
Subject: Niagara EMS Taxi Services Pilot Project Update

Report to: Public Health and Social Services Committee

Report date: Tuesday, July 12, 2022

Recommendations

1. That this Report **BE RECEIVED** for information.

Key Facts

- The purpose of this report is to provide background information and early outcomes from a Niagara EMS pilot project utilizing taxis to transport select low-acuity patients to their most appropriate healthcare destination.
- This project is aligned with Niagara EMS vision of ensuring residents have access to the right care, at the right time, at the right place, by the right provider.
- Individuals cannot call 911 to request a taxi. This service is used only when patients have been fully assessed and triaged by Niagara EMS, it has been determined they do not require further treatment by a paramedic, and transport to their healthcare destination is the only barrier to seeking medical care.
- Providing this service is helping to preserve both EMS and hospital system capacity in the face of ongoing COVID-19 pressures and record high offload delays.
- A projected annual forecast of 200 ambulance transports to Emergency Departments (ED) diverted and 20 diversions away from an ED entirely would result in \$206,720 in offset expenditures to Niagara's healthcare system, from an investment of less than \$10,000.
- Transportation is a social determinant of health (SDOH) that affects both rural and urban communities contributing to health inequity. Each year, many Niagara residents do not obtain the medical care they need due to transportation barriers and our experience is that many calls to 911 for an ambulance are primarily for conveyance to a hospital.

Financial Considerations

This pilot project will cost less than \$10,000/per year based on usage projections and the strict medical eligibility criteria that have been put in place. In the five months since this pilot has been operational, the average cost of a taxi trip has been \$15-20. As per Municipal Benchmarking Network Canada (MBNC) in 2018, Niagara EMS Operating Cost per Patient Transported was \$1,006.

By deferring an EMS transport to an ED, there are also additional costs saved to the health care system. For each patient that is diverted from an ED, there are additional savings to the hospital system of approximately \$276.00/visit (as per the Niagara Health System Annual Report 2019/20).

Based on usage from Q1 2022, a conservative annual forecast of 200 ambulance transports to ED diverted and 20 diversions away from the ED entirely, would result in approximately \$206,720 in offset expenditures to Niagara's healthcare system, from an investment of less than \$10,000.

Continuing this program will have no incremental budget impact on Niagara EMS, and based on the information presented in this report, will continue to provide future cost avoidance for both Niagara EMS and further downstream in the healthcare system.

Analysis

Access to safe, adequate and reliable transportation is an equity issue that impacts health at both an individual and community level. Transportation barriers may result in missed or delayed health care appointments, increased health expenditures and overall poorer health outcomes.

It may also result in patients requiring more expensive options, such as transport by ambulance to the emergency department. Of the calls triaged by ECN's since 2019 where an ambulance was required to be dispatched, 7.9% were a result of a transportation issue only, meaning the patient did not require clinical interventions of a paramedic and only needed transport to the appropriate healthcare facility.

Planning for this Niagara EMS pilot project began in 2019, prior to the onset of the COVID-19 pandemic. It was put on hold due to other pandemic related priorities in 2020 and planning re-started in the summer of 2021, with a launch on December 31, 2021. In-depth consultations were held with Niagara Region's legal counsel and Niagara EMS medical directors, to ensure a formal agreement with Taxitab (Central Taxi) was completed that minimized risk to the corporation, and prioritized patient health and safety while being transported via taxi to their most appropriate healthcare destination. This agreement can be terminated at any time during the pilot if deemed necessary.

The taxi service can only be used by the following Niagara EMS care providers:

1. ECN's following secondary triage of low-acuity 911 calls.
2. MIH teams after responding to a low-acuity 911 call and performing an in-person patient assessment.
3. Operations Superintendents, as long as the same patient eligibility criteria are followed.
4. MIH staff working in the Community Paramedic High User (CP HU) or Long-Term Care (CP LTC) programs, with their rostered patients for scheduled medical appointments.

From the above list, options 1 and 4 have been made operational at this time. We are reviewing the early outcomes from the pilot, and have yet to decide when to make options 2 and 3 operational.

Only the CP HU and CP LTC teams can use the taxi service for transport to future medical appointments, since they proactively serve a rostered caseload of patients with whom they interact on a regular basis.

Individuals cannot call 911 to request a taxi. All options for transport are discussed with the patient (such as family, friends or public transit) before use of the taxi service. Only as a last resort, if they meet the program's criteria, will EMS staff call a taxi.

All trips must originate and terminate within Niagara Region, and the vast majority have been for short trips within the same municipality (average of 9.7 kilometres from destination). The majority of transports have originated from St. Catharines and Niagara Falls, with residents from nine of the 12 local area municipalities having made use of the taxi service.

Since the launch of the pilot it has been used eighty four times by Niagara EMS Emergency Communications Nurses (ECN's) and twenty two times by Mobile Integrated Health (MIH) staff working with rostered clients in the Community Paramedicine programs. In addition to preserving EMS ambulance capacity, five of these trips diverted patients away from ED's to more appropriate healthcare facilities such as walk-in clinics. The purpose of this initiative was to better meet patient needs, and help preserve both ambulance availability and hospital ED capacity, particularly during this time when both are severely stressed.

Reviewing ECN usage of the service, the most common low-acuity concerns that have resulted in taxi transport thus far include: back pain, general anxiety, and upper

respiratory infection symptoms. ECN's perform a 24 hour-call back to all patients who are not transported by ambulance to the emergency department, and during those calls patient satisfaction has been high for this new taxi service, with no adverse patient outcomes reported.

Patient Eligibility Requirements:

Robust consultation occurred with Niagara EMS medical directors to ensure strict medical eligibility criteria was approved and put in place for all patients that would be permitted transport in a taxi. EMS staff are required to complete a formal training module before having access to the program, which stipulates they may only use the taxi service for patients if all of the criteria are met. See Appendix 1 of Report PHD 9-2022, for a full list of the patient eligibility/exclusion criteria.

Alternatives Reviewed

Prior to the launch of this pilot project, these patients were transported by Niagara EMS to hospital via ambulance. Resuming this practice would result in \$200,000 additional health care costs as well as negative impacts on patient care and overall staff wellbeing.

Relationship to Council Strategic Priorities

Addressing patient transportation barriers is related to the Council priority of Healthy and Vibrant Community. Engaging in alternate service delivery models such as this pilot project that better meet the health and social needs of people calling 911, reduce emergency department overcrowding, and reduce taxpayer expenditures also supports Council's priority for Sustainable and Engaging Government.

Other Pertinent Reports

PHD 5-2022 Niagara EMS – System Pressure Update 2
PHD 11-2021 Niagara EMS – System Pressures Update

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Appendices

Appendix 1: Patient Eligibility Criteria for Taxi Usage