EMERGENCY HEALTH SERVICES MODERNIZATION: AND THE ROLE FOR COMMUNITY PARAMEDICINE

Preamble

The Ontario Community Paramedicine Secretariat (OCPS) works to support partnerships that can reduce hallway healthcare, prevent hospitalizations, and improve patient-centred care. Established in 2018 through LHIN-funding, the Secretariat's mandate supports the advancement of Ontario's provincial community paramedicine network, enabling and facilitating work on the creation and dissemination of standardized care processes, performance reporting and measurement activities, and aspects of knowledge translation and exchange. The OCPS Steering Committee has representation from multiple key stakeholders including the Ministries of Health, Seniors Affairs and Accessibility, Ontario Health, the Ontario Association of Paramedic Chiefs, and frontline community paramedics.

The OCPS was established at a time of both regulatory change to paramedicine and administrative transformation across all sectors of health care. The Secretariat and Steering Committee are optimistic about how community paramedicine programs continue to be established, grow, adapt and develop new priority and patient/public aligned models of care. Since the first Ministry-funded community paramedicine were established in 2014, virtually every municipal paramedic service across Ontario has now established at least one or multiple community paramedicine programs.

Ontario's community paramedicine programs are demonstrating effective and efficient ways to provide short-to-midterm episodic care to underserved patient populations (1–10). We expect that new strategies currently being explored and deployed in community paramedicine programs will be part of a modern Emergency Health Services (EHS) system that will address hallway healthcare by helping patients overcome barriers or challenges in accessing timely coordinated care. The OCPS will continue to support planning and implementation of community paramedicine programs and future reporting on the impacts of these programs related to improved health outcomes, patient and provider experience, value, and improved system performance which has broader impacts on the whole population.

In the following pages, we present our responses to the Ministry of Health Discussion Paper: *Emergency Health Services Modernization* (11). We have included a summary of the themes that emerged through the process of writing our responses as well as a glossary of terms that we use repeatedly. We have provided answers to the general questions that were part of the consultation meetings and the specific questions that appear in the online form. In creating this document, we solicited input from Steering Committee and Working Group members as well as representatives from municipal paramedic services operating Community Paramedicine Programs to inform our responses.

OCPS Emergency Health Services Modernization Summary Response

Fundamentally, the 9-1-1 system represents a "help" system. Whether it be for police, fire, or ambulance services, when an individual dials 9-1-1, it is because of some situation exceeds their own ability to provide immediate assistance. Very often a 9-1-1 call represents the first identified phase of a medical emergency and the entry point for a patient into the care of emergency health services. Historically, the EHS system assumed (often rightly) that emergencies were rare, isolated incidents not connected in sequence or otherwise repeating (12). Dispatch, response, and transportation represented a simple, linear structure for how the system should be designed.

The process of modernizing emergency health services must challenge these assumptions in order to optimize and improve delivery of patient care, find efficiencies in system design, better align with partners in a modern health system, and contribute solutions that help address current hallway healthcare challenge.

In response to the questions presented in the Ministry of Health Discussion Paper: *Emergency Health Services Modernization*, the OCPS has identified four broad themes that demonstrate how community paramedicine can contribute to improvements in the provision of emergency health services. In the pages that follow, these themes emerge repeatedly and often overlap in responses to the specific questions posted for discussion. The four guiding themes are:

1. ***Cultural Change*** – This means that the linear process of dispatch, response, transport that has been ingrained in all aspects of delivery of emergency health services needs to shift to better recognize patient needs and experiences, population health, system performance (costs), and experiences of all health system providers.
2. ***Technology*** – Information and communication technologies need to evolve beyond a system designed for single isolated incidents. Information is a powerful tool for maximizing efficiencies that need to be incorporated into a modern system.
3. ***Integration*** – Delivery of patient care does not happen in isolation of other care providers, whether that be the public health system, primary care providers, emergency medicine, or other specialist, acute, or post-acute care services. Contributing to a team-based approach to the delivery of patient care needs to be a central aspect of a modern system.
4. ***Health Equity*** – Modern emergency health services must recognize that underserved population groups create unique challenges for the delivery of patient care. By identifying, planning, implementing, and evaluating the delivery of patient care to underserved population groups, emergency health services can address existing barriers to care and improve patient outcomes for all Ontarians.

The OCPS has gathered a great deal of information about the present state of community paramedicine programs in Ontario. Additional resources about community paramedicine are available on our website, http://www.ontariocpsecretariat.ca. Many of the responses we provide below were informed by our 2019 *Report on the Status of Community Paramedicine in*

Ontario (13). As the Ministry embarks on EHS Modernization, the OCPS is ready to act as an advisor on community paramedicine according to the mandate that it was provided. If these responses prompt further questions, please contact the OCPS at info@ontariocpsecretariat.ca.

Glossary: Frequently Used Terms and Definitions Used in this Document

Included here are a number of frequently used terms and their definitions which appear in our responses:

Community Paramedicine Program: a program that uses paramedics to provide immediate or scheduled primary, urgent, and/or specialized healthcare to vulnerable patient populations by focusing on improving equity in healthcare access across the continuum of care (14).

Community Assessment and Referral Programs: This model of care represents a case finding strategy employed by front-line paramedics to connect individuals and patients with other care providers, most often LHIN Home and Community Care Services and local Community Support Services (CSS) Agencies. A specific model of assessment and referral that has been adopted by many Paramedic Services providers across most LHINs in the province is known as Community Referrals by EMS (CREMS). (15).

Community Paramedic-Led Clinics: This model of care has been established in areas with an identified need where community paramedics advertise and provide health promotion and preventative care services in partnership with local health system partners. Community paramedics in this model may provide flu shots, education about healthy living, chronic disease prevention education, blood pressure checks, blood glucose checks, or other services. (15).

Home Visit Programs: This model of care usually sees community paramedics working in a team with other health care providers to maximize the available "at home" support through the provision of proactive and preventative home visits for patients that have either repeatedly called 9-1-1 or who have been identified as high risk of 9-1-1 utilization due to their underlying medical conditions and unmet social needs. Some models have embedded community paramedics into primary care teams to support primary care providers in monitoring at-risk patients through more frequent home visits. Other models have embedded community paramedics into a circle of care led by an acute care hospital to support the early discharge of admitted patients and smooth the transition from hospital to home, especially among those patients identified as being at high-risk for re-admission. (15).

Remote Patient Monitoring Programs: This model of care involves patients with chronic health conditions like COPD, CHF and Diabetes who are at high-risk of a future emergency department visit or hospitalization in being enrolled in a home-based patient monitoring program that can allow them to live with greater confidence in their own homes. In these programs, patients enrolled by their primary care providers are provided with remote monitoring devices that can transmit their vital signs to a 24-hour monitored communication hub that alerts a community paramedic when their readings fall outside of expected values. In partnership with their primary care providers, community paramedics working under pre-determined care protocols customized to each patient, are then contacted by a community paramedic by phone or visited in person to address any care issues proactively in order to pre-empt 9-1-1 calls or emergency department visits. (13).

Community Paramedic-Specialist Response Programs: These emerging models of care operating under names such as Community Paramedicine Response Units (CPRUs), Paramedic-Specialist Teams, or Mobile Integrated Health (MIH) Teams represent a growing level of service coordination and cooperation between traditional paramedic emergency response and emerging community paramedicine programs so that access to other health care providers can be better enabled and accessed in real time through an on-demand system that parallels a traditional 9-1-1 response. (13).

Integrated Care: The delivery of care that focuses on achieving the Quadruple Aim (16) through a coordinated effort within and between healthcare providers (17).

Case management: Comprehensive assessment and care planning activities that include combined efforts of other health care providers over a defined period of time, usually days, weeks, or months (6,18). Case management approaches may be general or specifically tailored to individual patient needs (19,20).

Transition of care: Also referred to as "discharge," a transition of care involves a patient moving from one care provider to another. Typically used in reference to patient care moving from an in-hospital setting to an out-of-hospital setting. (21)

General Emergency Health Services Modernization Discussion Questions and Responses:

1. ***What are the priority actions that should be taken to modernize Ontario's ambulance dispatch system?***

A modern EHS system should be focused on providing excellent patient-centred care and this must include dispatch. One of the highest priority actions should be to include the clinical experience of community paramedics within the communication centres and to facilitate the technological capabilities of a common electronic medical record so that patient care can begin as soon as a call for help is placed. Right now, patients are able to speak directly with a community paramedic through community paramedicine programs operating in over 20 municipalities, freeing up 9-1-1 lines, improving efficiency of paramedic resources, and enabling care "in-place."

2. ***What specific actions can be taken across Ontario to reduce ambulance offload delays?***

Ambulance offload times are a symptom of hospital and long-term care systems that are functioning over capacity. Community paramedicine programs supporting 9-1-1 Call and ED Transport avoidance, hospital discharge transitions of care, alternate level of care patients, and patients waiting for long-term care can help address system capacity that contributes to the offload time challenge.

Community Paramedicine-Specialist Response Units (CPRUs) mobilize community paramedic-led case management that could be applied to new models of care for 9-1-1 patients. CPRUs can back up or replace responding emergency transport vehicles when transport is not needed as well as provide follow-up after non-transport to ensure patient safety and effective case management. Case management approaches to integrated care through paramedic participation in Ontario Health Teams can further expand access to care 24/7 and delivery of care outside of the emergency department, possibly further reducing the offload delay challenge. Community paramedicine programs work to pre-empt or prevent the need for patients to be transported to hospital as well as support patients as they transition out of hospital—both contributing solutions to ending hallway healthcare.

3. ***How should medically stable patient transfers be carried out to ensure the best use of ambulance services and that can reduce hallway health care?***

Community paramedics can facilitate case management to coordinate patient care with health system partners. Where appropriate, community paramedics can arrange transportation to the appropriate destination (not necessarily the closest destination) through a case management approach. Improved integration and leveraging improved technologies and can ensure better coordination of patient care. The municipal basis for the provision of paramedic services make them uniquely positioned to implement solutions within and between Ontario Health Teams, expanding on and modernizing the concept of "seamless" service that already exists. Many community paramedicine programs have incorporated point-of-care diagnostics like ultrasound

and bloodwork as well as treatments that can be provided "in-place" through an extended scope of practice. Improved utilization of portable diagnostic technologies can also address the need to transfer patients for these services.

4. ***With an aging population and the resulting increase of pressures on ambulance services what specific actions ensure modern, responsive pre-hospital services?***

There are multiple examples across Canada and internationally where emergency health systems have been modernized. In six of ten provinces, paramedics are now governed as regulated health professionals. The evolution of paramedicine in these systems has seen greater alignment with other health care sectors to improve delivery of patient care and streamline access to the appropriate health system partners. Ontario Health Teams represent an important step towards this goal in Ontario. Community paramedicine programs across Ontario are improving access to primary, urgent, and/or specialized healthcare through scheduled or unscheduled visits to underserved patient population groups. Incorporating community paramedicine programs as part of the development of Ontario Health Teams aligns with the vision of Ontario Health and will have impacts on the increasing demands for responsive out-of-hospital integrated care. The 2019 *Report on the Status of Community Paramedicine in Ontario* describes a number of community paramedicine programs that have already spread and can be scaled accordingly.

5. ***What ideas, innovations or alternatives should EHS consider for First Nations, rural and northern communities?***

Community paramedicine programs use paramedics to provide immediate or scheduled primary, urgent, and/or specialized healthcare to vulnerable patient populations by focusing on improving equity in healthcare access across the continuum of care. First Nations, rural, and northern communities face unique challenges and barriers to healthcare access. By encouraging a "community paramedicine" approach to the design and delivery of emergency health services, focusing on integration of care, and maximizing available technologies, community paramedics in First Nations, rural, and northern communities can act as primary care extenders when traditional primary care providers may not be locally or adequately available while also supporting safe transitions of care back to these communities when patients are discharged from hospitals far from home. The emergency response capabilities of a community paramedic provide added value and the ability to interface with the broader healthcare system outside of a local community when a patient's condition worsens or if there is a medical emergency. (22).

OCPS Responses to Specific Questions Presented in the Emergency Health Services Modernization Discussion Paper

Dispatch

1. *What new technology can help to improve responses to 9-1-1 calls and increase the efficient use of resources in the EHS system?*

Community Paramedicine Remote Patient Monitoring (CPRPM) programs and Community Paramedic Response Units (CPRU) leverage the latest innovative technologies to increase the efficient use of resources. CPRPM provides community paramedics with alerts about worsening symptoms before a 9-1-1 call is required (23). CPRPM also allows one community paramedic to expand her/his caseload by being able to monitor patient condition remotely—thereby increasing efficient human resource management. CPRUs enable community paramedics to provide surge capacity within the current system by leveraging their response capability in addition to the case management that they are engaged with on a day to day basis (24).

2. *How can communication between dispatch centres, land ambulance services, and air ambulance be improved?*

A modern EHS system should be focused on providing excellent patient-centred care and this must include dispatch communication. A patient registration process should be initiated within Paramedic Communications Centres built around provincial electronic health records. Seamless communication should follow where call-taker, dispatcher, and paramedics on land or in air have access to essential patient information similar to what is made available to acute care providers and via information systems like Connecting Ontario. Community paramedicine electronic medical records and previous emergency Ambulance Call Reports provide valuable baseline information about patient medical conditions and history that can be reviewed during a 9-1-1 call by paramedic dispatchers and en route to calls by paramedics. Community paramedics can provide follow-up care, again drawing from the 9-1-1 call information to design a care plan that best supports patients to remain safe at home.

3. *Are there local examples of good information sharing between paramedic services, hospitals and/or other health services?*

The electronic medical record (IdealLife platform) used in CPRPM programs is designed to be accessible by whomever the patient includes in their circle of care. This access has enabled improved chronic disease monitoring by primary care providers as well as members of the home and community care team. ClinicalConnect is another example, presently being used by community paramedics in Niagara, Hamilton, Grey County, and Essex-Windsor. This platform provides healthcare providers with complete clinical records of all providers and enables coordinated care planning between multiple healthcare agencies. Many community paramedicine programs have partnered with 2-1-1 which also can ensure that the right call gets directed to the right provider. Finally, the Community Agency Notification (CAN) system

operating in Toronto supports information sharing between community paramedics and other community agencies. The advent of Ontario Health Teams and their focus on improved technological solutions will provide even more opportunities for improved information sharing between paramedic services and their health system partners.

Delivery

1. What partnerships or arrangements can improve ambulance offload times?

Ambulance offload times are a symptom of a hospital and long-term care systems that are functioning over capacity. Community paramedicine programs supporting transitions of care including hospital discharge transitions, alternate level of care patients, and patients waiting for long-term care can help address system capacity that contributes to the offload time challenge. The approach to case management that has been adopted in Assessment and Referral Programs, Home Visit Programs, and Community Paramedic-Specialist Response (CPRU) programs can help support non-transport decisions, thereby eliminating offload issues. CPRUs could support ambulance offload times in emergency departments as well by initiating case management strategies inside emergency departments. Case management approaches to integrated care through paramedic participation in Ontario Health Teams can further expand access to care 24/7 and delivery of care outside of the emergency department, possibly further reducing the offload delay challenge. Community paramedicine programs work to pre-empt or prevent the need for patients to be transported to hospital as well as support patients as they transition out of hospital—both contributing solutions to ending hallway healthcare.

2. What other interventions would be helpful to address ambulance availability?

Many interventions have been piloted as alternatives to either ambulance dispatch or transport (25–27). From the time of the 9-1-1 call, online clinical review by paramedics can be initiated such that not every call requires an immediate ambulance response. Once on scene, paramedics can also make determinations about appropriate transportation decisions. Self-regulation of paramedicine has been a common enabling factor in these alternative approaches (28). By broadly scaling up the CPRU model, community paramedics could back-up responding ambulances and take over patient care in instances of treat & release or treat & refer. CPRU community paramedics would also be tasked with follow-up to these patients to ensure patient safety.

3. How can we best ensure that medically stable patients receive appropriate transportation to get the diagnostics and treatments they need?

To date, community paramedicine programs have incorporated diagnostics such as:
Point of care ultrasound (POCUS) and Point of care testing (POCT, ie. iSTAT, influenza, urinalysis). Some of these diagnostic processes have the potential to remove or defer the need for transportation by coordinating interpretation of diagnostic findings with primary care providers. Similarly, community paramedics practicing with expanded scope of practice can

provide additional treatments in place, avoiding the need for transportation (29,30). Where plausible, such initiatives should be expanded to reduce the need for transportation.

When transportation is necessary, paramedics should be empowered to make the appropriate transportation destination decision—which may not be the closest destination. Here again, the case management skills of community paramedics can support making the appropriate decision that aligns with patients care plans.

4. *How do we respond to the transport of medically stable patients in a way that is appropriate to local circumstances (e.g., less availability of stretcher transportation services)?*

When improved patient care is the focus of paramedic care and the EHS system, then transporting to the most appropriate destination becomes more important than transporting to the closest appropriate destination. This could mean taking the patient to the right destination at the outset. Here, the comprehensive patient information and care planning that is available through community paramedicine programs can guide responding paramedics to the destination that is congruent where care plans have been established and such transportation makes sense. It is also noteworthy that such transportation may not require an ambulance when patients are medically stable. The utility of a community paramedic in the dispatch center or who is on call for consultation may assist in this decision-making process.

5. *Should there be changes to oversight for private stretcher transport systems to ensure safety for medically-stable patients?*

If community paramedics, acting as regulated health professionals and actively contributing to the case management of patients, have the role of care specialists that can also contribute to system navigation for patient movement (including in Paramedic Communication Centres), then changes to the oversight for private stretcher transport systems would inevitably follow. The present state of under-regulation of these services does not ensure excellence in the delivery of patient care.

Integration

1. *How can land ambulance and air ambulance systems be better coordinated to address transportation of medically-stable patients, especially in the North?*

Many communities in Ontario's North do not have paramedic services operating in them. If a paramedic service was implemented in these communities with its primary responsibility being community paramedicine, then the associated case management role of the community paramedic could improve coordination of transportation when required. The CSA Group recently published a report on Health in the North that explored the implementation of a paramedic service whose primary role would be to act as a community paramedicine service (22). The emergency response capacity would be secondary to the goal of improving access to care for individuals living in remote and isolated communities. A similar philosophy should be

applied across all communities in Ontario's North to improve integration between primary care providers and other parts of the healthcare continuum.

2. *How might municipal land ambulance services address "cross-border calls" to ensure that the closest ambulance is sent to provide care of patients?*

With implementation of the *AMPDS Omega card*[1] that includes online paramedic review at the time of a 9-1-1 call and access to CPRUs, the opportunity exists to reduce instances of time-critical (lights and sirens) responses (31), one of the predicating factors behind the "cross-border call" issue. The Ontario Community Paramedicine Secretariat is coordinating paramedic service best practices in community paramedicine programs to improve utilization of existing standards and ensure seamless delivery of excellent patient-centred care.

3. *How can relationships be improved between dispatch centres and paramedic services?*

In British Columbia, Paramedic Specialists rotate between holding response and dispatch responsibilities. When these paramedics are working in the Paramedic Communications Centre, their time is spent acting as an on-call resource in the dispatch centre for both dispatchers and responding paramedics. Aligning efforts between dispatch and response can be facilitated by improving both paramedic and dispatcher understanding of roles and paramedic integration in Paramedic Communications Centres.

4. *How can interactions between EHS and the rest of the health care system be improved (e.g., with primary care, home care, hospitals, etc.)?*

All 48 municipal paramedic services operating at least one community paramedicine program have identified health system partnerships that they have developed with the rest of the health system according to the 2019 *Report on the Status of Community Paramedicine in Ontario* (13). As a result of community paramedicine programs partnerships include: Home and Community Care providers (79%, 38/48) Primary Care Providers (46%, 22/48), Hospitals (50%, 24/48), Long-term Care Residences (8%, 4/48), Public Health Units (17%, 8/48), Mental Health Services (31%, 15/48), and Palliative Care Providers (10%, 5/48). Other Municipal or Community Services were identified as partners by 44% (21/48) of municipal paramedic services and other organizations were identified by 54% (26/48) of municipal paramedic services. This level of partnership and integration is often cited by municipal paramedic services as one of the greatest successes of their community paramedicine program implementation.

Ontario Health Teams represent an important step towards improved interactions between EHS and the rest of the health care system. Community paramedicine programs across Ontario are improving access to primary, urgent, and/or specialized healthcare through scheduled or

[1] The Advanced Medical Priority Dispatch System can include determining that a 9-1-1 call may be better served through referral to another organization or not by providing an ambulance response, known as Omega call classification or Omega card. Examples of utilization include British Columbia, Ireland, and the United Kingdom.

unscheduled visits to underserved patient population groups. Incorporating community paramedicine programs as part of the development of Ontario Health Teams aligns with the vision of Ontario Health and will have impacts on the increasing demands for responsive out-of-hospital integrated care. The 2019 *Report on the Status of Community Paramedicine in Ontario* describes a number of community paramedicine programs that have already spread and can be scaled accordingly.

Innovation

1. *What evaluated, innovative models of care can be spread or scaled to other areas, as appropriate?*

Many community paramedicine programs have been evaluated in Ontario, across Canada, and internationally according to a number of different measures. We would direct the reader to the Ontario Community Paramedicine Secretariat Resources (www.ontariocpsecretariat.ca/resources) page on our website for an information package that highlights many of these evaluated models that can be included in the development of Ontario Health Teams. Briefly, some of the models of care are; Assessment and Referral, Community Paramedic-led Clinics, Home Visit Programs, Community Paramedicine Response Units, Influenza Surge Capacity Programs, Community Paramedicine Remote Patient Monitoring Programs, Safe Transitions (both from Hospital to Home and from Long-Term Care to Hospital), and Paramedic Palliative Care Projects. (13). In addition to improved patient care, the economic values have also been demonstrated (32–35).

2. *Are there new or different approaches to delivery that could be considered as part of a modern EHS system?*

Case management by paramedic services that aligns delivery of services and accounts for new models of care, as well as addressing needs for the delivery of integrated care as part of Ontario Health Teams are first steps. Other aspects of a modern EHS system that would further facilitate delivery of community paramedicine programs include:

- Clinical practice guidelines that recognize (facilitate and encourage) excellence in paramedic decision-making.
- Opportunities for paramedics to work in expanded or integrated roles.
- Improved education and evaluation processes – translating established evidence into clinical practice.
- Broader uptake of community-based smartphone apps such as GoodSam[2].

[2] Smartphone applications that alert qualified/registered members of the public with the ability and/or certification to respond to events through a proximity based notification system and integration with the Paramedic Communication Centre and responding paramedic service. GoodSam is one example, see https://www.goodsamapp.org/

3. *As new models of care for selected 9-1-1 patients are piloted, how can we adapt these models to elsewhere in the province, and how can we encourage uptake? What needs to be standardized versus locally-designed?*

Community paramedicine programs are designed to improve patient access to care, recognizing that different regions or population groups face different barriers when attempting to access care. Program designs can follow a standard approach while adapting to locally identified barriers, making them well-suited and complimentary to the approach taken in the development of Ontario Health Teams. Case management approaches within community paramedicine programs are an ideal testing ground for new approaches. Further information about the uptake and delivery of multi-dimensional community paramedicine programs that are integrated with emergency operations is available in the 2019 *Report on the Status of Community Paramedicine in Ontario* (13). The OCPS continues to lead efforts to evaluate community paramedicine programs, establishing standardized reporting processes that contribute to data linkages with the broader health system and enable review of patient care, patient outcomes, patient safety, and health system utilization.

4. *How can community paramedicine fill gaps in health care services for Ontarians, and how should this be implemented, scaled, or spread across the province?*

The 2019 *Report on the Status of Community Paramedicine in Ontario* describes a number of community paramedicine programs that have already spread and can be scaled accordingly (13). Community paramedicine programs across Ontario are improving access to primary, urgent, and/or specialized healthcare through scheduled or unscheduled visits to underserved patient population groups. Most municipal paramedic service have implemented multiple community paramedicine programs in a coordinated and scalable process to represent a multi-dimensional community paramedicine strategy that includes partners in primary care, mental health services, palliative care, home and community care, or combinations of these and more. Through expanded scope of practice, community paramedics can provide care “in-place” which helps to address the hallway healthcare challenge.

The OCPS is positioned to be a resource for the Ministry, Ontario Health, municipal paramedic services, Ontario Health Teams, and other locally identified health system partners to communicate solutions to planning, implementation, and evaluation of community paramedicine programs that have improved delivery of patient care by addressing challenges of health care access for underserved patient populations. Broad implementation across Ontario should happen immediately through dedicated funding (from the Ministry or Ontario Health). One-time and short-term funding arrangements delay further spread and scale of community paramedicine programs.

Equity

1. *What initiatives could improve delivery of emergency health services to Indigenous communities?*

The CSA Group investigated the utility of the Z1630 standard for Community Paramedicine Program Development in Remote, Isolated, and Indigenous Communities finding that:

- "Community" should extend beyond local geography
- Culturally safe approaches should respect traditional indigenous values of wellness
- Impact of service delivery may result in increased utilization (22)

To improve delivery of paramedicine to Indigenous communities, a formal process should be developed to give First Nations communities the ability to initiate the delivery of paramedic services according to community identified needs.

2. *How can EHS services be more sensitive to the unique needs of Indigenous people, including providing culturally safe care?*

All EHS services, including all community paramedicine programs, should recognize the impact of inter-generational trauma that has resulted from a history of colonialism, including, as an example, residential schools. The *Calls to Action* from the Truth and Reconciliation Commission can guide all efforts to improve delivery of care (36). At all steps, First Nations leaders should be consulted on decisions, or provided the means to be the decision makers in planning and implementing community paramedicine programs.

3. *How can EHS support First Nations in creating better services for pre-clinic services in far northern communities?*

In a "Community Paramedicine" approach, the practices of community paramedics to partner with other health care providers, adequately identify, manage, and maintain patient caseloads, and facilitate integrated care planning and treatment. Local tribal councils and the First Nation Inuit Health Branch of Indigenous Services Canada must be part of a coordinated approach to improving delivery of pre-clinic services.

4. *What improvements to EHS can be made for rural areas?*

Patients in rural areas can experience unique challenges in accessing care including shortages of primary care or home care providers. Community paramedicine home visit programs including remote patient monitoring can support rural patients. Community paramedics with expanded scope of practice can act as an extension of primary care. A rural and remote strategy for health that includes community paramedicine program delivery as part of emergency health services would support improvements for rural areas.

5. *Are there opportunities for partnerships to align and improve health and social services in rural and northern areas?*

There are many opportunities to align and improve service delivery. Some examples are:

- The CP@Clinic model represents an alignment of paramedicine and public housing (37).
- Community paramedicine programs have addressed food insecurity by working with local food banks to include grocery delivery for their patients.
- Community paramedicine programs have acted as extenders of primary care in homeless shelters (19).

Community paramedics should be supported through broad, provincially-supported enhanced education for working with underserved populations (including Indigenous populations, homeless or shelter residents, refugees, and individuals with addictions) (38). The OCPS can provide additional information about examples of programs designed to meet these needs as required.

6. *Are there opportunities to address social determinants of health and health disparities in rural, remote and Northern regions to reduce the need for EHS transport of patients out of these regions?*

Community paramedicine programs can support social determinants such as:

- Improved connections with local supports and services (1)
- Health promotion (2)
- Home safety reviews (39)
- At-home exercise support (40)
- Social support (41)

Community paramedicine programs represent a means for community paramedics to work with patients on preventative interventions that can improve both health and social well-being.

7. *What improvements could be made to the provision of services in French to Francophone communities?*

Unlike emergency operations that require documentation in English, community paramedicine programs are able to have documentation in French where this is a patient's first language. This is an important component of health equity. Work that has been done in community paramedicine programs that serve Francophone communities may serve as an example for improving the provision of services in French. Examples of this have been implemented in Francophone communities in Eastern Ontario (Prescott-Russell) and Northern Ontario (Cochrane District).

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