



Report of the Acting Commissioner of Community and Health Services
**Dispatch Modernization Update: Implementation of the Medical Priority
Dispatch System in November 2024**

1. Recommendation

1. The Regional Clerk circulate this report to the local municipalities, York Regional Police and local fire services for information.

2. Purpose

This report provides an update on the Ministry of Health's implementation of the Medical Priority Dispatch System (Dispatch System) at the Georgian Central Ambulance Communication Centre in November 2024. This new Dispatch System is intended to optimize paramedic resource deployment, improve call triaging so the most urgent conditions receive timely care, and maintain compliance with legislated and Council-approved response time targets for York Region residents.

Key Points:

- The Ministry of Health (Ministry) operates the Georgian Central Ambulance Communication Centre, which coordinates and deploys York Region Paramedic Services
- In November 2024, the Ministry will implement the new Dispatch System at the Georgian Central Ambulance Communication Centre
- Implementation of the new Dispatch System marks a significant milestone following years of Council-led advocacy, as previously reported in [April 2018](#), [April 2019](#), [February 2020](#)

- The current Dispatch Priority Code Index system over-prioritizes low acuity 911 calls as lights and sirens responses, risking public safety and inefficiently allocating paramedic resources
- The new Dispatch System, an industry-standard, evidence-based patient triaging technology, optimizes paramedic resource deployment, providing timely responses to true emergencies based on clinical needs and potentially longer paramedic response times for non-urgent calls
- The new Dispatch System better matches the response to the urgency of the medical situation. The Dispatch System will not cause a delay in answering 911 calls. It will ensure that priority calls are serviced first
- In 2026, an updated Master Plan for 2026 to 2031 will be presented to Council for approval. It will incorporate, changes based on evaluation of the Dispatch System and include disaggregated data trends related to 911 call demand, population growth, and 911 caller patterns and implications for paramedic resources
- York Region Paramedic Services remains dedicated to maintaining clinically safe and efficient community responses

3. Background

York Region’s 911 dispatch system is operated by the Georgian Central Ambulance Communication Centre

In Ontario, ambulance communication and dispatch are managed by Central Ambulance Communication Centres (dispatch centres). All of Ontario’s dispatch centres are funded and regulated by the Ministry. There are 22 dispatch centres in Ontario, 19 of which are Ministry-run and three municipally-run.

Ambulance dispatch centres triage all 911 calls for paramedic services, communicating directly with 911 callers to determine the nature of the call, provide instructions to callers, triage each call based on the level of urgency and dispatch paramedic resources to attend to the patient.

Calls to York Region Paramedic Services (Paramedic Services) ambulances and rapid response units are forwarded from York Regional Police and dispatched by the Ministry-operated Georgian Dispatch Centre, which also provides dispatch services for Simcoe County.

Regional Council has been advocating for modernized dispatch technology for several years

Regional Council has advocated for the new Dispatch System because the current Dispatch Priority Card Index over-prioritizes non-urgent conditions that do not require an urgent response (such as moderate pain or trauma, and minor ailments). This results in low-acuity patients receiving the same response times as critically ill patients, misallocating resources, occupying

paramedics on non-emergency calls, potentially impacting capacity to meet response times to critically ill patients.

In 2017, the Ministry announced plans to implement the Dispatch System at all its dispatch centres. Expansion of the Dispatch System is part of Ontario's [Your Health: A Plan for Connected and Convenient Care](#), enabling paramedic services to provide the right care at the right time and ease pressure on emergency departments.

The Georgian Dispatch Centre was initially set to 'go live' on November 18, 2020. After several delays, the Ministry confirmed in February 2024 the new Dispatch System will be operational by November 2024, marking a significant milestone for Paramedic Services after years of advocacy.

4. Analysis

Dispatch modernization is a phased process that Paramedic Services began in 2018

In 2018, the Ministry rolled out a multi-year dispatch modernization project. York Region Paramedic Services collaborated with the Ministry on several sub-projects in preparation for the new Dispatch System:

- **Computer Aided Dispatch Upgrade:** The first phase was upgrading the Computer Aided Dispatch, linking the platform to in-vehicle tablets and paramedic smartphones. This upgrade laid the foundation for the new Dispatch System's clinical response model and was completed in March 2021.
- **Real-Time Data Exchange:** Paramedic Services upgraded its Electronic Patient Care Reporting system to implement Real-Time Data Exchange. This secure connection allows near real-time data flow from the Ministry's Computer Aided Dispatch system to service operators, reducing errors and eliminating the need for re-entering required fields. This project was completed in July 2021.
- **911 Telephony Solution Replacement:** In a 911 communications centre, telephony technology is the software, network connections and physical infrastructure allowing telephone calls, text messaging and other internet protocol messages to be placed and received. The telephony systems at dispatch centers required replacement and upgrades to comply with regulatory directives from the Canadian Radio-television and Telecommunications Commission. This work was completed in 2023.
- **Public Safety Radio Network:** This two-way radio infrastructure is used by Ontario's dispatch services to connect paramedics, dispatchers, hospitals, and ambulance communication centres across the province, and is also used by the Ontario Provincial Police and the Ministries of Natural Resources and Transportation. All two-way radio equipment in ambulance vehicles and stations were replaced as part of the Ministry's upgrade, completed in July 2024.

New technology will reduce the number of over-prioritized calls and better calibrate response with the urgency of the medical situation

Currently, the Georgian Dispatch Centre uses the Dispatch Priority Card Index tool to triage patients based on the severity of their condition and identify the most time-sensitive calls. This tool operates on a four-code scale, with only two codes used for emergency responses: Priority 4 for urgent, life-threatening emergencies requiring a fast 'lights and sirens' response, and Priority 3 for urgent, non-'lights and sirens' situations, leading to over-prioritization of calls. The remaining two codes are for interfacility transfers. Accurate prioritization is crucial for appropriate care and efficient use of paramedic resources.

The new Dispatch System better calibrates response with the urgency of the medical situation. It replaces the two current priority tools with a five-priority colour-coded system that better matches resources to patient needs. Dispatchers will use a structured call processing system known as 'key questioning' to gather detailed information from callers and assign specific determinant codes, allowing for more accurate triaging and the ability to provide pre-arrival instructions to callers for critical situations, such as performing CPR or delivering a baby.

This industry-leading standard for patient triaging technology, used in approximately 35,000 ambulance communication centres in 46 countries, is based on current medical evidence and undergoes ongoing testing, development and quality assurance.

As part of the new Dispatch System evaluation to be conducted in 2025, staff will examine if there are any impacts to caller patterns and any other trends on demand and report back as part of the next Master Plan update in 2026.

Implementation of the new Dispatch System in Ontario has positively impacted paramedic services by reducing “lights and sirens” calls, leading to more effective use of paramedic resources

The new Dispatch System is currently used by several Ontario paramedic services, including the City of Toronto (since 1995), Niagara Region (since 2005), Peel and Halton Regions (since 2022), Kenora (since 2023), and Thunder Bay, Ottawa, Cornwall, and Renfrew County (since 2024).

Paramedic service organizations that have transitioned to the new Dispatch System have not reported cost savings but have experienced operational improvements. For example, since Halton Region implemented the system in 2022, their first year showed a 4% improvement in response times for high-acuity calls compared to the previous year.

Based on experiences of other jurisdictions, York Region can anticipate similar improvements, including a reduction in lights and sirens responses from 70% in 2024 to approximately 50%, as observed in Halton Region. Instead of assigning the closest ambulance, the Dispatch System will allocate the most suitable resource, leading to better system management. This is expected to reduce staffing cost pressures, such as overtime. The full impact will be better understood

after evaluating the Dispatch System post-implementation in 2025. This will include an assessment of impacts to the Master Plan which will be updated in 2026.

However, jurisdictions like Peel and Halton Region have reported longer responses for lower acuity calls due to call holding, where urgent calls are prioritized for faster paramedic response over lower acuity calls. This practice was not typical before implementation of the new Dispatch System. This can lead to longer wait times for less urgent cases, but ensures resources are available for high-priority, urgent calls. For example, the Mississauga Dispatch Centre, serving both Peel and Halton Paramedic Services faced challenges with holding non-urgent calls (such as response times for some low acuity calls increasing significantly during periods of high call volumes as reported in [2024](#)).

York Region Paramedic Services has mitigation plans to address challenges experienced in Peel and Halton due to call holding. These plans will help sustain the level of response that York Region residents and the community have come to expect.

Residents can expect clinically safe changes for low priority calls, while maintaining quality paramedic responses

The new Dispatch System supports improved deployment of paramedic resources by dispatching resources based on the clinical situation with the following expected changes for callers:

- **More call details requested by 911 dispatchers:** Callers can expect more detailed questions from dispatchers about a patient's condition to help determine the urgency of the call and better prioritize the response.
- **Paramedic response that better matches patient need:** Critical patients will receive the fastest paramedic response. Incidents deemed not urgent will be dispatched as soon as an appropriate ambulance is available. This means higher acuity patients will be prioritized, potentially leading to longer wait times for non-urgent calls.
- **Follow-up calls:** For lower acuity calls, dispatchers will hold calls during peak, busy times to enable a minimum number of available ambulances for life-threatening emergencies. Low-urgency incidents will be dispatched as soon as an appropriate ambulance becomes available. Callers will receive follow-up calls to check on the patient's status and be advised to call back 911 if the patient's condition worsens and requires immediate medical attention.
- **Guidance from 911 dispatchers prior to paramedic arrival:** Standardized pre-arrival instructions will be provided over the phone for patient care before paramedics arrive, including CPR, childbirth, EpiPen, tourniquet or naloxone administration.

Despite expected changes for lower-priority calls under the new Dispatch System, quality care and customer service remain a priority and will not cause a delay in answering 911 calls. The Dispatch System is anticipated to positively impact York Region's response time performance and will result in patients receiving a paramedic response matched appropriately to their condition.

Collaboration and public awareness are key priorities in preparing for the Dispatch System

Paramedic Services is actively planning to achieve a seamless transition and meet all operational requirements for implementing the Dispatch System. Using the Ministry's change management approach, Paramedic Services has been working with internal and external partners to plan and implement strategies for communication, staffing needs and knowledge sharing around policy, and paramedic education as follows:

- **Collaboration:** Paramedic Services has been collaborating with County of Simcoe Paramedic Services to develop response plans for each of the Dispatch System's determinant codes for approval by the Ministry's Medical Director. The Ministry is engaging all municipal fire services and York Regional Police to advise of the transition to the Dispatch System. Staff will continue to work with local emergency services partners to identify and manage any required changes.
- **Communication and Staff Education:** Paramedics are being informed about the upcoming changes and will begin training on new dispatch communication tool ahead of the November 2024 launch.
- **Public Awareness Campaign:** Paramedic Services, in collaboration with the Ministry and other regions is preparing a public awareness campaign to inform residents about the new Dispatch System. The campaign will launch in September 2024, educating the public on what to expect, as well as improvements in paramedic response.

The Dispatch System is paving the way for future innovations in advanced emergency care for 911 dispatch centres, enhancing health system navigation

The new Dispatch System is the first step toward implementing the Emergency Communication Nurse System which would introduce secondary medical triage by nurses in dispatch centres. This means registered nurses with specialized training in advanced telephone triage can respond directly to 911 callers. Nurses will evaluate a patient's condition to determine the type and place of care needed. This will further help to avoid unnecessary ambulance responses for non-urgent cases.

While this is not a scheduled project for York Region, it is currently being piloted in Niagara Ambulance Communications Services. Other potential innovations include opportunities to enhance triaging within the broader health system, such as urgent care, and mental health addictions centres.

In addition, the Public Safety Answering Point system used by York Regional Police for transferring calls to the Georgian Dispatch Centre is moving to the Next Generation 911 network, which enables location triangulation. The Georgian Dispatch Centre is ready for this upgrade. Timelines depend on York Regional Police, Bell Canada and the Canadian Radio-television and Telecommunications Commission, responsible for implementation and

governance. Since these factors are out of our control, the impact to Paramedic Services remain unknown.

Paramedic Services Master Plan 2021 to 2031 supports transition to the Dispatch System and maintains customer service and quality care

While changes under the new Dispatch System could lead to concerns about extended paramedic response for non-urgent conditions, Paramedic Services is prioritizing customer satisfaction as a key aspect of the roll-out plan. Once implemented, a comprehensive evaluation of the Dispatch System will be conducted in 2025 to understand potential system efficiencies and implications and impacts for the next Master Plan update scheduled for 2026.

Through the combination of the Dispatch System's innovative prioritization of emergencies and the Council approved Master Plan, Paramedic Services is adequately equipped with necessary resources and infrastructure to maintain optimal performance, responsive health outcomes and quality customer service.

5. Financial Considerations

The Ministry assumes all costs directly tied to implementing the Dispatch System at Georgian Dispatch Centre. The Ministry funds up to 50% of eligible paramedic service costs and 100% for the Dispatch System. Paramedic Services expects some time-limited indirect internal costs associated with Paramedic training and communication regarding the Dispatch System, which is managed through the approved 2024 Paramedic Services budget.

Implementation of the new Dispatch System is still in its early stages, and there is no data on cost savings from other services. Currently, Paramedic Services does not have sufficient data to predict any impacts to system costs (which are driven by various factors including population growth, aging population, availability health care resources in the community, and social determinants of health).

A comprehensive evaluation will be conducted after the Dispatch System has been in place for one year to assess potential system efficiencies and cost savings. Staff will assess whether there are any changes in caller patterns or other demand trends and will provide a report as part of the next Master Plan update.

6. Local Impact

Paramedic Services has engaged municipal fire services through the York Region Fire Chiefs' Association to prepare for the new Dispatch System implementation. No significant changes to tiered response are anticipated. Fire services will continue to respond to life-threatening and other public safety calls within their legislated responsibilities. Additionally, Paramedic Services will collaborate with local municipalities on the public awareness campaign to inform residents.

7. Conclusion and Next Steps

Implementation of the Dispatch System at the Georgian Dispatch Centre marks a significant milestone for the York Region Paramedic Services, resulting from years of Council-led advocacy. The new Dispatch System will enhance public safety by improving paramedic resource prioritization and availability for true emergencies, without affecting overall response time performance. Public awareness will be supported through a targeted communications campaign about the new Dispatch System beginning in September 2024.

Regional Council will receive updates on implementation of the new Dispatch System as part of the annual response time performance reports.

For more information on this report, please contact Chris Spearen, General Manager (A) at 1-877-464-9675 ext. 74709. Accessible formats or communication supports are available upon request.



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