For Information Only

Paramedic Services Update

Presented To:	Emergency Services Committee
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Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This information report was prepared to provide the Emergency Services Committee an overview of recent business activities, relevant statistics and good news stories in the Paramedic Division, Community Safety Department.

Financial Implications

There are no financial implications associated with this report.

Signed By

Division Review
Paul Kadwell
Deputy Chief of Paramedic Services
Digitally Signed Jan 24, 20

Financial Implications
Apryl Lukezic
Co-ordinator of Budgets
Digitally Signed Jan 24, 20

Recommended by the Department
Joseph Nicholls
General Manager of Community Safety
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Recommended by the C.A.O.
Ed Archer
Chief Administrative Officer
Digitally Signed Jan 28, 20

EXECUTIVE SUMMARY

This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on activities, 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

Health and Safety Training

Working with City of Greater Sudbury Health and Safety Section, Paramedic Services is committed to sending more people to Level I and Level II Joint Health and Safety Certification Training. The knowledge this group has gained is already improving the worksite inspection process. The team has learned to identify and resolve hazards and establish and build upon a strong safety culture in the workplace.

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 latest session which was held in December covered calls associated with domestic violence and sexual assault.

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	27,729
EMS Unit Response	32,708
EMS Patients Transported	19,424

Table 1. Greater Sudbury Paramedic Services Statistics Q1-Q4 2019

Logistics

Overhead Door Sensors

During a one-year trial a selected number of doors had a new electronic door sensor installed, not one system has failed, which is an example of investment in reliable technology that improves safety and decreases costs. Typically, overhead doors require frequent inspection and maintenance, specifically the built-in safety systems at the leading edge of the door panel, which prevents closing on a person or obstacle. With our conventional air pressure system, where the safety edge is full of air that if pressed, against an object, it would trip a pressure switch to reverse the door direction. This system often failed due to air leaks, intense summer heat or cold winter air and requires constant adjustments. On average $600.00 per month is spent to have the doors repaired or adjusted, to correct safety edge problems. The new electronic door safety edge costs approximately $600.00 each. Moving forward our intention is to install the new electronic door sensor onto all 12 main bay doors, when the current system requires replacing. We anticipate to recover the implementation costs in 12 months, with a goal to eliminate the monthly $600.00 contractor costs associated with the safety system.

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. Professional Standards also manages the electronic patient care record system, including quality assurance oversight.

Clinical events are monitored and evaluated to identify training and education opportunities for the Paramedics.

Reported number of clinical events: Date range is October 1 – December 15, 2019

Cardiac	Number of calls with at least 1, 12 Lead Acquired	825
	Total Cardiac Ischemia related	225
	Number of STEMI	37
	A STEMI is a specific type of heart attack, which can be diagnosed by Paramedics in the pre-hospital setting.	

Neurological	Total Neuro-related	943
	Number of Acute Stroke (**FAST** positive, timeline criteria met)	36
	Average Age in years	76
	Number of Strokes	27
	An Acute Stroke Patient qualifies for specific time-sensitive treatments from the hospital to reduce and reverse damage caused by stroke.	

Sepsis	Number of Suspected Sepsis Cases	40
	Average Age in years	82
	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	73
	Total Treated Cardiac Arrest Medical and Traumatic	35
	Number of Treated Cardiac/Medical Arrest	31
	Number of Medical Arrest with Return of Spontaneous Circulation at any time while in Paramedic Care.	7

Training

Staff Education Sessions

During the fourth quarter, Training Officers delivered in-class education sessions to all frontline Paramedics. Topics covered during the full-day session included Court Process and Legal Documentation, Indigenous Cultural Training, SafeTALK Suicide Awareness Training, CPR Recertification and Stroke Review.

Community Paramedicine

Health Promotion Community Paramedicine (HPCP)

The objective of this program is to maintain and expand health promotion, education and injury prevention. This program will also assist citizens in chronic disease recognition and prevention, injury awareness/prevention strategies, referrals and health system navigation assistance. The primary goals of this program 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.

During the 2020 budget, council approved additional funding for the Health Promotions Community Paramedic Program. The additional funding will allow the expansion and addition of services equitably throughout CGS communities.

Within this reporting period, 150 calls were reffered to local service/programs. Of these 150 calls, four were refered to withdrawl management services, six to the Community Mobilization Sudbury-Rapid Mobilization Table, eight to mental health services, with the remaining 132 being Paramedic referrals.

A revised Mental Health and Addictions Emergency Department Diversion by Paramedics Directive is under review with our Medical Director, who brought the directive forward to Health Science North (HSN) Quality Control Committee, where recommendations have been presented. The next steps for initiation of the new directive will be to meet with diversion destination agencies and HSN Withdrawal Management and Crisis Intervention Services to inform of proposed changes and receive feedback before beginning Paramedic staff education. The new directive intends to help ensure Paramedics offer the right care to the right patients at the right time with improved utilization of diversion. Improved tracking processes have been created to allow follow-up and interagency data sharing regarding patient destinations when a Paramedic offers a diversion from ED to these alternate, more appropriate destinations.

Paramedic Services presented six 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 two of these cases. Paramedic Services was requested as an assisting agency in 53 other CMS-RMT responses presented by other community agencies. HPCP total engagement was 55 out of 63, or 87.3% of total RMT discussions for this Q4 2019 period. Paramedic Services is a valuable resource during RMT discussions. These processes are very

time-sensitive and take priority as these individuals are at an elevated risk of harm. These cases take time to develop effective planning with appropriate community agencies.

A home visit program was initiated in December 2019, where a Community Paramedic will visit those identified in our community as frequent 911 users. This program is called CP@Home and is a randomized research collaboration between CGS Paramedic Services HPCP program and McMaster University that will run from December 2019 to March 2021. The goal is to see a lowering of frequent 911 callers' reliance on the 911 system through engagement with more appropriate community services resulting in a lowering of these types of 911 calls annually, thus allowing Paramedic Services to maintain current service levels provided to the community.

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 shared Paramedic Service Community Drug Strategy Opioid Report 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 tables (4, 5, and 6) 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 between October 1, 2019, and December 31, 2019.

Table 4. Q4 2019 with comparisons to Q4 2018 and 2017 – Paramedic Services Suspected Opioid Incidents

Reporting Period	**2019**	**2018**	**2017**
October	25	19	18
November	30	27	12
December	52	28	6
Total for Q4	107	74	36

Table Data Source shared Sudbury Paramedic Services Community Drug Strategy Opioid Report

Table 5. Q4 2019 with comparisons to Q4 2018 and 2017 - Naloxone Administration by Non-Paramedic Services

Reporting Period	**2019**	**2018**	**2017**
October	2	1	7
November	5	6	6
December	7	6	3
Total for Q4	14	13	16

Table Data Source shared Sudbury Paramedic Services Community Drug Strategy Opioid Report

Table 6. Q4 2019 with comparisons to Q4 2018 and 2017 - Paramedic Services Non-Paramedic Naloxone Administration

Reporting Period	**2019**	**2018**	**2017**
October	7	9	1
November	8	9	3
December	18	6	2
Total for Q4	33	24	6

Table Data Source shared Sudbury Paramedic Services Community Drug Strategy Opioid Report