



EMERGENCY SERVICES COMMITTEE AGENDA

Emergency Services Committee Meeting
Wednesday, October 23, 2019
Tom Davies Square - Council Chamber

COUNCILLOR GERRY MONTPELLIER, CHAIR

Rene Lapierre, Vice-Chair

4:00 p.m. EMERGENCY SERVICES COMMITTEE MEETING
COUNCIL CHAMBER

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DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

PRESENTATIONS

1. Report dated October 8, 2019 from the Interim General Manager of Community Safety regarding Paramedic Services - Emergency Department Diversion for Mental Health and Addictions Patients. **4 - 9**
(ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)
 - Melissa Roney, Acting Deputy Chief of Emergency Services(This report provides information regarding Greater Sudbury Paramedic Services' Mental Health and Addictions Diversion Programs which allows Paramedics to safely transport intoxicated or mental health patients to an alternate facility, bypassing the emergency department.)
2. Report dated October 8, 2019 from the Interim General Manager of Community Safety regarding Paramedic Services - Implementation of a Sepsis Alert Protocol. **10 - 14**
(ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)
 - Melissa Roney, Acting Deputy Chief of Emergency Services(This report provides information regarding Greater Sudbury Paramedic Services' implementation of a prehospital sepsis alert protocol which has a direct impact on the morbidity of patients suffering from sepsis.)
3. Report dated October 8, 2019 from the Interim General Manager of Community Safety regarding Fire Services - Motor Vehicle Collision Response Protocols. **15 - 20**
(ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)
 - Jesse Oshell, Acting Deputy Fire Chief(This report addresses a Motion from the July 5, 2019 Emergency Services Committee meeting for a report to provide information about the Greater Sudbury Fire Services response protocols related to motor vehicle collisions.)

REGULAR AGENDA

MANAGERS' REPORTS

- R-1. Report dated October 9, 2019 from the Interim General Manager of Community Safety regarding Transfer of National Emergency Strategic Stockpile. **21 - 23**
(RESOLUTION PREPARED)

(This report provides information regarding the Public Health Agency of Canada's divestment of stockpiled equipment and its transfer to the City of Greater Sudbury.)

MEMBERS' MOTIONS

CORRESPONDENCE FOR INFORMATION ONLY

- I-1. Report dated October 9, 2019 from the Interim General Manager of Community Safety regarding Emergency Management Update Report. **24 - 28**
(FOR INFORMATION ONLY)
(This report provides an update on good news stories, an overview and statistical information from Emergency Management.)
- I-2. Report dated October 9, 2019 from the Interim General Manager of Community Safety regarding Fire Services Update Report. **29 - 35**
(FOR INFORMATION ONLY)
(This report provides an update on good news stories, relevant statistics and recent business activities within the Community Safety Department, Fire Services Division.)
- I-3. Report dated October 9, 2019 from the Interim General Manager of Community Safety regarding Paramedic Services Update Report. **36 - 50**
(FOR INFORMATION ONLY)
(This report provides an update on recent business activities within the Paramedic Services Division of the Community Safety Department.)

ADDENDUM

CIVIC PETITIONS

QUESTION PERIOD

ADJOURNMENT

For Information Only

Paramedic Services - Emergency Department Diversion for Mental Health and Addictions Patients

Presented To: Emergency Services
Committee

Presented: Wednesday, Oct 23,
2019

Report Date Tuesday, Oct 08, 2019

Type: Presentations

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

Improving prehospital care delivery services through the development of Emergency Department Diversion Strategies in turn looks to improve the health and well-being of citizens. Therefore, this report supports the Quality of Life and Place pillar of the Corporate Strategic Plan.

Report Summary

In response to a growing number of addictions and mental health-related emergency calls, two Sudbury Paramedic Services diversion pilot projects were implemented in 2015 to reduce the strain on the 911 system and the local emergency department. These pilot projects were developed with the simple idea that not everyone who calls 911 needs to go to the Emergency Department. There have been no adverse outcomes arising from these programs and it has been recommended that these diversion pilots become full operational programs.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By

Melissa Roney
Acting Deputy Chief of Emergency
Services
Digitally Signed Oct 8, 19

Financial Implications

Liisa Lenz
Coordinator of Budgets
Digitally Signed Oct 8, 19

Recommended by the Department

Joseph Nicholls
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Safety
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Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
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Paramedic Services – Emergency Department Diversion Protocol for Mental Health and Addictions Patients

Due to Paramedics coping with a growing number of addictions and mental health-related emergency calls, two Sudbury Paramedic Services Diversion pilot projects were implemented in 2015 to reduce the strain on local hospitals. These pilot projects were developed with the simple idea that not everyone who calls 911 needs to go to the Emergency Department (ED).

Health Sciences North (HSN) operates a satellite Withdrawal Management Clinical Program at 336 Pine Street and a Mental Health and Addictions Centre at 127 Cedar Street in Sudbury. In 2015, Paramedic Services began diverting ambulance patients to these two sites through a pilot Emergency Department (ED) Diversion Strategy. Staffed by nurses, occupational therapists or social workers, these clinics treat patients who require detox or are in mental distress but who are stable and do not require the full support of the ED. These patients could be suffering from intoxication, depression, or may be thinking about suicide but do not have a plan in place.

Diversion Pilot Program Development

Through Paramedic Services Continuous Quality Improvement Program, a review of multiple caller patient profiles determined many patients were mental health and addictions patients that Paramedic Services had often brought to the ED and had either left without being seen or had been assessed and released with no real change in behaviour or call volume. Additionally, the review also determined that intoxicated patients may lead to ambulance off load delays if patient's behavior and/or level of intoxication made them unable to be placed into the waiting room.

Historically, Paramedics were never able to directly transport conscious intoxicated patients to HSN Withdrawal Management even though police had been doing so for years.

In 2012, Greater Sudbury Police Services commenced a pilot program that included training and establishing protocols to transport people to the HSN Mental Health and Addictions Centre to facilitate persons with non-acute mental illness to obtain rapid assessment and treatment by trained clinicians. This action also permitted more timely redeployment of police officers. This pilot program was successful with no adverse patient outcomes.

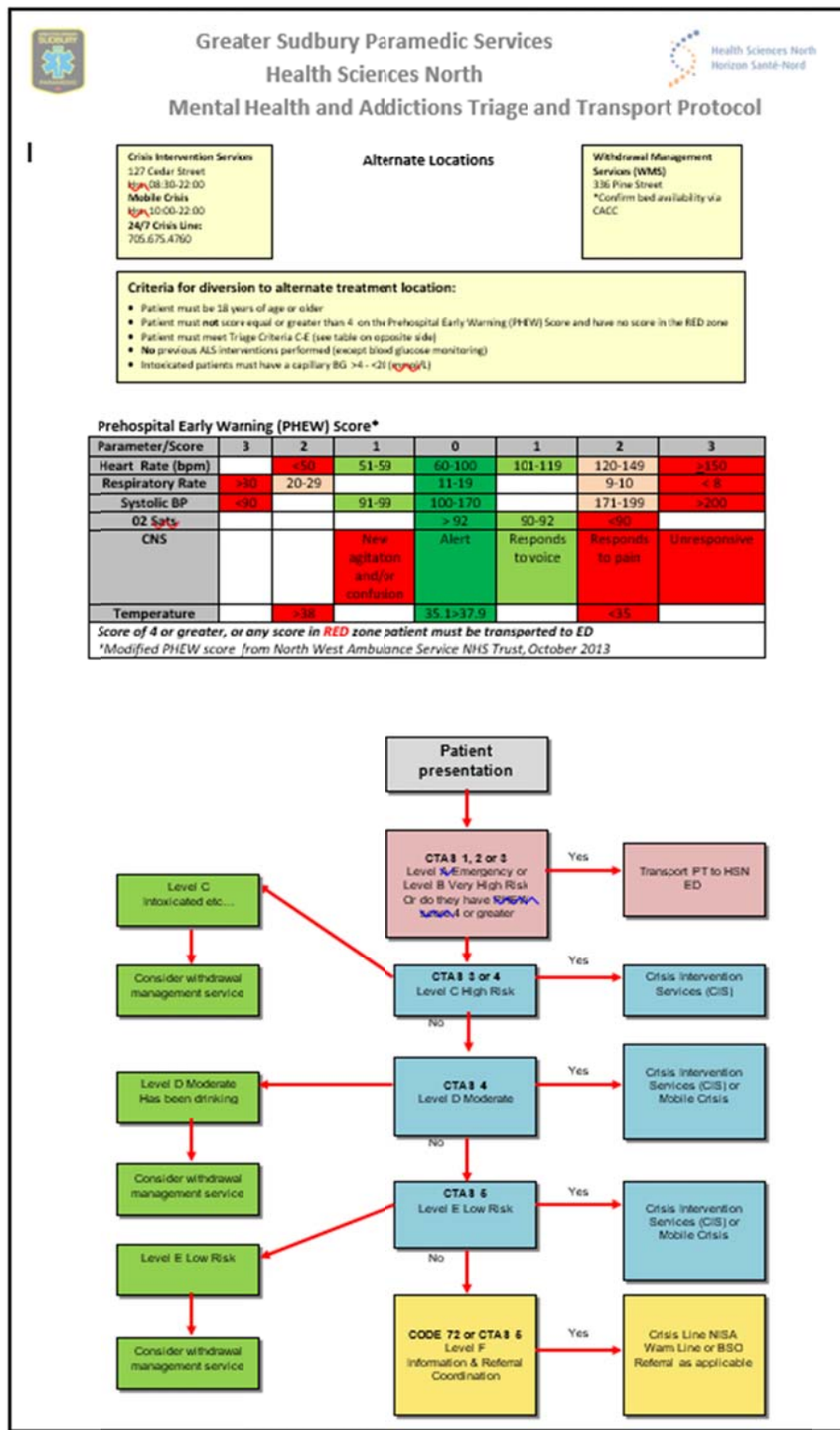
In 2013, Paramedic Services opened dialogue with HSN Mental Health and Addictions Centre to address mental health patients. Opportunities for community care were discussed and the HSN Mental Health and Addictions Triage and Transport Protocol (Fig.1) for Paramedic Services was developed and approved by Dr. Jason Prpic, Medical Director, Health Sciences North Centre for Prehospital Care.

In 2014, multiple meetings with HSN occurred to discuss options, opportunities and requirements for Ministry of Health notification and approval. Approval by the Ministry of Health was required as the Ambulance Act prohibits the transportation of ambulance patients to any other location other than a hospital.

In late 2014, the HSN Mental Health and Addictions Triage and Transport Protocol was fully approved by the Ministry of Health. Under this protocol, all patients 18 years or older, who met the medical

assessment criteria, were cooperative and agreed with the alternate location could be diverted. All acute, high-risk emergent patients would continue to be transported to the ED.

Fig. 1 Sudbury Paramedic Services Mental Health and Addictions Triage and Transport Protocol

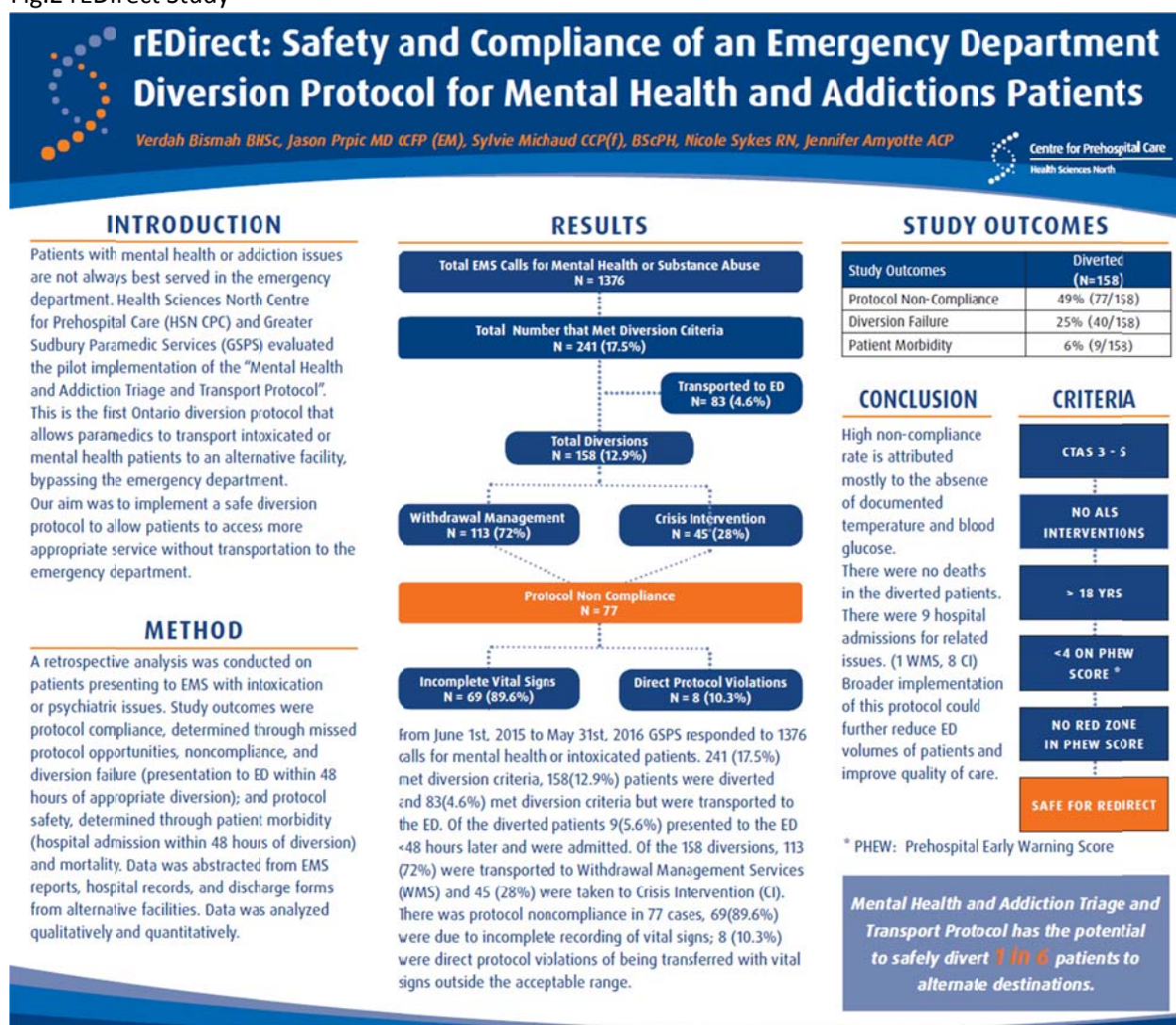


Clinicians from HSN Withdrawal Management, the Canadian Mental Health Association, Dr. James Chau, and Behavioral Supports Ontario provided Paramedics training in the safe use of the Diversion Protocol and training to enhance skills in the detection, prevention and best response of non-urgent community mental health and addictions related calls. This training was partially funded by North East Local Health Integration Network. Paramedic Services officially launched the Diversion pilots June 15, 2015.

An Evaluation of the Sudbury Paramedic Service Withdrawal Management and Crisis Intervention Diversion Pilot Programs

Sudbury had the first Ontario protocol that allowed Paramedics to transport intoxicated or mental health patients to an alternative facility bypassing the ED and in 2016, a group of researchers and healthcare professionals led by Dr. Jason Prpic completed an analysis of the programs. This research was also presented at the Canadian Association of Emergency Physicians conference in Halifax, NS in May of this year (Fig.2).

Fig.2 rEDirect Study



Used with permission from Health Sciences North- Center of Prehospital Care

The rEDirect study was a retrospective analysis on patients presenting to Paramedic Services with intoxication or psychiatric issues. Study outcomes included protocol compliance and protocol safety.

From June 1, 2015 to May 31, 2016, Paramedic Services responded to 1376 calls for mental health or intoxicated patients. Of these calls, 241 patients met diversion criteria, 158 patients were diverted and 83 met diversion criteria but were transported to the ED. Of the diverted patients nine presented to the ED less than 48 hours later and were admitted. Of the 158 diversions, 133 were transported to the Withdrawal Management Clinical Program and 45 were taken to the Mental Health and Addictions Centre. There was protocol non-compliance in 77 cases, 69 were due to incomplete recording of vital signs and eight were direct protocol violations of being transported with vital signs outside the acceptable range. There have been no adverse outcomes and it has been recommended that these diversion pilots become full operational programs. Broader implementation of the protocol has the potential to reduce ED volumes and improve quality of care.

Next Steps

On average, Sudbury Paramedic Services responds to approximately 1200 low acuity mental health and addictions related calls every year and this call volume is increasing. In 2018, there were 420 calls with alcohol related problem codes identified as non-urgent and 61 patient were diverted to the Withdrawal Management Clinical Program. Subsequently, there were 764 calls with a primary problem code of non-urgent behaviour psychiatric and of those 28 patients were diverted to the Mental Health and Addictions Centre. Currently, the Withdrawal Management Clinical Program accepts patients 24/7, however; the Mental Health and Addictions Centre receives patients daily between 8:30 am - 10:00 pm only. More patients could have been successfully diverted had the Centre been open at the time of their call.

Many other diversion opportunities exist where patients needs can be better met other than in the hospital's ED. The Nurse Practitioner Clinic at 200 Larch Street will open its doors in 2020 offering many clinical services to a vulnerable patient population who are without a family physician. Discussions are underway for diversion program expansion. Additionally, Paramedic Services is also discussing the opportunity for diverting non-urgent patients of The City of Lakes Family Health Team physicians, to the City of Lakes Family Health Team Clinic. Provincial approval will again be required for further expansion of these programs.

On September 5, 2019, the Ministry of Health announced proposals to enable new models of care for select 911 patients. This proposal to amend regulations under the Ambulance Act and Health Insurance Act will provide an opportunity for select 911 patients with alternate care options for prehospital care other than transport to the emergency department. We believe these changes are an important step in the progression of health care as a whole and the modernization of emergency medical care in particular. The Paramedic profession is continually evolving to play a more comprehensive role in the healthcare system and is agile enough to adapt to fill gaps in service for the communities we serve.

Over the years, 911 has unintentionally become the safety net within the healthcare system. Diversion programs help individuals navigate the sometimes complicated health care system. Paramedics help to safely and responsibly determine if there is a more appropriate care setting for patients to receive treatment other than an ED. Our aim, with broader implementation of diversion protocols, is improved

quality of care, assisting 911 patients to receive faster treatment, and in turn, allow faster treatment for everyone waiting in line at the ED.

For Information Only

Paramedic Services - Implementation of a Sepsis Alert Protocol

Presented To: Emergency Services Committee

Presented: Wednesday, Oct 23, 2019

Report Date Tuesday, Oct 08, 2019

Type: Presentations

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

Improving prehospital care delivery services through the implementation of a Sepsis Alert Protocol in turn looks to improve the health and well-being of citizens. Therefore, this report supports the Quality of Life and Place pillar of the Corporate Strategic Plan.

Report Summary

This report outlines how the continuous quality improvement process lead to the development of the Sudbury Paramedic Services Sepsis Alert Protocol which resulted in decreasing mortality for patients suffering from sepsis. Sepsis is a Public Health Concern as sepsis numbers are on the rise. Sepsis is the primary cause of death from infection and is the leading cause of mortality and critical illness worldwide. Paramedics are trained to fully understand sepsis, be able to asses, recognize, and initiate rapid transport of sepsis patients to ensure patients receive time sensitive treatment.

Financial Implications

There are no financial impacts associated with this report.

Signed By

Report Prepared By

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Digitally Signed Oct 8, 19

Financial Implications

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Recommended by the Department

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Ed Archer
Chief Administrative Officer
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Paramedic Services – Introduction of a Sepsis Alert Protocol

This report outlines how the continuous quality improvement process lead to the development of the Sudbury Paramedic Services Sepsis Alert Protocol which resulted in decreasing mortality for patients suffering from sepsis.

Introduction

Sepsis is a life-threatening illness caused by your body's response to an infection. Your immune system protects you from many illnesses and infections, but it is also possible for it to go into overdrive in response to an infection. Sepsis develops when the chemicals the immune system releases into the bloodstream to fight an infection cause inflammation throughout the entire body instead. Severe cases of sepsis can lead to septic shock, which is a medical emergency. Sepsis is a Public Health Concern as sepsis numbers are on the rise most likely because of aging populations with more comorbidity factors. Sepsis is the primary cause of death from infection and is the leading cause of mortality and critical illness worldwide. It is of high importance that Paramedics are trained to fully understand sepsis, be able to assess, recognize, and initiate rapid transport of sepsis patients to ensure patients receive time sensitive treatment.

Background

Research within the last decade has changed the way sepsis is clinically managed and much effort has been made to better define, recognize and expedite treatment of sepsis. Delays to definitive treatment of intravenous (IV) fluid administration and antibiotics lead to increased morbidity and mortality. Severe sepsis and septic shock bears around 30% mortality rate and for each hour of delay in antibiotics, mortality increases (Rivers Trial).

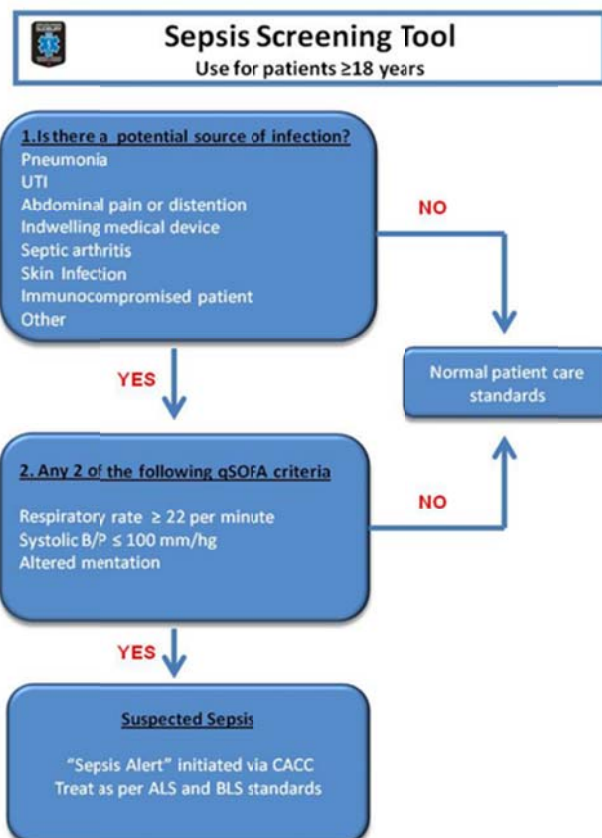
Prehospital medical care provides the earliest opportunity for identification of sepsis and potentially delivering immediate life-saving treatment for patients. It is known that prehospital recognition of sepsis can speed up care in the emergency department and that these patients get the required diagnostics and treatment sooner (Studnick, 2012). Paramedics play a major role in the identification, pre-alert, and initial management of sepsis. Traditionally, Paramedic training has focused on assessing and managing 'barn door' presentations such as chest pain and heart attacks, stroke and transient ischemic attacks, and acute trauma. To date, there has been little focus on the acute assessment and management of sepsis, though the Sequential Organ Failure Assessment (SOFA) and shortened qSOFA Sepsis Screening Tool, is now used by some Paramedic services. This new prehospital sepsis screening tool assesses a patient's breathing rate, blood pressure and level of awareness for those with a suspected infection. Although this new definition of sepsis has been implemented as how we should be identifying sepsis, the qSOFA criteria has never been validated in the Emergency Department (ED) or prehospital setting. Approximately 50% of patients with sepsis in the ED arrive by ambulance, with an average prehospital care time of 45 minutes. This suggests an important window of opportunity for early recognition and care of sepsis before hospital arrival.

Continuous Quality Improvement Initiative

Beginning in 2015, through the Paramedic Services Continuous Quality Assurance process, it was discovered that Paramedics were not consistently or accurately recognizing all sepsis patients in the field. With a high volume of generally unwell patients transported to the ED, a clinical review identified these patients were potentially suffering from sepsis. This meant delays to early definitive sepsis treatment in the ED with resultant increase in morbidity.

In 2016, our Clinical Auditor lead a project that developed the following two deliverables; a sepsis education plan for Paramedics to better train for recognition of sepsis, near sepsis, or high risk for sepsis patients and a communication alert between Paramedics and Health Sciences North emergency department staff in an effort to see septic patients receive treatment early.

The sepsis training program was delivered in the 2016 Paramedic spring training sessions with the introduction and overview of the Sepsis Screening Tool (Fig.1) that included the new sepsis quick SOFA (qSOFA) patient assessment criteria. The sepsis screening consists of a three-step algorithm for Paramedics to follow. This is based on having two or more of the qSOFA criteria, which assess the patients breathing rate, their blood pressure and their level of awareness for patients with a suspected source of infection.



The development of the Sepsis Alert Protocol had cross-functional impacts with the Sudbury Central Ambulance Communications Centre for hospital Sepsis Alert notification and the ED to ensure seamless transfer of care of patients as well as a process to ensure prompt physician assessment and commencement of treatment. In June 2016, the Sepsis Alert Protocol and Sepsis Screening Tool was made final and received approval from Health Sciences North Medical Director, Dr. Jason Prpic. The Sepsis Alert Protocol and Sepsis Screening Tool became operational June 6, 2016.

An Evaluation of the Implementation of a Prehospital Sepsis Alert Protocol & Sepsis Screening Tool

Sudbury Paramedic Services was the first Paramedic Service in Ontario to implement the Sepsis Alert Protocol and Sepsis Screening Tool. In 2017, a group of researchers and healthcare professionals led by Health Sciences North Medical Director, Dr. Jason Prpic, completed a research study to see whether implementing in the prehospital setting would lead to a decrease in time to antibiotic administration in the ED. The Research Ethics Board of Health Sciences North approved this study.

Specific objectives include determining the predictability and reliability of the screening tool for septic patients, patient impact including number of patients who receive antibiotics and their outcomes, and system impacts including operational efficiencies.

This pre and post observational study was conducted and patients' charts were reviewed by a physician from June 5, 2015 to June 5, 2016. Intervention data was also gathered from implementation until February 28, 2017.

The time to administration of antibiotics was calculated from the time Paramedics arrived in the ED and the time it took the health care provider to administer the antibiotic.

Results from this study showed clinically and statistically, a significant reduction in the time to antibiotic administration with the implementation of the prehospital Sepsis Alert Protocol and Sepsis Screening Tool.

Conclusion

Implementation of the Greater Sudbury Paramedic Services Sepsis Alert Protocol and Sepsis Screening Tool lead to a decrease in time to antibiotic administration in the ED by 48.81 minutes. The qSOFA sepsis patient screening tool is not sensitive enough to use solely as a screening tool. However, in the prehospital setting the qSOFA screening algorithm is of much value, because if patients screen positive, over 95% of patients will indeed have sepsis and should be prioritized given they are the group that will benefit the most from early antibiotic treatment. In this study, the implementation of the qSOFA sepsis screening tool and the sepsis alert protocol had a direct impact on the morbidity of sepsis patients.

Paramedics play a key role in providing early recognition, initial treatment, and rapid transport for patients with sepsis proving earlier identification and management in the prehospital setting improves health outcomes and speeds up care in the ED.

Similarly, Paramedic alert protocols for stroke and heart attack recognition have both been shown to significantly decrease time to definitive treatment and thus sepsis with an up to 30% mortality warrants a fast track protocol. Much public education has been done in recognizing early signs of stroke or heart

attacks and emphasis has been placed on delivering basic life support care. However, there remains a great deal of work in acknowledging and educating the public on the devastating consequences of sepsis from an untreated infection.

For Information Only

Fire Services - Motor Vehicle Collision Response Protocols

Presented To: Emergency Services Committee

Presented: Wednesday, Oct 23, 2019

Report Date Tuesday, Oct 08, 2019

Type: Presentations

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report describes the Greater Sudbury Fire Services response protocols related to Motor Vehicle Collisions (MVC's) as requested by the Emergency Services Committee Chair, Councillor Montpellier, at the June 5, 2019 Emergency Services Committee meeting. The type of response to vehicle accidents varies based on the known or unknown information received at the 911 communications centre by way of direct contact from those involved or by third party observers to the accident. Since 2015, three specific and unique types of response protocols are in place for MVC's across Greater Sudbury.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By

Jesse Oshell
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Digitally Signed Oct 8, 19

Financial Implications

Liisa Lenz
Coordinator of Budgets
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Recommended by the Department

Joseph Nicholls
Interim General Manager of Community Safety
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Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
Digitally Signed Oct 8, 19

Fire Services – Response Protocols Related to Motor Vehicle Collisions

Purpose

This report describes the Greater Sudbury Fire Services response protocols related to Motor Vehicle Collisions (MVC's) as requested by Emergency Services Committee Chair, Councilor Montpellier, at the June 5, 2019 Emergency Services Committee meeting. The type of response to vehicle accidents varies based on the known or unknown information received at the 911 communications centre by way of direct contact from those involved or by third party observers to the accident. Since 2015, three specific and unique types of response protocols have been in place for MVC's across Greater Sudbury.

Executive Summary

In 2015, Greater Sudbury Fire Services launched a process for updating and restructuring the deployment model for all emergency incidents including Motor Vehicle Collisions (MVC's). This model uses a comprehensive set of rules which govern the recommended selection of the initial fire apparatus. The units in this model respond to an emergency incident once a call for service is received by the 911 communications centre. This model replaces a system, which was established in 2011 and went unchanged until September of 2015. Utilizing evidence-based knowledge and supporting historical data, MVC's were classified into three categories of response which can change depending on the severity of the accident, the type of vehicle(s) involved, or the total number of vehicles involved. In 2017 and again in 2018, further revisions of these three MVC response types were undertaken in order to apply changes which would result in efficiencies during dispatch and a more effective use of fire resources.

Analysis

MVC incidents are reported via 911 callers who are either those involved in the accident or who are only witness to the situation. Those who do drive by often do not stop and only report what they observed while moving past the accident location. This type of information provides a lack of detail in terms of specific needs related to emergency response and therefore a broader deployment may occur which sends multiple resources to an unknown MVC type. In addition, any MVC in a Volunteer Firefighter response area may have multiple vehicles attending as Volunteer Firefighters respond from home or work to the Fire Station at staggered times and may take several apparatus to attend to the accident. Volunteer Firefighters do not arrive at the station at the same time, do not know the location or number of other firefighters attending and only wait a short amount of time for other responders before leaving the Fire Station.

In every MVC response, the role of Greater Sudbury Fire Services is to ensure the safety of the public and that of all first responders who attend at the incident scene. Providing resources to block oncoming traffic while maintaining high visibility using Fire Services apparatus ensures all responders have a safe place to work and persons involved are not exposed to additional risks on busy roadways. The many

environmentally harmful vehicle fluids potentially spilled on the scene, the dangers of both deployed and non-deployed airbags, and the addition of hybrid or all electric vehicles adding numerous high voltage hazards to MVC incidents are mitigated as Fire Services trains for these situations. Firefighters carry the proper tools and have the resources to address these and other situations which may arise and potentially cause further harm to either persons involved or the responders on scene. Finally, Fire Services may assist Paramedics with their treatment of persons involved, perform auto-extrication to remove persons trapped, assist Police Services, and ensure the area is safe and accessible for tow and recovery operations.

2015-2016 MVC Response Types

Beginning in September of 2015, the updated response types for MVC's were the following:

- 1) No Injuries/Injuries – This type of response sent the one closest Fire Services engine to the emergency. Only one pumper was dispatched to this type of incident; however, in a volunteer response area, additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident.
- 2) Auto Extrication – This type of response sent the closest two Fire Services engines in all response areas except for the Val Caron/Val Therese/Hanmer area which had a special response type to send the full time staffed Engine 16, the closest one volunteer engine, and the one volunteer support apparatus from Station 16. Additional apparatus might arrive on scene due to number of volunteer firefighters who attend the incident.
- 3) Multi-Vehicle/Commercial/Rollover – This type of response sent the closest two Fire Services engines and the closest one support apparatus in all response areas except for the Val Caron/Val Therese/Hanmer area which had a special response type to send the full time staffed Engine 16, the closest one volunteer engine, and the one volunteer support apparatus from Station 16. Additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident. Further, if this type of response occurred in a volunteer response area, it triggered the Optimized Tiered Response (OTR). OTR is the dispatch of the closest career engine to the incident in order to provide a guaranteed response.

2016 Fire Services MVC Response	
697	No Injuries/Injuries and Multi-Vehicle/Commercial/Rollover
25	Auto Extrication
722	Total MVC Responses

2017 MVC Response Types

In January of 2017, one additional response type was added in order to capture the updated Greater Sudbury Police Service Collision Reporting Centre (CRC) incidents. CRC incidents are MVC's which do not have a Police Cruiser attending and affected parties are directed to the CRC located at the Lionel

Lalonde Centre in Azilda. CRC incidents are often known at the time of dispatch due to information the 911 call taker is able to obtain from the caller. In 2017, only incidents without injuries or property damage could qualify for CRC status.

- 1) CRC – This type of response was selected when it was a known CRC incident and sent the one closest Fire Services engine to the emergency. Only one pumper was dispatched to this type of incident; however, in a volunteer response area, additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident.
- 2) No Injuries/Injuries – This type of response sent the one closest Fire Services engine to the emergency. Only one pumper was dispatched to this type of incident; however, in a volunteer response area, additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident.
- 3) Auto Extrication – This type of response sent the closest two Fire Services engines in all response areas except for the Val Caron/Val Therese/Hanmer area which had a special response type to send the full time staffed Engine 16, the closest one volunteer engine, and the one volunteer support apparatus from Station 16. Additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident.
- 4) Multi-Vehicle/Commercial/Rollover – This type of response sent the closest two Fire Services engines and the closest one support apparatus in all response areas except for the Val Caron/Val Therese/Hanmer area which had a special response type to send the full time staffed Engine 16, the closest one volunteer engine, and the one volunteer support apparatus from Station 16. Additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident. Further, if this type of response occurred in a volunteer response area, it triggered the Optimized Tiered Response. OTR is the dispatch of the closest career engine to the incident in order to provide a guaranteed response.

2017 Fire Services MVC Response	
154	Collision Reporting Centre
698	No Injuries/Injuries and Multi-Vehicle/Commercial/Rollover
35	Auto Extrication
887	Total MVC Responses

2018 MVC Response Types

In June of 2018, changes were made once more to the response types which removed the CRC type and the No Injury type from incidents which Fire Services responds and further clarified the remaining incident types in order to provide an effective response with the proper number of apparatus:

- 1) Injuries/Unknown Injuries/Hazards/EMS Attending – This type of response sends the one closest Fire Services engine to the emergency. Only one pumper is dispatched to this type of incident; however, in a volunteer response area, additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident. (Hazards are identified as unknown fluids leaking from the vehicle or the vehicle is in a location or state which is a potential danger to the occupants or others.)
- 2) Auto Extrication/Rollover – This type of response sends the closest two Fire Services engines in all response areas except for the Val Caron/Val Therese/Hanmer area which has a special response type to send the full time staffed Engine 16, the closest one volunteer engine, and the one volunteer support apparatus from Station 16. Additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident. (Rollover is more likely to lead to an extrication type event and was included in this response type to better reflect that potential.)
- 3) Multi-Vehicle (4 or more)/Commercial – This type of response sends the closest two Fire Services engines and the closest one support apparatus in all response areas except for the Val Caron/Val Therese/Hanmer area which has a special response type to send the full time staffed Engine 16, the closest one volunteer engine, and the one volunteer support apparatus from Station 16. Additional apparatus might arrive on scene due to the number of volunteer firefighters who attend the incident. Further, if this type of response occurs in a volunteer response area, it triggers the Optimized Tiered Response. OTR is the dispatch of the closest career engine to the incident in order to provide a guaranteed response. (Multi-Vehicle is now defined as 4 or more vehicles involved in a very serious collision or incident.)

2018 Fire Services MVC Response – January to June	
106	Collision Reporting Centre
483	No Injuries/Injuries and Multi-Vehicle/Commercial

2018 Fire Services MVC Response – July to December	
412	No Injuries/Injuries and Multi-Vehicle/Commercial
24	Auto Extrication/Rollover

2018 Fire Services MVC Response	
1025	Total MVC Responses

2019 Fire Services MVC Response – January to June	
321	No Injuries/Injuries and Multi-Vehicle/Commercial
16	Auto Extrication/Rollover

Projections for total 2019 approximately 680 MVC responses

Conclusion

Since 2015, the response of Fire Services to MVC's has been modified as the needs and circumstance to this type evolve and change. Three distinct and specific modifications have occurred in 2015, 2017, and 2018 which addressed targeted outcomes in order to make evidence-based changes to the MVC response types. In addition to these changes, our partners in response at Greater Sudbury Police Services (GSPS) continue to also make changes to their CRC criteria which affect the overall response to a MVC by first responders. By continuing to work with GSPS and the 911 Fire/Police Communications Centre while analyzing our year-over-year response data, Fire Services continues to evaluate our MVC response types in order to provide an effective and efficient response which will ensure the safety of the public and first responders.

Request for Decision

Transfer of National Emergency Strategic Stockpile

Presented To: Emergency Services Committee

Presented: Wednesday, Oct 23, 2019

Report Date: Wednesday, Oct 09, 2019

Type: Managers' Reports

Resolution

THAT the City of Greater Sudbury grants the Interim General Manager of Community Safety authority to sign an agreement accepting equipment currently owned by the Public Health Agency of Canada as outlined in the report entitled "Transfer of National Emergency Strategic Stockpile", from the Interim General Manager of Community Safety, presented at the Emergency Services Committee meeting on October 23, 2019.

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

The Community Safety Department was approached by the Public Health Agency of Canada in relation to transferring equipment which was part of a National Emergency Strategic Stockpile currently being stored in Greater Sudbury. The Public Health Agency of Canada is divesting itself of the equipment and is offering it to the community. Accepting this equipment which consists mainly of blankets and portable stretchers would provide extra equipment in emergency situations. By way of resolution the Department is asking Council to allow the Interim General Manager of Community Safety to enter into an agreement to accept the transfer of this equipment.

Financial Implications

No ongoing financial implications.

Signed By

Report Prepared By

Melissa Roney
Acting Deputy Chief of Emergency Services
Digitally Signed Oct 9, 19

Financial Implications

Liisa Lenz
Coordinator of Budgets
Digitally Signed Oct 9, 19

Recommended by the Department

Joseph Nicholls
Interim General Manager of Community Safety
Digitally Signed Oct 9, 19

Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
Digitally Signed Oct 9, 19

Transfer of National Emergency Strategic Stockpile

Purpose

The purpose of this report is to inform Council on an opportunity to obtain equipment currently under custodial care within the Community Safety Department for the Public Health Agency of Canada. Pending direction from Council, the transfer of this equipment, can occur immediately upon appropriate signing of a transfer agreement.

Background

In March 2019, the Community Safety Department was contacted by the Emergency Preparedness & Response Officer for the Ontario region of the Public Health Agency of Canada. They were looking to reclaim and possibly transfer some historical emergency preparedness equipment and were reaching out regarding the location of a portable hospital that was within the City of Greater Sudbury. The Government of Canada has maintained a National Emergency Strategic Stockpile since 1952 in response to Cold War threats. Since 1965, by Cabinet decision, the Government has allowed the provinces to utilize these supplies during times of peace. Being managed through the Public Health Agency of Canada, National Emergency Strategic Stockpile assets have been distributed across Canada so that each province had items they could use in the case of an emergency.

Equipment known as a Mobile Emergency Hospital was stored at a Ministry of Health storage facility at the McFarlane Lake Provincial complex. Upon assessment of the equipment by the Community Safety Department personnel in March, it was determined that there is use for some of this equipment.

Additionally, there was a second set of equipment known as a Casualty Care Unit which was intended to be used to help the “walking wounded” in the event of an emergency. This equipment was transferred to custodial care of the City in 2002 and is currently stored in the Capreol Paramedic Station. This equipment was not part of the initial review. However, on July 12, 2019, the Community Safety Department was contacted again, indicating that the Public Health Agency of Canada would like to transfer the contents of the Casualty Care Unit.

Analysis

The items that Public Health Agency of Canada indicated were available for transfer include portable stretchers, wool blankets, a variety of towels, older first aid bins, and two older model generators. Community Safety Department determined they could

find a use for these items and would be able to continue to store them. There would be a minimal cost to transfer the remaining items from the hospital and Central Ambulance Communications Centre to the Capreol Paramedic Station with the use of a moving company. There would be no ongoing additional costs in continuing to store these items.

Conclusion/Next Steps

The Community Safety Department would like to transfer the available items from the Public Health Agency of Canada to the City of Greater Sudbury. By way of resolution associated with this report, there is a request of Council to allow the Chief/General Manager of Community Safety to enter into an agreement to transfer the items.

Resources Cited

None

For Information Only

Emergency Management Update Report

Presented To: Emergency Services Committee

Presented: Wednesday, Oct 23, 2019

Report Date: Wednesday, Oct 09, 2019

Type: Correspondence for Information Only

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report for information was prepared to provide the Emergency Services Committee with good news stories, an overview and statistical information from Emergency Management.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By

Latoya McGaw
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Division Review

Melissa Roney
Acting Deputy Chief of Emergency Services
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Financial Implications

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Recommended by the Department

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Recommended by the C.A.O.

Ed Archer
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Greater Sudbury Emergency Management Update Report



Presented to: Emergency Services Committee on August 14, 2019

This report aims to provide The City of Greater Sudbury Emergency Services Committee with an update on information as it relates to recent business activities within the Emergency Management Section of the Community Safety Department.

The Emergency Management Section provides leadership, guidance and direction to ensure the safety of residents in community emergencies. This Section is governed by the Emergency Management and Civil Protection Act (EMCPA). The Office of the Fire Marshal and Emergency Management and the Greater Sudbury Emergency Management Advisory Panel provide further direction and advice to the Emergency Management Section. This Section offers 24/7 support with a primary focus on the safety of our citizens through the effective management of community risks and emergencies.

Basic Emergency Management (BEM) Course

On May 30-31 and September 19-20 CGS Emergency Management hosted two sessions of the Basic Emergency Management (BEM) course.

The course provided an opportunity for participants to learn about emergency management in Ontario; including the systems and processes for preventing, mitigating, preparing for, responding to, and recovering from emergencies and disasters.



The BEM course is a two-day provincially certified course taught through the City of Greater Sudbury's Emergency Management Office. The training was provided by Emergency Management Officer Latoya McGaw and Regional Advisor North, Business Continuity and Emergency Management Unit at Ontario Ministry of the Attorney General, Carolyn Salem. A total of 46 participants received this training.

The course dates for 2020 will be announced at the end of the year.

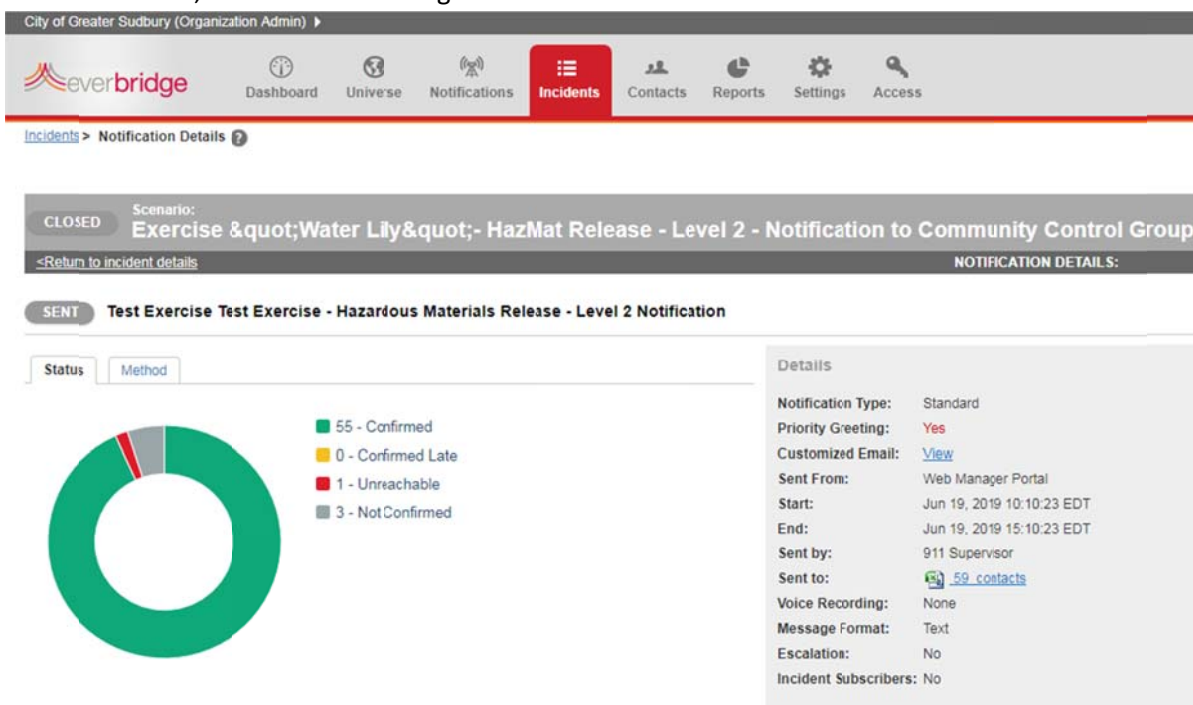


Strathcona Mill's Joint Health and Safety Week

During Strathcona Mill's Health and Safety Week, June 10-14, the CGS Emergency Management was invited to deliver a presentation on Personal Preparedness. The presentation highlighted the various hazards/emergencies that could occur in the community. It encouraged community members to "be prepared" by taking steps/actions that could help to reduce the impact of emergencies on their families, property, the environment and their community. The presentation was attended by 58 Glencore workers.

Exercise Water Lily

A second hazardous material quarterly testing for 2019, "Exercise Water Lily," was held on June 19th. The exercise was designed to test the communication process between response and partner agencies who would be involved in a hazardous material release event. The reporting results were extremely positive in terms of Community Control Group members reporting back in response to the test notification, as noted in the image below.



The exercise also provided a training opportunity and ongoing awareness for the Community Control Group and staff. Activities such as this assist in continuously improving our Standard Operating Procedure (SOPs) by identifying gaps and assists responding and partner agencies in enhancing their response procedures.

2018 Compliance Results

The Emergency Management and Civil Protection Act (EMCPA) requires all Ontario municipalities and provincial ministries to develop, implement and maintain an Emergency Management program. The



Act establishes the minimum standards for emergency management programs required by municipalities and specifies the requirement in the Act for mandatory emergency management programs. Emergency Management programs require several key elements, including:

- Conducting an annual Hazard Identification and Risk Assessment (HIRA)
- Establishing a Municipal Emergency Control Group
- Identification of Critical Infrastructure
- Preparation of an Emergency Response Plan
- Establishing an Emergency Operations Centre (EOC)
- Conducting annual exercise and training for Municipal Emergency Control Group
- Public Education and Awareness
- Appointing a Community Emergency Management Coordinator (CEMEC)

The Office of the Fire Marshal and Emergency Management (OFMEM) performs an annual year-end audit of all municipal emergency management programs in Ontario. A yearly statement of compliance must be submitted by the Community Emergency Management Coordinator (CEMC), declaring that the Municipality has completed all the annual requirements.

The City of Greater Sudbury engaged in many initiatives in 2018 to achieve compliance with the requirements of the Emergency Management and Civil Protection Act and Ontario Regulation 380/04.

OFMEM has reviewed Greater Sudbury's submission and has determined that the Municipality was compliant with the EMCPA in 2018.

2019 Annual Compliance Training

To meet the 2019 legislative training requirement, the Emergency Management Team selected "IMS 200 – Basic Incident Management System" as the annual training component. In this course, participants will solidify their knowledge of core principles and concepts of Incident Management functions and organization. The course will also provide opportunities to learn how to command a single incident, build familiarization with incident facilities, and practice resource management as well as the management of communication.





On June 25 & 26, the Community Safety Department in partnership with the Office of the Fire Marshal and Emergency Management (OFMEM) offered the first of three, two-day sessions of the IMS 200 training course. The second training session was held on September 18 & 19.

The Basic Incident Management course is the next progression in the training component required to transition from the current departmental model in the EOC to the Incident Management System (IMS) response model.

Children's Water Festival

The Children's Water Festival was held on September 18 & 19 in Greater Sudbury. The Festival is an educational event for elementary students to learn about the importance of water in their daily lives. The Emergency Management Section participated in this event and used the opportunity to provide students and their chaperones with information on the importance of having enough water stored for their family and pets during emergencies.

Staff also used the event to encourage community members to be prepared for the various emergencies that could affect Greater Sudbury.



The Emergency Management Section had encounters with approximately 229 students and their chaperones.

Operation Brian

Greater Sudbury Airport performed a full-scale exercise on September 25, 2019, as mandated by Transport Canada. The training provided an opportunity to test airport protocol, procedures, communications, and planning for emergency and security-related incidents. Staff from the Emergency Management Section also participated in the exercise, which provided an opportunity to assess overall community preparedness and response in the event of a major aircraft incident.

For Information Only

Fire Services Update Report

Presented To: Emergency Services Committee

Presented: Wednesday, Oct 23, 2019

Report Date: Wednesday, Oct 09, 2019

Type: Correspondence for Information Only

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report for information was prepared to provide the Emergency Services Committee with good news stories, an overview and statistical information from Fire Services.

Financial Implications

There are no financial implications associated with this report.

Signed By

Report Prepared By

Jesse Oshell
Acting Deputy Fire Chief
Digitally Signed Oct 9, 19

Financial Implications

Liisa Lenz
Coordinator of Budgets
Digitally Signed Oct 9, 19

Recommended by the Department

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Interim General Manager of Community Safety
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Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
Digitally Signed Oct 9, 19

Greater Sudbury Fire Services Update Report

Presented to: Emergency Services Committee on October 23, 2019



This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on good news stories and relevant statistics as well as recent business activities within the Fire Services Division of the Community Safety Department.

Fire Services is responsible for delivering proactive public safety and response programs to prevent emergencies wherever possible and to preserve and enhance life, property, and the environment where response is required.

Good News Story

Congratulations to Elissa Bertuzzi, who was recognized for her actions and willingness to assist in patient care and removal at a serious motor vehicle collision during her probationary year as a volunteer fire fighter. Thank you Elissa!



1- Probationary Volunteer Firefighter, Elissa Bertuzzi
Acting Deputy Chief Brian Morrison



Fire Services Statistics

Major Fire Loss Incidents May 1, 2019 – August 31, 2019		
Date	Location	Estimated Loss
Wednesday, May 22, 2019	257 Jean St., Sudbury	\$155, 000
Friday, June 21, 2019	16 Ravina, Garson	\$450, 000
Friday, June 21, 2019	20 Ravina, Garson	\$450, 000
Monday, June 24, 2019	220 Hanna Ave., Capreol	\$250, 000
Sunday, June 30, 2019	5544 Deschene Rd., Hanmer	\$150, 000
Saturday, July 6, 2019	20 & 24 Chinaberry Dr., Lively	\$760, 000
Tuesday, July 9, 2019	2309 Mallard's Landing Dr., Sudbury	\$760, 000
Wednesday, July 24, 2019	1520 Bancroft Dr., Sudbury	\$800, 000
Saturday, August 17, 2019	2 Edinburgh St., Sudbury	\$250, 000

Data Source: Fire House

Incident Type	Jan 1 – Aug 30, 2019	Jan 1 – Aug 31, 2018
Fires	218	288
Fire Alarms	738	817
Vehicle Collisions	450	731
Open Air Burning Response	142	185
Medical Assistance	658	511
Other Incidents (assisting other agencies, no incident found on arrival, etc.)	900	985
Total	3106	3517
TOTAL Estimated Loss for Fires	\$5, 712, 570	\$6, 669, 054

Data Source: Fire House



Public Fire Safety Education/Fire Prevention

Public Fire Safety Education and Fire Prevention work hand-in-hand to proactively deliver programs aimed at ensuring safe communities. Public Education provides directed and focused fire safety programs to reduce risk where fire code enforcement has a diminished impact and where emergency response is delayed due to the city's geography.

Fire Prevention conducts inspections, and enforces various sections of municipal by-laws and provincial legislation. The Section's goal is to reduce the possibility and severity of fire or explosion, by providing tools, resources and leadership to the community, with a focus on disadvantaged and vulnerable citizens.

Vulnerable Occupancy Inspections

The Fire Prevention and Protection Act requires that a municipality's fire service inspect all "vulnerable occupancies" on an annual basis. A vulnerable occupancy is defined as a: **building or organization that is either a care and treatment occupancy, a care occupancy or a retirement home. Care occupancy means an occupancy in which special care is provided by a facility, directly through its staff or indirectly through another provider to residents of the facility.** The Fire Services Division has completed this mandatory inspection requirement of all 53 Vulnerable Occupancies within the City of Greater Sudbury (CGS). It takes approximately six months of dedicated work by the Fire Prevention Officers to carry out this work, ensuring protection of some of our most vulnerable citizens. The work commenced in January 2019.

Fire Inspections

During this same time period, the Fire Prevention Section also conducted 513 inspections. Each inspection requires the attendance of a Fire Prevention Officer at the specific property, sometimes due to a complaint, at other times by request.

Fire Prevention Officer Recruitment

With the second Fire Prevention Officer position filled, the new officer will be working on recent amendments of the Fire Code, such as education of property owners on the new firefighter elevator requirements.

Plans Examiner

Fire Prevention's dedicated Plans Examiner has reviewed 353 plans/occupancy "walk throughs" for new construction projects within CGS since January 1st. This work is carried out in partnership with CGS Building Services.



Public Education

Public Safety Officers continue to be very active conducting education within CGS. School presentations have been delivered that consist of three parts, homework, in class discussion and use of the inflatable house for “plan your escape” exercises, smoke and carbon monoxide alarm familiarization. Secondary School presentations have also been conducted, utilizing smart phone technology. One topic of discussion is fire prevention while cooking. Public Safety Officers also attended the recent “Aging in Place” symposium, which was a very positive opportunity to discuss fire safety with our senior citizens.

As a result of a bus fire, Public Safety Officers conducted fire extinguisher training for local bus line staff. In addition, two new television commercials were filmed that will air in 2019 and focus on “planning your escape” and “kitchen fire safety.”

The summer season festivals provided additional opportunities for both Public Safety Officers and Fire Prevention Officers to attend and deliver community safety messages to businesses, citizens and visitors. Public Safety Officers will be focusing on fire safety messaging for the travelling public by working with local hotels/motels on fire safety tips.

Jim Copeland Award 2018

Derek D’Agostino of First General Services (Sudbury) Inc., was the recipient of the 2018 Jim Copeland Award for public fire safety. Mr. D’Agostino was nominated for this award by the Fire Prevention Section. The award, presented by the Ontario Municipal Fire Prevention Officers Association, recognizes an individual or community group that demonstrates support of fire prevention activities and the promotion of fire life safety in the community. The award was presented by the Association’s president at their annual conference in Oshawa.



- Luc Willard, GSFS Public Safety Officer, Derick D’Agostino, Gary Laframboise, OMFPOA President



Fire Fleet/Logistics

Fleet provides logistical and maintenance support to ensure fire vehicles, equipment and buildings are maintained and repaired in accordance with applicable legislation, regulations, policy and manufacturers' suggested standards.

Annual Testing

The Fleet and Mechanical Section has begun the 2019 annual resource testing process which includes all hose, pumps, ladders and self-contained breathing apparatus devices. The testing is specific to each item and ensures that these resources are in their top operating condition and certified to safety standards for use by Fire Services staff. Working with our suppliers, the testing is on schedule and staff are ensuring as little interruption in service as possible while the equipment is cleaned, tested, repaired and then placed back into service.

Diesel Emissions Capture

Working with CGS Buildings and Assets Division, Fire Services Fleet and Mechanical staff will begin assisting with the engineering and design of an exhaust emissions capture system in five fire stations. These systems are put in place to vent the exhaust from fire apparatus to the outside environment without indoor contamination or spread of exhaust throughout a building. A critical piece of safety hardware, these systems will work to keep a high level of air quality while ensuring the harmful emissions generated by the apparatus does not affect the occupants of the stations.

Training

Training involves the development and delivery of fire service related training programs, including recruit training, officer development, emergency care, equipment operator training, fire suppression, and fire prevention. They also oversee operation of fire training grounds.

Full Time Captain Promotional Process

Fire Services has qualified 15 fulltime firefighters to the rank of Acting Captain which shall allow them to operate in a relief capacity when there is an opportunity due to a scheduled vacancy for an on-duty Captain. The process was completed over several months of self-directed study and various mentoring and learning opportunities, which prepared the candidates to write a comprehensive exam and complete scenario-based assessments.

Volunteer Captain Promotional Process

The final stage of the three-stage learning and evaluation Volunteer Captain Promotional process is underway. The candidates have attended classroom sessions and followed self-study material in order to prepare for their next evaluation. A comprehensive written exam and a scenario-based assessment shall be done to qualify for the rank of Volunteer Captain.



Platoon Chief Promotional Process

Three new Acting Platoon Chiefs have recently been qualified to operate in a relief capacity when there is an opportunity due to a scheduled vacancy for an on-duty Platoon Chief. The process involved many learning objectives, classroom sessions and contained self-study material. All Acting Platoon Chief candidates performed multiple scenario based-assessments and completed a written examination.

Annual Fire Training/Physical Assessment

Volunteer Firefighters have begun their annual mandatory training sessions which are completed at the Fire Training Tower located at the Lionel E. Lalonde Centre. Each Volunteer Firefighter will attend sessions providing skills and tactics to be used on different fire emergencies while applying those skills to simulated fires on the training ground. Included is a physical assessment to assist Volunteer Firefighters in understanding their current health and wellbeing when operating on the fire ground.

Volunteer Firefighter Recruitment

A Volunteer Firefighter recruitment drive was held this past summer. A recruit class will commence this fall with additional volunteer firefighters joining the stations in October.

For Information Only

Paramedic Services Update Report

Presented To: Emergency Services Committee

Presented: Wednesday, Oct 23, 2019

Report Date Wednesday, Oct 09, 2019

Type: Correspondence for Information Only

Resolution

For Information Only

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report provides an update on recent business activities within the Paramedic Services Division of the Community Safety Department.

Financial Implications

This report has no financial implications.

Signed By

Report Prepared By

Melissa Roney
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Digitally Signed Oct 9, 19

Financial Implications

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Recommended by the Department

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Recommended by the C.A.O.

Ed Archer
Chief Administrative Officer
Digitally Signed Oct 9, 19

Greater Sudbury Paramedic Services Update Report

Presented to: Emergency Services Committee on October 23, 2019



This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on good news stories and relevant statistics as well as recent performance measures within the Paramedic Services 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 pre-hospital emergency medical care and transportation to 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

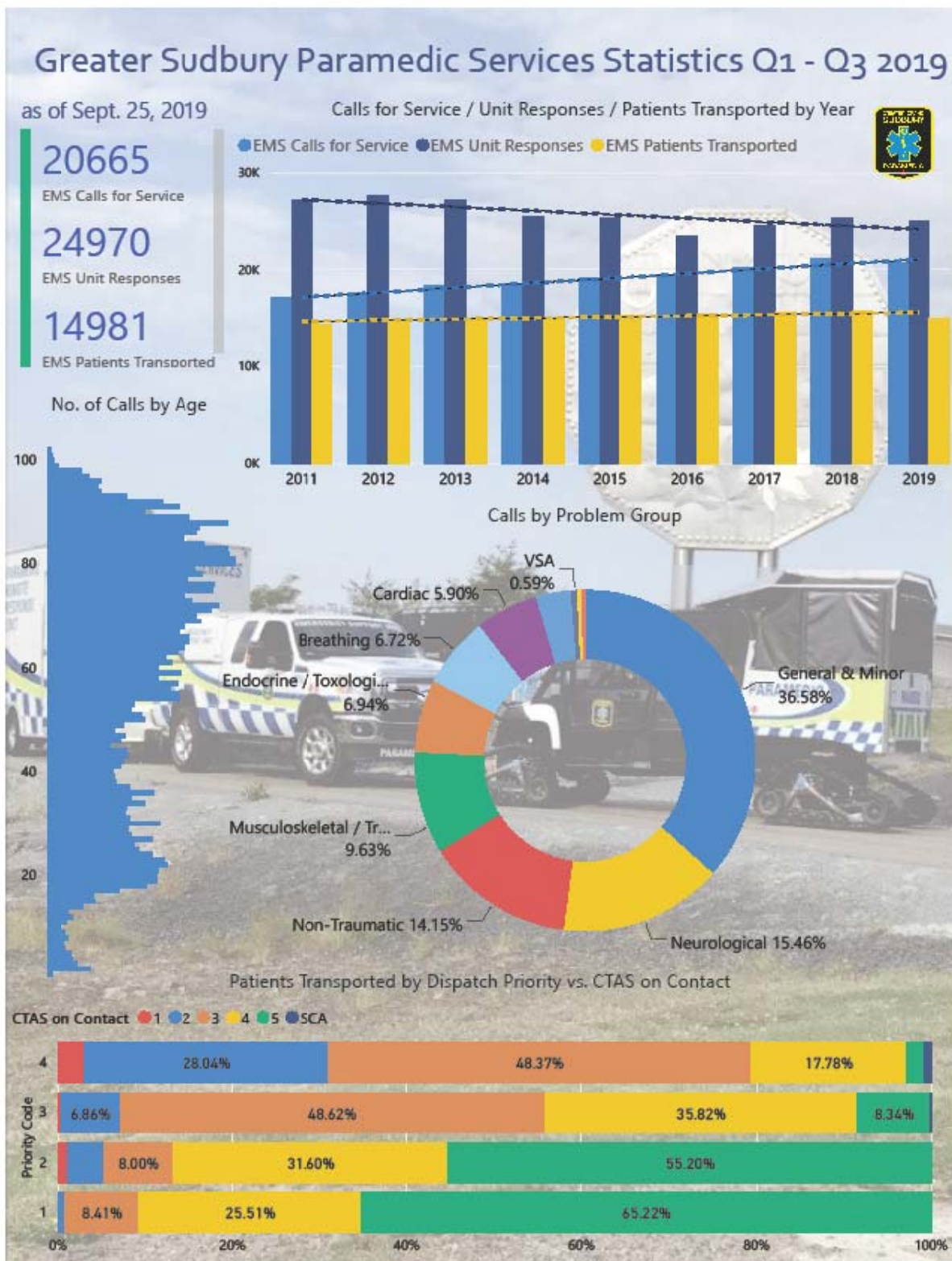
The Operations Section provides pre-hospital emergency medical care and transportation as well as non-urgent transportation between health-care facilities, the airport and residences, to over 21,000 patients. 83% of the Division's resources are used to deliver approximately 114,000 hours of ambulance services in accordance with mandated provincial legislation. Responding to over 27,000 calls for service, Paramedic Operations maintains a response time for the most serious patient acuity (CTAS 1) within eight minutes, 80% of the time.

Peer Support Network Team Professional Development

On June 19th, 2019 several members of the Peer Support Network Team participated in a professional development session with clinical psychologist Dan Keaney from Dan Keaney and Associates. These sessions are instrumental in further developing the team. The training was not only important to help in the development of each member but also to ensure the members take care of themselves. Mr. Keaney's session was titled "Self Care". The information presented was critical to making sure the team members have all the tools required to assist fellow Paramedics and Firefighters and to take care of each other as well.

Platoon Superintendent Professional Development

Most of the Platoon Superintendent group (Full-time and Relief) actively participated in a dynamic and interactive education session hosted on June 11th, 2019. Jack Miller, from Jack Miller and Associates, led the presentation and concentrated on leadership development. This session taught many valuable lessons. It allowed participants to share their experiences, and these methods will be applied to improve communication amongst fellow Paramedics, Managers, Dispatchers, and other allied agencies.





Paramedic Services Performance Measures Defined

Paramedic Calls for Service

A measure of calls **received** by Greater Sudbury Paramedic Service 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.

Calls for Service/Unit Response/Patients Transported by Year

A comparative chart detailing, since 2011, these three measures together.

No. of Calls by Age

A clustered bar chart detailing the age of each patient encountered. The purpose of this chart is to detail the effects of the aging population in comparison to call volumes.

Calls by Problem Group

A pie chart detailing the categorized primary problem of each patient who was transported. Paramedics detail in great granularity the primary problem as assessed and treated where possible. These primary problem codes have been rolled up into primary categories as detailed on the Patient Care Record and displayed here.

Patients Transported by Dispatch Priority vs. CTAS on Contact

A metric consisting of a 100% stacked bar chart that measures the urgency at which Paramedics are dispatched by the CACC against the actual patient acuity at patient contact.

Ambulance Communications Officers (ACOs) at the CACC currently use a system called the Dispatch Priority Card Index (DPCI) when determining a patient priority. This system automatically generates a priority based on the series of questions answered by the caller of the emergency. Then, once on scene, Paramedics assign a detailed Canadian Triage Acuity Scale (CTAS) rating based on the patient's presenting condition.

Paramedics are generally dispatched, by CACC, to patient calls on four different "Priority" codes.



- **Code 1** “Deferrable” (no time factor) - e.g. a non-scheduled transfer with no definitive time factor, a minor injury
- **Code 2** “Scheduled” (time is a factor) – e.g. inter-hospital transfers for scheduled diagnostic tests, a scheduled meet with an air ambulance, patient transferred for a scheduled appointment.
- **Code 3** “Prompt” – transport without delay (serious injury or illness e.g. stable fracture)
- **Code 4** “Urgent” – where the patients “life or limb” is at risk (e.g. Vital Signs Absent patient; unconscious).

CTAS is a widely recognized rating scale used across within Canadian healthcare institutions. There are 5 different CTAS ratings.

- **CTAS 1:** Severely ill, requires RESUSCITATION
 - Requires resuscitation and includes conditions that are threats to life or imminent risk of deterioration, requiring immediate aggressive interventions (for example, arrest, and major trauma or shock states).
- **CTAS 2:** Requires EMERGENT care and rapid medical intervention
 - Requires emergent care and includes conditions that are a potential threat to life or limb function, requiring rapid medical intervention or delegated acts (for example, head injury, chest pain or internal bleeding).
- **CTAS 3:** Requires URGENT care
 - Requires urgent care and includes conditions that could potentially progress to a serious problem requiring emergency intervention, such as mild to moderate asthma, moderate trauma or vomiting and diarrhea in patients younger than 2 years.
- **CTAS 4:** Requires LESS-URGENT care
 - Requires less-urgent care and includes conditions related to patient age, distress or potential for deterioration or complications that would benefit from intervention, such as urinary symptoms, mild abdominal pain or earache.
- **CTAS 5:** Requires NON-URGENT care
 - Requires non-urgent care and includes conditions in which investigations or interventions could be delayed or referred to other areas of the hospital or health care system, such as sore throat, menses, conditions related to chronic problems or psychiatric complaints with no suicidal ideation or attempts.



Professional Standards

Using 5% of the Division's resources, the Professional Standards Section is responsible for the delivery of continuous quality improvement programming ensuring that legislatively mandated responsibilities of the division are upheld. This section also manages the electronic patient care record (ePCR) system in accordance with various legislative and regulatory requirements. By conducting approximately 1,600 clinical audits of paramedic documentation this section endeavors to achieve the goal of improving safety and high-quality clinical care. Conducting approximately 1,400 event analysis/reviews in relation to patient care and operational investigations this section assists in preparations for related legal proceedings. Lastly, this section provides approximately 500 hours of stakeholder/community relations to ensure integration into the health-care framework.

Opioid Surveillance and Clinical Audit

Prompted by a notable increase in opioid-related events as seen on the Community Drug Strategy Opioid Reporting Tool Dashboard, a clinical and documentation quality review of opioid calls was conducted in early June 2019. There was a review of 71 patient call records for 63 events for May which focused on problem code – Suspected Opioid Overdose.

Overview of findings

Paramedic Services response was prompt. Response Time Standards for associated CTAS on Contact was met for 100% of opioid-related calls. Not all cases coded as 81.1 Suspected Opioid Overdose calls require life-saving interventions (i.e. airway management, ventilator support, and naloxone).

Although these calls are compliant with the Ministry of Health Documentation and Patient Care Standards, they present a challenge with the Community Drug Strategy Opioid Reporting Tool where treatment meets or exceeds the standard of care in 94% of call events. Minor clinical variances noted on four occasions were resolved through clarification and education.

Recommendations

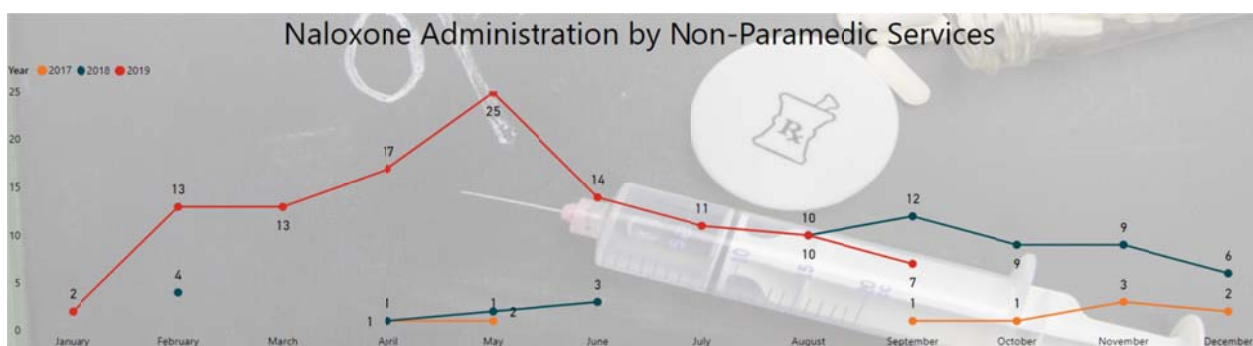
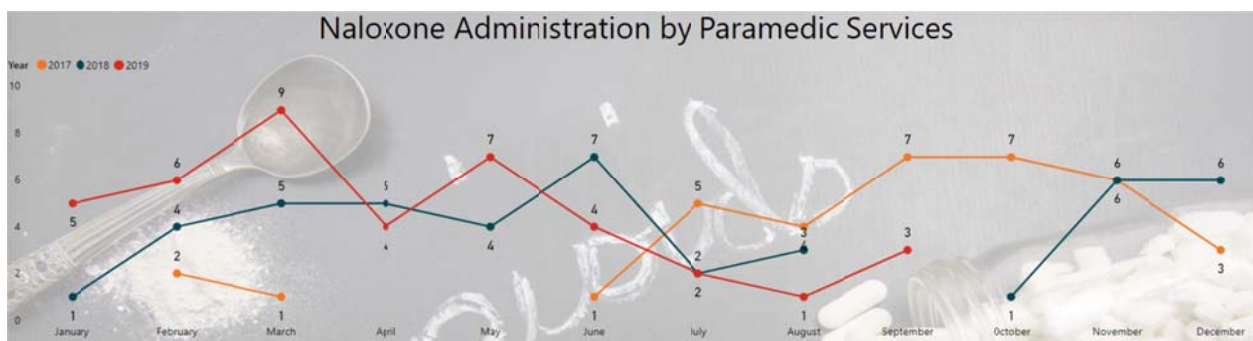
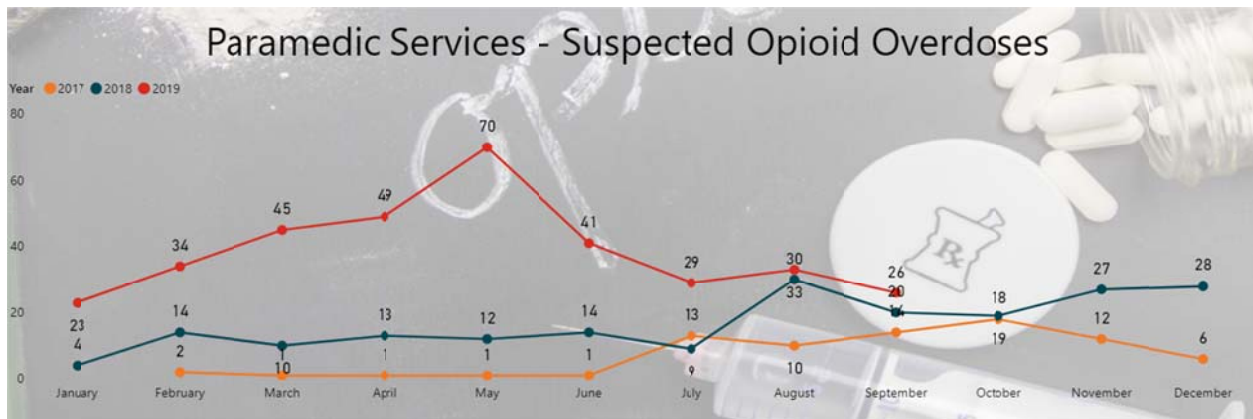
Despite life-saving measures not being required on many of these calls, problem code 81.1 Suspected Opioid Overdose was the most appropriate problem code available. This limits the accuracy in the Community Drug Strategy Opioid Reporting Tool. This review recommends that clinical filters related to vital sign parameters for opioid overdoses be added to the Opioid Reporting Tool Dashboard for patient care records. The following measures will include:

1. Respiratory Rate ≤ 10 and
2. A patient's level of responsiveness (recorded as Glasgow Coma Scale) and
3. Documentation of Suspected Opioid Overdose in primary, secondary or final problem code.



Paramedic Services Opioid Monitoring and Reporting

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 September 24th, 2019.



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 and bystander reports of drug use or incident history. The Opioid Reporting Tool Dashboard represents suspicion of opioid-related incident(s) 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>

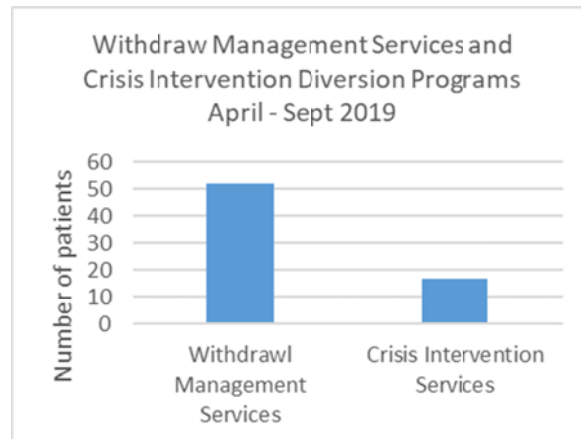


Clinical Audit for heart attack patients is underway – ST elevation myocardial infarction (STEMI)

Clinical audit enables the quality of care to be reviewed objectively with a supportive approach and is focused on clinical treatment improvement. This review focuses on key components of care and documentation as identified in applicable standards related to STEMI. This is a type of heart attack, which can be identified in the field by Paramedics using 12 Lead electrocardiogram interpretation skills. Identification of this type of infarction can, in the absence of exclusion criteria, initiate a bypass protocol to Health Sciences North's cardiac catheterization lab. This review is expected to be completed in early Q4.

Mental Health and Crisis Emergency Department (ED) Diversion Pilot Program Update

The program has shown to safely divert patients from the Emergency Department (ED) to appropriate receiving facilities based on their complaint and clinical presentation. There is a need to broaden uptake to these ED diversion locations. Some eligible patients are still being transported to the ED. To identify opportunities for improvement, we have created a new diversion form, which is to be completed by Paramedics for all patients that qualify for diversion but who are transported to the ED. This data will assist in reviewing patient cases and help us better understand diversion barriers.



Training

Training utilizes 5% of the Division's resources to orient new staff, sustain legislatively mandated training requirements for staff, and support reorientation of staff returning to work after a medical leave. Service level training is delivered annually to 165 staff on initiatives that include continuing medical education and remedial education to address identified gaps in knowledge, skill or critical decision-making. Additionally, the Training Section devotes an average of 28 days of orientation support for newly hired Paramedics. Coordinating with educational institutions, this section assists with the clinical placement of paramedic students, and educational observer shifts for other allied



agencies. Lastly, Training participates in national and international clinical research initiatives aimed at improving pre-hospital clinical care.

In the second quarter, the Training Section conducted return to work programs for two Primary Care Paramedics as well as an Emergency Vehicle Technician. 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.

In June, the Training Section participated in Peer Support Team training over four days. This program was a refresher program with a key focus on peer-to-peer support and group defusings, thereby providing assistance to alleviate potential stress-related symptoms. Eight new peer support team members were welcomed to the team and received their orientation training.

Annual Paramedic Spring Training sessions commenced in May. Highlights of these sessions included guest speakers from the Ministry of Attorney General's Office and Bill Morin, Professor, Laurentian University School of Indigenous Studies. The Attorney General's Office presented material to frontline staff on court processes and Dr. Morin brought in the beginning of a series of cultural competency training sessions specific to Indigenous peoples.

In June, Platoon Training Officers delivered the Road to Mental Readiness (R2MR) Working Minds Program to Platoon Superintendents. Key course concepts include supporting the mental health and well-being of their co-workers and ensuring a workplace climate that is respectful and inclusive of all, including those with mental health problems. Additionally, the training helped provide front line supervisors with a focused approach on the responsibility of operating in a high-stress environment and the relationship between stress and performance.

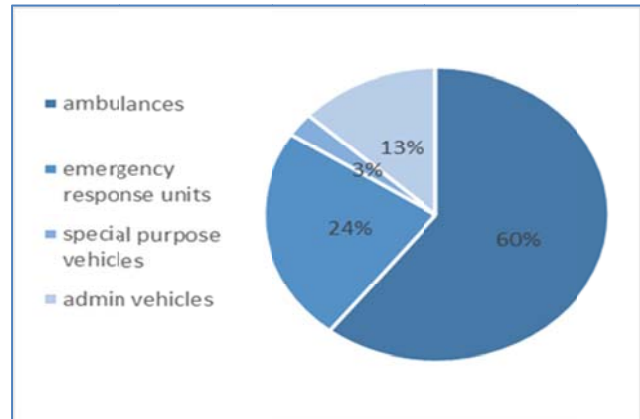
Logistics

Encompassing 7% of the Division's resources the Logistics Section provides support through asset management and supply chain maintenance services for Paramedics and vehicles. Processing approximately 5,400 paramedic vehicles each year the Logistics Section meets the processing standard 93% of the time. They ensure both vehicles and equipment are sanitized, stocked and operationally ready for service in accordance with all legislative requirements and industry best practices. Inventory control is managed through the purchasing and deployment of materials within a centralized model with delivery to five satellite stations on a regular basis. This section also maintains operational oversight of two specialized response units; the Mobile Command Unit and the remote response rural unit, as well as maintenance oversight of the city's emergency helipads. Ensuring the reliability of paramedic vehicles according to manufacturer's recommendations, logistics personnel monitor and deliver paramedic vehicles to the maintenance depot, on average, over 780 times per year.



Fleet Services

The City of Greater Sudbury Paramedic Service's operating fleet consists of 41 vehicles. The Logistics Section coordinates vehicle purchasing, maintenance and the decommissioning of retired vehicles.

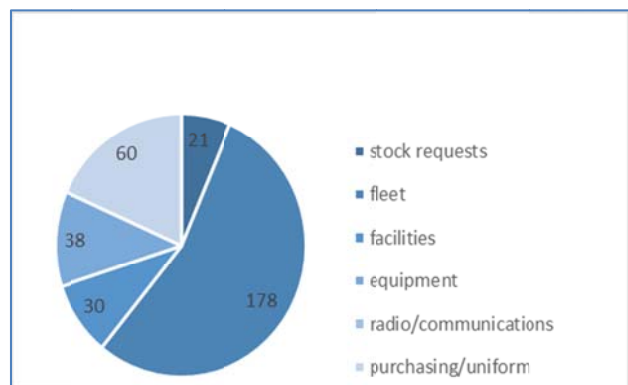


In Q2 Paramedic Services drove a total of 214,593 km equivalent to 5 times around the Earth!



Requests for Service

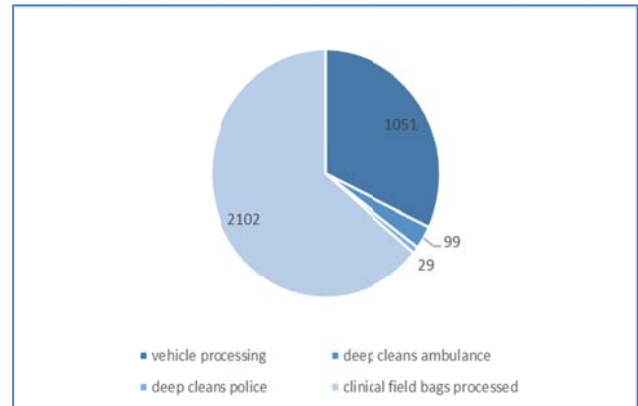
In Q2 Logistics staff processed a total of 327 requests for service. These requests are made by frontline Paramedics for stock, fleet issues, needs within facilities, uniforms and radio/communications system issues.





Emergency Vehicle Technicians

Emergency Vehicle Technicians (EVT) process vehicles 24 hours per day, ensuring vehicle readiness. This includes washing, deep cleaning and restocking vehicles and field clinical bags. EVT's processed 1051 vehicles in this quarter and all clinical field bags within them. 128 deep cleans were completed, including 29 Police vehicles.



Community Paramedicine

The Community Paramedicine section utilizes specially trained Paramedics in non-traditional roles providing home visits, clinical interventions, and preventative health initiatives with the goal of reducing 911 calls, demand for Emergency Department visits and hospital admissions. Community Paramedics (CPs) also assist our at-risk aged population to keep them healthy and at home while working to aid our vulnerable populations by directing them to suitable community resources. Both programs are currently funded through the Northeast Local Health Integration Network (NE-LHIN) with in-kind contributions from the City of Greater Sudbury.

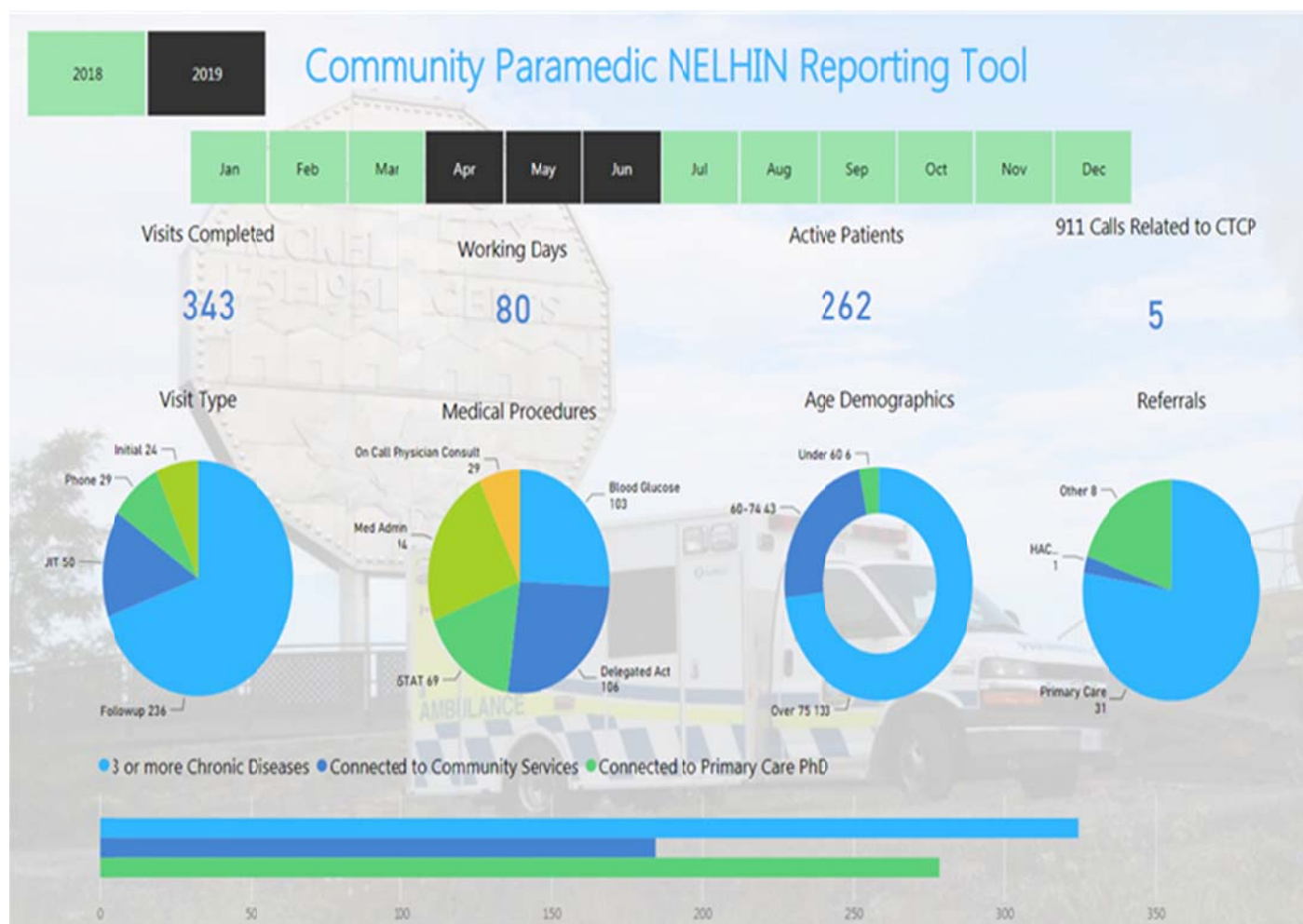
Care Transitions Community Paramedic Program

The Care Transitions Community Paramedic (CTCP) Program has been active since January 12, 2015. This program employs two full-time specially trained Advanced Care Paramedics who are able, through an expanded scope of practice, to provide education and medical interventions for three targeted chronic diseases; Congestive Heart Failure, Chronic Obstructive Pulmonary Disease and Diabetes. The education and interventions improve our patients' quality of life at home and decrease reliance on the emergency response of Paramedic Services and readmissions to the hospital.

In the spring of 2019, six Relief Community Paramedics were hired and completed their specialized training program. This program was conducted over six weeks and included online training as well as 18 various clinical placements with outpatient programs at Health Sciences North, the NE LHIN Home and Community Care Palliative Care – Care Coordination programs, with the North East Specialized Geriatric Program, and our Community Paramedic Physician Group. We are incredibly pleased to have these new members on our team to support our evolving Community Paramedicine Programs.



Care Transition Community Paramedic Performance Measures



Care Transition Community Paramedicine Performance Summary

Between April 1st - June 30th, 2019, the CTCP Program had 262 active patients who received 343 clinical calls for service that include phone consultations, scheduled visits or just in time visits. CTCPs also made 44 referrals this quarter to other care agencies for their patients.

A summary of therapeutic interventions performed includes; 94 medication administrations, 69 iSTAT point of care blood testing, 106 delegated acts, 103 capillary blood glucose testing and 29 on-call medical direction consultations (via phone).

Health Promotion Community Paramedic Program

The Health Promotion Community Paramedic (HPCP) program is a compilation of various prevention and health education initiatives that work to ensure our most vulnerable populations are linked to community health and/or social services and can obtain healthy lifestyle education and prevention information. HPCP initiatives include; paramedic referrals to community agencies, Wellness Clinics targeting older adults and homeless populations; Free Bystander Hands-Only CPR/AED Training; and

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Rapid Mobilization Table (RMT) response. RMT is a collaboration with community partner groups working toward healthy and safe communities. Our next initiative is a Home Visit Program, which includes case management and home visits to frequent 911 users.

The goal of the Health Promotion initiatives is to ensure our vulnerable populations remain living with their health at home for longer without reliance on Paramedic Services or the local Emergency Department. This program employs one full-time Paramedic and is currently at maximum capacity (evaluated at 96% workload capacity). Unfortunately, this service is suspended when vacation or sick time occurs.

Paramedic Referrals

Paramedic Referrals typically come out of a 911 call for service. During a 911 call when our Paramedics notice that their patient is not coping well at home, that there are risks to the patient or others, or perhaps a noted lack of social supports, a referral is sent to the HPCP. The assistance the HPCP provides these patients helps to prevent unnecessary use of Paramedic Services, ED visits or hospital admissions. These patients undergo a case management process, which may result in a home visit or further referral for services.

Rapid Mobilization Table

The HPCP sits at the Rapid Mobilization Table (RMT) biweekly. This forum is where agencies can present individuals, families or community situations that are at an acutely elevated risk of harm. Paramedic Services presents opioid overdose patients that meet the criteria of elevated risk of harm to the RMT for an immediate multi-agency response offering wrap-around care strategies for this patient population.

Community Hands Only CPR Training

Our HPCP is currently in the planning phase for our next round of Free Community Hands Only CPR Training and AED review. To date CPs have educated 1685 citizens and in this last quarter 123 citizens with this life saving skill.

CP@Clinic / Shelters

This research program has been running since 2015 in collaboration with McMaster University. Through this program, the HPCP sets up weekly clinics in older adult subsidized buildings and targets vulnerable populations. The HPCP provides the following services in these clinics; chronic disease screening, education, medication review, healthy lifestyle evaluation, falls evaluation and education, referrals to community services and support for healthy change goal setting.

This program is staffed by one HPCP who hosts weekly clinics in the following five buildings; 1920 Paris Street and 1960 A & B Paris Street in Sudbury and 38 Coulson Street and 27 Hanna Street in Capreol. Monthly maintenance clinics are also held at our two original CP@Clinic research buildings; 720 Bruce Street and 1052 Belfry Street in Sudbury.



Shelter Clinics are modelled after the CP@Clinic program, though they are not part of the McMaster University research project. At the shelters, the goal is to empower this vulnerable population to reengage with the health care system or community services as necessary and as required.

CP@Home

This program set to commence in October 2019, is another collaborative research program with McMaster University. This program involves Paramedic Services identifying multiple callers of 911 for consensual enrollment for CP home visits. During three home visits, the HPCP will offer chronic disease screening, education, medication review, and healthy lifestyle evaluation and make recommendations. The premise is to identify the root of the reliance on Paramedic Services (perhaps an unmet need that limits their independence) and link the individual to required support services.

The need for this program in the City of Greater Sudbury has been evaluated, and through monitoring, we have identified that our multiple caller rates are growing faster than other communities.

As reported in Municipal Benchmarking Network Canada (MBNC) for Paramedic Services in 2018:

- Multiple caller rates increased by 24% in 2018
- 750 individuals were identified as having called 911 more than four times in 2018
- Repeat calls from these 750 individuals account for over 4700 calls for service
- More than 6600 hours were spent on responding to these multiple callers
- Amount of calls per individual ranged from four to 38 calls



Good News Stories

In recognition of Paramedic Week in May, CGS Paramedic Services hosted an official proclamation on Monday, May 27th at the LEL Centre in Azilda. Many honoured guests attended this event, including Mayor Brian Bigger and Councilor Rene Lapierre. In addition to staff appreciation initiatives, a number of community events took place including the Save a Life session at the YMCA, Summer Safety sessions at Adamsdale Public School and a Seniors Wellness Workshop at the Kinsman Club in Lively. Paramedic Week 2019 was organized by the organizing committee under the leadership of Kevin Powell, Committee Chair and Primary Care.

Greater Sudbury Paramedic Services has partnered with Trillium Gift of Life Network (TGLN) regarding a new initiative to identify, screen and connect family members to Trillium for organ donation consideration following the loss of a loved one. The goal of this program is to help families fulfill their loved one's wishes, provide them with information and connect them with TGLN. Greater Sudbury is one of five paramedic services working with the group in Ontario. Currently, over 1,500 Ontario citizens are waiting for an organ transplant and countless others could benefit from tissue donation.

On June 8th, 2019 at St. Joseph School in Chelmsford during Rayside Belfour Days, Cruisin for Organ Donors presented Commander Shawn-Eric Poulin from Paramedic Services with a plaque to recognize Paramedics who save lives daily just like organ donors. Cruisin for Organ Donors continues to educate people about the need for organ donation and raises money to help people who are waiting for a transplant.