedicated to receive, treat and manage patients in non-life threatening conditions that have been brought to hospital by ambulance. In the County of Peterborough, a memorandum of understanding was established with Peterborough Regional Health Centre (PRHC), being the sole hospital within the UTM contributing to significant and persistent off-load delay pressures.

On November 17, 2008, utilizing funds provided by the MOHLTC, the program was initiated at PRHC. Those funds provided for dedicated nurse coverage for 8 hours per day, 7 days per week. The peak period of off-load delay pressure was examined and the time period of 12:00PM to 8:00PM daily was identified as being the period of coverage that would have the most positive impact utilizing the funds provided.

During the initial implementation phase of the program, PRHC experienced human resource issues causing difficulty filling the position on a consistent basis. The issues described as contributing to the difficulty filling the position included; a lack of certainty of length of program, nurse shortage, and difficulty scheduling due to coverage shifts being only 8 hours per day while all hospital shifts were 12 hours per day.

Throughout the first 12 to 18 months of implementation, Peterborough EMS continually monitored the effects that the dedicated nurse program had on service delivery. Considering the aforementioned difficulties and the limited time period that this program had been in place, there existed tangible evidence of the value of this program as it relates to the cost and efficiency of land ambulance service delivery in the form of:

- Reduction in the number of hours of up staffing EMS vehicles to meet deployment requirements to respond to emergencies;
- Reduction in Transfer of Care Time Reported by PRHC;
- Reduction in the number of missed or delayed paramedic meal breaks;
- Reduction in the number of incidents of off-load delay;
- Reduction in the total number of ambulance off-load hours.

While the first year of data derived from the program indicated that there was a positive impact, Peterborough EMS expressed its opinion through numerous avenues that the full potential could not be realized without enhancement. Subsequently, Peterborough EMS was provided increased funding, to allow for the program to operate 12 hours per day, 7 days per week beginning on April 1st, 2010. This allowed for daily hours of operation for the program from 9:00AM - 9:00PM.

Further enhanced funding was announced in the latter part of 2011, whereby in December, our program expanded coverage to 24 hours per day 7 days per week.

2012-2013 Program Requirements:

Based on performance measures from the previous/current operating period of this program, Peterborough EMS proposes to continue with the program utilizing the same staffing as follows:

Hospital Selection:

 PRHC being the only hospital within the UTM experiencing substantial and persistent off-load delays and as such is the only hospital considered in this proposal.

Staffing Requirements:

- 8760 hours for the period of March 31/12 to April 1/13
- Dedicated nurse coverage 24 hours per day, 7 days per week.

Note: According to the College of Nurses, patients cared for by an RPN must have a predictable outcome. Given that patients arriving at the ED by ambulance would not yet have seen a physician, or have a diagnosis, they would be classified as unpredictable especially the CTAS Level 3 patients. In the best interest of promoting safe patient care it is necessary that RNs remain as the dedicated nurse. In addition, at PRHC, only RNs with a minimum of two years' experience can perform the function of patient triage.

2012/2013 Projected Costs:

Cost assumptions for costs of this proposal are based on the following:

- 24 hours per day coverage X 365 days per year = 8760 hours
- The rate of pay \$55.93 per hour
 - → Same rate of pay as 2011-12. No incremental increase until April 1, 2013.
 - → Hourly average inclusive of applicable benefits, shift premiums and holiday pay.
- Total cost of wages = \$498,946.80

Operational Monitoring:

Over the past 4 operational periods for the Offload Nurse Program, Peterborough EMS has successfully negotiated a Memorandum of Understanding with PRHC which includes all expectations and deliverables of the facility in regards to the Offload Nurse Program. These deliverables include hours of operations, duties and assignments for the position and reporting requirements of the facility. Further, PRHC and Peterborough EMS have established a working group consisting of Senior EMS Management and Senior PRHC Staff from the hospital including the ED Manager. This working group meets regularly with a standing agenda item to monitor and review operation of the Offload Nurse Program.

Record Keeping/Documentation Requirements:

A template for consistent tracking of ambulance off-load times has been developed and implemented by the ambulance off-load nurse in order to provide accurate data as mandated by the MOA with the Ministry. This data captures ambulance arrival, disposition and offload times during the hours of Offload Nurse coverage. This data is forwarded by PRHC staff to Peterborough EMS at regular intervals.

To further add to the accuracy of the data, Peterborough EMS has included a Transfer of Care time field and record within our iMedic electronic Ambulance Call Report (ACR). It has been found that this data source is far more reliable and accurate in establishing true impact of the Offload Nurse Program. The electronic ACR now captures true arrival, triage and offload times for each patient carried. Historically, ADDAS T6-T7 intervals have been used however Peterborough EMS feels that this data does not project a true image of the actual loss of available ambulance times caused by offload delay pressures.

Through collection of this data by the aforementioned means, Peterborough EMS will ensure accurate collection that will be utilized to provide reporting and program feedback to the ministry as required.

Continued Operational Pressures:

Peterborough EMS has continued to utilize call volume data collected through ADDAS and iMedic Patient Charting software. In the past year, Peterborough EMS has experienced a 5% increase in emergency calls, 6% increase in total off-load times and related expenses, and a 25 second increase in our 90th percentile average response times. In the same period of time, PRHC has experienced a 7.5% increase in patient flow through their ED. Approximately 90% of the patients transported by Peterborough EMS are taken to the ED at PRHC that accounts for an average patient load of 34 patients per day delivered to PRHC. All indications are that this trend will continue to increase. We are optimistically monitoring our new enhanced program to further curb our off-load times.

Summary:

Through the cooperative and collaborative relationship established with PRHC, the application of the funding provided by the MOHLTC for the Dedicated Nurse Program has had a very positive impact on our community. The benefits realized include a number of efficiencies and improvements in EMS response and operations as well as improved patient flow and care within our health care facility.

As indicated at the beginning of the report, this business case was approved as submitted for the amount of \$498,946.80

Respectfully submitted, Robert S. English, Chief