

EXECUTIVE SUMMARY

This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on activities, good news stories, relevant statistics, and recent performance measures within the Paramedic Service Division of the Community Safety Department.

Greater Sudbury Paramedic Services is responsible for the delivery of a performance-based paramedic 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

The Operations Section provides pre-hospital emergency medical care and transportation as well as non-urgent transportation between health-care facilities, the airport and residences.

New Hires

Paramedic Services hired 13 part-time Paramedics during this year's fall hire; 11 Primary Care Paramedics, two Advanced Care Paramedics and one Emergency Vehicle Technician have joined our service. These recruits have now completed a service orientation to ensure they are prepared to join our Paramedic team in delivering quality land ambulance services to the public.

Peer Support Network Team Professional Development

Our Peer Support Network (PSN) team continues to participate in professional development sessions with a local clinical psychologist. These sessions are instrumental in advancing the development of our PSN team, ensuring they are well prepared to assist their colleagues in times of need. The ongoing training was not only essential to help in the development of each member but also to ensure the PSN members are paying attention to their own mental health as well as assisting fellow Paramedics and Firefighters. This session was titled "Self Care".



Paramedic Services Performance Measures Defined

Paramedic Calls for Service

A measure of calls **received** by Greater Sudbury Paramedic Services by the Central Ambulance Communications Centre (CACC) to respond to emergencies. In simpler terms, the number of calls to 911 for paramedic services that resulted in Paramedics being dispatched.

Paramedic Unit Responses

A measure of units **dispatched** by the CACC to Paramedics 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

A measure of patients being transported on both an emergency and non-emergency basis (Table 1).

EMS Calls for Service	21,438
EMS Unit Response	25,370
EMS Patients Transported	15,056

Table 1. Greater Sudbury Paramedic Services Statistics Q1-Q3 2019

Professional Standards

Professional Standards is responsible for the delivery of quality assurance programming consisting of clinical and service delivery auditing to improve patient safety and ensure high-quality clinical care, thereby reducing risks. By also managing the electronic patient care record system, including quality assurance oversight, Professional Standards coordinates legal proceedings and maintains compliant handling of patient medical records within various legislative and regulatory requirements. Lastly, Professional Standards represents Paramedic Services amongst stakeholders within the community and participates in research studies to advance and ensure integration into the health-care framework.

Reported number of clinical events: Date range is July 1 – November 5, 2019

Cardiac	Number of calls with at least 1, 12 Lead Acquired	1,413
	Total Cardiac Ischemia related	239
	Number of STEMI	27
	A STEMI is a specific type of heart attack which can be diagnosed by Paramedics in the pre-hospital setting.	

Neurological	Total Neuro-related	1,033
	Number of Acute Stroke (FAST positive, timeline criteria met)	54
	Average Age in years	73
	Number of Strokes	27
	An Acute Stroke Patient qualifies for specific time-sensitive treatments from hospital to reduce and reverse damage caused by stroke.	

Sepsis	Number of Suspected Sepsis Cases	32
	Average Age in years	81
	Number of Confirmed Sepsis Cases	27
	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	Total Cardiac Arrest, Medical and Traumatic	74
	Total Treated Cardiac Arrest Medical and Traumatic	52
	Number of Treated Cardiac/Medical Arrest	47
	Number of Medical Arrest with Return of Spontaneous Circulation at any time while in Paramedic Care.	7



Training

Training involves the development and delivery of paramedic education that includes: continuing medical education, orientation for new hires and those returning following extended absences, and remedial education to address identified gaps in knowledge, skill or critical decision making. Additionally, participation in national and international clinical research initiatives aims at improving pre-hospital clinical care.

Return to Work Programs

In the third quarter, the Training Section conducted a return to work program for eight Paramedics. These staff members are required to review all Paramedic Services training and education that occurred in their absence, in addition to preparation for Base Hospital Certification for Paramedics.

Mental Health and Wellness

Our training officers are certified instructors for “The Working Minds for First Responders (formerly Road to Mental Readiness)”. In October, our Training Officers provide this training to the staff at the local Central Ambulance Communication Centre (CACC). The training session focused on practical knowledge and skills to address Mental Health and Mental Illness.

Community Paramedicine

The Community Paramedicine Section utilizes Paramedics in non-traditional roles providing home visits, clinical interventions, and preventative health initiatives to reduce demand for Emergency Department visits, hospital admissions and to keep our at-risk aged population healthy and at home. Also, by attempting to aid our vulnerable populations by directing them to suitable community resources. There are two distinct programs; the Care Transitions Community Paramedicine Program and the Health Promotion Community Paramedic Program.

Care Transitions Community Paramedicine Program (CTCP)

The Care Transitions Community Paramedicine Program partners with Health Sciences North to utilize trained Community Paramedics to provide home visits and approved interventions under medical oversight to complex, high-risk patients to assist them in transitioning from acute care to community and self/or supported in-home care. Goal: to decrease Emergency Department visits and readmissions by 10% for identified high- risk patients with chronic disease (CHF, COPD, and Diabetes) compared to their past utilization.

During the third quarter of 2019, only four of our patients reported the need to utilize 911 services related to the CTCP program treated chronic health condition(s) (Diabetes – COPD – Congestive Heart Failure).



There were 22 referrals in this period to either primary care and or community services, which will improve the quality of life and independence in the home for these patients. As per Health Sciences North's (David McNeil and Trevor Blanchard) evaluation of the program in 2017 states, this program has shown to be highly cost-effective with estimated cost savings to the Health Care System of 50% per enrolled patient over one year. An average of approximately \$10,000 per registered patient as compared to each enrolled patients' health care costs in the year prior to CTCP program enrollment.

At the time of this program evaluation, CTCP average daily home visit rate was 2.71 patients per day. In 2018, our average daily home visit rate rose to 4.01 patients per day and this last quarter, the average was maintained at 4.1 patient visits per day (Table 2).

Visits completed	332
Working Days	81
Active Patients	285
911 Calls Related to CTCP	4

Table 2. Q3, 2019 Community Paramedic NELHIN Reporting Tool

Health Promotion Community Paramedicine (HPCP)

The objective of this project is to maintain and expand a health promotion, education, injury prevention program to assist citizens in chronic disease recognition and prevention, public education and injury awareness/prevention strategies, referrals and health system navigation assistance. The primary goals of this project are to mitigate emergency calls and hospital visits, keep our "at-risk" aged population healthy and at home, attempt to aid our vulnerable populations and redirect them to more suitable community resources other than the Emergency Department.

Within this reporting period, the number of calls resulting in referrals to local services/programs is 149. Referrals are made through four established processes – Clinical Diversion, Paramedic referrals and Health Concern Reports, and Community Mobilization Sudbury-Rapid Mobilization Table responses (Table 3).

Referral Type	Q3 2019	2016-17 Fiscal Year	2017-18 Fiscal Year	2018-19 Fiscal Year
Withdrawal Management Services	34	78	36	98
Mental Health Services	7	38	146	51
Paramedic Referral	97	149	191	293
RMT Presentation	11	7	11	12
Community Health Concerns	3	31	39	36



Total 911 Calls for service (No Code 8 or Code 2, does not include multiple units) *Note: 911 call data for these purposes are derived from ePCR data	N/A	26,014	27,276	28,153
---	-----	--------	--------	--------

Table 3. Q3 2019 with comparisons – 2016 to 2018 fiscal referral types

A revised Mental Health and Addictions Emergency Department Diversion by Paramedics directive is under review with our medical director. The intent of the new directive is to help ensure the right care is offered to the right patients at the right time with improved utilization of diversion by Paramedics. Improved tracking processes have been created to allow follow up and interagency data sharing (no PHI) regarding patient destinations when a Paramedic offers a diversion from ED to these alternate more appropriate destinations.

Our Service would like to improve the uptake of Paramedic Referrals as part of a quality insurance initiative. Processes have been put in place to measure compliance to achieve this goal. Through our ePCR platform, we have added a compliance rule for the mandatory PERIL score completion. This applies to all patients 65 or older; lift assist and failure-to-cope call types. This mandatory visualization of the PERIL tool becomes a reminder to Paramedics of those who are at risk of independence loss and to consider utilization of a Paramedic referral for support services.

Paramedic Services presented 11 cases to the Community Mobilization Sudbury – Rapid Mobilization Table (CMS-RMT) for persons found at acutely elevated risk who require a multiple agency response. HPCP was the lead agency in three of these cases. Paramedic Services was requested as an assisting agency in 33 other CMS-RMT responses presented by other community agencies. Paramedic Services is a valuable resource during RMT discussions.

These processes are very time-sensitive and take priority as these individuals are at elevated risk of harm; each case takes time to develop effective planning with appropriate community agencies.

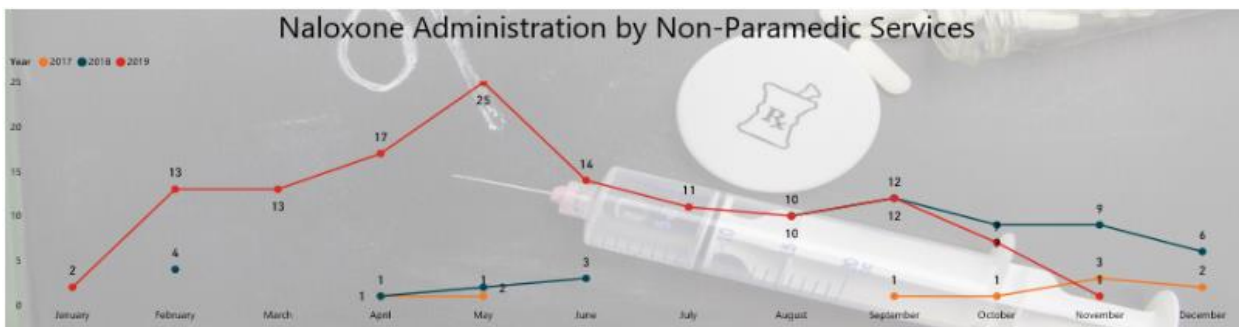
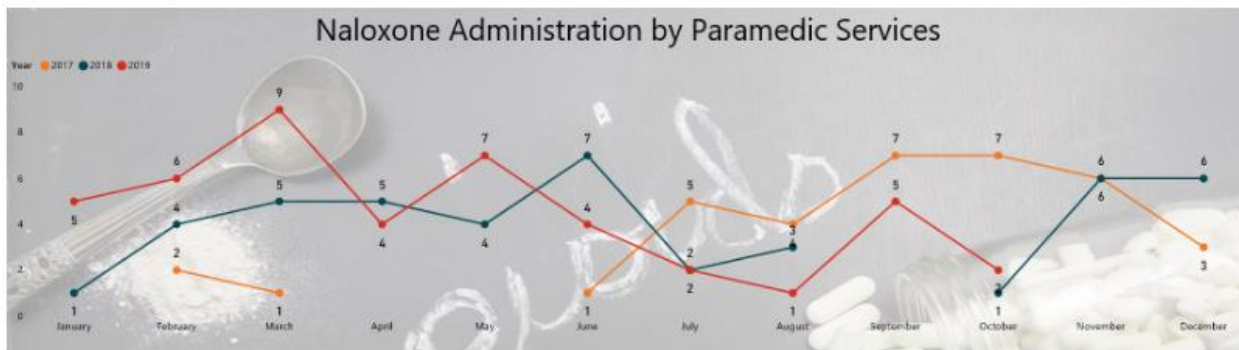
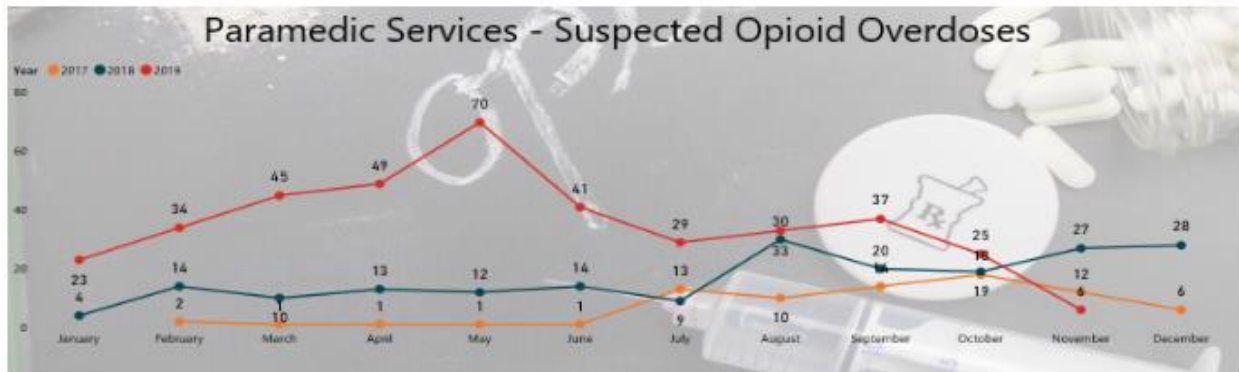


Paramedic Services Opioid Monitoring and Reporting

Paramedics in Ontario do not confirm an opioid overdose as they lack the diagnostic tools to do so. Paramedics indicate suspicion of an opioid-related incident as derived from the patient, scene assessment, signs and symptoms, patient or bystander reports of drug use or incident history. The Opioid Reporting Tool Dashboard represents suspicion of an opioid-related incident and cannot confirm cases or deaths because of the suspected opioid overdose. Data regarding deaths from opioid overdoses can be obtained from the Public Health Ontario website.

<https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool#/dTrend>

The following three graphs represent the cumulative suspected opioid-related incident call data and naloxone administration as tracked and shared with the Community Drug Strategy for early warning and detection up to November 5, 2019.



GOOD NEWS STORY

Paramedic Ride



On September 13-16, four Paramedics from Sudbury Paramedic Services joined hundreds of other Paramedics from across the province, in the annual Paramedic Ride from Toronto to Ottawa. The cyclists raised funds and awareness for the Canadian Paramedic Memorial Foundation that is committed to building a National Monument in Ottawa honouring the dedication and sacrifice of all Canadian Civilian and Military Paramedics who have lost their lives in the line-of-duty.

2018 Recognition Event

On October 3, Community Safety celebrated the Fourth Annual Community Safety Recognition Event. The evening was an opportunity to honour the men and women for their years of service, peer recognition and Federal Medals.

Primary Care Paramedic Roger Frappier was presented the Paramedic Services Award, which honours a Paramedic or EVT who demonstrates perseverance towards excellence in the quality of care or services provided to the community.

Advanced Care Paramedic and Community Paramedic Gary Lauzon was presented the Leonce Seguin Memorial Award, which honours a Paramedic who has demonstrated a commitment to growth in their knowledge base and adherence to pre-hospital care.

Advanced Care Paramedics Angele Paquette and Richard Sasseville received their Emergency Medical Services Exemplary Service Medal. The Governor General of Canada Exemplary Service Medals recognize the men and women dedicated to preserving Canada's public safety through long and outstanding service. Emergency Medical Exemplary Service Medal, recognizes professionals in the provision of pre-hospital emergency medical services to the public who have performed their duties in an exemplary manner, characterized by ethical conduct, industry and efficiency. Recipients must have been employed with emergency medical services on or after October 31, 1991, and have completed 20 years of exemplary service, including at least ten years in the performance of duties involving potential risk.

