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DEFIBRILLATOR SUPPLIES, MAINTENANCE, AND SUPPORT SERVICES

The Health and Emergency Medical Services Committee recommends the adoption of the recommendations contained in the following report, September 18, 2008, from the Commissioner of Community and Health Services:

1. RECOMMENDATIONS

It is recommended that:

1. The Region enter into contract(s) with Physio-Control Canada (a division of Medtronic of Canada) for monitor-defibrillator and automated external defibrillator supplies, maintenance, and support services, with a total annual cost of approximately \$183,060 for a one-year period with the option to renew for two additional 12-month periods at the discretion of the Commissioner of Community and Health Services upon satisfactory performance.
2. The Commissioner of Community and Health Services be authorized to sign any related contract(s), subject to review by Legal Services.

2. PURPOSE

This report seeks authorization for the Region to purchase consumable supplies, ongoing maintenance, and support service from Physio-Control Canada (a division of Medtronic Canada) to maintain compatibility with existing York Region monitor/defibrillator and automated external defibrillators (AEDs).

The purchasing by-law requires that, with respect to awarding a sole source purchase contract if the total cost exceeds \$100,000, the award shall be subject to Council approval.

3. BACKGROUND

Monitor-defibrillators are required in ambulance and paramedic response vehicles in accordance with the *Ambulance Act*

Monitor-defibrillators are controlled medical devices used by paramedics in the treatment of medical emergencies. These complex devices provide monitoring of a patient's heart and lung functioning and in cases of cardiac emergencies provide an electrical cardiograph (ECG) of the heart, an electrical shock to the heart (defibrillation), or external cardiac pacing (pacemaker) as the case may be. Monitor-defibrillators are

required in each ambulance and paramedic response vehicle in accordance with standards in the *Ambulance Act*. The Region owns fifty-one Physio-Control LifePak-12 models and three Physio-Control LifePak-1000 models.

AEDs used in the Heart Alive Program are directly compatible with the monitor-defibrillators used in the EMS emergency vehicles

AEDs are controlled medical devices used by trained responders in sudden cardiac arrest emergencies. These devices monitor and interpret the heart rhythm of a patient experiencing sudden cardiac arrest and deliver an electrical shock to the heart, if required. Through the Region's Heart Alive Program, regional and municipal staff and York Regional Police have been trained and certified in the use of these automated devices. The Region owns sixty-five Physio-Control CR-Plus models located in 29 locations. The AEDs used in the Heart Alive Program are directly compatible with the monitor-defibrillators used by paramedics within the Region resulting in optimum transfer of care between AED providers and EMS.

Ongoing readiness of supplies and device maintenance are needed to ensure service delivery expectations

Monitor-defibrillators require three types of supplies:

1. Disposable supplies include sensors and electrodes that connect the patient to the device and are designed for single-patient use.
2. Accessory equipment includes batteries, ECG cables, and non-invasive blood pressure cuffs that are reused.
3. Information management software is used to extract electronic information used for quality control from these devices.

Monitor-defibrillators and AEDs are biomedical devices that require ongoing assessment, maintenance and upgrading to ensure they are functioning at the required standard.

4. ANALYSIS AND OPTIONS

Physio-Control Canada is the current vendor of monitor-defibrillators and AEDs owned by the Region

Physio-Control Canada (a division of Medtronic, Inc.) is the world's largest provider of defibrillators with over 650,000 units in operation. The company has a strong Canadian presence and focused operations. All York Region monitor-defibrillators and AEDs have been purchased from Medtronic, Inc. (prior to its affiliation with Physio-Control Canada). Its Canadian head office is located in Mississauga where a technical team, providing 24/7 service, is maintained.

The proprietary nature of the hardware and software within the Physio-Control devices and the high liability associated with any failure require due diligence on the part of the Region. Only approved disposable/accessory equipment can be used with the devices and only approved personnel may perform ongoing assessment and maintenance of the devices. These devices are regulated by Health Canada.

Relationship to Vision 2026

Properly maintained and functional medical devices are directly linked to York Region's Vision 2026 goals of Responding to the Needs of Our Residents.

5. FINANCIAL IMPLICATIONS

Funding for these supplies and service are available within the EMS Branch's approved budget. The annual cost of supplies is estimated at \$87,000. Annual cost of maintenance and support services for the EMS monitor-defibrillators and AEDs is estimated at \$96,000.

6. LOCAL MUNICIPAL IMPACT

There are no local municipal implications associated with this report.

7. CONCLUSION

Physio-Control monitor-defibrillators and AEDs owned by the Region are a critical component of EMS and the Heart Alive Program. As these are proprietary devices, no other vendor is authorized to perform the maintenance and service or supply the consumable medical supplies.

It is recommended that the Region enter into contract(s) for defibrillator supplies, maintenance, and support services with Physio-Control Canada to ensure the integrity and ongoing operation of monitor-defibrillators and AEDs owned by York Region.

For more information on this report, please contact Norm Barrette, General Manager, Emergency Medical Services, at Ext. 4044.

The Senior Management Group has reviewed this report.