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Report 2024-085

| Report Title: | Northumberland Paramedics, 2024 Semi-annual Report |
|---------------------------------------|---|
| Committee Name: | Community Health |
| Committee Meeting Date: July 30, 2024 | |
| Prepared by: | Keith Barrett Deputy Chief of Operations Northumberland Paramedics |
| Reviewed by: | Susan Brown Chief – Northumberland Paramedics Northumberland Paramedics |
| Approved by: | Jennifer Moore, CAO |
| Council Meeting Date: | August 14, 2024 |
| 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 2024-085 Northumberland Paramedics '2024 Semi-annual 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 semi-annual review of Northumberland Paramedic Services inclusive of the Operations and Quality Assurance and Training departments for information purposes. All data and statistics presented are inclusive of the period of January 1 to June 30, 2024.

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 and (1) 12- hour ambulance,
- > Colborne (1) 24 hour ambulance (1) 12-hour ambulance * Q2
- Roseneath, (1) 24- hour Ambulance, (1) 12- hour first response unit,
- Campbellford, (1) 24- hour ambulance,
- Brighton (1) 24 -hour ambulance.

Call Volume

The total responses for service requests for the first half of 2024 were 12,365 calls. 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. This currently is trending slightly below the call volume compared to the first 6 months of 2023 where it was 15,575 and the full year 29,162 call responses.

To respond to these calls Northumberland Paramedics, drove 494,971 km per vehicle in the first half of 2024. To help put this into perspective, the Earths circumference is 40,075 kilometers. Northumberland Paramedics would have driven around the earth twelve (12) times. This distance required approximately 139,774 litres of fuel in first half of 2024.

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 due to the geographical distance. In the first half of 2024 the first response vehicle responded to a total of 195 calls and arrived prior to the dispatched transporting ambulance 131 times. The deployment of the ERV saved a total of 1,502 minutes and 16 secs in response times and began an earlier assessment and treatment by the responding Paramedic. This data is congruent to the 2023 ERV responses of 218 calls mid-year with the full year of 439 responses in total.

Northumberland Paramedics total call volume includes all responses from within our County and to external municipalities due to seamless coverage for all code 4 – Life threatening calls. Seamless coverage ensures that the closest vehicle to a code 4 (Life Threatening) call is sent regardless of the operating municipality. Northumberland Paramedics continues to respond to most neighboring services more frequently than external responses to our area. (APPENDIX 2) In the first half of 2024 Northumberland Paramedics responded to 293 calls in Peterborugh compared to their total responses within our county of 179. Also, Northumberland Paramedics responded to Hastings County for 330 calls compared to their response of 121 calls within our County. This effects our deployment in several ways as it takes Northumberland ambulances out of our county and in most cases places us in off load delays at hospitals outside of our catchment area.

Off load delays are still being experienced in the first half of 2024 (APPENDIX 3). 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 pre-hospital 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 the first half of 2024 the total off-load time was 382 hours for the four (4) hospitals we routinely transport to. If the off loads continue in the same trajectory, we project a total off load delay of 758 hours compared to 899 hours experienced in 2023.

Northumberland Paramedics once again have applied for Off-load nurse funding from the Ministry of Health and Long-Term care and have utilized the "Fit to Sit" programs to help with off-load delays at Northumberland Hills and Campbellford Memorial Hospitals in 2024.

Quality Assurance and Education 2023-year end

Education

In the spring of 2024, we actively recruited and onboarded eighteen (18) 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. To date each Paramedic has received 8 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. Thus far we have returned 5 paramedics from various leaves back to their frontline duties.

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. Thus far in 2024 each paramedic has received 8 hours of in-service training. Training has included updates regarding the changes to the standards, Multi Casualty Incidents (MCI), oxygen delivery systems, pregnancy and neonatal standards, and skills maintenance on equipment that is not frequently used to ensure competency.

Working with our partners we have trained 6 medics in the first half of 2024 for IV starts to become IV autonomous. Training also took place, for all medics on the new digital radio system Public Safety Radio Network System (PSRN) for the ambulances.

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 spring to visit primary and Secondary age schools 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 2024 we have manually audited over 2,600 call reports completed by paramedics in addition to the software audits completed in real time when the Paramedics are documenting their reports.

Paramedic Supervisors also completed over 50 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 2024

Thus far in 2024 Northumberland Paramedics have responded to 135 Cardiac Arrest where they were able to provide care. Of the 135 cardiac arrests, 9 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.

In October of 2024 we will be holding our annual survivor night to celebrate those patients where the Paramedics were able to restore heartbeats from 2023. This year we will be honoring 19 survivors of cardiac arrests along with those first responders that were part of the chain of survival including the Paramedics, Ambulance Communications Officers and Firefighters that were a part of the survival stories.

For certain types of heart attacks (STEMI's), Paramedics by-pass the local hospital emergency department and take these patients for definitive care directly to the Catheter lab for angioplasty treatment at Peterborough Regional Health Centre (PRHC). This far in 2024 Northumberland Paramedics have identified and utilized the bypass criteria eleven (11) times. The Cath lab is deemed to be the definitive care "gold standard" for myocardial infarctions, as time is heart muscle; the quicker the blockage is physically restored by direct catheterization of the vessel occluded the less heart damage occurs.

Patients suffering from an acute stroke (within 6 hours of onset) were transported by paramedics to regional stroke centers for definitive treatment. Thus far in 2024 seventeen (17) patients have been 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 Data Systems (ADDS)

Legislative Authority / Risk Considerations

N/A

Discussion / Options

N/A for information only

Financial Impact

N/A

Member Municipality Impacts

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

Conclusion / Outcomes

Staff request that the Community Health Committee receive report 2024-085, Northumberland Paramedics '2024 Semi-annual Report' for information.

Attachments

- 1. Report 2024-085, ATTACH 1 '2024 Paramedic Services Mid-Year Report'
- 2. Report 2024-085, ATTACH 2 'Cross Border Calls'
- 3. Report 2024-085, ATTACH 3 'OFF load Delays January 1 to June 30, 2024'