Subject: 2024 Ottawa Paramedic Service Annual Report

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Report to Emergency Preparedness and Protective Services Committee on 23

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Submitted on 12 June 2025 by Pierre Poirier, Chief Paramedic, Ottawa Paramedic Service

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Ward: Citywide

Objet: Rapport annuel 2024 du Service paramédic d'Ottawa

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Rapport présenté au Comité des services de protection et de préparation aux situations d'urgence

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Soumis le 2025-06-12 par Pierre Poirier, chef du Service, paramédic d'Ottawa

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REPORT RECOMMENDATION(S)

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

RECOMMANDATION(S) DU RAPPORT

Que le Comité des services de protection et de préparation aux situations d'urgence recommande au Conseil d'accueillir ce rapport à titre d'information.

EXECUTIVE SUMMARY

This report summarizes Ottawa Paramedic Service activities, service demand and performance trends in 2024. This report fulfills the requirement under the Emergency Preparedness and Protective Services Committee Terms of Reference for the Ottawa Paramedic Service to prepare an annual report.

The Ottawa Paramedic Service provides patient care and emergency medical coverage to more than one million residents of the nation's capital across 2,800 square kilometres while the Ottawa Central Ambulance Communications Centre receives emergency medical calls through 9-1-1 and dispatches paramedic resources across 10,000 square kilometres of eastern Ontario.

The Ottawa Paramedic Service achieved legislated emergency response time performance standards and Council-approved targets in 2024. Overall, service to the community has improved. The Ottawa Paramedic Service has successfully reduced incident volumes and transports to hospital.

Since the introduction of the Medical Priority Dispatch System in April 2024, and the implementation of new mitigation measures there has been a significant decrease to hospital offload delay and level zero events.

As described throughout this report, the Service has continued to leverage the Ministry of Health's patient models of care aimed at diverting select patient populations away from emergency departments through safe and appropriate community-based care.

Ottawa City Council approved the Ottawa Paramedic Service 2024-2026 Investment Plan (<u>ACS2023-EPS-OPS-0002</u>), which has contributed to our improved service delivery.

In 2024, the Service prioritized the implementation of initiatives to improve organizational culture and employee wellbeing.

RÉSUMÉ

Le présent rapport résume les activités du Service paramédic d'Ottawa, la demande de services et les tendances en matière de rendement en 2024. Le rapport répond à

l'exigence du mandat du Comité des services de protection et de préparation aux urgences selon laquelle le Service paramédic d'Ottawa doit préparer un rapport annuel.

Le Service paramédic d'Ottawa prodigue des soins aux patients et assure des services médicaux d'urgence à plus d'un million de résidents de la capitale nationale sur un territoire de 2 800 kilomètres carrés, tandis que le Centre de répartition des paramédics d'Ottawa reçoit des appels d'urgence médicale passés au 9-1-1 et assure la répartition des paramédics dans l'Est de l'Ontario, sur un territoire dont la superficie est de 10 000 kilomètres carrés.

Le Service paramédic d'Ottawa a atteint les normes de rendement prescrites par la loi pour les délais d'intervention en cas d'urgence et les cibles approuvées par le Conseil en 2024. Dans l'ensemble, le service à la communauté s'est amélioré. Le Service paramédic d'Ottawa a réussi à réduire le nombre d'incidents et le nombre de personnes transportées à l'hôpital.

Depuis le lancement du Système de répartition des priorités médicales (SRPM) en avril 2024 et la mise en œuvre de nouvelles mesures d'atténuation, il y a eu une diminution importante des délais de déchargement dans les hôpitaux et des incidents de niveau zéro.

Comme il est indiqué tout au long de ce rapport, le Service a continué de tirer parti des modèles de soins aux patients du ministère de la Santé, qui visent à détourner certaines populations de patients des services d'urgence en leur offrant des soins communautaires sûrs et adéquats.

Le Conseil municipal d'Ottawa a approuvé le Plan d'investissement 2024-2026 du Service paramédic d'Ottawa (<u>ACS2023-EPS-OPS-0002</u>), ce qui a contribué à l'amélioration de notre prestation de services.

En 2024, le Service a donné la priorité à la mise en œuvre d'initiatives visant à améliorer la culture organisationnelle et le bien-être des employés.

BACKGROUND

Overview of the Ottawa Paramedic Service

The Ottawa Paramedic Service provides patient care and emergency medical coverage to more than one million residents of the nation's capital. This team of dedicated and qualified professionals includes paramedics, community paramedics, communications officers, equipment and supply technicians, educators, trainers, quality assurance staff,

and support staff. They deliver high quality care and services to the individuals and communities they serve.

Vision Statement

A professional and sustainable paramedic service that supports our people and delivers high quality services in a socially and environmentally responsible manner.

Mission Statement

To deliver high quality care that meets the diverse and changing needs of the individuals and communities we serve and improve the staff and paramedic experience.

The Service's strategic goals:

- To deliver clinical excellence
- To enhance our safe workplace
- To improve operational efficiency
- To develop career paths in our Service

There are three cross-cutting themes that interact with each of the strategic goals:

- Communication: Ensuring open and frequent communication throughout the Service.
- Technology: Leveraging information technology and the use of digital tools.
- Culture: Creating a positive workplace with shared values, beliefs, and norms.

The Service maintains four specialized teams: the Paramedic Marine Unit, the Paramedic Bike Unit, the Paramedic Tactical Unit and the Paramedic Support Unit.

Marine paramedics support water-based operations, while bike paramedics provide medical coverage during special events as it may be easier and quicker for a bicycle to move through pedestrian and vehicular congestion than an emergency response vehicle. Paramedics working on the Paramedic Support Unit and the Paramedic Tactical Unit support police operations and other high-risk events including CBRNE/Hazmat, active threats, public order, missing person searches, and warrant executions.

In addition, the Ottawa Paramedic Service includes community paramedics who provide home and community-based health care through non-traditional, alternate models of care. The Service is also responsible for delivering public education programs to City of Ottawa staff and partners, managing medical equipment purchases for the City of

Ottawa, and overseeing the Public Access Defibrillator Program, which places Automatic External Defibrillators (AEDs) in public and private buildings.

Quintuple Aim of health care

The Ottawa Paramedic Service's strategic goals are well aligned with the <u>Quintuple Aim</u>, an internationally recognized framework that aspires to deliver an effective health care system. It is the guiding framework for Ontario Health, an agency created by the Government of Ontario to connect, coordinate, and modernize the province's health care system. The five objectives of the Quintuple Aim:

- Enhancing patient experience
- Improving population health
- Reducing the per capita cost of health care
- Improving the work life of health care providers
- Advancing health equity

Collectively, the vision statement, mission statement, and strategic goals provide the Ottawa Paramedic Service and its staff an overall sense of direction and assist the organization in establishing its priorities.

Statutory Requirements and Funding

Ontario's Emergency Health Services Division of the Ministry of Health is responsible for emergency medical (paramedic) services. The Ambulance Act, its regulations, and standards, form the legal framework for the Ottawa Paramedic Service. Together, the Ministry of Health and the City of Ottawa are responsible for delivering patient care.

The Ottawa Paramedic Service is the designated delivery agent for land ambulance service across Ottawa. They are singularly responsible for supervising staff, maintaining vehicles and equipment, and assuring quality-of-service delivery. The Service has a shared funding model for the land ambulance service which is 50 per cent funded by the Ministry of Health.

In Ontario, all land ambulance services must be certified by the Ministry of Health.

Certified ambulance service operators undergo a peer certification process every three years. The certification process confirms compliance with legislated certification standards.

The Ottawa Central Ambulance Communications Centre receives emergency medical calls through 9-1-1 and manages paramedic resources across 10,000 square kilometres of eastern Ontario including Ottawa, the United Counties of Prescott and Russell, the

United Counties of Stormont, Dundas, and Glengarry, and Cornwall. The Ottawa Central Ambulance Communications Centre is 100 per cent funded by the Ministry of Health. The Ottawa Paramedic Service is responsible for the administration, staffing, reporting, and operational functions across eastern Ontario. Since December 2002, a Transfer Payment Agreement between the City of Ottawa and the Ministry of Health has been in place.

Every three years, ambulance communications centres in Ontario must undergo a certification review to ensure their compliance with the performance agreement. In October 2024, the Ottawa Central Ambulance Communications Centre successfully completed their certification review.

Preventive Care

The Ottawa Paramedic Service has evolved its service delivery in response to a growing population, an aging demographic, and reduced access to primary care. Current health care challenges include the increase in mental health illness, and the opiate crisis and related social issues.

The role of a paramedic bridges the gap between healthcare and public safety. More recently, the paramedic practice has shifted from an exclusive emergency-based response to a more patient and community-centered approach. Paramedics provide care at the scene, in the home, in the retirement residence, and on the street. In addition, they collaborate with firefighters and police officers in maintaining a safe community.

Community Paramedics work closely with hospitals and social service agencies to provide at-home care that reduces the need for patients to be transported or seen in emergency departments.

Ontario Health

The Government of Ontario created Ontario Health in 2019 to oversee health care delivery across the province. Their mandate is to connect, coordinate and modernize the province's healthcare system to ensure that the people receive the best patient-centered care possible.

Ontario Health supports 58 regional Ontario Health Teams. The Ottawa Paramedic Service is an anchor partner and voting member of three Ontario Health Teams in Ottawa: Archipel, Ottawa West Four Rivers, and Ottawa Health Team.

Ministry of Health models of care

In 2021, the Ministry of Health announced it was launching new patient care models to give paramedics more options for providing individuals with the right care in the right place while helping to reduce transports to the hospital and protect healthcare capacity. Initial patient care models included the Treat and Refer model and the Alternate Destination model, which focused on palliative care patients and individuals experiencing mental health and addictions challenges. Under the Treat and Refer model, an eligible patient may be treated by paramedics on scene and referred for appropriate follow-up care by a healthcare provider. Under the Alternate Destination model, an eligible patient may choose to go to an alternate healthcare provider in the community for treatment and care.

In 2023, patient care models were expanded to include a Treat and Discharge model. Under the Treat and Discharge model, an eligible patient may be treated on scene by paramedics and discharged with recommendations for follow-up care if needed by a primary care physician or home and community care provider. These models of care permit a paramedic to work within an expanded scope of practice. Patient eligibility criteria vary from model to model.

As described in this report, the Ottawa Paramedic Service leverages these models of care with the goal of providing alternate care pathways that are safe and best suited for patients' individual health needs. Treating individuals in alternate care settings such as the community or their home can reduce transport to hospital and repeat calls to 9-1-1, in turn increasing the availability of paramedics in the community.

DISCUSSION

This report fulfills the requirement under the Emergency Preparedness and Protective Services Committee Terms of Reference for the Ottawa Paramedic Service to prepare an annual report detailing current levels of service and identify any needs or methods of improvement to Council. The Service also reports annually to the Ministry of Health on response time performance through a separate reporting process. This report highlights service delivery, performance trends, and linkages to Term of Council strategic objectives.

City Council approved the <u>2024 - 2026 Ottawa Paramedic Service Investment Plan</u> in 2023, which immediately resulted in hiring 14 new full-time positions in 2023, and 28 new full-time positions in 2024. Another 27 full-time positions have been approved for

2025. The annual incremental investment allows the Service to improve service delivery as the city population grows.

In 2024, a new Commander was hired in the Office of the Chief to oversee the Service culture change initiative. Today, approximately 40% of the Ottawa Paramedic Service's current workforce identify as women. The Service remains committed to an inclusive working environment for all.

Paramedic Headquarters at 2465 Don Reid Drive was constructed in 2005 to meet operational needs for 15 years and has reached its maximum capacity. Overcrowding of staff, vehicles, and equipment is putting growing pressure on our service delivery. The consultant Ernst & Young LLP has completed a Value for Money assessment to determine feasibility of different delivery models for a new facility on Strandherd Road. A pending Business Case will define various project delivery models.

SPECIAL TEAMS AND SERVICES

The Ottawa Paramedic Service provides a range of services requiring special training, skills, and equipment. The Ottawa Paramedic Service has developed several special teams to address unmet community needs. Collectively these teams positively impact several Term of Council Strategic Objectives.

Mental Wellbeing Response Team

The Ottawa Paramedic Service Mental Wellbeing Response Team assists individuals experiencing mental health and substance use challenges. A specially trained paramedic and a mental health professional assess patients and provide resource referrals, a care plan, and arrange follow-up care. Launched in 2022 as a partnership with The Ottawa Hospital, the Mental Wellbeing Response Team operates as a Treat and Refer model of care. In addition to reducing the number of transports to hospital, the program has reduced calls to 9-1-1.

In 2024, the Ottawa Paramedic Service was among the first in Canada to administer Suboxone as a treatment option when responding to 9-1-1 calls of suspected overdose or withdrawal. Suboxone is a drug that eases the painful symptoms of overdose reversal and withdrawal. The Mental Wellbeing Response Team can directly refer individuals interested in recovery into the Royal Ottawa Mental Health Centre's Rapid Access Addiction Medicine clinic.

The Mental Wellbeing Response Team directly supports Term of Council Strategic Objective 5: Promote and support proactive mental health supports, strategies, and

community-led crisis mental health response models (5c) and Strategic Objective 6: Simplify access to social services to support those in need, including housing, employment, and child-care services.

ByWard Market Advanced Care Paramedic Response Unit

The City of Ottawa has acknowledged a need for collaborative services in the ByWard Market to restore its vibrancy. Launched in July 2024, the ByWard Market Paramedic Response Unit is staffed by a team of advanced care paramedics. Over nine hundred paramedic interactions have been documented in the first 6 months, which includes 9-1-1 calls, naloxone distribution, referrals, community outreach and wellness checks.

Paramedics provide proactive care and build trust with residents and community organizations in Lowertown. This initiative has received funding through the provincial Ministry of the Solicitor General.

The ByWard Market Paramedic Response Unit supports Term of Council Strategic Objective 23: Reimagine the downtown and ByWard Market through increased economic activity, safety, and tourism. The presence of paramedics in the ByWard Market has reduced 9-1-1 responses and positively contributes to Term of Council Strategic Objective 7: Improve emergency response times by aligning emergency response with community needs.

Special Operations

The Ottawa Paramedic Service maintains four specialized teams of paramedics with additional training for various community safety and high-risk situations.

The Paramedic Tactical Unit members are deployed primarily alongside the Ottawa Police Service Tactical Unit as well as the Royal Canadian Mounted Police Emergency Response Team on a range of responses to public safety threats. In 2024, they participated in almost six hundred deployments. In June 2024, the Ottawa Paramedic Service hosted the first Canadian Tactical Paramedic Conference, CanTacMed. The conference included an update on best practices and a review of the Canadian Tactical Paramedic Training Competency Profile.

The Paramedic Support Unit is deployed on planned and unplanned events with an identified public safety concern. They renewed their Urban Search and Rescue service level mandate and participated in over 70 deployments with the Ottawa Police Service Emergency Support Unit and Ottawa Fire Services Fire Support Unit.

The Paramedic Marine Unit is deployed to riverine events and provides education on water safety. They participated in over 70 deployments with the Ottawa Police Service Marine Dive and Trails Unit.

The Paramedic Bike Unit provided a health care and public safety service during large scale events such as the Tamarack Ottawa Race Weekend, Escapade Music Festival, Canada Capital Pride, and 9runrun.

In addition, many events and demonstrations occur in the ByWard Market, and our Special Operations Teams provide community support, helping to achieve the Term of Council Strategic Objective 23: Reimagine the downtown and ByWard Market through increased economic activity, safety, and tourism.

Neonatal Transport Team

In 2020, the Ontario Ministry of Health provided funding to the Ottawa Paramedic Service for specialized care of eastern Ontario newborns. The Service works collaboratively with the Children's Hospital of Eastern Ontario Neonatal Transport Team. In 2024, our Service supported the Neonatal Transport Team on over 500 occasions. Recently, the program expanded to include critically ill pediatric patients.

COMMUNITY PARAMEDICS

Community paramedicine is a model of care that utilizes a specially trained paramedic to provide community-based, preventive, and primary health care services. A community paramedic reduces emergency calls for service, paramedic transports to the hospital, and unnecessary hospital admissions and readmissions through timely home visits, health assessments and interventions, medication management, and patient education. The community paramedic contributes positively to the sustainability of the healthcare system.

Community paramedics provide preventive care which reduces emergency call volumes supporting Term of Council Strategic Objective 7: Improve emergency response times by aligning emergency response with community needs (7a). In addition to efforts to reduce the need for emergency transports, a focus on in-residence care supports Strategic Objective 16: Reduce emissions associated with the City's operations and facilities, including fleet and facilities (16) by providing patient remote care monitoring services which reduce vehicle driving.

In 2024, Community Paramedics cared for 11,000 patients and provided over 16,000 patient visits. For several years, the Ottawa Paramedic Service has received ad-hoc

grant funding separately from the Ministry of Health, and the Ministry of Long-Term Care for various community paramedic programs.

Community Paramedicine for Long-Term Care Plus

The Community Paramedicine for Long-Term Care program was launched in 2020 to support vulnerable individuals in staying safe and healthy in their homes while waiting for placement in a long-term care home. Community paramedics provide patient assessment, evaluative diagnostic procedures, and at-home treatments. Also, a community paramedic can remotely monitor patient vital signs, schedule patient visits, provide acute episodic care, manage chronic conditions, and provide health education.

In December 2024, the program expanded to Community Paramedicine for Long-Term Care Plus. Paramedics provide an expanded scope of practice to provide ultrasound, blood analysis and urinalysis, to further reduce emergency department transport from within long-term care homes. This partnership started with Hillel Lodge, and three additional long-term care homes are expected to complete onboarding in 2025.

The Ministry of Long-Term Care has determined several key findings in community paramedic programs:

- A 10% reduction in emergency department utilization and 7% reduction in visits requiring hospital admission
- Calls to 9-1-1 decreased by a range of 22-32%
- Waitlisted clients are less likely to be reprioritized into the crisis category
- Clients, caregivers, and family members are very satisfied with the program

Surgical Transition Remote Care Monitoring Team

In 2022, the Ottawa Paramedic Service in partnership with the Montfort Hospital implemented a unique remote care monitoring program. Community paramedics monitor post-surgical patients after their discharge from the hospital, with the ability to monitor and treat many post-surgical complications. The goal is to improve health system access, flow, and capacity. Recently, the program was noted as a leading practice by Accreditation Canada.

An early success of Surgical Transition Remote Care Monitoring is observed with postdischarge patients after surgical transurethral resection of the prostate. Prior to the program, 40% of these patients returned to the emergency department after discharge. After implementation, only 6% of patients required emergency department care after discharge.

Neighborhood Integrated Care Model wellness clinics

The Ottawa Paramedic Service holds regular wellness clinics in partnership with Ottawa Community Housing. Community paramedics support senior clients through health assessment, education, enrollment in ongoing community paramedic care, and referral to community health partners. The program aims to improve overall health and reduce emergency department visits. Community paramedics refer over 50 per cent of their clients for follow-up care. In 2024, the Ottawa Paramedic Service expanded wellness clinic services to include mental health support and cancer screening.

Palliative Care Program

The Ottawa Paramedic Service's Palliative Care Program operates under the Treat and Refer model of care. Paramedics treat palliative care patients in their home, and administer specific medication for pain, difficulty breathing, agitation, nausea, or vomiting. This initiative provides support to the patient so they can remain at home. A paramedic will coordinate follow-up care with the patient's primary palliative care team.

Smart Transportation Program

The Smart Transportation Program uses a Treat and Refer model of care, wherein paramedics assess and treat patients in their residence which reduces the unnecessary transportation of low acuity patients to the emergency department. They conduct an enhanced patient assessment, consult with a physician, provide care, and then determine whether it is safe for the patient to remain at home. Patients who remain at home receive a follow-up call within 24 hours of the initial visit.

MEDICAL EDUCATION AND RESEARCH

In alignment with the Ottawa Paramedic Service's strategic goals and commitment to deliver clinical excellence, the Service continues to engage in research activities. The Service recognizes that out of hospital research is essential to improving patient care. In 2024, these activities included:

 Sixteen Service members participated in a two-week research course in collaboration with MicroResearch Nova Scotia

- Launched the EpiDOSE randomized controlled trial to assess the efficacy of administering a lower dose of epinephrine in adults experiencing out-of-hospital cardiac arrest
- Contributed to research informing the Spinal Motion Restriction Protocol
- Contributed to several articles published in scientific journals covering topics such as mental health of first responders, treat and refer pathways for patients living in long-term care homes, and community paramedicine
- Paramedics participated in the Champlain Centre for Healthcare Ethics symposium
- Participated in The Ottawa Hospital's economic evaluation of the Canadian cspine rule, which won a national award from the Canadian Association of Emergency Physicians

The paramedic scope of practice continues to expand, and continuing medical education is essential for developing, maintaining, and increasing the knowledge and competence of paramedics. In 2024, continuing education topics offered to Ottawa Paramedic Service staff included:

- Verbal do not resuscitate (DNR) order
- Medication safety self-assessment for paramedics
- High performance cardiac arrest management
- Transcutaneous pacing for heart rhythms that are too slow and ineffective
- Synchronized cardioversion for heart rhythms that are too fast and ineffective
- Left ventricular assist devices to support the improved mechanical functioning of the heart
- Biases in STEMI (ST-elevation myocardial infarction) treatment of a specific lethal heart rhythm

The Ottawa Paramedic Service is participating in several physical health research initiatives including a paramedic fatigue/sleep study, a respiratory FIT Test study, and a study to evaluate the risk of occupational exposure when using methoxyflurane gas in the back of an ambulance.

At the Central Ambulance Communications Centre, an innovative study will employ machine learning to increase bystander CPR rates by enhancing the recognition of abnormal breathing (agonal respirations) by communications officers during 9-1-1 calls.

PUBLIC EDUCATION

The Ottawa Paramedic Service is dedicated to enhancing public safety through highquality training. The Public Education team delivered almost 600 courses and trained 7,000 participants. The Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) courses emphasize the importance of early intervention. The Chain of Survival is strengthened when the public knows when to call 9-1-1, perform CPR, and operate an AED.

The Public Education Unit delivered first aid training to over 115 youth participants in the City of Ottawa's Youth Futures program, an initiative helping to develop essential skills for post-secondary education and future employment.

In July 2024, the week-long Paramedic Awareness Week Camp, welcomed a diverse group of teenagers providing them with a broad review understanding of the Service.

Ottawa is a 'Heart Safe' City

Cardiopulmonary Resuscitation (CPR) used in combination with an Automated External Defibrillation (AED) may increase the likelihood of survival by 75 per cent. Since 2001, the Ottawa Paramedic Service Public Access Defibrillator Program has placed more than 1,500 AEDs in public and private buildings; and in Ottawa Police Service, Ottawa Fire Services, and OC Transpo vehicles. In October 2024, the program's first outdoor AED with a heated enclosure was installed in St. Luke's Park.

SERVICE ENHANCEMENTS

Medical Priority Dispatch System

On April 10, 2024, the Ottawa Paramedic Service transitioned the previous call triage software to the Medical Priority Dispatch System. Ottawa City Council received a report (ACS2024-EPS-OPS-0001) detailing the implementation. The Medical Priority Dispatch System is more accurate than the previous system at detecting patient severity of illness or injury, and determining which calls require a paramedic response with lights and siren.

The Medical Priority Dispatch System can successfully identify low acuity patients that may be deferred and high acuity patients who require an immediate response. Low acuity patients may wait longer for paramedics to arrive. Delaying the response for some patients is safe and clinically appropriate when retaining paramedics' availability to respond to the next life-threatening incident. Communications officers follow-up with low acuity patients regularly to check on their health status at 30- or 60-minute intervals.

The successful completion of this initiative has had an immediate positive impact on Term of Council Strategic Objective 7: Improve emergency response times by aligning emergency response with community needs.

Next Generation 9-1-1

In July 2024, the Ottawa Central Ambulance Communications Centre implemented a new telephony system. The project was led by the Ministry of Health and aims to prepare the Communications Centre for Next Generation 9-1-1, a new internet-protocol based 9-1-1 infrastructure that will replace the existing analog system.

Prehos Electronic Patient Care Record Solution

In October 2024, the Ottawa Paramedic Service successfully transitioned to a new electronic medical records software solution, Prehos, a Canadian cloud-based software solution. Patient records are transmitted to all area hospitals through a secure portal system, providing quicker access to records.

Environmental Committee

Ottawa Paramedic Service vehicles consume almost two million litres of gasoline every year. The Service has added thirteen hybrid Emergency Response Vehicles to the fleet. Ambulances are equipped with Eco-mode or EcoSmart devices which will shut off the engine when vehicle batteries are charged, and the internal temperature is within limits for pharmaceuticals and medical equipment.

In 2024, the Project Pillow oversaw the transition from rented fabric pillowcases in vehicles to a product that can be cleaned in the field and reused. In 2021, the Service consumed 39,000 fabric pillowcases and 7,000 pillows. Annually, the new wipeable products will save approximately 84,000 litres of water used for laundering and approximately eighty cubic metres of landfill waste.

The Service has consolidated or reduced paper used for the operations daily shift report, overtime form, and live birth reporting, and introduced paper towel composting inside staff facilities.

The Ottawa Paramedic Service Environment Committee mission aligns with Strategic Objective 16: Reduce emissions associated with the City's operations and facilities, including fleet and facilities.

Auditing

The Ottawa Paramedic Service Quality Assurance unit completed over 2,000 audits of individual electronic patient care records, with feedback provided to the responding paramedic. An additional 1,400 system audits were completed on specific data points as a measure of overall service compliance with process, procedure, or standards.

The Central Ambulance Communications Centre has maintained a 97% performance compliance audit for the preceding 6 months as it prepares itself for their submission for an Accredited Center of Excellence with the International Academies of Emergency Dispatch.

Planning and Logistics

The Ottawa Paramedic Service planning unit oversaw service preparation for 228 planned events. Notable events included the Tamarack Ottawa Race Weekend, Escapade Music Festival, Bluesfest Music Festival, Canada Day, and Remembrance Day. The Service provides a paid duty service at major sporting events such as Canadian Tire Centre and TD Place. In 2024, almost \$1 million was generated as a cost recovery source.

Logistics are integral to daily operational readiness and service delivery. Logistics staff are key to optimization and efficient use of paramedic resources. In 2024, they have:

- Processed over 45,000 vehicles
- Inspected and fit over 100,000 kit bags
- Responded to more than 700 requests for in field support
- Assisted with Neonatal Transport Unit transports over 500 times

PERFORMANCE TRENDS

The Ottawa Paramedic Service reviews and analyzes several performance metrics including:

- The total number of 9-1-1 calls received
- The total number of patients assessed, treated, and transported
- The total number of paramedic resources required to respond
- The total time on task per response
- The offload delay measurement
- A quality review of patient care documentation
- The number of successful resuscitations

In early 2024, the Ottawa Paramedic Service continued to experience significant challenges affecting overall service delivery to the community including a high incident

volume, significant hospital offload delay, and level zero events. These three factors are a risk to public health and public safety.

Following implementation of the Medical Priority Dispatch System, there was a reduction in incident and response volumes. Significant improvements to paramedic response times and hospital offload delay were noted.

Paramedic incident volume

An incident is generated when a call is received by the Ottawa Central Ambulance Communications Centre either originating from inside the City of Ottawa or requiring a response from the Ottawa Paramedic Service. A single incident may include multiple emergency calls or multiple paramedic units for the same location. For instance, a motor vehicle collision involving three vehicles with six patients is a single incident. Over the last 5 years, incident volume has increased by 19 per cent.

Table 1: Paramedic incident volume

Year	Incidents	% Change
2020	102,067	-8.6%
2021	110,612	8.4%
2022	117,623	6.3%
2023	127,107	8.1%
2024	121,461	-4.4%

Paramedic response volume

A paramedic response is generated when an emergency response vehicle is assigned to a call by the Ottawa Central Ambulance Communications Centre. Some calls require more than one response (vehicle) depending on the complexity of the situation and the number of patients. Paramedic response volume is a measure of how many paramedic resources are assigned to calls.

In 2024, the Ottawa Paramedic Service response volume was 173,053 representing a 10.4 per cent decrease over 2023.

Table 2: Response volume and annual percentage change from 2020 to 2024

Year	Responses	% Change
2020	132,631	-9.5%
2021	149,344	12.6%
2022	184,113	23.3%
2023	193,127	4.9%
2024	173,053	-10.4%

Paramedic transport volume

Paramedic transport volume is a count of the total number of patients transported by the Service which includes transports from a scene location to the hospital as well patients transported to alternate destinations such as the University of Ottawa Heart Institute and TED program. Patients transported between hospitals for specialized treatment are also included in the transport volume.

In 2024, the Ottawa Paramedic Service transport volume was 83,773, representing a 5.3 per cent decrease over 2023.

Table 3: Transport volume and annual percentage change from 2020 to 2024

Year	Transports	% Change
2020	73,323	-8.5%
2021	81,446	11.1%
2022	85,228	4.6%
2023	88,504	3.8%
2024	83,773	-5.3%

Paramedic Response Time Performance Plan

The Ottawa Paramedic Service response time performance plan reporting framework is defined as the elapsed time from when the first paramedic unit is notified of the call to the arrival of a paramedic resource on scene. The Ottawa Paramedic Service is required to report annually to the Ministry of Health.

Response time performance is based on the Canadian Triage Acuity Scale (CTAS), which sets a score for the patient severity of illness or injury. CTAS 1 is the highest acuity and CTAS 5 is the lowest. The Ministry of Health determines the response time

for each CTAS level while the response time target is established by Council. The CTAS score is determined once a paramedic has arrived on scene and after an initial medical assessment. The percentages in the Table represent how often a paramedic arrives on scene to provide service to patients within the established targeted response time for each CTAS category.

In 2024, the Ottawa Paramedic Service met the Council-approved response time performance targets.

Table 4: Response Time Performance from 2020 to 2024

Acuity Category	Target Time (minutes)	Council Approved Percentile	2020	2021	2022	2023	2024
CTAS 1 (life threatening)	8:00	75%	75.7%	66.8%	61.8%	68.0%	75.1%
CTAS 2 (urgent)	10:00	75%	76.6%	71.2%	63.2%	68.8%	76.2%
CTAS 3	15:00	75%	89.1%	85.9%	76.3%	79.3%	82.8%
CTAS 4	20:00	75%	94.4%	92.1%	83.4%	83.5%	78.3%
CTAS 5	25:00	75%	96.6%	94.7%	86.7%	86.8%	88.8%

City of Ottawa response time performance for sudden cardiac arrest

In cases of sudden cardiac arrest, 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 response time for sudden cardiac arrest is positively impacted if an Automated External Defibrillator (AED) is available at the scene or by a police officer, firefighter, or OC Transpo Special Constable, who are equipped with an AED.

In 2024, the Ottawa Paramedic Service met the Council-approved response time for sudden cardiac arrest.

Table 5: Response Time Performance for Sudden Cardiac Arrest 2020 to 2024

Category	Target Time (minutes)	Council Approved Percentile	2020	2021	2022	2023	2024
Sudden Cardiac Arrest	6:00	65%	77.3%	63.8%	48.4%	64.8%	70.2%

The Ottawa Paramedic Service has successfully reduced response volume, incidents, and transports to hospital. Overall, paramedic service to our community has improved.

The introduction of community paramedics keeping patients safe and healthy at home has reduced the need for some emergency responses. The implementation of several models of care has improved service delivery and has reduced the requirement to bring a patient to the hospital.

The implementation of the Medical Priority Dispatch System has successfully reduced the unnecessary duplication of resources attending emergency calls.

Rural Service

Ottawa has a unique geography and population distribution. The Ottawa Paramedic Service legislated response time performance reporting is service-wide and does not differentiate rural from urban. In 2024, there were 23,123 life-threatening emergency calls in urban areas and 1,501 in rural areas. Our service delivery balances the probability for the next call for service with the travel time to arrival in an urban or rural area.

Tables 6 and 7 display response time performance in rural and urban areas for the past five years. Data for 2024 differentiates before and after implementation of the Medical Priority Dispatch System in April 2024.

Table 6: Response time performance in the urban area

Acuity Category	2020	2021	2022	2023	2024 Jan- Apr	2024 Apr-Dec
CTAS 1 (life threatening)	78.2%	72.9%	65.8%	70.9%	72.1%	79.3%

Acuity Category	2020	2021	2022	2023	2024 Jan- Apr	2024 Apr-Dec
CTAS 2 (urgent)	79.3%	74.0%	67.2%	71.6%	74.3%	82.8%
CTAS 3	90.1%	87.6%	80.5%	81.7%	82.9%	86.1%
CTAS 4	94.5%	91.4%	85.0%	84.5%	86.0%	89.8%
CTAS 5	96.2%	93.1%	87.6%	87.4%	90.3%	93.2%

Table 7: Response time performance in the rural area

Acuity Category	2020	2021	2022	2023	2024 Jan- Apr	2024 Apr- Dec
CTAS 1 (life threatening)	23.6%	20.4%	8.1%	18.8%	13.8%	18.1%
CTAS 2 (urgent)	29.7%	24.6%	22.2%	24.4%	24.5%	25.7%
CTAS 3	59.5%	53.4%	42.7%	46.9%	49.4%	55.5%
CTAS 4	79.3%	71.2%	62.3%	65.9%	63.5%	75.5%
CTAS 5	87.3%	79.9%	69.2%	71.7%	70.2%	84.6%

There has been a significant improvement in rural and urban response time performance since the implementation of the Medical Priority Dispatch System and investments by Council.

Ottawa Central Ambulance Communications Centre Response Time Performance Plan

In 2024, the Ottawa Central Ambulance Communications Centre answered 155,837 calls for service and dispatched 215,000 paramedic responses. The Ministry of Health establishes response time standards for all 23 central ambulance communications centres. The response time standards are a measure of the elapsed time from when an emergency call is received to when a paramedic has been notified of the call. Communications centres report annually on the percentage of time this process is completed within two minutes.

Table 8: Response Time Performance from 2020 to 2024

Category	Target time(mi nutes)	Target Percentile	2020	2021	2022	2023	2024
CTAS 1 (life threatening)	2:00	80%	80.2%	74.0%	75.5%	74.0%	34.4%
CTAS 2 (urgent)	2:00	75%	60.7%	52.5%	54.5%	51.2%	24.1%
Sudden Cardiac Arrest	2:00	80%	81.9%	77.1%	80.2%	73.4%	41.4%

In 2024, the Ottawa Central Ambulance Communications Centre did not meet response time performance targets. The Ministry of Health is aware that neither the previous call taking triage tool, nor the new Medical Priority Dispatch System are conducive to achieving the performance targets. The Service, along with other Ontario Central Ambulance Communications Centres continue to advocate to the Ministry of Health to revise the response time performance targets.

Hospital Offload Delay and Level Zero

Offload delay occurs when a paramedic crew cannot immediately transfer the care of a patient to hospital staff. Offload delay severely impacts prompt response to the next call for service. Excessive offload delay is a patient health and public safety risk. The industry accepted performance target for transfer the care is 30 minutes at the 90th percentile.

In 2024, offload delays have improved though do not yet meet the performance targets.

Table 9: Ottawa Hospitals Response Time Performance for 2022, 2023, and 2024

Facility	90 th Percentile Transfer of Care (minutes) 2022	90 th Percentile Transfer of Care (minutes) 2023	90 th Percentile Transfer of Care (minutes) 2024
The Ottawa Hospital – General Campus	162.72	158.08	112.73
The Ottawa Hospital – Civic Campus	136.00	142.20	112.78

Montfort Hospital	224.18	234.40	159.01
Queensway Carleton Hospital	167.84	171.81	144.18
Children's Hospital of Eastern Ontario	39.10	39.46	38.45

Level Zero

Level zero occurs when there is no ambulance available to respond to the next call for service in the community. Offload delay at local hospitals continues to be a significant contributor to level zero events. The performance target for level zero is that there should never be a time when a paramedic crew is not available.

Automated tracking and reporting for total time spent at level zero has been initiated, rather than a manual record of occurrences. In 2024, the total time spent at level zero decreased significantly.

Table 10: Level zero events 2020-2024

Year	Duration (minutes)	% Change from previous
2020	12,447	N/A
2021	24,310	95.3%
2022	73,060	200.5%
2023	52,995	-27.5%
2024	11,372	-78.5%

SERVICE IMPROVEMENTS AND OFFLOAD DELAY MITIGATION

The implementation of the Medical Priority Dispatch System improved call triage ability and permitted the queueing of calls which allowed for a more reliable service delivery. In September 2024, Ottawa hospitals implemented several strategies aimed at reducing offload delay and improving service to the patient. The Ottawa Paramedic Service has worked in collaboration with the hospitals on the improved patient transfer of care.

Paramedic Response Unit

The Paramedic Response Unit is an emergency response vehicle staffed with a single paramedic. This paramedic can assess patients, initiate care, and determine whether an ambulance is required. If transportation is not needed, the paramedic crew will be cancelled from the call and remain available for service.

Dedicated Offload Nurse Program

The Ottawa Paramedic Service continues to oversee the Dedicated Offload Nurse Program, permitting paramedics to transfer patient care to a dedicated health professional within the hospital's emergency department. Funding for the program has increased to \$3M providing over 56,000 hours of nurse coverage for dedicated paramedic offload.

Vertical Patient 'Fit 2 Sit' Program

The Vertical Patient Program is a partnership with Ottawa Hospitals, redirecting almost 4,500 patients to the emergency department waiting room allowing paramedic crews back into the community more quickly for the next call for service. In November 2024, program qualifying criteria was expanded. As a result, the paramedic transfer of care time is reduced, and they can service more quickly.

Targeted Engagement Diversion

The Targeted Engagement Diversion Program is a valuable partnership between the Ottawa Paramedic Service, Ottawa Inner City Health, the Shepherds of Good Hope, The Ottawa Hospital, and the Ottawa Police Service.

In 2024, almost 900 individuals were diverted away from the emergency department. Paramedics may transport an individual experiencing homelessness to a specialized medical clinic operated by Ottawa Inner City Health. Ottawa Inner City Health provides primary care, mental health care, and substance use treatment services.

Mobile Logistics Support Unit

The Mobile Logistics Support Unit initiative involves equipment and supply technicians deployed to resolve vehicle and equipment issues in the field. Providing logistical support can save a paramedic crew from having to return to Paramedic Headquarters thereby reducing the time the paramedic crew is out of service, thus maximizing paramedic availability.

Patient Flow Paramedic

Over 200 patients were assigned to a patient flow paramedic totaling over 400 hours saved in hospital offload delay. This initiative is a partnership with the Queensway Carleton Hospital and The Ottawa Hospital. The Service deploys a single patient flow paramedic to an emergency department to receive up to four patients, which results in the ability for four paramedic crews to return to service. The patient flow paramedic will monitor patients until transfer of care to hospital staff occurs.

Patient Ratio Protocol

The Patient Ratio Protocol was activated over 200 times. The protocol is activated during a level zero event, or when a paramedic crew nearing end of shift is in offload delay. It permits another paramedic crew on offload delay at the same hospital to assume care for multiple patients, so the crew nearing end-of-shift can complete their shift on time. This initiative reduces the occurrence of end-of-shift overtime.

Physician assessment on stretcher

Over 2,000 patients were assessed or treated by a physician while in the care of a paramedic crew during an offload delay. The Ottawa Paramedic Service permits a physician to provide treatment to a patient during offload delay. This initiative results in expedited patient care, improved flow in the emergency department, and paramedic crews returning to service more quickly.

Paramedic treatment on offload delay

Since 2021, Paramedics have administered clinical treatment while in hospital during offload delay. Previously, paramedics were only permitted to monitor the patient while in offload delay. Through this initiative, a paramedic can consult with a physician on patient care and provide ongoing treatment. This expedites patient care within the hospital.

Breakaway paramedic crew

In 2022, the Ottawa Paramedic Service instituted a new start of shift procedure. Breakaway crews are identified and deployed when there are high acuity calls waiting in the queue. The procedure improved service and reduced overtime for staff. With the introduction of the Medical Priority Dispatch System in 2024, the requirement for a breakaway paramedic unit has significantly diminished.

WORKPLACE CULTURE & EMPLOYEE WELLBEING

Organizational culture is referred to as the collection of values, ethics, beliefs, norms, practices, and behaviors that define a work environment. Culture is important for the achievement of vision, mission, and strategic goals.

Organizational Culture Shift

Consultant MNP was engaged by the Ottawa Paramedic Service to assess the existing culture, define a desired culture, and develop a roadmap towards improvement.

The culture assessment was completed in several phases. Feedback was collected from approximately 400 staff through an anonymous online survey. Approximately 150 staff participated in focus groups and leadership workshops. A gap analysis was completed to identify more detail on the disparity between the current and desired culture. An action plan was then developed to help bridge the gap between the current and desired organizational culture.

Culture Shift Action Plan

The Culture Shift Action Plan was introduced to Ottawa Paramedic Service staff in late 2024. It is a three-year plan focused on a series of key strategies.

Leaders in the Service must share the culture vision and adapt their own decisions and behaviours to align with the desired future culture. Superintendents, Commanders, Deputy Chiefs, and the Chief, totalling 160 leaders in the Service, participated in a 1.5-day Change Leadership training course.

Seven key strategies have been established for the first year. Service Commanders are leading the implementation for each strategy.

- 1. Spreading the Culture Vision
- 2. Modeling Desired Culture
- 3. Culture Champion Network
- 4. Internal Communications Strategy
- 5. Embed Culture in Organizational Systems
- 6. Leadership Development
- 7. Recognition and Rewards

Mental health supports for staff

Recently, staff exposure to potentially traumatic incidents has been compounded by increased public intolerance to communications officers, and physical violence towards

paramedics. Paramedics are experiencing moral injury, which is a profound psychological and spiritual distress that arises from challenging situations that upset a person's value system or moral beliefs.

In 2024, the Public Services Health and Safety Association selected the Ottawa Paramedic Service to participate in the development of a cognitive demands analysis resource for Paramedic Services and Communications Centres.

Paramedic Psychologist

The Ottawa Paramedic Service 2024-2026 Investment Plan (<u>ACS2023-EPS-OPS-0002</u>) report approved the hiring of mental health professionals. A psychologist has joined the Service to develop an employee wellness strategy. The recruitment of two additional medical mental health professionals to complement the wellness strategy is planned for 2025.

Peer Support Program

Peer supporters are coworkers that listen, empathize, defuse, and share information. They are critical to the maintenance of a healthy workplace. Peer supporters help bridge the gap between frontline staff and mental health professionals. Established in 2014, the Ottawa Paramedic Service Peer Support Team comprises approximately 50 individuals and is supported by a City of Ottawa wellness consultant.

Ottawa Paramedic Service peer supporters had over six hundred interactions with over three hundred employees and met with sixty-one employees returning to the workplace. They partnered with Ottawa Fire Services and Ottawa Police Service peer support teams on a half-day workshop for mental health professionals to increase their awareness of the unique challenges faced by first responders.

LOOKING AHEAD

The Ottawa Paramedic Service is committed to the Culture Shift Action Plan. In 2025, a group of over 80 Culture Champions has received focused training to help better understand their role as a peer leader through the adoption of change. The Service is engaged with the University of Ottawa in the development of an evaluation matrix.

The overcrowding of staff, vehicles, and equipment in Paramedic Headquarters at 2465 Don Reid Drive is expected to exacerbate in the coming years. A city-owned site on Strandherd Drive has been identified for a second paramedic deployment facility and building design work is ongoing. Planned studies for the proposed site include the Traffic Impact Assessment, Rail Proximity Study, and Noise and Vibration Report. These

studies will support future re-zoning, design/construction procurement activities including the Request for Proposal, and Site Plan Control applications. In 2025, a business case for this new facility will be finalized for consideration.

Community paramedic programs and other coordinated care efforts will continue to expand as provincial funding is available. The Mental Wellbeing Response Team plans to expand their hours of operation. In consultation with the University of Ottawa, the effectiveness of the new ByWard Market Paramedic Response Unit will be evaluated.

Implementation of the new Medical Priority Dispatch System necessitates a review of the current resource deployment plan, which is planned for completion in 2026. In 2025, the Ottawa Paramedic Service will also be seeking recognition as an Accredited Center of Excellence, which can lead to enhancements such as the ability for secondary triage by a paramedic in the communications centre.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

LEGAL IMPLICATIONS

There are no legal impediments to receiving the information in this report.

CONSULTATION

Consultation activities were not required for this information report.

ACCESIBILITY IMPACTS

The Ottawa Paramedic Service provides care for patients with disabilities in line with the obligations of the Accessibility for Ontarians with Disabilities Act, 2005 and the Integrated Accessibility Standards Regulation, 191/11.

The Service ensures that patients with disabilities have continued access to their support persons, devices, and support animals during transport and arranges for temporary care of service animals.

The Ottawa Paramedic Service reports on its initiatives that enhance service to older adults and people with disabilities through the City's Annual City of Ottawa Municipal Accessibility Plan annually.

DELEGATION OF AUTHORITY IMPLICATIONS

The Ottawa Paramedic Service reports annually to the Emergency Preparedness and Protective Services Committee on the use of delegated authority, as described in Section 17 of Schedule F of the Delegation of Authority By-law (2023-67). There is no new delegated authority requirement associated with this information report.

INDIGENOUS, GENDER, AND EQUITY IMPLICATIONS

Since 2010, the Ottawa Paramedic Service Diversity Champion Program has built relationships with diverse communities across the city to improve overall equity, diversity, and inclusion in the community. All paramedics participating on the Mental Wellbeing Response Team have completed the San'yas indigenous cultural safety training.

RISK MANAGEMENT IMPLICATIONS

Risk implications and associated mitigation strategies are identified and explained in this report.

RURAL IMPLICATIONS

The Ambulance Act requires a seamless service meaning that the closest available ambulance is dispatched to respond to emergencies regardless of municipal borders. The provision of seamless service requires neighbouring municipalities to provide care within the boundaries of the City of Ottawa. Similarly, the Ottawa Paramedic Service also provides care in bordering communities. The Ottawa Paramedic Service has augmented its service to rural areas. We will continue to monitor rural and urban response time data.

TERM OF COUNCIL PRIORITIES

Ottawa Paramedic Service initiatives align with the 2023 - 2026 Term of Council Priorities:

- A city that has affordable housing and is more liveable for all:
 - Promote and support proactive mental health supports, strategies, and community-led crisis mental health response models. (5)
 - Number of people served through alternate response (c)
 - Simplify access to social services to support those in need, including housing, employment, and child-care services. (6)

- o Improve emergency response times. (7)
 - Align emergency response times with community needs. (a)
- A City that is green and resilient:
 - Reduce emissions associated with the City's operations and facilities, including fleet and facilities. (16)
- A City with a diversified and prosperous economy
 - o Reimagine the downtown and ByWard Market. (23)

DISPOSITION

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