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Report 2024-047

Report Title: Northumberland Paramedics - 2023 Year End Report

Committee Name: Community Health

Committee Meeting Date: April 2, 2024

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Council Meeting Date: Select Council Meeting Date

Strategic Plan Priorities: □ Innovate for Service Excellence

☐ Ignite Economic Opportunity☒ Foster a Thriving Community☐ Propel Sustainable Growth

☐ Champion a Vibrant Future

Information Report

"**That** the Community Health Committee receive Report 2024-047 'Northumberland Paramedics – 2023 Year End Report' for information; and

Further That the Committee recommend that County Council receive this report for information.

Purpose

The purpose of this report is to provide a year-end review of Northumberland Paramedic Services inclusive of the Operations and Quality Assurance and Training departments for information purposes. All data and statistics presented include the time period of January 1 to December 31, 2023.

Background

Northumberland County with a land area of 1,905 sq Km. provides emergency responses from six (6) ambulance stations that are strategically located throughout the County in the following locations:

- Cobourg (1) 24- hour and (1) 12- hour ambulance,
- > Port Hope (1) 24 -hour, (1) 12- hour ambulance,
- > Colborne (1) 24- hour ambulance,
- Roseneath, (1) 24- hour Ambulance, (1) 12- hour first response unit,
- > Campbellford, (1) 24- hour ambulance,
- Brighton (1) 24 -hour ambulance.

The total responses for service requests for the 2023 year was 25,262. Included in this figure are requests for emergency and life-threatening calls (Code 3 and Code 4), interfacility transfers and assessments (Code 1,2,3, and 4), standby for emergency coverage and incidents. Please refer to Appendix A showing our top 5 type of calls for 2023, as well as the number of each CTAS call responded to. CTAS is the Canadian Triage Acuity Scale which measures the acuity of the patient. The concept of the CTAS system is prioritizing response, assessment, and treatment to the sickest person the fastest.

Northumberland Paramedics drove a total of 841,838 Km in 2023. To help put this into perspective, the Earths circumference is 40,075 kilometers. Northumberland Paramedics would have driven around the earth 21 times. This distance required approximately 230,533 litres of fuel in 2023.

Northumberland Paramedics deploys one (1) first response Emergency response Vehicle (ERV) throughout Northumberland County each day. The first response vehicle is available to respond to calls in each of the lower tier municipalities within Northumberland County, however the focus is in the central rural area of the County where we experience increased response times. In 2023 the first response vehicle responded to a total of 439 calls and arrived prior to the dispatched transporting ambulance 225 times. The deployment of the ERV saved a total of 1,964 minutes and 56 secs in response times and began an earlier assessment and treatment by the responding Paramedic. Please see appendix A for the types of high acuity calls as well as the number of calls the first response vehicle has responded to in each lower tier municipality.

With Northumberland Paramedics call volume rising both from within Northumberland County and to our neighboring Counties and services, we are also seeing an increase in off-load delays at the hospitals to which we most frequently transport our patients. The four (4) main hospitals we transport to are: Northumberland Hills (NHH), Campbellford Memorial Hospital (CMH), Peterborough Health Center (PRHC), and Trenton Memorial Hospital (TMH). The common prehospital measure of an off-load delay begins to count after 30 minutes on arrival at the hospital. This 30- minute delay has been accepted as a 'normal time to arrive at the hospital, register the

patient with triage nurse, be provided direction to the stretcher/ room, transfer the patient over and give a report to the nurse/doctor, clean their stretcher and equipment, return to state of readiness, and begin the required documentation for the patient. Currently Paramedics are experiencing off-load times beyond the "accepted" 30 minutes. In 2023 our total amount of off-load time was a total of 2,333 hours for the hospitals we routinely transport to. See attached appendix A to view the amount of off-load time for each hospital. Northumberland Paramedics applied for Off-load nurse funding from the Ministry of Health and Long -Term care and utilized the "Fit to Sit" programs to help with off-load delays at Northumberland Hills and Campbellford Memorial Hospitals in 2023 and have again in 2024.

Quality Assurance and Education 2023-year end

Education

In the spring of 2023, we actively recruited and onboarded sixteen (16) new Paramedics. These new Paramedics attended an orientation that included topics such as: driver training, legislative requirements, policies & procedures, County culture and values, equipment training for the provision of patient care, mental wellness and resilience.

Each year Paramedics must attend training for the maintenance of skills and knowledge for delegated medical acts (medications and procedures) as well as training on new directives and medications. This training is provided by the Central East Prehospital Care Program (CEPCP) which is a part of Lakeridge Health. In 2023 each Paramedic received 24 hours of training on these topics. CEPCP also provides training to Paramedics that are returning from extended leaves to ensure that they are comfortable and able to provide patient's care with any of the delegated medical acts.

In addition to the CEPCP training Northumberland Paramedics provide 16 hours of training to each paramedic to ensure that the paramedics are meeting the legislative standards. This includes the Basic Life Support Patient Care Standards (BLS-PCS), Ontario Ambulance Documentation Standards, and others. In 2023 this included knowledge of changes to standards, CPR recertification and skills maintenance on use of equipment that is not used frequently. In the fall of 2023, the Ministry of Health introduced a new tool for Paramedics to use while responding to calls. Training was completed on the Mobile Computer Aided Dispatch (MCAD) which allows Paramedics to visually see the details of the calls they are responding to in real time, provide them the most efficient route based on traffic and time of day to enhance Paramedic safety, improve communication with the dispatch center, and decrease response times.

Working with our partners at Northumberland Hills Hospital paramedics attended training on caring for a patient in a mental health crisis and de-escalation techniques that can be applied to many situations that the Paramedics would encounter as part of the 16 hours of training each Paramedic received.

We provided the opportunity for three (3) classes to visit our Cobourg station and three (3) school visits where the students were able to tour the ambulance, view the equipment and discuss the situations and incidents that may require them to call 911 for an ambulance. We also had opportunities over the summer to visit public libraries and meet with the children to let them know what to expect if they were to be in an ambulance and when to call 911.

Quality Assurance

In 2023 we manually audited over 6,000 call reports completed by paramedics in addition to the software audits done in real time when the Paramedics are completing their reports.

Paramedic Supervisors also completed over 150 evaluations on calls they attended with paramedics. These evaluations provide feedback on paramedic performance during the real applications of their skills and compliance with BLS-PCS standards.

Call Data 2023

In 2023 Northumberland Paramedics attended 133 Cardiac Arrest where they were able to provide care. Of the 133 cardiac arrests, 23 of these patients resulted in the return of spontaneous circulation (ROSC- resulting in a return of the heartbeat) restored by the Paramedics with a defibrillator during their response. This resulted in a 17% save rate, whereas the Canadian statistics reports an industry save rate of 10%.

In Sept. of 2023 we held our annual survivor night to celebrate those patients where the Paramedics were able to restore heartbeats. We were honored to have 4 of the survivors of cardiac arrest join that evening as we recognized the Paramedics, Ambulance Communications Officers and Firefighters that were a part of the survival stories.

For certain types of heart attacks (STEMI's), Paramedics can by-pass the local hospital emergency department and take these patients directly to the Catheter lab for angioplasty treatment at Peterborough Regional Health Centre (PRHC). In 2023 Paramedics identified and utilized the bypass criteria thirty-five (35) times.

Patients suffering from an acute stroke (within 6 hours of onset) were transported by paramedics to regional stroke centers for definitive treatment. In 2023, 72 patients were transported to a regional stroke center under the stroke protocol bypass agreement.

These specialized bypass protocols have made significant improvements of the patient's quality of life within Northumberland County.

Consultations

ESO (Interdev) Analytics

Ambulance Dispatch Reporting Systems

Legislative Authority / Risk Considerations

N/A

Discussion / Options

N/A

Financial Impact

N/A

Member Municipality Impacts

Data presented is a year-end report inclusive of Northumberland County

Conclusion / Outcomes

Staff request that the Community Health Committee receive Report 2024-047 'Northumberland Paramedics – 2023 Year-End Report' for information.

Attachments

1) 2023 Emergency Services Year End Review