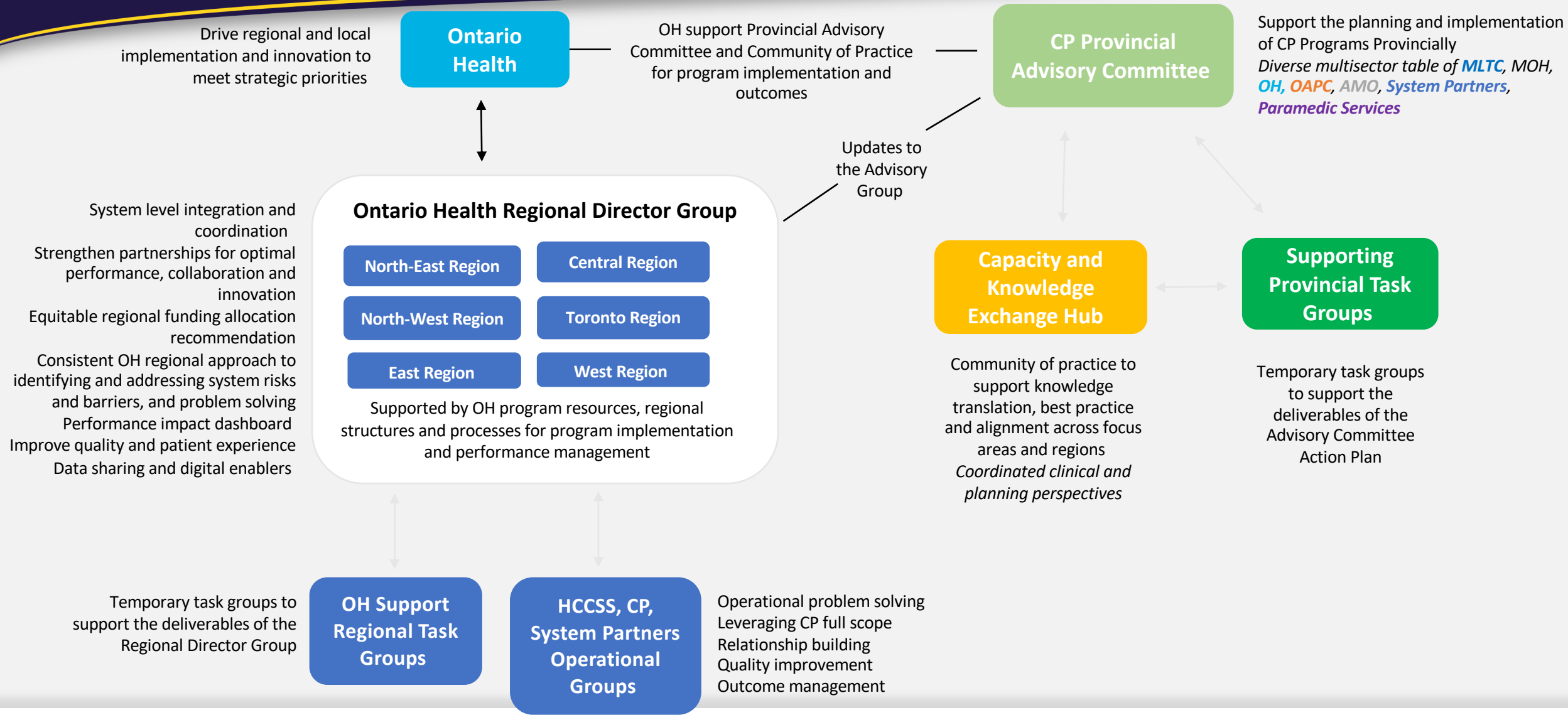


**COMMUNITY
PARAMEDIC**

Community Paramedics Supporting
Ontarians Eligible for Long-Term Care

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What & How?



Response

Advanced Care Paramedics (ACP)	Primary Care Paramedics (PCP)	Community Paramedics (CP)
Current State Medications Procedures & Controlled Medical Acts Including:		
<ul style="list-style-type: none"> • 12 Lead ECG, Posterior, Right & STEMI Diagnosis • Advanced Airway (Endotracheal Intubation) • Advanced Airway • Advanced Airway (Tracheal Tube Introducer Device) • Airway Foreign Body Removal (McGill Forceps) • Airway Suctioning & Deep Suctioning • Capnometry & Capnography (ETCO2) • CPAP Therapy (PEEP) • CVAD Infusion • Defibrillation (Manual External) • Intraosseous Therapy • Intravenous Therapy* • Needle Cricothyrotomy • Needle Thoracostomy • SpO2 / SpCO* • Synchronized Cardioversion • Taser Probe Removal • Transcutaneous Pacing • Evidence Based Research • Advance care planning and goals of care discussions* • Initiating Serious Illness Conversations* 	<ul style="list-style-type: none"> • 12 Lead ECG & STEMI Diagnosis • Advanced Airway • Airway Suctioning Capnometry (ETCO2) • CPAP Therapy (PEEP) • Defibrillation (Semi-Automated External) • Intravenous Access & Monitoring* • SpO2 / SpCO * • Taser Probe Removal • Evidence Based Research • Advanced care planning and goals of care discussions* • Initiating Serious Illness Conversations* 	<p>Expanded scope of practice operating under the delegated authority of independent medical doctor (MD)</p> <ul style="list-style-type: none"> • Expanded medication administration* • Immunizations • Urine chemistry testing • IV access and maintenance* • Point of care blood testing • Advanced physical assessments* • Advanced care planning and goals of care discussions* • Initiating Serious Illness Conversations* • Point of Care Ultrasound

NOTE:

- *CPs are either ACPs or PCPs. They operated at an expanded scope under the delegated authority of an MD. They can perform additional tasks through this medical delegation.*
- *Paramedic training is now a **comprehensive 2-year program for PCP with an additional year for ACP.***
- *Additional training is required to work as a CP, often from specialist teams.*
- *When working as a CP, the paramedic is not working in the context of an emergency response paramedic (ACP, PCP) under the ambulance act.*

Our Story

Where we were:

Previously, Paramedics provided a reactive service responding post-event to retrospectively address individual patients needs. Through early prevention programs, a greater understanding of the health ecosystem and how Paramedics care influence the outcomes and behaviours of patients with modifiable risk factors.

Where we are:

Community Paramedicine is a proactive and integrated model of care, recognized as an innovative best practice that adds measured capacity that is designed to rapidly adapt to patient, community and health system needs.

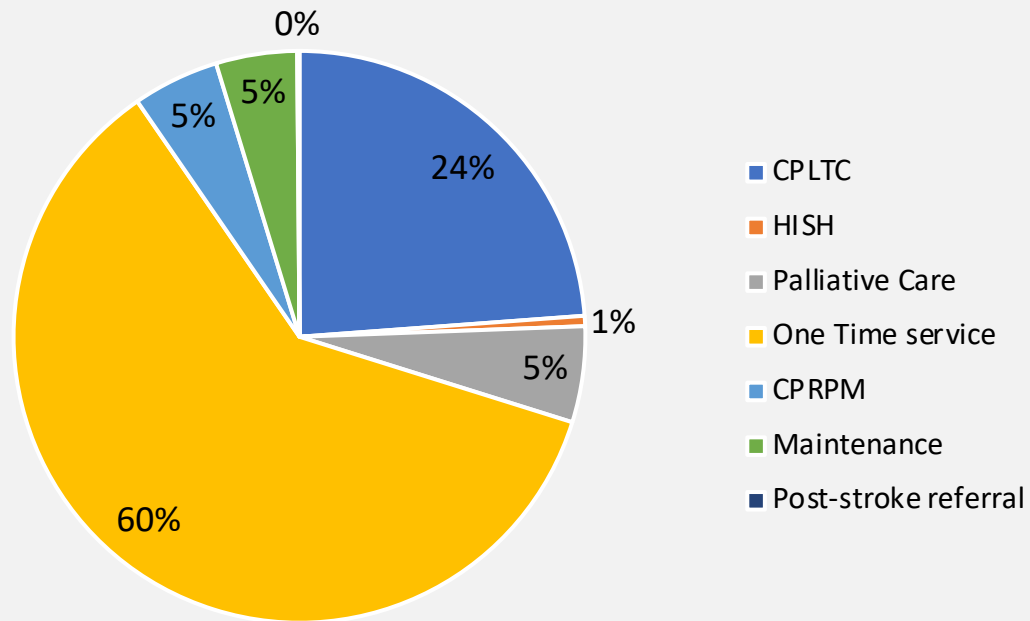
The Future:

Paramedics are a proven and trusted resource by patients and government. Expanded research and advanced education on enhancing system integration, models of care, and accelerated integration of technology solutions for Community Paramedicine sustainability.



Our Goal

Percentage of patients by program



Number of Patient per Program

Program	Total number of patients (historical)	Number of active patients (as of August 8, 2022)
CPLTC	1107	731
HISH	27	14
Palliative Care	252	107
One Time service / VTAC Referral	2814	
CPRPM	227	164
Maintenance / surveillance	213	178
Post-stroke referral	6	5
Total (all programs) (*)	7112	2385

* Number of unduplicated patients

Key Features of CPLTC



Available

- 24/7 access to paramedic services for non-emergency and emergency procedures in their own home.



Responsive

- Prompt and flexible response to changing circumstances or medical conditions and if necessary, connection to the right health care provider at the right time in order to avoid escalation and crisis.



Proactive

- Systematic, routine-based remote monitoring to prevent emergency incidents or escalation in medical conditions.



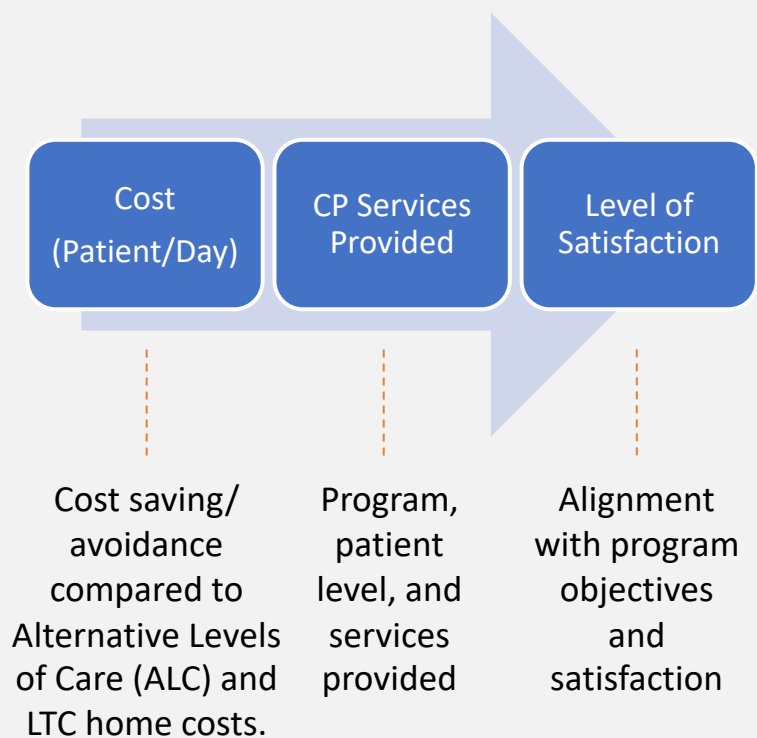
Safe

- Diagnostic procedures and treatments can be provided at home.

Program Evaluation Framework

INPUTS

- Biweekly Enrollment
- Quarterly Quantitative*
- Q3 & Q4 Financials
- Biannual Qualitative



OUTPUTS

- Peace of Mind
- Cost-Effectiveness
- Health Outcomes
- LTC Deferral

Broader Health Sector Impact

911 calls, ED visits, hospital admissions/re-admissions, LTC waitlist stabilization

CPLTC data will be linked to other health system data to analyze:

1. Impact of CPLTC on **client health outcomes** – e.g., which CPLTC services are most effective in stabilizing LTC wait list clients in their own homes.
2. Impact of CPLTC on the **broader health care sector** – e.g., CPLTC services are keeping clients out of hospital or off the LTC crisis wait list by reducing avoidable 911/emergency department visits.
3. **Cost effectiveness** of the program – e.g., CPLTC services provide cost savings/avoidance compared to alternative approaches, such as Alternate Levels of Care (ALC) and LTC home costs.

Community Paramedicine – tried and tested

- ▼ Canada is behind in optimizing community paramedicine
- ▼ Healthcare environment is changing and the ability to respond to changing needs and mobilize teams quickly is paramount e.g. SARS-COV-2-19
- ▼ CP has been established for over a decade
- ▼ CP impacts and reduces the reliance on 911 response
- ▼ CP supports system pressure
- ▼ CP benefits the existing models of community care
- ▼ Patient feedback is overwhelmingly positive
- ▼ CP is taking on a role within OHTs
- ▼ CP provides effective care to people where access to care is challenging

Community Paramedicine in Renfrew County

- ▼ Staffed by Advanced Care Paramedics
- ▼ Self dispatched – zone layered care model
- ▼ 6 – 10 Community Paramedics on each day in Emergency Response Units
- ▼ Originally provided Community Paramedic Support in partnership with a local Long-Term Care home to 32 persons on the waitlist.
- ▼ Officially launched in 2008

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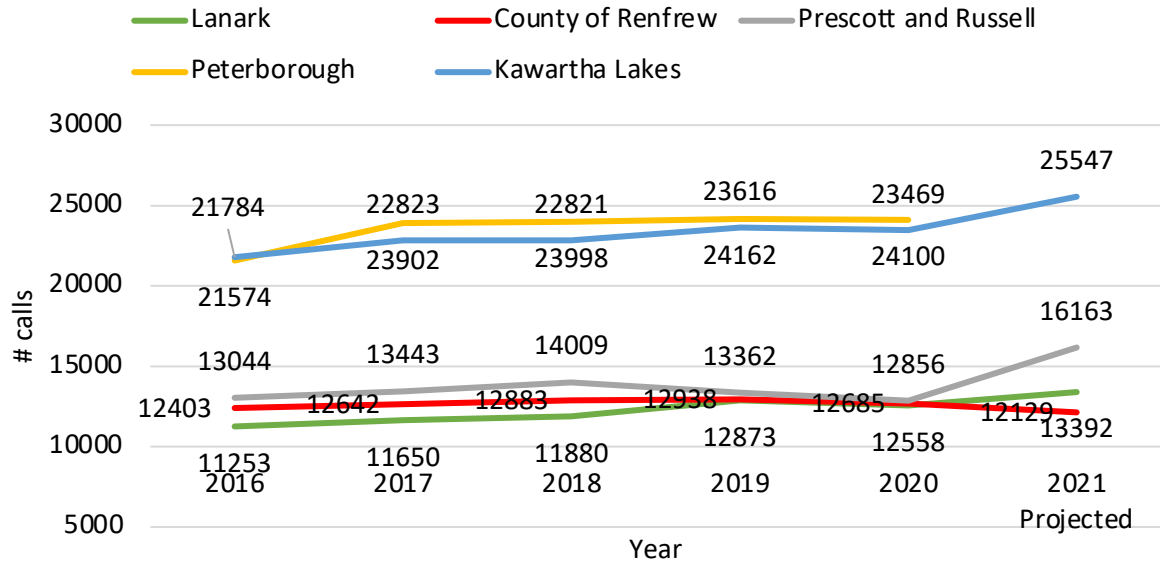
- ▼ 24/7 access to a Paramedic in Renfrew County
- ▼ Non-emergency line
- ▼ Aimed at decreasing unnecessary 911 calls
- ▼ Stakeholders (physicians, hospitals, nursing homes etc.) have a consistent number to contact Community Paramedics
- ▼ Patients have a way to speak directly to a Paramedic, circumventing the 911 system
- ▼ Alternative to 911
 - ▼ 911 compared to Community Paramedicine



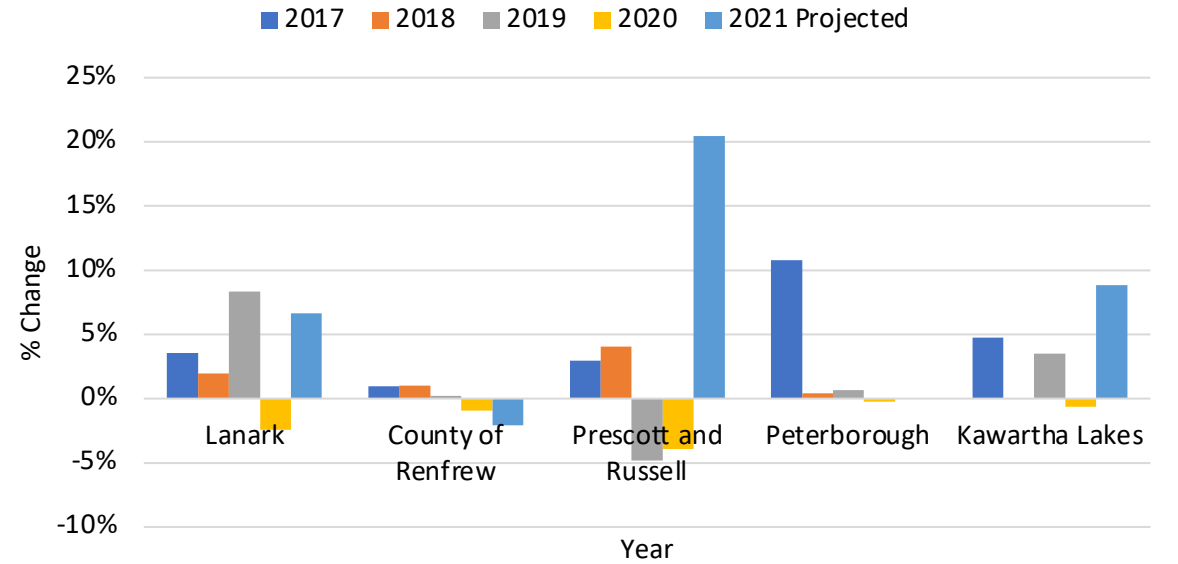
i-Stat

Community Paramedicine Impact on the 911 Call System

Call volume comparison

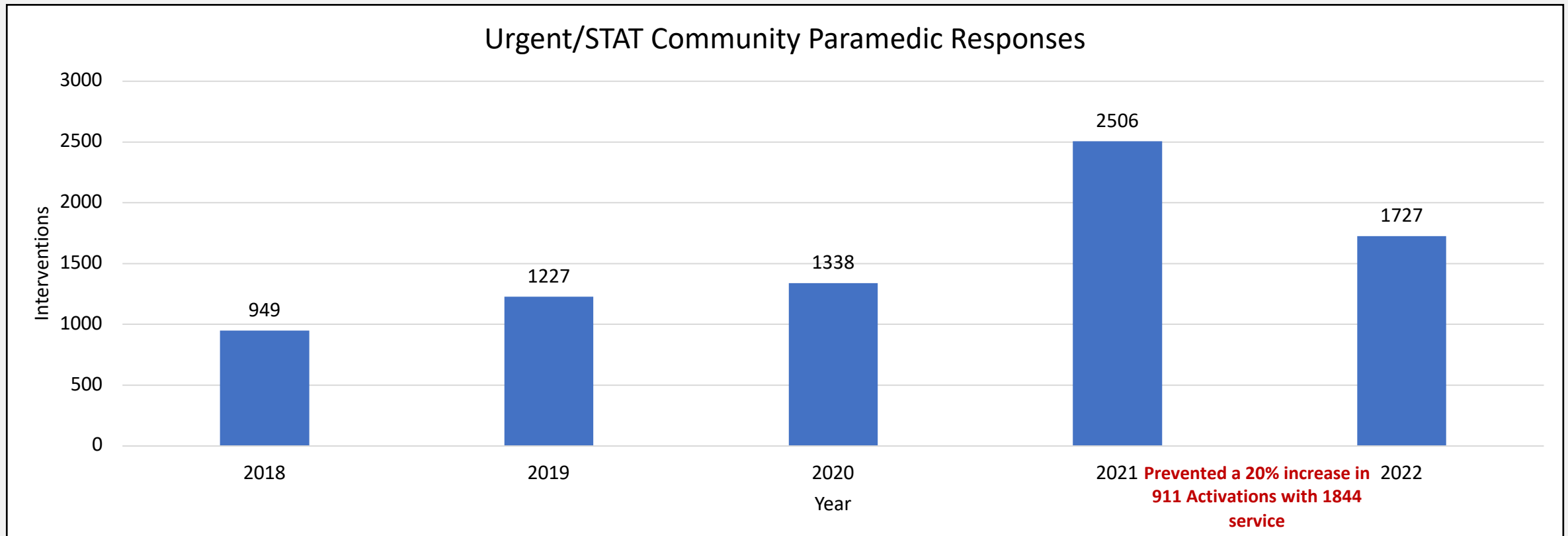


% of change on call volume over time

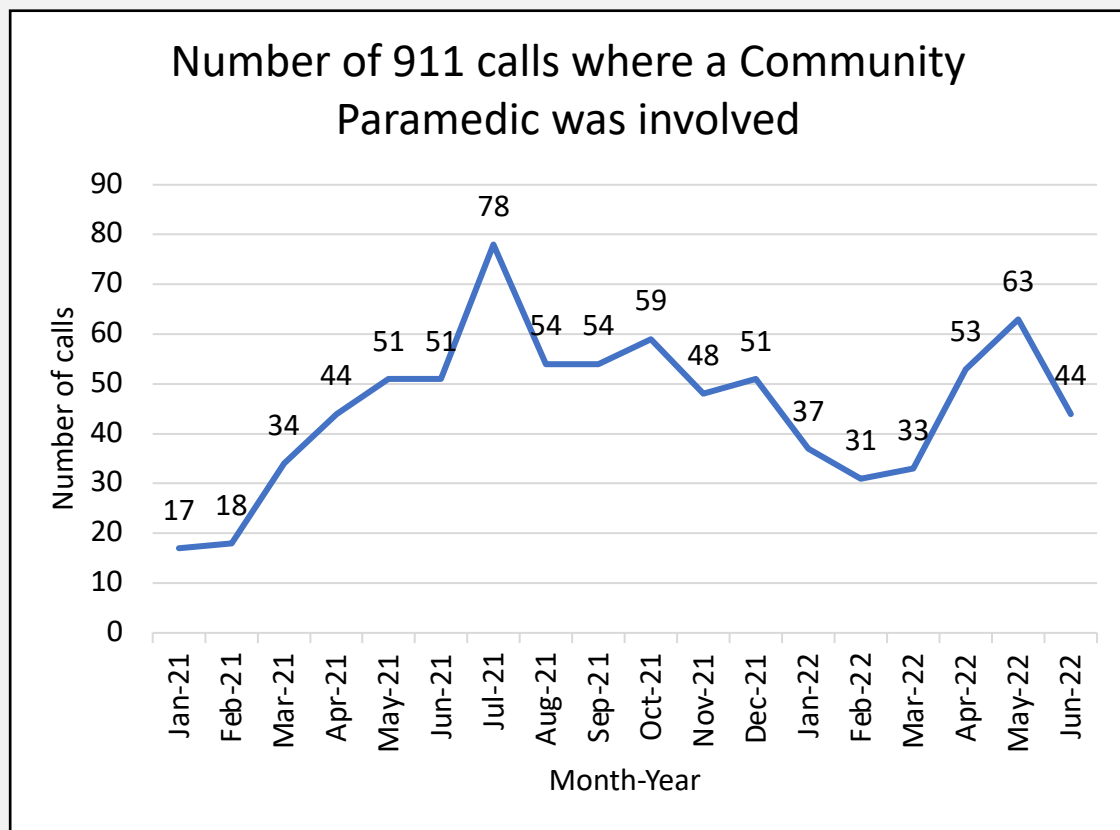


Direct diversion from 911 call system

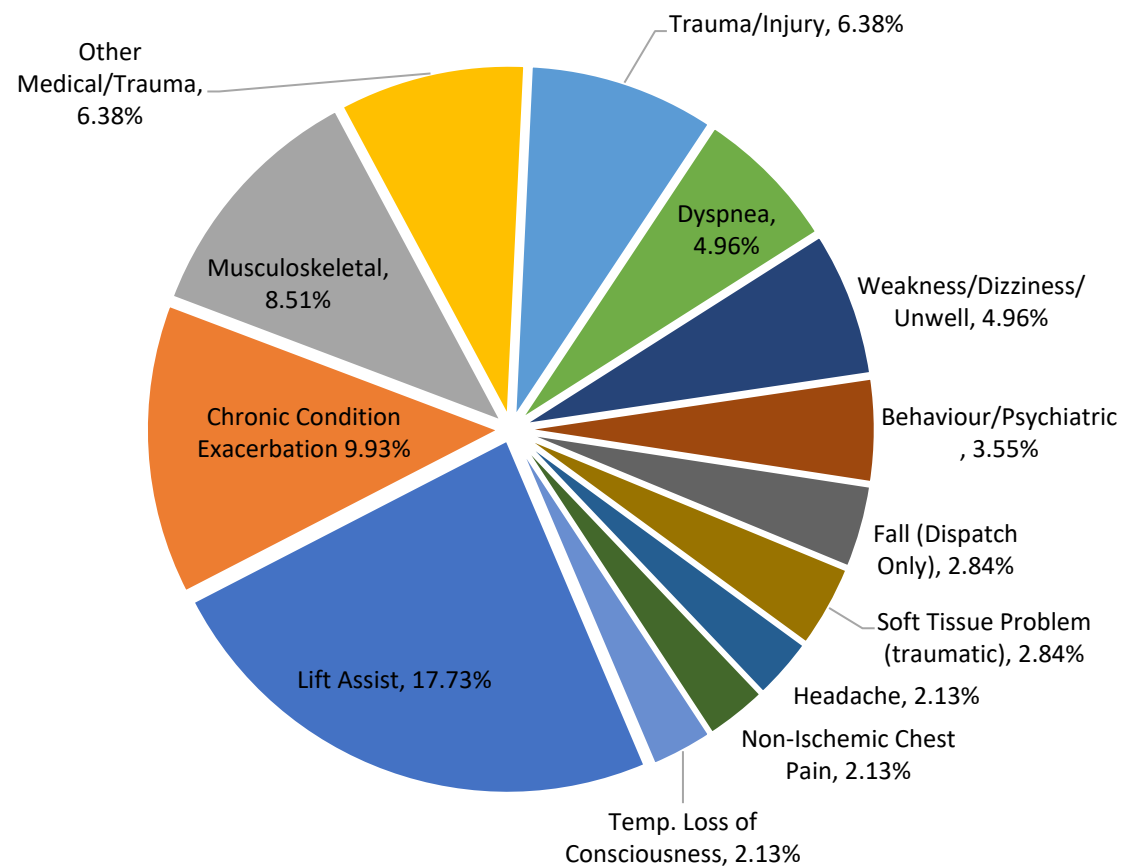
Urgent/STAT Community Paramedic Responses



Number of Community Paramedic attached 911 calls



Primary problem of 911 calls with a Community Paramedic



Community Paramedicine Outcomes Renfrew County

~542% return on investment for Community Paramedic patients supported with remote monitoring.

Reduced the need for Long Term Care crisis placement of over 1,800 persons in 2 years.

>20% 911 call diversion through the 1-844 Community Paramedic Outreach Line

76% reduction in repeat 911 & ED use by targeted population

A deployable resource supporting seasonal surge capacity and pandemic response efforts in Community and Long-Term Care

A fully integrated care model that meets both local and health system needs.

Supporting Health System Priorities

Prevention and Community



Published Research

Kivanc, J. (2022, August 11). *Community paramedics could take pressure off buckling health care system, advocates say*. The Globe and Mail. Retrieved August 12, 2022, from <https://www.theglobeandmail.com/canada/article-paramedics-healthcare-emergency-room-shortages/>

- ▼ In Renfrew County, for example, 30 per cent of people do not have a family doctor, which Mr. Nolan says is an example of how community paramedics carry a burden that otherwise might be passed onto hospitals – both in terms of patients coming into emergency departments for checkups or prescriptions, as well as more severe outcomes for people who do not get preventative care.
- ▼ “Waiting for people to call 911 or go to the emergency department is too late. We need to engage them in their homes, on their turf, and help them earlier on. And I know it’s not nearly as sexy as running around with lights and sirens and doing the other things that we do, but that’s not the point.”

Fitzsimon, J., Gervais, O., & Lanos, C. (2022, February). *Covid-19 assessment and testing in rural communities during the pandemic: Cross-sectional analysis*. JMIR Public Health and Surveillance. Retrieved August 12, 2022, from <https://publichealth.jmir.org/2022/2/e30063>

- ▼ The blended model of virtual and in-person care is well suited to provide improved access to other aspects of health care post pandemic, particularly for patients without a family physician.

O'Meara, P., Ruest, M., & Stirling, C. (2014). *Community paramedicine: Higher education as an enabling factor*. Australasian Journal of Paramedicine. Retrieved August 12, 2022, from <https://ajp.paramedics.org/index.php/ajp/article/view/22/29>

- ▼ Study participants were strongly of the view that the program needs to be
- ▼ come institutionalized and not be dependent on individual champions to ensure its ongoing existence. There is clearly a need for structures and mechanisms to make the program sustainable and to maintain standards of safety

Fitzsimon, J., Gervais, O., Lanos, C., & Sullivan-Bentz, M. (2022, July 30). *Providing 24/7 healthcare for all during the COVID-19 pandemic*. CFPA. Retrieved August 12, 2022, from <https://www.cfp.ca/news/2020/06/12/06-10>

- ▼ Renfrew County VTAC has proven its ability to provide acute episodic care, including COVID-19 testing, during the pandemic. It has highlighted an opportunity to modernize the 911 system and improve access to primary care well after the COVID-19 pandemic. Where communities are unable to recruit Family Physicians locally, access to a named Family Physician via virtual means, with support from locally available Allied Health Professionals, may offer a better alternative to the Emergency Department as the only current option for unattached patients to access primary care in the future.

O'Meara, P., Stirling, C., Ruest, M., & Martin, A. (2016, February 2). *Community paramedicine model of care: An observational, ethnographic case study - BMC Health Services Research*. SpringerLink. Retrieved August 12, 2022, from <https://link.springer.com/article/10.1186/s12913-016-1282-0>

- ▼ When combined with earlier studies, the findings indicate that successful CP programs are integrated with local health systems, have viable treatment and referral options for sub-acute and chronic patients, are built on broad paramedic education and have inclusive governance systems.

Ashton, C., Duffie, D., & Millar, J. (2017). *Conserving Quality of Life through Community Paramedics*. Retrieved from Healthcare Quarterly Vol. 20 No 2 from https://www.researchgate.net/profile/Chris-Ashton-3/publication/319278095_Conserving_Quality_of_Life_through_Community_Paramedics/links/5dd455d2299bf11ec86279ed/Conserving-Quality-of-Life-through-Community-Paramedics.pdf

- ▼ This randomized controlled trial is to determine whether community paramedicine services would have a positive economic impact through influencing self-perceived quality of life and determining a monetized value. 5% of Canadian population consume 50%-67% of resources, the need has evolved to change the health and wellness profile of this group of citizens. This type of CP did significantly converse quality of life. Additionally, leveraging technology through remote patient monitoring has been shown to allow paramedics to care for more patients in their homes.

Questions?