




CITY OF HAMILTON
HEALTHY AND SAFE COMMUNITIES DEPARTMENT
Hamilton Paramedic Service

TO:	Chair and Members Emergency and Community Services Committee
COMMITTEE DATE:	September 7, 2023
SUBJECT/REPORT NO:	Defibrillator Standardization for the Hamilton Paramedic Service and Hamilton Fire Department (HSC23043) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Cliff Eggleton (905) 546-2424 Ext. 7743
SUBMITTED BY:	Michael Sanderson Chief, Hamilton Paramedic Service Healthy and Safe Communities Department
SIGNATURE:	

RECOMMENDATIONS

- (a) That the ZOLL Medical Corporation electrocardiogram monitor-defibrillators, ZOLL AED Pro and the ZOLL Public Access Defibrillation devices be designated a “Standard” device pursuant to Procurement Policy 14 – Standardization, such designation to be reviewed again no later than December 31, 2031; and,
- (b) That the ZOLL Medical Corporation electrocardiogram monitor-defibrillators, ZOLL AED Pro systems be obtained on a single source basis from ZOLL Medical Canada Inc., a subsidiary of ZOLL Medical Corporation, pursuant to City Procurement Policy 11 through to December 31, 2031; and,
- (c) That staff be authorized to standardize the purchase of ZOLL public access defibrillator units from the ZOLL Medical Corporation in compliance with a Competitive Procurement Processes when required Procurement Policy 5.1 – Low Dollar Value Procurements, Policy 5.1 – Request for Quotations, Policy 5.3 – Request for Tenders or Policy 5.4 – Requests for Proposals, as applicable; and,
- (d) That staff be authorized to single source the annual preventative maintenance and biomedical testing contracts, along with parts and repairs for the ZOLL

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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Medical Corporation electrocardiogram monitor-defibrillators systems directly with ZOLL Medical Canada Inc., a subsidiary of ZOLL Medical Corporation, for any issues not otherwise captured by the warranty program provided from the ZOLL Medical Canada Inc., a subsidiary of ZOLL Medical Corporation, pursuant to City Procurement Policy 11 through to December 31, 2031; and,

- (e) That staff be authorized to negotiate with ZOLL Medical Canada Inc., a subsidiary of ZOLL Medical Corporation, as a single source for the supply, parts and accessory equipment required and associated with the standardized ZOLL Medical Corporation electrocardiogram monitor or ZOLL public access defibrillator chosen by the City, pursuant to City Procurement Policy 11 through to December 31, 2031; and,
- (f) That the Chief of the Hamilton Paramedic Service and/or the Chief of the Hamilton Fire Department, or their designate, be authorized and directed to enter into and sign, for their respected departments, on behalf of the City of Hamilton, any negotiated agreements and necessary associated documents with ZOLL Medical Canada Inc., a subsidiary of ZOLL Medical Corporation, with content acceptable to the City Solicitor for the purchase of ZOLL electrocardiogram monitor-defibrillators and ZOLL Public Access Defibrillators, subject to Procurement Policy, Section 4.2, Policy 2 Approval Authority; and,
- (g) That the Chief of the Hamilton Paramedic Service and/or the Chief of the Hamilton Fire Department, or their designate, be authorized to amend any Contracts executed and any ancillary documents as required if a supplier(s) identified in this report undergoes a name change.

EXECUTIVE SUMMARY

The Hamilton Paramedic Service, Hamilton Fire Department, and the City's Public Access Defibrillator Program currently utilize ZOLL electrocardiogram defibrillators under Corporate Procurement Policy 14 – Standardization, approved by Council (report HES12020) on December 12, 2012.

On September 30, 2020 (By-Law 20-205) Corporate Procurement Policy was updated and changes occurred to Policy 14 – Standardization, Section 4.14(4) which now includes, "Where a standardized Good or Service is approved by Council or the Manager of Procurement and the expiry of the standardization is not stated in the approval report or motion, the expiry of the standardization shall be no more than 3 years from the date of the approval". That policy change initiated a 3-year time limit on all current standardization agreements that didn't include an original end date to expire on September 30, 2023.

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Council's continued approval is recommended for the Hamilton Paramedic Service, the Hamilton Fire Department and the city's public access defibrillator program to continue the standardization of the ZOLL defibrillators units from ZOLL Medical Corporation.

The Hamilton Paramedic Service and the Hamilton Fire Department have completed their review of the current system and recommend that paramedic, firefighter, and public access defibrillation continue to be standardized to ZOLL Medical Corporation given the benefits related to standardizing defibrillators across the system, and specifically to the ZOLL brand standardization, including the public access defibrillators which support an integrated approach to patient care, quality assurance, and data transfers between all units seamlessly. In the event that ZOLL Medical Corporation does not continue to offer a suitable product, meeting both the financial or technology needs of the City, the departments (Paramedic Service/Fire Department) can go out to market and review other options utilizing the City of Hamilton's current Procurement Policy.

Alternatives for Consideration – Not Applicable

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: Acquisition and replacement of the Hamilton Paramedic Service ZOLL defibrillators over the next 8 years (2024-2031) are estimated at \$240,000. This includes ongoing repair and replacement of existing defibrillators to keep all equipment in operational order. Following the recommendations included in the Hamilton Paramedic Service Master Plan, there will be a total replacement of all defibrillators in 2031, estimated at \$2,748,713. These costs are included in the 10-year Capital Budget Equipment Replacement Project #7642351101 and funded from the Hamilton Paramedic Service Equipment Replacement Reserve #100033.

Acquisition and replacement of the Hamilton Fire Department ZOLL defibrillators over the next 8 years (2024 – 2031) is estimated at \$87,343. This includes ongoing repair and replacement of existing defibrillators to keep all equipment in operational order. The Hamilton Fire Department recommends a total replacement of all defibrillators in 2032, estimated at \$320,108. These costs are included in the 10-year Capital Budget Equipment Replacement Project #7402351100 and funded from the Hamilton Fire Department Equipment Replacement Reserve #100031.

Staffing: N/A

Legal: All agreements with ZOLL Medical Canada Inc., a subsidiary of ZOLL Medical Corporation will be in a form satisfactory to the City Solicitor.

HISTORICAL BACKGROUND

The Hamilton Paramedic Service and Hamilton Fire Department currently procure ZOLL electrocardiogram defibrillators under the Corporate Procurement Policy 14 – Standardization, that was approved by Council (HES12020) on December 12, 2012, and to date have not experienced any reason to change the current devices.

Hamilton Paramedic Service has recently completed a system wide refresh of 61 defibrillators in 2022 which was identified to committee on December 9, 2021, in report HSC21039 at a cost of \$2,164,252.10 These funds were included in the 2022 Capital Budget under Project #7642251101 – 2022 Annual Equipment Replacement Project for Hamilton Paramedic Service.

The Hamilton Fire Department recently purchased 76 defibrillators at a cost of \$239,774.71 to effect a system-wide replacement of in-service units. These funds were included in the 2022 Capital Budget under Project #7402251100 - 2022 Annual Equipment Replacement Project for the Hamilton Fire Department.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Pursuant to the *Ontario Ambulance Act*, Section 4, Part 1(d), the Minister of Health has authority “to establish standards for the management, operation and use of ambulance services and to ensure compliance with those standards”.

Pursuant to this authority, the Ministry of Health has published the “Provincial Equipment Standards for Ontario Ambulance Services V3.7”. The ZOLL Cardiac monitor/defibrillator are certified as following these standards, specifically No.40,45,50,55 and,60.

RELEVANT CONSULTATION

Corporate Services, Procurement, Financial Services and Taxation – Consultation with Procurement staff regarding the interpretation and application of Procurement policy.

Corporate Services, Finance and Administration, Financial Planning Administration and Policy – Consultation with Finance to verify financial information.

Corporate Services, Legal Services, Legal and Risk Management Services – Consultation to confirm applicability and compliance.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The current standardization of the systems has been working well for the past 11 years with no identified problems. Paramedics and Firefighters are comfortable with the devices and completely understand how they function during high stress medical emergencies. Changing to a new device would increase stress levels of first responders as they learn a new system.

On September 15, 2021, report HSC21028 requested that Hamilton Paramedic Service receive Council Approval for the Standardization of the ZOLL AutoPulse® Compression devices on all front-line ambulances. The ZOLL AutoPulse® A-CPR board works wirelessly with the existing ZOLL electrocardiogram monitor-defibrillators' the ZOLL AutoPulse® also utilizes what is called "ShockSync" technology. These technologies work between the two devices to wirelessly calculate when the heart is best able to respond to paramedic treatments such as defibrillation of the heart at the least measured impedance, "Optimal Time". The ZOLL AutoPulse® board and ZOLL electrocardiogram monitor-defibrillators also allow for paramedics to integrate CPR feedback/defibrillation data into its existing electronic patient care records. Switching to a different defibrillator would cause these two pieces of equipment to no longer be able to work together leading to sub-optimal patient care.

The anticipated operating costs of switching to a different device would have to include the costs associated with procuring associated new devices and providing training to over 1,100 paramedics and firefighters on new equipment. The training cost alone, based on a minimum of four hours per paramedic/firefighter, would likely exceed \$97,808 for Paramedic Service and Fire Department.

Additionally, disposal fees for the current defibrillator consumable inventory and the purchase of new consumable items would be a factor, as differentially branded consumable items are not compatible with each other.

APPENDICES AND SCHEDULES ATTACHED

None