SUBJECT: Public Access Defibrillation (PAD) (HES07005(c)) (City Wide)

RECOMMENDATION:

(a) That Hamilton Emergency Services be authorized and directed to receive any available grants from the Heart and Stroke Foundation of Ontario and Hockey for Hearts to purchase and/or subsidize the cost of Public Access Defibrillators, training and other related costs.

(b) That the General Manager/Chief of Hamilton Emergency Services or his designate be authorized and directed to negotiate the applicable and appropriate agreements, in a form satisfactory to the City Solicitor, between the City of Hamilton and the Heart and Stroke Foundation of Ontario and Hockey for Hearts, required to receive the grant(s) for the purchase of Public Access Defibrillators, training and other related costs.

(c) That the General Manager/Chief of Hamilton Emergency Services or his designate be authorized and directed to negotiate the applicable and appropriate agreements, in a form satisfactory to the City Solicitor, between the City of Hamilton and the Hamilton YMCA, Hamilton YWCA, Hamilton-Wentworth School Board, Hamilton-Wentworth District School Board, Redeemer University College, Hamilton District Christian High School, Mohawk College and other not-for-profit schools; subject to their interest, to extend the City of Hamilton Public Access Defibrillation program, in accordance with the principles, as outlined in Appendix A to Report HES07005(c).

Jim Kay
General Manager / Chief
Hamilton Emergency Services
EXECUTIVE SUMMARY:

Hamilton Emergency Services, Emergency Medical Services (HES-EMS) is requesting the support of Council to expand the existing city-wide PAD program from 68 PAD sites to as many as 190 PAD sites in local YMCA, YWCA and not-for-profit schools.

EMS proposes to expand the program accordingly if the Heart and Stroke Foundation of Ontario (HSFO) provide the necessary one-time grant of $665,000 for the PAD units and training in the noted facilities and by entering into appropriate agreements with those agencies. Under the proposed model the cost to the City will be for services in kind to support the community agencies when one of their PAD units is used, and in providing other quality assurance support functions. This request requires no change in the current EMS FTEs, and no change in Capital or Operating Budgets.

By endorsing this proposal and receiving the HSFO grant funding, the City and its community partners will be supporting many objectives of the City’s Strategic Plan, and contributing to improving the potential of surviving an out-of-hospital sudden cardiac arrest.

BACKGROUND:

With the support of Council in 2007, EMS was designated as the city-wide lead for public access defibrillation. On the direction of Council EMS established a Memorandum of Understanding (MOU) with the City’s Legal Services Division that supports the relationship with the HSFO and the City in this project. To date, EMS has received two (2) up-set limit grants ($225,000 and $52,500) from the HSFO to purchase 65 PAD units and facilitate the training of staff in CPR and PAD. In late 2008, “Hockey for Hearts” donated three (3) PAD units. By the first quarter of 2009 there will be 68 PAD sites in City facilities and over 1,000 City staff trained.

As of February 18, 2009, the HSFO is reviewing another request from the EMS (subject to Council approval) for additional PAD units and training submitted in advance to meet the HSFO submission deadline. In this round of applications the HSFO is considering other public sites including schools.

EMS has reached “in principle” agreements with key management staff at the five (5) Hamilton “Y’s”, Hamilton-Wentworth District School Board, Redeemer University College, Hamilton District Christian High School, Mohawk College and other not-for-profit schools subject to their interest to submit the application to the HSFO. McMaster University is not specifically included at this time as they already have an established first response team that is equipped with defibrillators and provide an on-site response across the Main Street West Campus. Many HES-EMS teams assisted in establishing the University Students’ First Response Team in the early 1980s.

Subject to Council’s endorsement, EMS will work with the City’s Legal Services Division to enter into formal agreement(s) with each of these agencies to formalize the roles and responsibilities of the parties (see Appendix A to Report HES08005(c)).
Subject to the HSFO support for the City’s application in whole or part, EMS will facilitate the one-time deployment of the PAD units and training for the organizations; and, provide ongoing in-kind support when one of these designated PAD units is used in sudden cardiac arrest resuscitations within the City.

**ANALYSIS/RATIONALE:**

It is challenging for any emergency service to guarantee that a defibrillator will consistently be at the side of a victim of sudden cardiac arrest within six (6) minutes using traditional response models given that much of the time to respond is consumed in processing the 911 call and travelling to the site. Medical research has demonstrated that the most effective solution to improve survival of out-of-hospital sudden cardiac arrest is to train the public in CPR and defibrillation and place the defibrillators on site. In this proposal the City will be using 100% of the HSFO grants to purchase the units and provide the initial training, and no further adjustments are required in the EMS Operating Budget.

As added benefit, as of 2011, based on new Land Ambulance Response Time Targets, the use of any defibrillator in an out-of-hospital sudden cardiac arrest will be credited with “stopping the clock” for the municipal response time. By leveraging on the HSFO grant funding for PAD units, the municipality is improving its potential response time performance. Based on the current medical literature, EMS anticipates that at least four (4) persons in the community per year will have PAD performed on them. In 2008, in the current PAD program with 50 sites across Hamilton, the PAD was utilized on two (2) occasions including the recent save in December 2008 (refer to Appendix B attached to Report HES07005(c)).

**ALTERNATIVES FOR CONSIDERATION:**

EMS could focus additional efforts on more City facility sites. This is not the preferred option at this time as the level of effort of the other City Divisions will be greater with this model than the proposed.

**FINANCIAL/STAFFING/LEGAL IMPLICATIONS:**

**Financial Implications:**
None.

If EMS does not acquire the full funding from the HFSO to expand PAD program to area schools and community groups, EMS will scale the program according to the grant received.

**Staffing Implications:**
None.
Legal Implications:
The agreement(s) between the City and the HSFO, and any other participating agencies will be negotiated on a case-by-case basis. The content of the agreement(s) (i.e. the terms and conditions) will require review and approval by HES and the City Solicitor.

POLICIES AFFECTING PROPOSAL:
None.

RELEVANT CONSULTATION:
Corporate Services Department, Legal Services Division
Hamilton-Wentworth School Board
Hamilton-Wentworth District School Board
Hamilton District Christian High School
Redeemer University College
Mohawk College
Hamilton YMCAs
Hamilton YWCAs

CITY STRATEGIC COMMITMENT:
By evaluating the “Triple Bottom Line”, (community, environment, and economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☑ Yes ☐ No
Public services and programs are delivered in an equitable manner, coordinated, efficient, effective and easily accessible to all citizens. This program provides life saving interventions based on the most current medical literature in an efficient manner across all communities.

Environmental Well-Being is enhanced. ☑ Yes ☐ No
Human health and safety are protected. Early recognition and aggressive prevention will greatly enhance the safety for the community and City staff.

Economic Well-Being is enhanced. ☑ Yes ☐ No
Investment in Hamilton is enhanced and supported.
This program will leverage grants from outside of municipal sector and contribution from community partners and the public. Provides enhanced services at subsidized costs to the tax payer.

Does the option you are recommending create value across all three bottom lines? ☑ Yes ☐ No
Do the options you are recommending make Hamilton a City of choice for high performance public servants?  ☑ Yes  □ No
The creation of a respectful, desirable and supportive workplace.  
This program enhances the health and safety for the public as well as staff.  Utilizes the advanced skill sets of staff, while encouraging community volunteerism.
The intended roles and responsibilities of each agency.

<table>
<thead>
<tr>
<th>Roles and Responsibilities</th>
<th>HES-EMS</th>
<th>Partner Agency (i.e. Schools)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application to the HSFO</td>
<td>X</td>
<td>Endorsement</td>
</tr>
<tr>
<td>Purchase of the PAD units and training from HSFO Grant</td>
<td>X</td>
<td>None</td>
</tr>
<tr>
<td>Receipt of PAD units (to be sent directly to partner agency</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Initial Training in CPR and PAD</td>
<td>Limited to initial connection to Zoll Training agent</td>
<td>X Report numbers trained to EMS</td>
</tr>
<tr>
<td>Any on-going Training in CPR and PAD</td>
<td>Limited to Annual Newsletter for all PAD sites</td>
<td>X Once annually - report to EMS number of any training including training devices</td>
</tr>
<tr>
<td>Use of a PAD unit</td>
<td>Deploy supervisor to switch out with Spare PAD, collect patient data, replace supplies, &amp; EMS PM to send data to hospital Follow-up report to HSFO</td>
<td>X Ensure internal reports complete Any CISM deemed appropriate for person using the PAD unit</td>
</tr>
<tr>
<td>Daily, monthly and annual check of PAD units in place</td>
<td>Receive monthly summary report done</td>
<td>X</td>
</tr>
<tr>
<td>Maintenance of PAD units (i.e. change of battery, change of PADS, compartment door alarm batteries)</td>
<td>Receive annual report that these are done Provide spare PAD units as needed at cost recovery if vendor unable to</td>
<td>X</td>
</tr>
<tr>
<td>Capital Replacement of PAD units (end of life -10 year life expectancy - or lost)</td>
<td>None</td>
<td>X</td>
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