

Paramedic Services Update – June 2024

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Emergency Services
Committee

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Report Summary

This report provides information regarding the recent business activities, relevant statistics and good news stories within the Paramedic Services Division, Community Safety Department.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

This report refers to operational matters and has no direct connection to the Community Energy and Emissions Plan.

Financial Implications

There are no financial implications associated with this report.

Background

This report provides the Community and Emergency Services Committee with an update on activities, relevant statistics, recent performance measures within the Paramedic Services Division of the Community Safety Department and good news stories.

Paramedic Services is responsible for the delivery of a performance-based service that complies with legislative and regulatory requirements, ensuring safe and quality pre-hospital emergency medical care and transportation for those individuals suffering injury or illness. A performance-based paramedic service focuses on clinical excellence, response time performance, patient outcomes, patient satisfaction, continuous quality improvement and a healthy work environment conducive to professional growth.

Paramedic Operations

Staffing

The Association of Municipalities of Ontario (AMO) has heard from members and partner organizations across the province that it is becoming increasingly challenging to attract and retain an adequate health care workforce in municipal health services as well as the broader health sector. Paramedicine is not immune to these growing human resource challenges. A provincial scan completed by Ontario Ambulance Paramedic Chiefs (OAPC) indicating that there will need to be 1,100-1,200 new paramedics annually.

The colleges anticipate providing approximately 670-700 new paramedics annually for the next 2 years, resulting in a shortfall of approximately 300-400 paramedics each year.

Currently, Greater Sudbury Paramedic Services staffing remains stable, however we are proactively engaging in employee retention and recruitment initiatives to address the anticipated provincial shortfall of paramedics. Historically, we have conducted two hires throughout the year and recruit approximately 20-25 regular part-time paramedics each year.

During the 2024 spring hiring process, we were able to recruit and train eleven new paramedics. All new recruits undergo extensive orientation training for four weeks, before being placed with a mentor for fourteen shifts. Working with a mentor is an important component of our onboarding process for new staff. The mentor is trained to provide ongoing support to the new paramedic as they continue to gain experience in providing patient care and driving to become familiar with our operational processes.

Service Review 2024

The Ambulance Act states that no person shall operate an ambulance service unless the person holds a certificate issued by the certifying authority, the Ministry of Health and Long-Term Care (MOHLTC), Emergency Health Services Branch. The Act further stipulates that a person shall be issued a certificate by the certifying authority only if the person has successfully completed the certification process prescribed by the Regulations.

The purpose of the Service Review is to ensure ambulance services are operated in a manner consistent with the Land Ambulance Certification Standards and in compliance with the legislation. Services are required to successfully complete the prescribed Ambulance Service Review certification process once every three years in order to maintain their certification to operate the service.

Greater Sudbury Paramedic Services has been in operation since December 3, 2000. The current certificate to operate expires on September 11, 2025. On August 27 and 28, 2024, the Ministry of Health will be conducting our Land Ambulance Certification review. During the review, we are required to meet all of the legislative quality requirements in the following areas:

- Level of Service
- Employee Qualifications
- Staffing
- Documentation
- Training
- Service Review Program
- Patient Care
- Vehicles
- Patient Care Equipment
- Policy and Procedures
- Operations

Paramedic Services Performance Measures Defined

Paramedic Calls for Service

A measure of calls received by Paramedic Services by the Central Ambulance Communications Centre (CACC) to respond to emergencies.

Paramedic Unit Responses

The total number of vehicles dispatched by the CACC to service emergencies. This number will typically be higher than calls for service as some calls necessitate the use of multiple ambulances, Paramedic Response Units, or Platoon Superintendent Units.

Paramedic Patients Transported

The total number of patients transported on both an emergency and non-emergency basis.

Requests for Service	Jan 1 – March 31, 2024	Jan 1 – March 31, 2023	Year over Year
EMS Calls for Service	9,102	8,411	+ 691 Increase of 8.22%
EMS Unit Response	10,616	9,815	+ 801 Increase of 8.16%
EMS Patients Transported	7,856	7,643	+ 213 Increase of 2.78%

Reported number of clinical events:

Cardiac	Jan 1 - March 31, 2024	Jan 1 - March 31, 2023	Year over Year
Number of calls with at least 1-12 Lead Acquired	1428	1385	+3.1% or 43 calls
Total Cardiac related	414	396	+4.5% or 18 calls
Number of STEMI**	21	28	-25% or 7 calls

** A STEMI is a specific type of heart attack, which paramedics can diagnose in the pre-hospital setting

Neurological	Jan 1 - March 31, 2024	Jan 1 - March 31, 2023	Year over Year
Total Neuro-related	744	643	+16% or 101 calls
Number of Acute Stroke ** (FAST positive, timeline criteria met)	64	57	+12% or 7 calls

** An Acute Stroke Patient qualifies for specific time-sensitive treatments from the hospital to reduce and reverse damage caused by stroke.

Sepsis	Jan 1 - March 31, 2024	Jan 1 - March 31, 2023	Year over Year
Number of Identified Sepsis cases **	48	46	+4% or 2 calls

**A Suspected Sepsis Patient meets a specific criteria (qSOFA) used to identify patients at risk of death due to systemic infection.

Cardiac Arrest Medical and Trauma	Jan 1 - March 31, 2024	Jan 1 - March 31, 2023	Year over Year
Total Cardiac Arrest Responses, Medical and Traumatic	107	100	+7% or 7 calls
Total Treated Cardiac Arrest Medical and Traumatic	44	48	-8% or 4 calls
Number of Medical Arrest with Return of Spontaneous Circulation at any time while in Paramedic Care	9	14	-36% or 5 calls

***A traumatic cardiac arrest happens because of an injury, while a medical cardiac arrest happens because of a health problem.*

Logistics Section

The Logistics Section is responsible for cleaning, sanitizing, inspecting and restocking all vehicles and medical equipment to make sure it meets legislative requirements. Emergency Vehicle Technicians manage our inventory of stretchers, medical equipment, medication and medical supplies. As well, they support operations by delivering specialized transport vehicles for remote response.

In the summer of 2023, a new vehicle wash system was installed in the Logistics Section for the daily cleaning of ambulances. This fully automated system replaced an older and outdated system. This new system can automatically clean the exterior of an ambulance in less than 5 minutes, compared to the older system that took 10-15 minutes, that also required some manual cleaning.

The ambulance production timelines (order to delivery) have increased significantly, from 4 to 6 months pre-Covid, to the current 20 to 24 months. As a result we have to keep frontline ambulances longer than planned. Fleet Services continue to collaborate with our logistics staff to maintain our fleet well beyond the normal life expectancy, which has resulted in increased repair costs and down time for frontline ambulances.

New Zoll defibrillators were purchased and successfully deployed in the first quarter, replacing the old units that had reached the end of their life cycle. These new units have advanced features that will allow paramedics to continue delivering the highest standard of prehospital care to the residents of the City of Greater Sudbury. The new Zoll defibrillators are also equipped with a case review tool which provides feedback that can be used for continuous quality improvement. Successful collaboration between the logistics, training, and frontline operations sections was essential in the effective completion of this project.

Training

Paramedic Training Officers (PTOs) continue to address training needs and deliver real-time training and support to staff where needed. PTOs also continue to complete field assessments of frontline paramedics to ensure excellent prehospital care is being delivered.

The Operative IQ program for the tracking and management of narcotics was implemented at the beginning of April. Our PTOs worked in collaboration with the Logistics Section to develop and implement this initiative and provided the training to all frontline staff. This electronic tracking program streamlines our current methods, allowing for real time identification and review of any narcotics administered by frontline Advanced Care Paramedics. It also tracks expiration dates and available stock, allowing for precise ordering, eliminating overstock, while maintaining required quantities.

The PTOs recently completed the delivery of the spring training sessions with front line paramedics, covering the following topics:

- Service updates, including the upcoming Ambulance Service Review, speed enforcement cameras, professional responsibilities, Electronic Patient Care Records platform, transfer vehicle, helicopter utilization, and Community Paramedicine updates.
- New Zoll Monitor
- Review of the new Operative IQ narcotics tracking and management.
- Ferno PowerTraxx stair chair equipment review.
- Introduction to prehospital administration of Suboxone by Base Hospital.
- How To Talk to People Who Use Drugs, presented by Health Sciences North Addictions Services.
- Hazmat Awareness, presented by Sudbury Fire Services

Future 2024 training initiatives that are being discussed include but are not limited to the following:

- Fall training sessions for all frontline paramedics with topics including customer service, electric vehicle safety, restraining patients safely, and changes to standards of practice.
- De-escalation training for all frontline paramedics.

Transfer of Medically Stable Patients (TMSP)

Funding was received from the Ministry of Health to conduct a two-year trial aimed at reducing the number of medically stable patients transported by paramedics. Certain patients are unable to ambulate and require the use of a stretcher to be transported either to and from medical appointments, or when they are discharged from the hospital. These patients are medically stable, meaning they do not require medical services during transport, but simply need a way to be transported safely.

Currently, transport of these patients is done in part by ambulances when they are not assigned to an emergency call. This TMSP vehicle will reduce the number of non-emergency transfers done by ambulances, allowing ambulances to remain available for 911 calls. This will also help to decrease the wait time for patients requiring safe transport, as it will not be dependent on when an ambulance is available, but rather will be prebooked through a coordinator.

Hiring is in progress for the TMSP vehicle which will be staffed by transfer attendants, not paramedics. There will be three full-time positions and three part-time positions, as well as a scheduling co-ordinator. Hours of operation will be from 07:00-19:00 on Mondays to Fridays and 07:00 to 17:00 on Saturdays and Sundays. We anticipate the TMSP service to commence at the beginning of June, 2024.

Tactical Paramedic Program

Greater Sudbury Paramedic Services' Tactical Paramedic Program has been in place since January 7, 2021. To date, the team has participated in approximately 200 activations with the Greater Sudbury Police Emergency Response Unit (ERU) and continues to evolve and learn with each event.

The Greater Sudbury Paramedic Services' Tactical Paramedics Program is currently in the process of recruiting new team members. The selection and training will commence within the second quarter of 2024 and ready to be deployed within the third quarter of 2024. New members will be provided with the same training as the current members. The specialized training concentrates on trauma care and allows to be on site immediately if ever a member of the ERU or public are injured during an activation. Immediate trauma care is key to increase the chance of survival when life-threatening traumatic injuries occur.

Every May and September, all Tactical Paramedics participate with Greater Sudbury Police ERU in their bi-annual training. This collaborative training helps maintain skills by being placed in stressful situations/scenarios such as multiple casualties, low light, distracting injuries, officer down, and many other situations.

Our Tactical Paramedics are now part of the Greater Sudbury Police Service's Public Order Unit. When the Public Order Unit is activated, the Greater Sudbury Police ERU and Tactical Paramedics are included in

these activations. The team attends yearly training with the Public Order Team to maintain their skills in case of deployment.

Currently, two members are certified by the International Board of Specialty Certification. To achieve this level of certification they are trained in; advanced cardiac life support, international and pre-hospital trauma life support, tactical combat, and emergency casualty care (TP-C). In the fall of 2023, the remaining Tactical Paramedics completed a 16-hour didactic course to prepare them for the final exam. Once this exam is successfully completed, each member will have their TP-C certification.

The team completed a two-day course on cold-winter training and survival (February 2024). This course includes mapping and GPS navigation, which provides new skills when deployed for a missing person or when attending an injured citizen in a remote area.

One of the Tactical Paramedic members is trained in K-9 Tactical Combat Casualty Care and has provided an introductory course to the rest of the team members to support our Greater Sudbury Police Services canine.

The Tactical Paramedic Team will continue to actively participate in training and are eager to further expand their scope of practice by learning new techniques and equipment, in collaboration with the Greater Sudbury Police ERU.

Paramedic Recognition

The work as a paramedic is never routine, but there are times that a particular event during a shift can make it very rewarding. Recognizing good work is great for morale and importantly gives credit where credit is due. Paramedic Services has implemented two recognition programs, Cardiac Save and Newborn Delivery, to recognize our paramedics' efforts that will have a positive and lasting impact on them and the lives of others.

Cardiac Arrest “Save” Pin

Individuals suffering from a cardiac arrest are unresponsive and not breathing. Without immediate action, death can occur within minutes. When paramedics treat and transport a pre-hospital cardiac arrest patient, they are rarely advised of the patient outcome because of the Personal Health Information Protection Act (PHIPA). PHIPA governs the way personal health information may be disclosed within the health sector. Occasionally, Paramedic Services are contacted by a cardiac arrest survivor to advise the paramedics of their outcome. CGS Paramedic Services recognizes the positive impact on paramedics when they are advised that a pre-hospital cardiac arrest patient made a full recovery. For this reason, a formalized recognition program has been implemented within CGS Paramedic Services to recognize paramedics for a pre-hospital cardiac arrest save. Paramedics who are recognized for their life-saving work will be awarded with a “Save” lapel pin, acting as reminder that their actions have impacted the lives of others. In 2023, eight paramedics were presented with a “Save” pin.

Newborn Delivery “Stork” Pin

This recognition program has been developed to recognize paramedics that have actively participated in a newborn delivery. The paramedics must be the individuals delivering the baby to be eligible to receive a Newborn Delivery Stork pin. If a midwife or family member has delivered the newborn, this would not constitute a paramedic to receive a Newborn Delivery Stork pin. On March 26, 2024, paramedics Kasandra Tancorre and Vincent Roy delivered a newborn. Both paramedics were recognized for assisting the delivery of the newborn and were presented with a Stork Pin.