

Community Paramedicine: Part of the Team

Dear Colleagues,

Across Ontario, paramedic services share common goals of helping patients navigate the health system so that they find the best care possible—care that may be better provided outside of the emergency department. Patients have embraced community paramedicine programs as an important component of maintaining their ability to live in the community and avoid hospital stays. Community paramedicine programs are one example of how paramedic services are making patient care a priority while working with health system partners.

Presently, 48 of 52 (92%) municipal paramedic services have implemented 143 community paramedicine programs that provided care to over 52,300 patients last year. The majority of paramedic services have adopted multi-dimensional strategies, offering an array of programs and adapting, spreading, and expanding the original 30 programs that were funded by the Ministry as demonstration projects in 2014. Community paramedicine program models have emerged that involve care transitions and safe discharging from hospital, assisting in providing palliative care, supporting patients on waitlists for long-term care, strengthening the provision of public health services, early identification and appropriate referral of vulnerable patients found in need of mental health/social supports, and adding more responsiveness for health system partners. All of these reasons make community paramedicine an important component of the integrated approach to care being built through Ontario Health Teams.

This short guide provides direction to the different phases of the Ontario Health Team development. The guide was informed by a review of all community paramedicine programs. Key areas of success and innovation that align with Ontario Health's vision for the future are highlighted. Moving forward, community paramedicine will continue to evolve and find success through a coordinated effort to deliver integrated care with health care services and providers across Ontario.

The Ontario Community Paramedicine Secretariat strives to support the larger paramedic community and their health system partners navigate health care system transformation. Please join us in the provincial conversation about the role of community paramedicine programs in Ontario Health Teams.

Best Regards,

Ontario Community Paramedicine Secretariat Team



Community Paramedicine: Part of the Team

A Guide for Ontario Health Teams

Paramedic services state that part of a community paramedicine program's success comes from the partnerships they enable—partnerships that are aligned with Ontario's vision for patient-centred care.

For 9-1-1 callers, community paramedicine programs provide rapid, responsive, same day navigation to specialized services and reduce hallway healthcare with effective management of short-to-midterm episodic care.

As part of the health care team, community paramedicine programs reduce costs⁽¹⁻⁴⁾, improve efficiency^(3,5,6), and reduce hallway healthcare by shortening length of stay (via early detection of deterioration using paramedic led remote patient monitoring)⁽³⁾, reducing readmissions (by connecting 911 callers to preventative community based services)^(3,7-11) and emergency department visits (by reducing avoidable emergency department visits)^(3,6,12) and helping patients navigate the system⁽¹³⁻¹⁹⁾.

Community Paramedicine...

- **...is a mobilized service able to respond in real time to unexpected events.** Leveraging existing expertise community paramedicine is able to respond to 9-1-1 callers and clients in a highly agile manner that cannot be duplicated by other “mobile” teams which often require pre-planned scheduled visits. Community paramedics, as mobile healthcare providers are able to see patients through both scheduled and unscheduled visits, supporting patients with care “in-place,” and assisting with transportation when necessary.
- **... is an adaptable element of patient-centered, integrated care.** Community paramedicine programs work with multiple stakeholders across multiple disciplines and specialties to support, develop and implement care plans aimed at keeping people safe at home. Community paramedicine programs include screening, assessment, and navigation to appropriate services for all major populations – chronic conditions, frequent fallers, frail elderly, palliative care at home patients, high risk emergency department discharges, and mental health & addictions.
- **... contributes to safe care transitions and supports other health care team members in ensuring a successful return to community settings.** Community paramedicine programs have been designed to include linkages with primary care providers, real-time notification processes, medication reviews, health promotion, patient and caregiver support and education, and integration and coordination with hospital discharge planners and/or home care coordinators.

Highlighting community paramedicine in Ontario Health Teams:

- ✓ Work with health system partners to integrate approaches to care like community paramedicine.
- ✓ Identify and highlight models of care that facilitate coordination between team members
- ✓ Indicate how community paramedicine programs span across the continuum of care (primary care, hospitals, home & community care, palliative care, mental health, long-term care).
- ✓ Include patient and caregiver voice of community paramedicine program clients.
- ✓ Highlight areas where community paramedicine programs need more support, resources, or funding.
- ✓ Describe how community paramedicine programs are integrated with the 24/7 access of paramedic services.

Ontario Health Team Partnerships

Please find in the table below key program characteristics to highlight in Ontario Health Teams. The key program characteristics are directly related to the vision of the Ontario Health. *Program characteristics have been identified through the annual review conducted by the Secretariat.*

| Ontario Health Team Goal | Community Paramedicine Program Characteristics |
|---|--|
| <p>Provide a full and coordinated continuum of care.</p> | <ul style="list-style-type: none"> Community paramedicine programs receive referrals from family health teams, specialists, hospitals, home care providers, in addition to direct referrals from frontline emergency paramedics. In the case of wellness clinics, patients attended on their own accord in response to a notice about the clinic's location and time. Community paramedicine programs provide "wrap-around care" by identifying and referring patients at elevated risk for adverse outcomes such as Alternate Level of Care (ALC) to health system partners and community agencies, facilitating an immediate, integrated, multiagency response to acute needs. Hundreds of existing partnerships between paramedic services and home & community care providers, primary care providers, hospitals, long-term care residences, public health units, mental health services, and palliative care providers have been identified. |
| <p>Offer patients 24/7 access to coordinated care.</p> | <ul style="list-style-type: none"> As a 24/7 service, paramedic services are able to offer access to short-to-midterm episodic integrated care. Community paramedicine programs are well positioned to help end hallway healthcare by improving access to care providers and helping to support patients to stay safely in their homes and communities, avoiding ALC hospital admissions. By partnering with other health system partners, paramedic services ensured that they have the knowledge and ability to assist their patients, including those waiting for long-term care placement, navigate the health system, thereby reducing their need to call 9-1-1 when conditions worsened. Community paramedicine programs pointed out that their programs have the ability to intervene before a patient's condition worsened at all. |
| <p>Include a measurement framework aligned with the Quadruple Aim.</p> | <ul style="list-style-type: none"> Patient experience: From the beginning, community paramedicine programs have built on trusted relationships with patients to ensure high standards for patient satisfaction in addition to providing care that helps them manage their condition so they can remain independent, safe and in place. Clinical outcomes: While community paramedicine program can be adapted to locally identified needs, the most important clinical outcome has been better identification and management of chronic conditions ^(7,20). Other health utilization results may have other clinical benefits that are yet to be measured. Health system costs: Community paramedicine programs have demonstrated the potential for a 542% return on investment ⁽³⁾. Paramedic services stated repeatedly that the key to the success of their programs was the collaborative approach that community paramedicine programs built with the broader health system making better use of all providers time, energy, and resources. Provider experience: Where community paramedicine programs demonstrated working with health system partners to deliver |

| | |
|---|---|
| | <p>integrated care to patients, they also showed an improved provider experience. Adapting care to help patients navigate the system was rewarding for the providers.</p> <ul style="list-style-type: none"> • Work continues to standardize the reporting framework and better reflect each of these aspects of the Quadruple Aim. |
| <p>Operate within an accountability framework.</p> | <ul style="list-style-type: none"> • The most commonly identified goal across all community paramedicine programs was to either connect patients to other health care services or improve the integration of care. • By ensuring that patients are receiving the right care from the right providers, community paramedicine programs are assisting health system partners with case finding efforts and preventing patients from “falling through the cracks” when they are waiting for specialized, palliative, or long-term care. • Community paramedicine programs coordinate care and maintain accountability to avoid duplicating efforts with health system partners, streamlining a patient’s access to the appropriate care. |
| <p>Be funded through an integrated funding envelope.</p> | <ul style="list-style-type: none"> • Current provincial funding for community paramedicine programs comes primarily from LHINs through partnerships between paramedic services and designated transfer payment agencies. • Many municipal paramedic services have extended their community paramedicine program with their own funding. Some have also received funds from hospitals, health units, and grants or donations. • Ontario Health Teams present the opportunity to stabilize funding and maintain partnerships through an integrated funding envelope. |
| <p>Reinvest into frontline care.</p> | <ul style="list-style-type: none"> • A concerted effort is being made to help prevent patient or population groups from waiting until things go wrong, decreasing their reliance on the 9-1-1 safety net, and providing added surge capacity ⁽²¹⁾ to help avoid emergency department offload delays. • Many paramedic services are aligning their community paramedicine programs with traditional emergency response and having frontline paramedics identify patients for CP programs when or if they do call 9-1-1. • Community paramedicine programs have accomplished much of their success by investing almost exclusively in direct frontline care. |
| <p>Improve access to secure digital tools.</p> | <ul style="list-style-type: none"> • Paramedic services are well positioned to draw on mobile technologies in the provision of community paramedicine programs. • Community Paramedicine Remote Patient Monitoring (CPRPM) is a broadly implemented community paramedicine programs that has realized a great deal of success, not only in reducing 9-1-1 calls, ED visits, and hospital admissions, but also in the use of digital tools by both paramedics and patients. The CPRPM allows full online access to health records for both the patient and the community paramedic. • A number of paramedic services have been able to implement technological solutions to facilitate information sharing through platforms such as Clinical Connect, Health Partner Gateway (HPG), and the Client Health Record Information System (CHRIS). |

Ontario Health Team Partnerships

REFERENCES:

1. Wood KA, Ashton C, Duffie-Ashton D. The Economic Value of Community Paramedicine Programs. 2017.
2. Ruest MR, Ashton CW, Millar J. Community Health Evaluations Completed Using Paramedic Service (CHECUPS): Design and Implementation of a New Community-Based Health Program. JHSA. 2017;(Fall).
3. Brohman M, Green M, Dixon J, Whittaker R, Fallon L. Community Paramedicine Remote Patient Monitoring (CPRPM): Benefits Evaluation & Lessons Learned [Internet]. Toronto, ON; 2018. Available from: <https://infoway-inforoute.ca/en/what-we-do/news-events/webinars/resources/reports/benefits-evaluation/3542-community-paramedicine-remote-patient-monitoring-cprpm-benefits-evaluation-lessons-learned>
4. Martin-Misener R, Downe-Wamboldt B, Cain E, Girouard M. Cost effectiveness and outcomes of a nurse practitioner–paramedic–family physician model of care: the Long and Brier Islands study. *Prim Health Care Res Dev*. 2009;10(01):14.
5. Dixon S, Mason S, Knowles E, Colwell B, Wardrope J, Snooks H, et al. Is it cost effective to introduce paramedic practitioners for older people to the ambulance service? Results of a cluster randomised controlled trial. *Emerg Med J [Internet]*. 2009;26(6):446–51. Available from: <http://emj.bmj.com/content/26/6/446.abstract>
6. Jensen JL, Carter AJE, Rose J, Visintini S, Bourdon E, Brown R, et al. Alternatives to Traditional EMS Dispatch and Transport: A Scoping Review of Reported Outcomes. *Can J Emerg Med*. 2015;17(5):532–50.
7. Abrashkin KA, Washko J, Zhang J, Poku A, Kim H, Smith KL. Providing Acute Care at Home : Community Paramedics Enhance an Advanced Illness Management Program — Preliminary Data. *J Am Geriatr Soc [Internet]*. 2016 Dec [cited 2016 Dec 28];64(12):2572–6. Available from: <http://doi.wiley.com/10.1111/jgs.14484>
8. Anna Abrashkin K, Poku A, Ramjit A, Washko J, Zhang J, Guttenberg M, et al. Community paramedics treat high acuity conditions in the home: a prospective observational study. *BMJ Support Palliat Care [Internet]*. 2019 [cited 2019 Apr 9];0:1–8. Available from: <http://spcare.bmj.com/>
9. Leyenaar M, McLeod B, Chan J, Tavares W, Costa A, Agarwal G. A scoping study and qualitative assessment of care planning and case management in community paramedicine. *Irish J Paramed*. 2018;3(July):1–15.
10. Gregg A, Tutek J, Leatherwood MD, Crawford W, Friend R, Crowther M, et al. Systematic Review of Community Paramedicine and EMS Mobile Integrated Health Care Interventions in the United States. *Popul Health Manag [Internet]*. 2019; Available from: <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=medp&NEWS=N&AN=30614761>
11. Rasku T, Kaunonen M, Thyer E, Paavilainen E, Joronen K. The core components of Community Paramedicine - integrated care in primary care setting: a scoping review. *Scand J Caring Sci [Internet]*. 2019; Available from: <http://doi.wiley.com/10.1111/scs.12659>
12. Agarwal G, Angeles R, Pirrie M, Marzanek F, McLeod B, Parascandolo J, et al. Effectiveness of a community paramedic-led health assessment and education initiative in a seniors' residence building: The Community Health Assessment Program through Emergency Medical Services (CHAP-EMS). *BMC Emerg Med [Internet]*. 2016;17(1):1–8. Available from: <http://bmccemergmed.biomedcentral.com/articles/10.1186/s12873-017-0119-4>
13. Verma AA, Klich J, Thurston A, Scantlebury J, Kiss A, Seddon G, et al. Paramedic-Initiated Home Care Referrals and Use of Home Care and Emergency Medical Services. *Prehospital Emerg Care [Internet]*. 2017;0(0):1–6. Available from: <https://doi.org/10.1080/10903127.2017.1387627>
14. Martin A, O'Meara P, Farmer J. Consumer perspectives of a community paramedicine program in rural Ontario. *Aust J Rural Health*. 2016;24:278–83.
15. O'Meara P. Community paramedics : a scoping review of their emergence and potential impact. *Int Paramed Pract*. 2014;4(1):5–12.
16. O'Meara P, Stirling C, Ruest M. Community paramedicine model of care: an observational, ethnographic case study. *BMC Health Serv Res [Internet]*. 2016 Dec 2 [cited 2016 Oct 26];16(1):39. Available from: <http://www.biomedcentral.com/1472-6963/16/39>
17. Choi BY, Blumberg C, Williams K. Mobile Integrated Health Care and Community Paramedicine : An Emerging Emergency Medical Services Concept. *Ann Emerg Med [Internet]*. 2016;67(3):361–6. Available from: <http://dx.doi.org/10.1016/j.annemergmed.2015.06.005>
18. Bigham BL, Kennedy SM, Drennan I, Morrison LJ. Expanding Paramedic Scope of Practice in the Community: A Systematic Review of the Literature. *Prehospital Emerg Care*. 2013;17(3):361–72.
19. Chan J, Griffith LE, Costa AP, Leyenaar MS, Agarwal G. Community paramedicine: A systematic review of program descriptions and training. *CJEM [Internet]*. [cited 2019 Mar 19];2019:1–13. Available from: <https://doi.org/10.1017/cem.2019.14>
20. Edwards MJ, Bassett G, Sinden L, Fothergill RT. Frequent callers to the ambulance service: patient profiling and impact of case management on patient utilisation of the ambulance service. *Emerg Med J [Internet]*. 2014;32(5):392–6. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25312857>
21. Seasonal Surge Provincial Guidance Document. Recommendations to prepare for and respond to influenza and the winter season in Ontario. 2019.

