

**Report to
Rapport au:**

**Community and Protective Services Committee
Comité des services communautaires et de protection
17 May 2018 / 17 mai 2018**

**and Council
et au Conseil
23 May 2018 / 23 mai 2018**

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**Submitted by
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Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE File Number: ACS2018-EPS-GEN-0008

SUBJECT: Ottawa Paramedic Service 2017 Annual Report

OBJET: Rapport Annuel de 2017 du Service Paramédic d'Ottawa

REPORT RECOMMENDATIONS

That the Community and Protective Services Committee recommend Council receive this report for information.

RECOMMANDATIONS DU RAPPORT

Que le Comité des services communautaires et de protection recommande au Conseil de recevoir le rapport aux fins d'information.

EXECUTIVE SUMMARY

The Ottawa Paramedic Service provides progressive out of hospital patient care and is dedicated to the community and visitors of the Nation's Capital. The purpose of this report is to present an overview of the Ottawa Paramedic Service, to highlight the performance of the Service over the previous year and to provide information on some of the successful programs and services delivered in 2017.

In 2017, the Paramedic Service response volume was 139,514, representing a 1.1% increase over the previous year. Staff will continue to monitor service demand and emerging trends to report impacts to Council.

This report confirms that the Service had an overall improvement in performance and met all Council approved response time performance targets, including the community percentile target set for the arrival of a person trained, qualified and equipped to provide defibrillation for sudden cardiac arrest.

The Service has also continued to use a number of mitigation strategies, such as Paramedic Response Units, the Off-Load Nurse Pilot Program, the Community Paramedicine Partnership with West Carleton Family Health Centre, Targeted Engagement Diversion, Heart Safe City, the Neonatal Transport Team Pilot Program and the Mental Health Strategy, to address increase demands on the service. New in 2017, the Service partnered with the Champlain Local Health Integration Network (LHIN) to utilize Community Paramedics for the peak flu season, to administer flu shots, and treat senior patients in their homes which prevented increased emergency department visits.

The Paramedic Service continues to monitor performance indicators and evaluate new and innovative solutions in the interest of providing the highest quality of medical care to all patients.

BACKGROUND

The Ottawa Paramedic Service provides progressive out of hospital patient care and is dedicated to the community and visitors of the Nation's Capital. The Service strives to be a dynamic leader in delivering and improving paramedicine, continuously seeking new knowledge and applying innovation. When a member of the public requires immediate medical care, an entire team of dedicated, highly qualified people come together to deliver excellence in clinical care. The Service consists of a team that includes Paramedics, Communications Officers, Equipment and Supply Technicians, Trainers, Quality Assurance Staff and critical Support Staff.

The Ottawa Paramedic Service provides emergency medical coverage across the City of Ottawa (2,796 square kilometres), while the Ottawa Central Ambulance Communication Centre provides dispatching services to over 10,000 square kilometres of Eastern Ontario including the United Counties of Prescott-Russell, Cornwall and the United Counties of Stormont, Dundas and Glengarry. The Service provides a fully integrated advanced life support system delivering state of the art medical services to more than one million residents and visitors.

The City of Ottawa operates the Paramedic Service on behalf of Ontario's Ministry of Health and Long-Term Care and is certified every three years. The parameters of this responsibility are defined through a Land Ambulance Agreement and the *Ambulance Act of Ontario*, whereby the Province of Ontario funds 50% of land ambulance services and 100% of the cost for the Ottawa Central Ambulance Communications Centre.

On October 28, 2004, the Emergency and Protective Services Committee directed that staff report back annually to Committee and Council prior to budget on performance trends, mitigation strategies and associated financial impacts to ensure the Service can maintain its baseline performance targets. As well, the Ottawa Paramedic Service reports annually to the Ministry of Health and Long-Term Care on response time performance.

This report highlights the service demand (response volume), as well as the Service's performance for 2017.

DISCUSSION

Performance Trends

The highest priority for the Ottawa Paramedic Service is to provide the best possible clinical care to the residents and visitors of Ottawa. The Service regularly analyzes

response times, response volumes and patient outcomes in order to maximize the deployment and usage of paramedic resources. The primary measures that determine service demand and associated resource requirements are:

- total number of 9-1-1 calls received;
- total number of patients assessed, treated, and transported; and
- total number of Paramedic resources required to respond, also known as response volume.

Paramedic Response Volume

Year over year response volume continues to increase in the City of Ottawa. This can be attributed to a number factors including population growth and an aging patient demographic. In 2017, the Paramedic Service response volume was 139,514, representing a 1.1% increase over the previous year. The five-year trend demonstrates a 16.9% overall increase.

Table 1 represents the response volume and the annual percentage growth over the last five years.

Table 1: Response Volumes

Year	Responses	% Change
2013	119,299	
2014	127,896	7.2%
2015	133,973	4.8%
2016	137,995	3.0%
2017	139,514	1.1%
Total		16.9%

Response Volume by Ward

Table 2 below shows the Ottawa Paramedic Service response volume by ward. In general, the more densely populated a ward, the higher the response volume. Note that

the Ottawa Paramedic Service also responds to calls outside of the City boundaries and as such, the total response volume is greater than the total ward responses.

Table 2: Response Volume by Ward

Ward Name	Ward #	2017
Rideau-Vanier	12	13,220
College	8	11,644
Alta Vista	18	10,643
Rideau-Rockcliffe	13	9,830
Somerset	14	9,586
Bay	7	8,854
Kitchissippi	15	8,188
River	16	7,403
Orleans	1	6,268
Capital	17	6,071
Gloucester-Southgate	10	5,099
Kanata South	23	4,790
Beacon Hill-Cyrville	11	4,689
Barrhaven	3	4,637
Innes	2	4,175
Knoxdale-Merivale	9	4,105
Kanata North	4	3,604
Rideau-Goulbourn	21	3,465
Cumberland	19	3,190
Gloucester-South Nepean	22	2,553
Stittsville	6	2,482
West Carleton-March	5	2,223
Osgoode	20	2,134

Paramedic Response Time Standards

The legislated response time reporting framework is defined as the elapsed time from when the first Paramedic Unit is notified of the call for service to the arrival of a Paramedic resource on scene (ambulance or single response unit). Response times across the Province of Ontario are measured and reported publicly by the Ministry of Health and Long-Term Care (MOHLTC).

Response time performance is based on the Canadian Triage Acuity Scale (CTAS), which sets a score for the acuity level of a patient, with CTAS 1 being the highest acuity. The MOHLTC determines the time target for CTAS 1 patients while the percentile rank is the Council-approved performance standard. The percentage represents how often a Paramedic Unit has arrived on scene to provide paramedic services to patients within the established targeted response time, categorized based on the CTAS score.

The acuity of the patient (CTAS score) can only be determined once a paramedic has arrived on scene to conduct a medical assessment.

Table 3 outlines the legislated response time standard targets and results from 2013 to 2017. In 2017, the Service met the Council approved percentile rank in all CTAS categories. Table 3 outlines the response time performance by CTAS category.

Table 3: Response Time Performance

Category (Acuity)	Target Time (minutes)	Council Approved Percentile Rank	2013	2014	2015	2016	2017
CTAS 1 (Life Threatening)	8:00*	75%	83.6%	79.5%	72.5%	73.2%	77.3%
CTAS 2 (Urgent)	10:00	75%	85.5%	82.9%	80.8%	78.6%	79.6%
CTAS 3	15:00	75%	95.4%	93.5%	91.9%	90.9%	91.2%
CTAS 4	20:00	75%	98.7%	98.0%	96.4%	95.6%	94.8%
CTAS 5	25:00	75%	99.6%	99.2%	97.6%	97.5%	97.1%

*Mandated by provincial regulations

Community Target for Cardiac Arrest

In cases of sudden cardiac arrest (SCA), response time is defined as the elapsed time from when the first Paramedic Unit is notified to the arrival of any person trained and equipped to provide defibrillation. The SCA response time is positively impacted if a public access defibrillator is available at the scene or by the arrival of a paramedic, police officer, firefighter or OC Transpo Security, who are all equipped with a defibrillator in their vehicles.

Table 4 shows the City of Ottawa's performance against the legislated response time standard for SCA. In 2017, the Ottawa Paramedic Service continued to meet the legislated response time.

Table 4: Response Time Performance

Category	Target Time (minutes)	Council Approved Percentile Rank	2013	2014	2015	2016	2017
Sudden Cardiac Arrest (SCA)	6:00*	65%	73.5%	63.0%	63.7%	69.3%	68.2%

*Mandated by provincial regulations

Ottawa Central Ambulance Communications Centre System Performance

The Ottawa Central Ambulance Communications Centre (OCACC) receives and triages 9-1-1 calls and dispatches paramedic resources across 10,000 square kilometres of Eastern Ontario.

In 2017, the OCACC answered 134,688 emergency calls, which required 175,101 emergency vehicle responses, an increase of 1.4% from 2016. Worthy of note, some emergency calls require more than one resource due to the number of patients that require transport to the hospital.

The Ministry of Health and Long-Term Care has created response time standards (call processing times) for all ambulance communications centres in the Province of Ontario. The response time standards are measured as the time difference between when the call is received at the communications centre and when a Paramedic Unit has been notified of an emergency call. Communications Centres must report annually to the Ministry of Health on the percentage of time this performance is achieved within two

minutes. Table 5 demonstrates the City of Ottawa call processing times for CTAS 1 and Sudden Cardiac Arrest patients.

Table 5: OCACC Call Processing Times

Category	Target Time (minutes)	Percentile Rank	2013	2014	2015	2016	2017
CTAS 1	2:00	80%	86.2%	86.8%	88.9%	84.8%	80.4%
Sudden Cardiac Arrest	2:00	75%	79.4%	89.1%	88.7%	87.5%	81.0%

Mitigation Strategies

Since amalgamation, the demand for the Paramedic Service has increased year-over-year and has recently begun to outpace current staffing levels and vehicle availability. Council has made investments over the past fifteen years to address growth and meet response time standards, including the approval of 12 full time equivalents in 2016, 24 full time equivalents in 2017 and 14 full time equivalents in 2018 to meet the increase in response volume. In addition, the Paramedic Service has implemented the following mitigation strategies to help offset the demand.

Paramedic Response Unit

The Paramedic Response Unit (PRU) is a vehicle staffed with a single Primary Care Paramedic. These Units are strategically placed around the city to provide rapid response to emergency calls. The primary function of this Unit is to increase capacity by providing rapid first response and to initiate patient care. Upon arrival, the PRU can downgrade the call and/or cancel a transport unit (ambulance), thereby allowing the transport crew to respond to the next emergency call. The PRU provides continual coverage in their assigned area, as they do not transport patients to hospital and are immediately available upon clearing a call. The Paramedic Response Unit initiative utilized by the Ottawa Paramedic Service is an industry best practice for deployment.

In 2017, Paramedic Response Units completed 16,543 responses, a 34.6% increase in vehicle responses over 2016. The PRU has an eight minute response time performance of 76.4%.

Off-Load Nurse Pilot Program

The Operations Division of the Ottawa Paramedic Service continues to oversee the 100% provincially funded Off-Load Nurse Pilot Program. This program is a partnership between the Ontario Ministry of Health and Long-Term Care, local emergency departments and the Ottawa Paramedic Service. This initiative allows Paramedics to transfer the care of a patient to the designated off-load nurse within the hospital's emergency department in an effort to expedite the return of paramedic resources to the community, thus increasing availability to respond to other medical emergencies. In 2017, the Province committed \$1.5 million for the 2017-2018 fiscal year to continue the pilot project. Table 6 outlines the time the Paramedic Service has gained because of the Off-Load Nurse Pilot Program.

Table 6: Time Saving From Dedicated Off-Load Nurse Pilot Program

Year	Time Gained by OLN (Hours)	Time Spent Waiting in Excess of 30 minutes (Hours)
2011	15,202	40,370
2012	17,244	38,753
2013	19,619	29,577
2014	24,423	27,445
2015	26,581	31,900
2016	26,649	36,213
2017	26,369	37,423

Community Paramedicine

In 2014, the Ottawa Paramedic Service identified a single Community Paramedic to work with the West Carleton Family Health Team as part of a community paramedicine pilot program funded by the Ministry of Health and Long-Term Care. The program increased from one to three Community Paramedics through to October 31, 2017 with funding from the Ministry of Health and Long-Term Care. Due to a decrease in funding from the Ministry of Health and Long-Term Care, the program now runs with a single

Community Paramedic. Community Paramedics are an integral part of the Family Health Team and are responsible for conducting proactive home visits to complex medical needs patients.

The program aims to reduce the impact of patients on health services, including the use of Paramedic Services, while improving patient's quality of life. The mobility of a community paramedicine service makes it particularly useful to patients in Rural Northwest with respect to being able to stay well at home.

This initiative has proven to be very successful. The program has 78 active clients that are in the Ottawa catchment area. The program continues to be successful and is 100% funded through the Ministry of Health and Long-Term Care.

Influenza Pilot Program

On December 1 2017, the Ottawa Paramedic Service received funding from the Champlain Local Health Integrated Network (LHIN) to assist with mitigating hospital surge associated with the 2017 influenza season.

The objective of this pilot was to establish a city-wide approach, providing specialized paramedic resources focusing on "at risk populations".

The Influenza Pilot Community Paramedics created community vaccination clinics as well as concentrate efforts on residents from nursing homes, retirement homes, community housing complexes, as well as others living within a institutionalize residence to provide influenza inoculations, influenza symptom relief and address other health care issues/concerns.

The overall goal of the LHIN funded pilot was to:

- Provide clinics for influenza awareness;
- Reduce 9-1-1 activations;
- Reduce the number of emergency room transports; and
- Assist patients with their influenza like illness, supporting them so they may remain in their home.

For this 2017 reporting period, the pilot was operational for 29 days.

During those 29 days using four fully contracted LHIN paramedics, the following was completed:

- Created 39 community wellness clinics for influenza vaccination administration

- Delivered 340 influenza vaccinations
- Responded, assessed, treated, and ultimately diverted 38 patients away from local emergency departments by providing alternate health care pathways

Through maximizing efficiencies, it is anticipated that the pilot will prove to have a significant impact at:

- Reducing the number of patients transported by paramedics to hospital;
- Improving vaccination distribution to vulnerable at risk patients;
- Increasing paramedic availability to respond to 9-1-1 calls; and
- Decreasing response times to emergency calls within our community.

Targeted Engagement Diversion (TED)

The successful partnership between the Ottawa Paramedic Service, Ottawa Inner-City Health, the Shepherds of Good Hope, The Ottawa Hospital and the Ottawa Police Service continued throughout 2017. The Program works to identify and assist vulnerable, homeless individuals who suffer from substance abuse issues as well as severe and persistent mental health issues and as a result, frequently use 9-1-1 services. As part of the TED program, Paramedics transport specific homeless patients to a specialized clinic as an alternative to bringing them to the hospital's emergency department. TED is a unique initiative that aims to deliver enhanced and specialized care to a vulnerable patient demographic while also addressing the steady increase in demand for Paramedic resources. In 2017, 768 patients, or approximately 2 patients per day, were transferred to the Shepherds of Good Hope rather than an emergency department.

Heart Safe City

The Ottawa Paramedic Service continues to be a leader with the Heart Safe City initiative, a partnership between the Paramedic Service, Heart and Stroke Foundation, Advanced Coronary treatment (ACT) Foundation, Maharaja's Ball and private businesses. This program has resulted in the placement and oversight of over 1,100 automatic external defibrillators (AEDs) in public and private buildings as well as police, fire and OC Transpo vehicles since 2001. Since then, the Public Access Defibrillator program has directly contributed to bystanders saving 128 lives. In an effort to strengthen the "chain of survival", in 2017 the Community Medicine Team delivered 576 First Aid, CPR and AED courses to 6,543 individuals.

Neonatal Transport Team Pilot Program

In partnership with the Children's Hospital of Eastern Ontario, the Service is participating in a pilot program to help the region's youngest patients. A dedicated, specially equipped ambulance serves CHEO's neonatal transport team, which was purchased through a grant provided by the CHEO Foundation. This ambulance provides the team with the equipment they need to respond as quickly as possible in an emergency. The ambulance is equipped with a power lift that can smoothly move fragile patients in and out of the vehicle, which eliminate the need for two paramedic crews and the risk of workplace injuries. The team responded to 312 calls in 2017. The Paramedic Service will continue to monitor the success of this program.

Post Traumatic Stress Disorder Legislation and Mental Health Strategy

In 2016, new legislation was passed recognizing post traumatic stress disorder (PTSD) as a work-related illness for police, firefighters and paramedics. Under the new legislation, a medical diagnosis of PTSD is assumed to be work-related for first responders.

In response, the Emergency and Protective Services Department has created a Mental Health Strategy. The focus of the strategy is around prevention, awareness and support. In 2018, all Paramedic Service staff will be trained on the Road to Mental Health Readiness (R2MR) program, the industry standard for mental health training and resiliency for first responders. The Paramedic Service has also introduced a "family day" as part of the new hire orientation program. The immediate family members of new recruits are invited into the Service to learn about the stressors of the job and how they can support their family members and to make them aware of the signs and symptoms of post traumatic stress injuries.

Opioid Task Force

In 2017, the Paramedic Service continued to monitor narcotic overdose calls to watch for trends and to respond to calls. The Service participated and continues to participate in the Opioid Task Force, led by Ottawa Public Health. The Service continues to work with community partners to take proactive measures to deal with overdose prevention and response. Also, the Paramedic Service trained Ottawa Fire Services staff to administer Naloxone.

Growth Impacts

The Ottawa Paramedic Service remains committed to establishing an accountable, open and transparent relationship with the public. The Service is trusted to provide an

established level of care prescribed by legislation and has an accountability framework that promotes adherence to this level of care.

Response volumes have increased by 16.9% over the previous five years. As a result of the investments by Council and the mitigation strategies implement by the Service, response times were met across all CTAS categories in 2017.

Paramedic Service headquarters has reached its maximum capacity related to vehicle deployments and staffing. The Service has initiated a review for the build of an Annex facility in order to meet city-wide growth demands. All other facility growth for the Paramedic Service has been deferred with capital funds being allocated to a future Annex.

The Ottawa Paramedic Service is a team of dedicated, highly qualified people who come together to deliver quality clinical care to members of the public who require immediate medical care. The Service will continue to monitor performance and trends and report back to Council as part of the 2018 Annual Report.

RURAL IMPLICATIONS

There are no rural implications associated with this report.

CONSULTATION

There were no consultations required as part of this information report.

LEGAL IMPLICATIONS

The City of Ottawa has an obligation pursuant to Subsection 6(1)(b) of the Ambulance Act “for ensuring the proper provision of land ambulance services in the municipality in accordance with the needs of persons in the municipality.” In discharging this responsibility, pursuant to Subsection 6(8) of the Act, the City must “ensure the supply of vehicles, equipment, services, information and any other thing necessary for the proper provision of land ambulance services in the municipality in accordance with this Act and the regulations.” The determination of what constitute the “needs of persons in the municipality” is left to City Council and is effectively determined by Council’s establishment of the response time standards required by the regulations to the Ambulance Act, which are referenced earlier in this Report. The discretion in City Council to make this decision as to ambulance service standards acknowledges its policy-making role in balancing the service expectations of residents in the municipality with the cost of providing a particular level of ambulance service, “bearing in mind the

budgetary restraints imposed and the availability of personnel and equipment”, to use the phrase articulated by the Supreme Court of Canada.

Where the City fails to meet service standards that have been established by Council in its policy-making role, the City is exposed to the risk of claims alleging failure in meeting the duty of care to persons who have suffered injury or loss. Given the nature of the service provided by paramedics and the potential consequences of failing to meet a duty of care, the value of such claims can be significant. In order to mitigate against the risk of such claims where there is evidence that the service standard can no longer be met with the resources available, the courts have recognized that a public authority ought to either move to lower the service standard in accordance with its policy-making role – subject, of course, to any statutory minimum service standard – or, alternatively, allocate the resources necessary to ensure that the standard can be met. The Ottawa Paramedic Service Review Report (ACS2016-EPS-GEN-0005, Council October 26, 2016) recommended the latter approach as the appropriate one in the circumstances.

This report informs that the additional resources allocated by Council had a positive impact on the CTAS 1 (life threatening) response time performance in 2016 (i.e. 72.5% to 73.2%), and further, the 2017 results (i.e. 77.3%) indicate that response time performance continues to improve.

It is also noted that in 2017 the Ambulance Act was amended by Bill 160, short title Strengthening Quality and Accountability for Patients Act, 2017. As of the time of this comment, not all provisions have yet been proclaimed in force. Once in force, section 7.0.1 of the Ambulance Act as amended will allow the Minister of Health and Long-Term Care to issue operational or policy directives to the operator of a land ambulance service where the Minister considers it to be in the public interest to do so. The operational or policy directive may be general or particular in application, and may include conveyance of persons by ambulance to destinations other than hospitals, and responsibilities in addition to the provision of ambulance services.

RISK MANAGEMENT IMPLICATIONS

There are no risk implications associated with receiving this report for information.

ASSET MANAGEMENT IMPLICATIONS

There are no asset management implications associated with this report.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

ACCESSIBILITY IMPACTS

There are no accessibility implications associated with this report.

ENVIRONMENTAL IMPLICATIONS

There are no environmental implications associated with this report.

TECHNOLOGY IMPLICATIONS

There are no technology implications associated with this report.

TERM OF COUNCIL PRIORITIES

There are no impacts on the Term of Council Priorities associated with this report.

DISPOSITION

The Ottawa Paramedic Service will action any direction received as part of consideration of this report.