
For Information

REPORT TITLE: Paramedic Services Full Service Update 2025

FROM: Nancy Polsinelli, RD HBS Sc MPA, Commissioner of Health Services

OBJECTIVE

To provide a comprehensive update on the status, performance, key initiatives in Paramedic Services to date.

REPORT HIGHLIGHTS

- Paramedic Services continues to adapt to the increasing complexity and volume of medical calls driven by Peel's growing, aging population with complex needs.
 - Clinical protocols and frontline practices are being refined to support timely, high-quality care delivery, especially for patients with multi-morbidity and mental health needs.
 - A multi-stage wellness strategy has been implemented to support the psychological safety and resilience of paramedic staff, including peer support and trauma-informed training.
 - Alternative care pathways such as the Low Acuity Diversion Program (*Fit2Sit* and Urgent Care Centre referrals) have saved 2,055 hours in the emergency health system in 2024, helping to alleviate immediate pressures.
 - Despite these gains, hospital offload delays and rising urban density continue to impact ambulance availability and response times.
 - Strategic investments in fleet modernization, station infrastructure, and predictive dispatch technology are essential to meet future service demands.
 - Maintaining and strengthening partnerships that support health system integration and innovation remains integral to delivering the highest quality of care and service.
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DISCUSSION

1. Background

Peel Regional Paramedic Services ("Paramedic Services") has grown to be an industry leading, world class, trusted public safety organization. Our care is deeply rooted in the community we serve, driven by a shared commitment to providing, timely, safe, and compassionate care for all residents and visitors in Peel. Peel is growing in population size as well as complexity of care for residents; Paramedic Services is proud to stand alongside our diverse Peel community, recognizing and supporting their unique needs.

Paramedic Services continues to explore opportunities to be innovative to patient care. Through enabling upstream approaches and applying principles of health equity, the Service

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looks to remove barriers to care, ensuring every individual needing care is supported in the time of medical aid.

a) Paramedic Services Delivery Model

Peel's Paramedic Services model prioritizes accessibility, efficiency, and rapid response. With 26 response stations, 4 divisional reporting stations, and 22 satellite stations, the system supports timely medical care for 1.5 million residents and thousands of visitors. As Peel's population is projected to reach 2.28 million by 2051 (growing ~45,000 annually), service demand will increase.

To address this, a fifth reporting station – **Docksteader** - has been approved for 2027. Larger than existing stations, Docksteader will house expanded ambulance capacity and centralized logistics for vehicle and equipment processing, supporting Ministry standards and Council's response time framework.

Satellite stations are strategically located, especially in high-demand areas, to reduce travel time and improve emergency response. Future satellite placements will explore partnerships with regional and municipal entities, reinforcing our commitment to equitable, high-quality care.

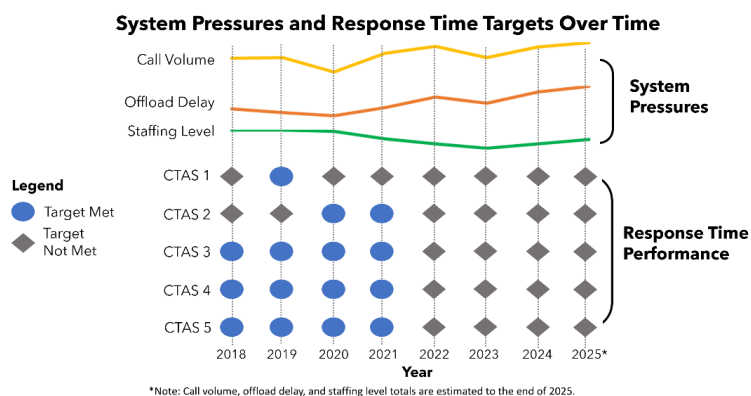
2. System Pressures

Paramedic Services continues to face challenges to maintain optimal service delivery. However, there are performance benchmarks that are set for Paramedics to meet. The following are some of the realities that Paramedics face when providing care.

a) Response Times

Patient Acuity Levels are determined through the Canadian Triage Acuity Scale (CTAS). CTAS categorizes patients from CTAS 1 which represents the emergent and life-threatening calls requiring immediate care to CTAS 5 which represents calls that are non-urgent and no immediate threat to life. CTAS 1-5 response time targets are set in collaboration with the Province and create a benchmark for Paramedic Services' performance. Meeting response time targets has become increasingly difficult due to the combined impact of system-wide pressures, including staffing shortages, hospital offload delays, and rising call volumes. See Figure 1. System Pressures and Response Time Targets Over Time.

Figure 1:



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b) Call Volume

Paramedic call volume continues to trend upward. In 2025, call volumes are projected to increase by 3.2 per cent compared to the 2024. Paramedic Services responded to an average of 407 calls per day in 2024 and has responded to an average of 420 calls per day in 2025. Table 1 shows the upward trend of call volumes.

Table 1. Total 9-1-1 Call Volumes from 2016 to 2026

Year	Calls
2016	115,367
2017	125,378
2018	136,799
2019	137,669
2020	122,817
2021	142,531
2022	149,591
2023	137,993
2024	148,718
2025 ¹	153,516
2026 ¹	158,314

c) Offload Delay

The industry standard time for Paramedics to transfer patient care to hospital staff, complete paperwork, and return to the road, ready to respond to new 9-1-1 calls is 30 minutes. Time beyond 30 minutes is “offload delay”. In 2024, the total paramedic hours lost to offload delay across all three Peel hospitals was 63,640 hours, which equates to 14 ambulances off the road each day. Paramedic Service has implemented programs for alternative models of care to assist with system challenges.

d) Alternative Models of Care

Programs such as Fit2Sit and alternative destination transports help reduce offload delays by enabling paramedics to return to service faster. In 2024, 5.5 per cent of low-acuity patients (CTAS 3–5) were identified as Fit2Sit, saving 2,055 hours in the emergency system. Additionally, 893 patients were diverted to Peel Memorial Urgent Care Centre (UCC) in 2024, freeing up paramedic crews for redeployment.

3. Program Highlights

In response to systems pressures, our in-house programs play a vital role in strengthening Paramedic Services, enhancing patient outcomes and creating new ways to serve the community. Through initiatives in quality, education and training, and specialized care, we continue to enhance programming that support our frontline paramedics and ensuring our

¹ Call volume, offload delay, and staffing level totals are estimated to the end of 2025.

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residents receive, safe, timely, and innovative care. The following section highlights the important work across these areas:

a) Education and Training

Ongoing training and certification are essential to ensure paramedics deliver safe, high-quality, and compassionate care. Advanced Care Paramedics (ACPs) must complete 36 hours of annual training, while Primary Care Paramedics (PCPs) require 20 hours. In 2024, paramedics participated in education programs covering hiring, certification, return-to-work, and skills development—resulting in more than 40,000 annual training hours. The program also led the annual recruitment, supporting onboarding, reintegration, and compliance. Additionally, 103 paramedics earned PCP Autonomous IV certification, enhancing their clinical capabilities. Paramedic Services continues to embrace innovation, with AI-powered CPR training now available 24/7 across all divisions to maintain readiness and certification.

b) Risk & Audit

Information requests have grown by approximately 6 per cent annually and are projected to continue rising. In 2024, Paramedic Services received over 1,800 PHIPA requests, requiring thorough review, redaction, and timely responses to ensure requester satisfaction. Notably, rising incidents of Intimate Partner Violence has contributed to this increase.

c) Specialized programs

Paramedic Services currently delivers specialized programs to meet the unique needs and complex community needs. Our Rapid Response Units ensure timely care by deploying smaller vehicles to navigate congested areas or high demand areas such as Pearson Airport within Peel. This program ensures a paramedic arrives quickly on scene to initiate care before an ambulance arrives on scene.

Our Tactical Paramedic Program, alongside our community partner Peel Regional Police, supports high-risk calls. Since November 2024, the tactical team has responded to 299 events which includes hostages and barricaded individuals, search warrants, suspicious packages, and weapons. Paramedic Services looks to expand specialty training of paramedics in public order safety and tactical awareness. So far in 2025, Paramedic Services has received over 11 calls for service to support public order events (i.e., parades and large gatherings). The integration of specialized programs within Paramedic Services advances health system partnerships, improve public trust, and promote a unified response to public safety incidents.

d) STEMI and Stroke Program

Paramedic Services ensures that residents receive the fastest, most effective care possible in time-sensitive emergencies such as heart attacks and strokes. ST-elevation myocardial infarction (STEMI) is a very serious form of heart attack. The average time for Peel paramedics to get a STEMI patient to a cardiac operating table is well below the international standard of 90 minutes. Between January 2024 to July 2025 Paramedic Services has transported a total of 341 STEMI patients to Trillium Hospital and Brampton Civic Hospital and 613 Stroke patients to Trillium Hospital.

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4. Community Relations

Paramedic Services actively supports cultural and marginalized communities by fostering public trust through meaningful engagement. The community relations program enhances outreach, aligns with public safety priorities, and promotes diversity, equity, and inclusion in emergency care. Staff regularly participate in events ranging from school visits to council-led community gatherings to make stronger connections to community groups.

5. Community Safety Programs:

a) Automatic External Defibrillator (AED)

Peel Region continues to demonstrate one of the highest rates of Automatic External Defibrillator (AED) use in Canada. To offer additional medical support, the community safety program was established to train volunteers who can deliver Cardiopulmonary resuscitation (CPR) and AED use when individuals are in urgent need. In addition, our Public Access Defibrillation (PAD) program has over 1800 Registered AED's and growing within the Region of Peel with over 800 within Regional buildings (i.e., Regional Long-Term Care and Public Health buildings).

b) Drone Pilot

In 2018, Paramedic Services joined a five-year study with Dr. Cheskes and Sunnybrook Hospital exploring how drones could be used to deliver AEDs to bystanders assisting cardiac arrest patients. These drones will carry medical response tools (Naloxone, Epinephrine Auto-injectors (EpiPens), and Stop the Bleed Kits) to aid in medical response. The goal is to ensure AEDs are available, especially for those in the rural areas of Caledon, before a paramedic arrives. This timely intervention is fundamental for someone experiencing cardiac arrest.

c) Community Responder Pilot

Paramedic Services has partnered with Sunnybrook Hospital for five years to create a group of community volunteers who can administer CPR to save lives. This volunteer program trains local volunteers to respond and provide care (Naloxone, Epinephrine Auto-injectors (EpiPens), and Stop the Bleed Kits) for life threatening emergencies before emergency services arrive. To date, Paramedic Services has 274 active volunteers with an average of receiving 8 medical alerts per day.

6. Community Paramedicine

To better serve vulnerable Peel residents, the Community Paramedicine (CP) program provides in-home assessments, health monitoring, education, and system navigation support—helping reduce 9-1-1 calls, emergency department visits, and hospital admissions. By leveraging paramedics' unique skills in home and community settings, CP advances health equity for individuals with complex needs.

The program operates through two main streams: Wellness Clinics and Home Visits, both offering tailored care. As Paramedic Services explores program expansion, a 24-hour model is being considered to support low-acuity and 9-1-1 patients. Advocacy for enhanced funding from the Ministry of Long-Term Care and Ontario Health is needed for continued support for sustainable service delivery.

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In 2024, CP facilitated 3,593 appointments across three service streams:

- a) **High Intensity Supports at Home (HISH)**
- b) **Community Paramedics for Long-Term Care (CPLTC)**
- c) **Community Paramedicine at Clinic (CP@Clinic)**

Strong partnerships with Ontario Health Teams, primary care providers, hospitals, long-term care homes, and community services ensure seamless care coordination and integrated planning for vulnerable residents.

Since the CP program's expansion in 2021, several key milestones have been achieved:

- Introduced a General Internal Medicine (GIM) approach in partnership with Trillium Health Partners for patients with complex comorbidities.
- Proposed expansion of the CP-Mental Health and Addictions (CP-MHA) program to the Associate Minister.
- Extended CP@clinic to 10 wellness sites in Peel Living seniors' residences.
- Broadened eligibility to include patients under 65 with complex health needs.
- Delivered mobile vaccinations to vulnerable and marginalized populations.
- Expanded services to Peel's Emergency Shelter System.
- Secured permanent CPLTC funding as of August 2025.

7. External Violence Against Paramedics

The External Violence Against Paramedics (EVAP) program, launched by Paramedic Services, continues to prioritize frontline safety. Between February 2021 and September 2025, there were an assessed 2,516 violent incidences reported. Exposure to violence increases the risk of screening positive for post-traumatic stress injury by 44 per cent and burnout by 55 per cent. From 2022 to 2024, 15 paramedics missed a total of 346 weeks due to violence and harassment, resulting in \$871,280 in WSIB claims.

EVAP's key achievement is the launch of the External Violence Incident Report (EVIR), enabling routine reporting of previously under-reported incidents. Since 2021, paramedics have submitted over 2,000 reports - one every 18 hours - highlighting frequent violence, including physical or sexual assault every two days. This data has helped identify risks, support staff, and guide prevention strategies.

Staff value EVAP's responsiveness, with evaluations showing that reporting depends on employer follow-up. Beyond safety, the program strengthens trust by demonstrating a tangible commitment to staff well-being and preventing repeat incidents through early identification of high-risk individuals. EVAP's sustainability is now part of the Paramedic Services strategic plan.

a) **ALERT**

Under the External Violence Against Paramedics (EVAP) program, Peel Regional Paramedic Services launched the Advanced Learning for Evaluating and Recognizing Threats (ALERT) training for all paramedics. Funded by Council in 2024, the training was completed by all staff and is now mandatory for new recruits.

ALERT equips paramedics with skills in threat recognition, conflict avoidance, tactical communication, de-escalation, and appropriate use of force through high-fidelity, reality-based scenarios. These skills are applied daily, with staff reporting—both anecdotally

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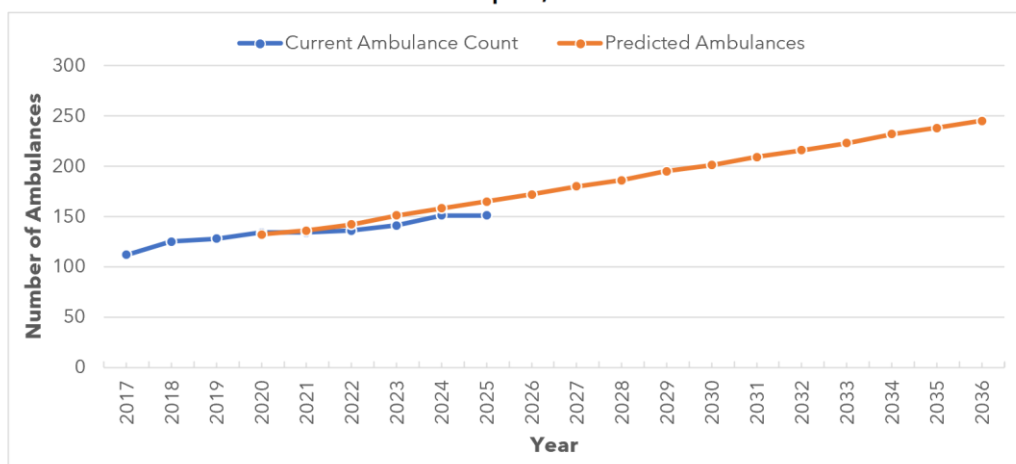
and through External Violence Incident Reports (EVIIRs)—that the training has helped them make safer decisions in high-risk situations, often preventing serious harm.

The program has also enhanced Peel’s reputation as a national leader in workplace violence prevention, with participants from 13 Ontario paramedic services, regional health and safety teams, and other municipal departments benefiting from the training.

8. Fleet, Supply and Ambulance Management

With rising call volumes and a growing senior’s population, additional infrastructure is needed to support demand. Expanding the ambulance fleet will enable Paramedics to meet service needs. Predictive models show a fleet of 201 ambulances will be required by 2030—an increase of 65 vehicles (47.8 per cent) from the 2022 fleet. Figure 2 illustrates projected fleet growth over the next decade.

Figure 2. Number of Current and Predicted Ambulances Over Time as Presented in the 2020 Report, 2017-2036



a) Modular Project

To improve ambulance readiness and reduce costs, Paramedic Services launched the Modular Equipment Project. This program places medical equipment into modular equipment bags that can be switched out during vehicle preparation and centralized modular production to boost efficiency. This reduced vehicle turnaround time to under one hour, enabling faster deployment. Piloted at Fernforest in 2023, all four reporting stations became fully modular by August 2025.

b) Remounts

Paramedic Services has adopted an alternative vehicle procurement model to address ambulance supply challenges. By piloting remounts—reusing the existing patient compartments onto new vehicle chassis—the service has improved turnaround times and reduced costs by \$50,000 per vehicle. To date, 15 remounts have been completed, resulting in \$750,000 in savings.

c) Corporate Logistics Integration

The integration of Corporate Logistics into Paramedic Services has enhanced product efficiency through centralized procurement of Personal Protective Equipment (PPE) and

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medical supplies. This approach has improved efficiency, reduced waste, and minimized duplication across the Region of Peel. It ensures compliance with legislated PPE inventory requirements while maintaining emergency preparedness. Additionally, it aligns health programs strategically, supporting more effective and reliable service delivery.

9. Psychological Health, Safety, and Workplace Culture

Employee well-being and a positive workplace culture are essential to delivering high-quality care. Paramedic Services is committed to fostering a psychologically safe and supportive environment where staff can thrive. In alignment with Health Services' goal to "create the conditions for a Learning Organization and inclusive culture to flourish," we continue to explore ways to support mental health and recognize staff contributions.

Below are key achievements in supporting our team:

- In 2025, the Culture and Well-being (CWB) team, aligned with the Health Services North Star Strategy, launched its first workplace culture plan for Paramedic Services. Centered on the pillars of **Belonging, Learning, and Success**, the plan outlines key focus areas and initiatives that reflect the team's strategic commitments. It includes oversight of active CWB programs, special projects, and cross-departmental efforts that support a positive workplace culture. Paramedic Services has also expanded cultural and service observances to include health equity learning, in collaboration with divisional teams, while maintaining alignment with the Region of Peel's Culture Strategy focused on shared values and behavioral understanding.
- **Well-Being Plan:** Developed in 2024 with internal and external partners, the Well-Being Plan aligns with the Health Services North Star Strategy and supports psychological health and safety in Paramedic Services. It provides a structured approach to prevention, intervention, recovery, and continuous improvement, with a focus on meeting the CSA Standard (Z1003.1-18). Implementation centers on three objectives: empowering leaders, enhancing risk management, and improving access to wellness resources. Using the plan-do-check-act model, the plan addresses psychosocial risks, promotes accountability, and fosters a culture of psychological safety to support staff well-being and high-quality patient care.
- **Mental Health Supports:** Enhanced access to mental health supports by incorporating staff feedback and partnering with Insight Health Solutions through Trillium Health Partners to streamline intake processes and promote early intervention.
- **Culture of Safety:** This program promotes learning and problem-solving to reduce risk and improve collaboration within Paramedic Services. Monthly case-based sessions with frontline leaders foster a psychologically safe space to examine system risks, decision-making, and human performance. These sessions support continuous improvement and a psychologically healthy workplace, aligned with CSA Z1003 standards for leadership, expectations, and positive organizational culture.

10. Achievements and Recognition

Paramedic Services continues its tradition of excellence through dedicated staff and strong programs. Recent grants, funding, and awards reflect our commitment to advancing patient care and the trust placed in our service by partners and organizations.

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Awards:

- Top Oral Abstract and Emerging Researcher Awards for EVAP.
- Paramedic Chiefs of Canada: Award of Excellence for a Quality Workplace.
- Paramedic Association of Canada Award of Excellence for Research and Innovation.
- Governor General Exemplary Service Medals and Bars.
- Peel Celebrates – Innovate Award: The Mobile Computer-Aided Dispatch (MCAD).

Grants:

- In July 2025, Paramedic Services received a grant of \$30,000 from Healthcare Excellence Canada for a Social Prescribing program. This grant focused specifically on Community Paramedics and Social Prescribing (non-medical support) - as a powerful opportunity to expand the ways this program support clients beyond clinical care.
- In June 2025, Warrior Health grant proposal was submitted to provide mental health courses for leaders and frontline staff through the Ministry of Solicitor General's Mental Health Supports for Public Safety Personnel (MHS4PSP).

Achievements:

- In 2024, PRPS released its first **strategic plan** (Appendix I) for the Service. The strategic plan provides a clear roadmap for our service by guiding our actions and decision-making.
- In 2022, Paramedic Services implemented the response plans to the new **Medical Priority Dispatch System** (MPDS) triage tool. This dispatching tool has allowed for greater triaging precision and ensures optimal paramedic response to 9-1-1 calls.
- Paramedic Services completed the **first Canadian review** of the new prehospital ketamine medical directive in the Canadian Journal of Emergency Medicine (CJEM) Publication.

11. Paramedic Services' Strategic Plan 2024-2028

In 2024, Paramedic Services launched its first four-year strategic plan to unify efforts in enhancing emergency care and community health. The plan outlines a mission, vision, and annual deliverables aligned with three integrated goals:

1. Foster a supportive, psychologically safe workplace that promotes employee well-being and success.
2. Provide exceptional patient care, experiences, and outcomes.
3. Strengthen health system partnerships and community collaboration to co-design innovative solutions for Peel Region's evolving needs.

Paramedic Services continues to continuously monitor our goal progress to ensure the plan informs decision-making across the Service.

12. Shifting the Paramedic Care Landscape

Over the past 20 years, Paramedic Services has changed the landscape of paramedicine within the Region of Peel and Provincially. Paramedic Services continuously identifies ways to enhance patient care and service delivery. The following are initiatives that Paramedic Services are exploring to enhance program delivery:

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a) Secondary Triage

Secondary triage involves redirecting low-acuity 911 calls, identified during initial intake, to a nurse or qualified practitioner for further assessment and appropriate care pathway selection. The Ministry of Health has invited Peel and Halton to explore this model, noting that Mississauga Central Ambulance Communications Centre (M-CACC) is nearing compliance with Medical Priority Dispatch System (MPDS) standards required for implementation. This approach supports provincial care models by enabling paramedics to provide safe, alternative care for low-acuity patients, helping preserve hospital and paramedic service capacity.

b) Emergency Management and Preparedness

Paramedic Services is developing protocols to support staff in complex situations. Recent major incidents have tested and strengthened these efforts, underscoring the importance of coordinated planning for community safety. Below are examples where Paramedic Services responded swiftly and effectively, minimizing risk and protecting public health.

- i. Plane Crash – February 2025
- ii. Tyndall Nursing Home evacuation – Flooding – July 16th, 2024 – 114 residents required evacuation
- iii. Ice Storm – March 2025 – Assisting out of region paramedic service who sustain widespread damage, power-outages, etc.

c) Narcotic Management

Paramedic Services implemented Operative IQ, which is a narcotics tracking system, that improves documentation, reconciliation, auditing transactions. This system has enabled visibility of narcotics usage across the system allowing review of controlled substance activity.

13. Technology

Technology plays a vital role in enhancing service delivery and supporting staff and clients in Paramedic Services. Electronic Ambulance Call Reports (eACRs) improve data accuracy and flow through a secure bi-directional exchange between paramedic records and ambulance dispatch. A secondary interface enables direct data transfer between the Central Ambulance Communication Centre (CACC) and paramedics in the field. The Mobile Computer Aided Dispatch (mCAD) app delivers real-time call information to paramedics' mobile devices and in-vehicle terminals, along with integrated turn-by-turn navigation to support rapid response.

FINANCIAL IMPLICATIONS

Paramedics Services includes operating and capital resources to maintain and enhance services through annual operating budgets. New enhancements and resources will be proposed in 2026 Regional Operating and Capital budget for Council's consideration. As growth continues in Peel Region, further resources will be included in future proposed budgets.

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CONCLUSION

As Peel grows and health system pressures continue to evolve, the role of paramedicine is expanding beyond traditional emergency response. To respond, Paramedic Services continues to learn, adapt, and support the complexity of the Peel Region. This is through providing innovative community programs and care, leveraging new technologies, using data to improve decision making, and building stronger partnerships across the health system. This approach ensures Paramedic Services meets the diverse needs of the community through reliable, innovative, quality care that prioritizes people, culture, and safety.

It is through our entire system that we are dedicated to community safety and wellness.

APPENDICES

Appendix I: Peel Regional Paramedic Services Strategic Plan 2024-2028



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