



Developing a Sustainable Model of Community Paramedicine for Northern Ontario, CANADA: Lessons Learned



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Purpose

- Share the **lessons learned** from a year of implementing pilot CP programs using regular duty primary care paramedics in rural communities across northern Ontario, with the goal of developing a sustainable model for CP in Northern Ontario.

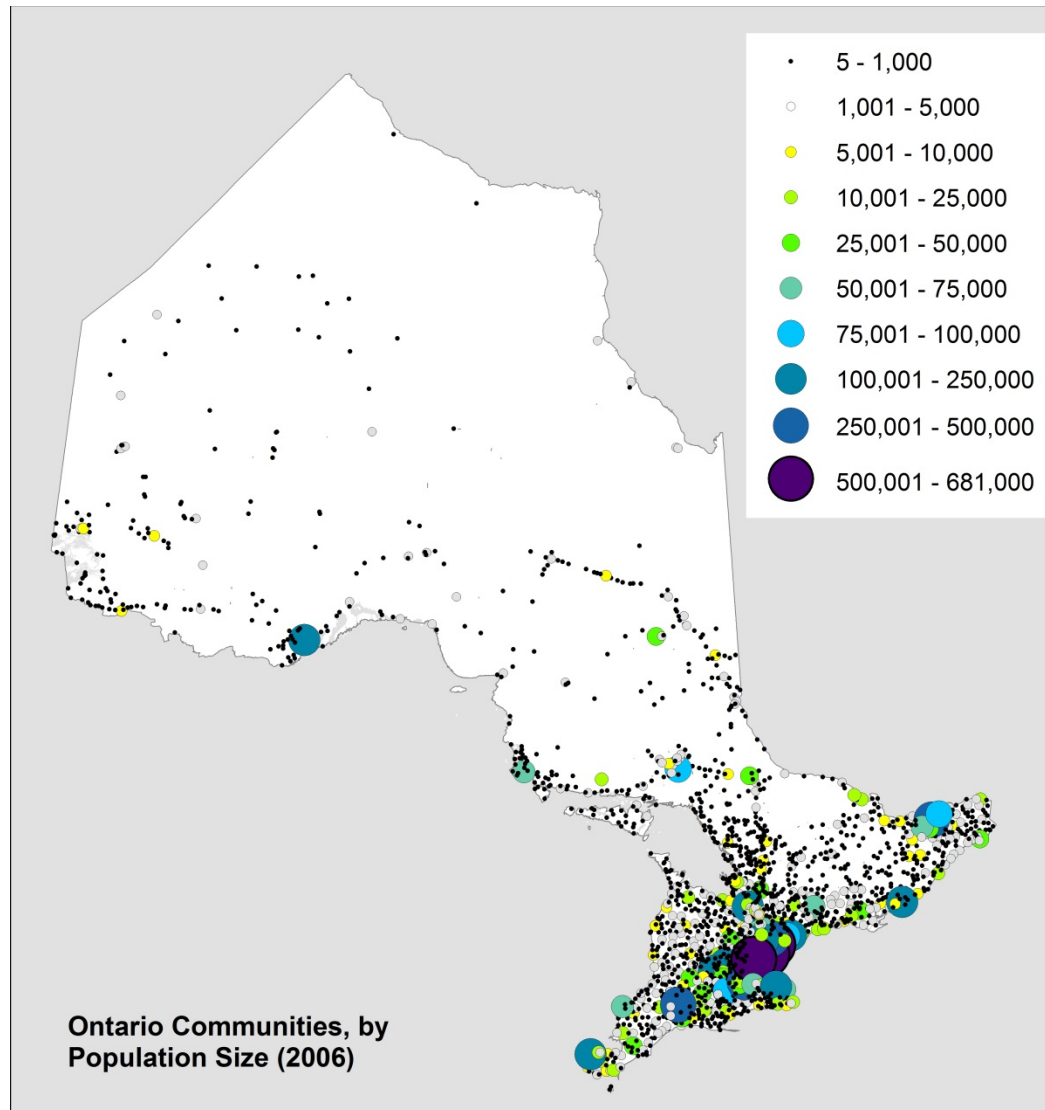
Agenda/Outline

- Background
 - CP in Northern Ontario; Rural & Northern Context; 4 Districts;
- Method: Collaborative Evaluation
- Results: Lessons Learned
 - Challenges; Benefits; Opportunities
- Conclusion
- Next Steps

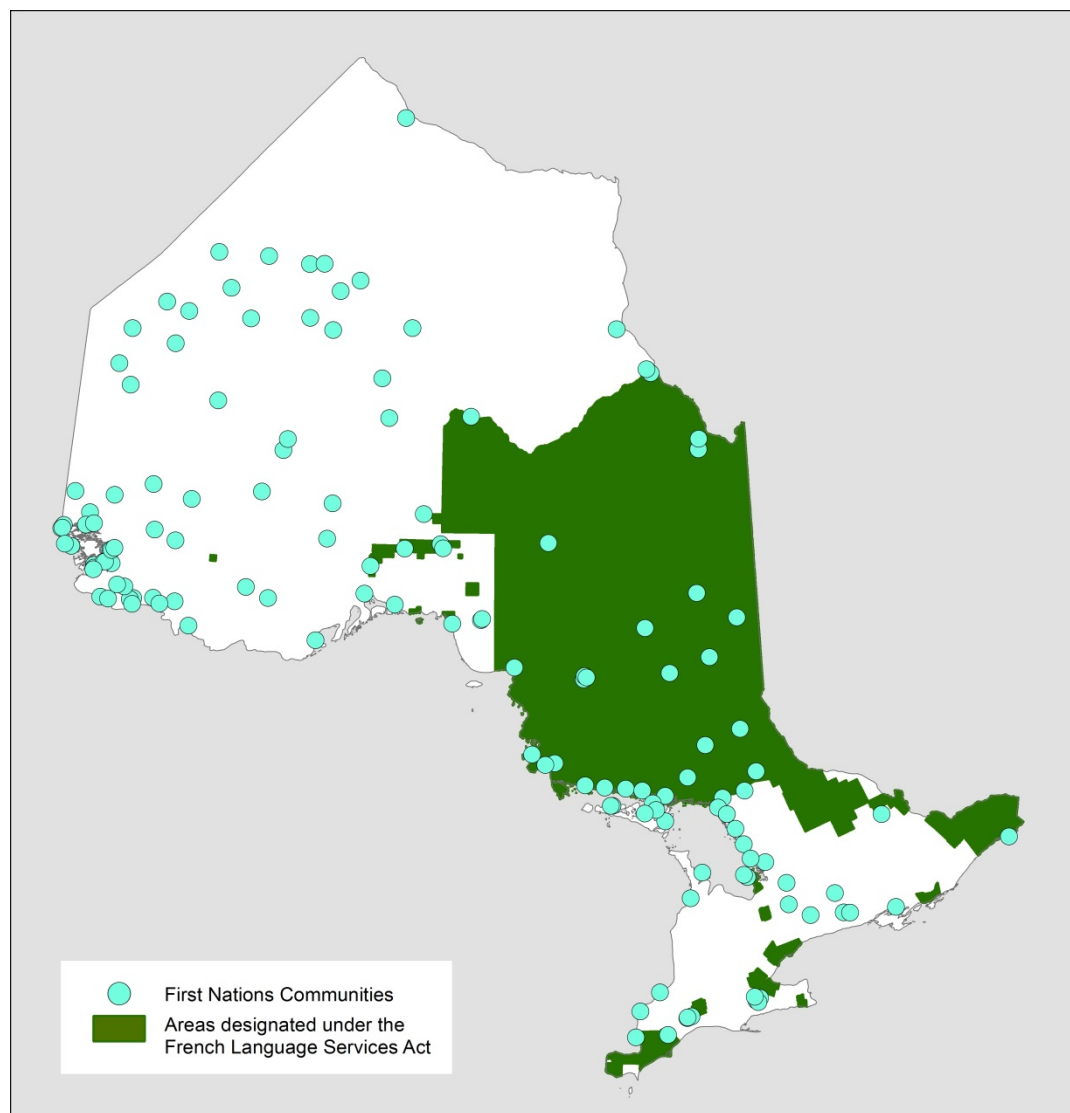
Northern Ontario Context

- Population Characteristics
 - Small dispersed communities, very low population densities
 - Diverse (higher proportions of Francophone, First Nations populations; 2% -> 88%)
 - Higher proportion of seniors (24% -> 37%)
- Distance, transportation challenges (1h+, 115km+)
- Higher rates of chronic disease combined with poorer access to health services

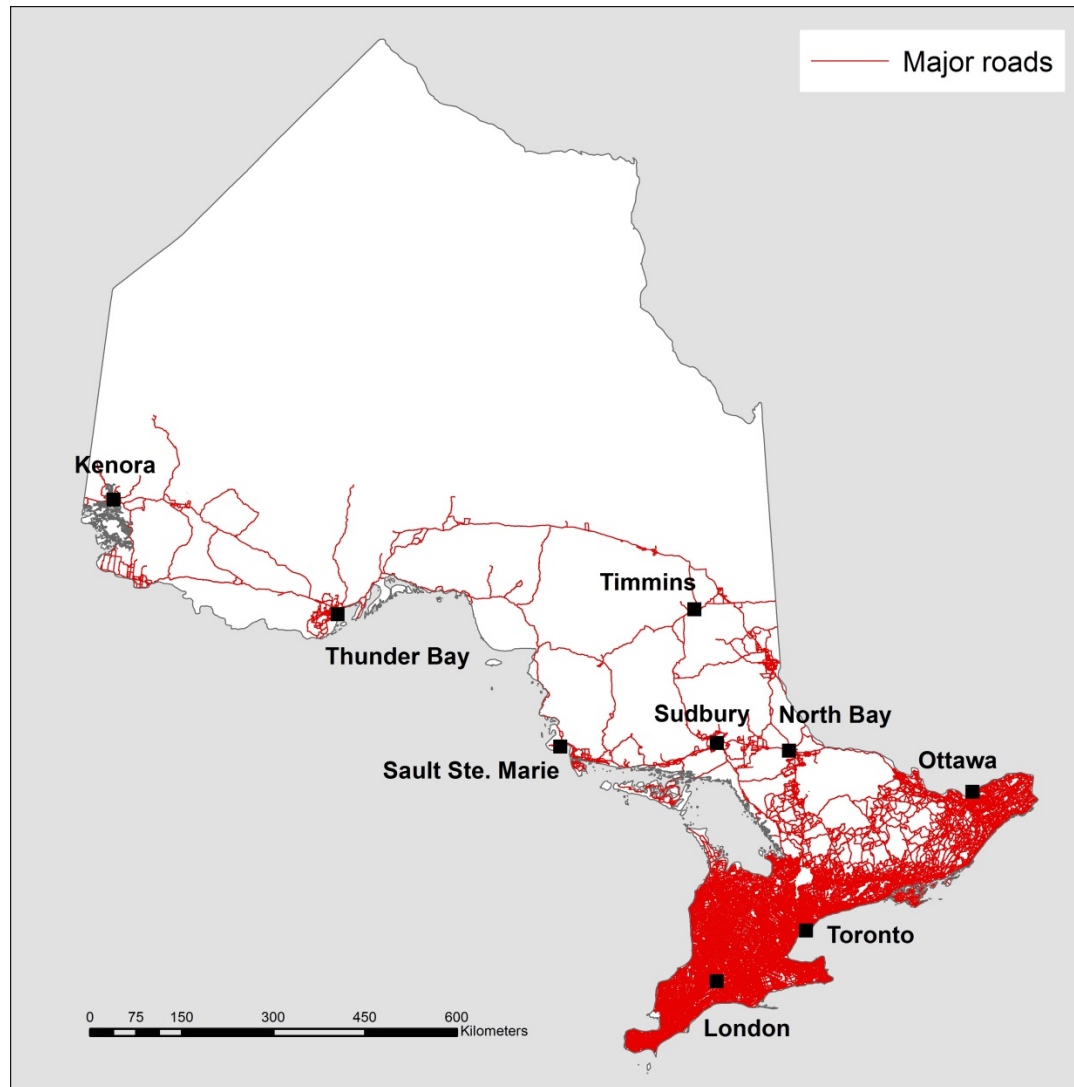
Ontario Communities, by Population Size



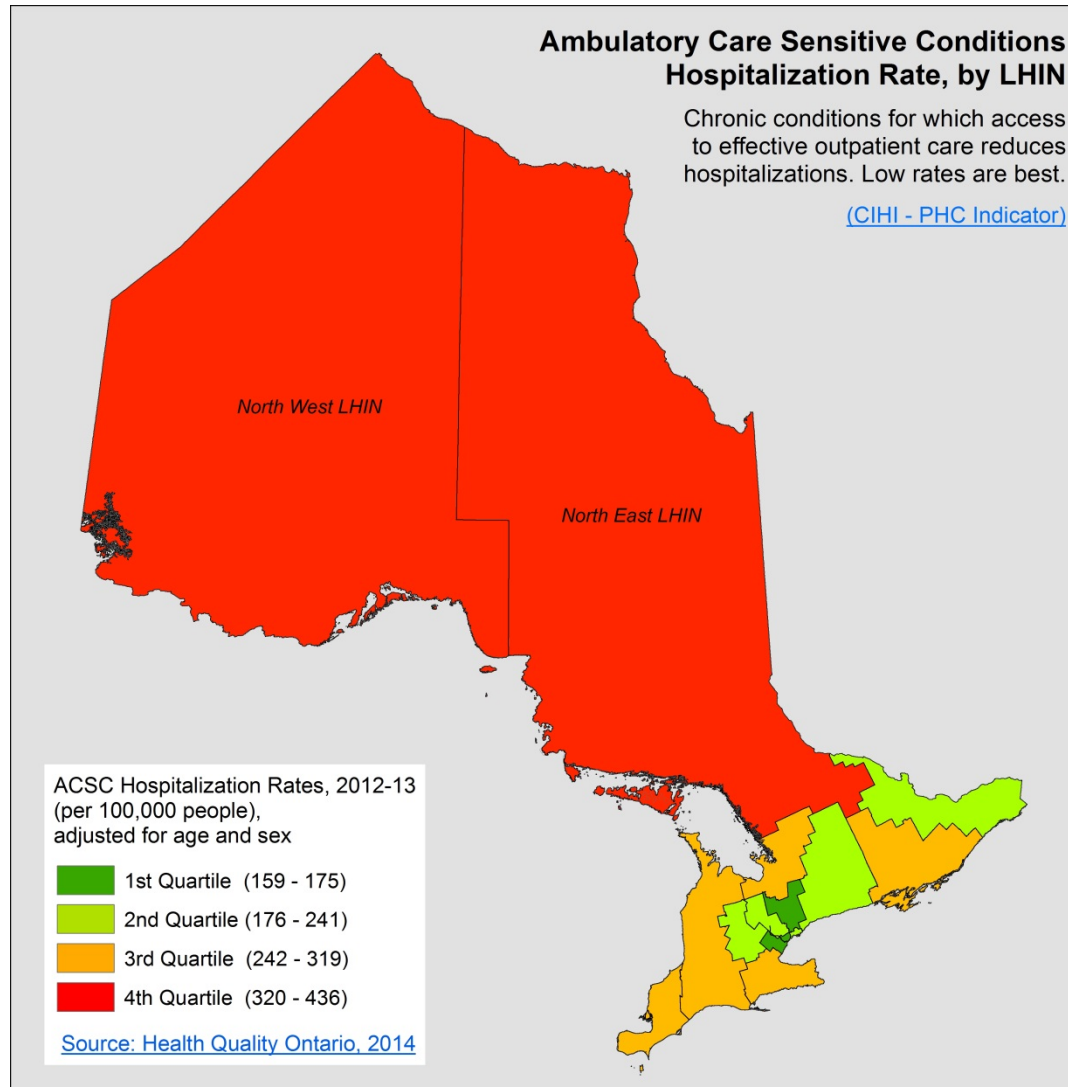
Diversity of Northern Populations



Road Network Density



ACSC Hospitalization Rate, by LHIN



Community Paramedicine in Northern Ontario

- **EMS Context**

- Rural/Small Town – Services administered by District Service Administration Boards (DSABs) or municipalities – limited tax base
- EMS Services - staffed by primary care paramedics
- Vast rural service areas
- Often have more discretionary time than urban paramedics
- CP funded as pilot projects → *sustainability concerns*

Model of Sustainable Rural CP:

- CP integrated into EMS Services – not an ancillary program
- CP performed by regular duty paramedics in between 911 calls
- All paramedics working in pilot communities expected to perform CP duties
- After start up, requires little to no extra funds to maintain CP operations

Manitoulin-Sudbury Sites

- Gogama
- Gore Bay

Cochrane District Sites

- Cochrane
- Hearst
- Smooth Rock Falls

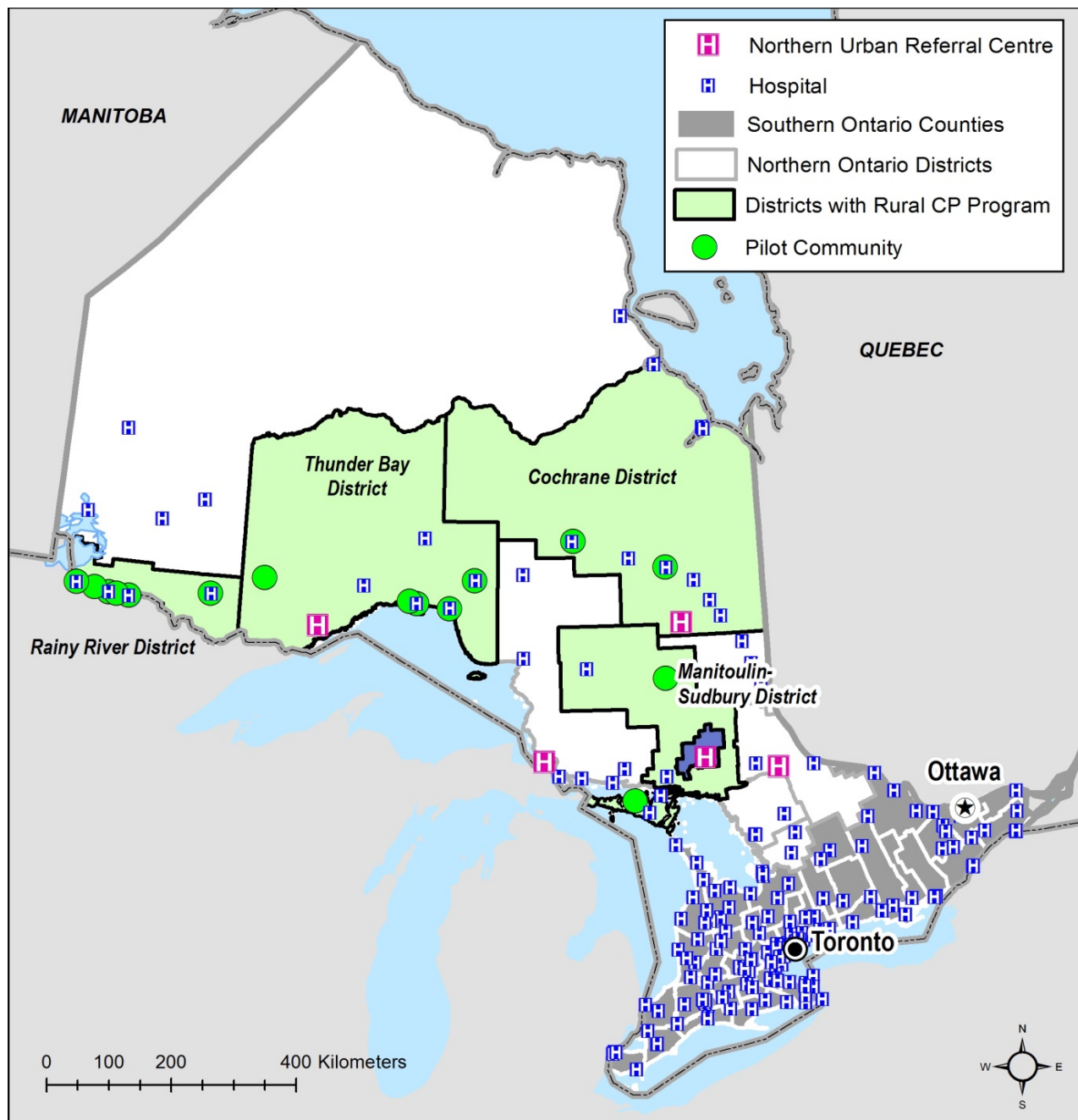
Rainy River District Sites

- Atikokan
- Stratton
- Fort Frances
- Emo
- Rainy River

Thunder Bay District Sites

- Manitouwadge
- Marathon
- Schreiber
- Terrace Bay
- Upsala

(City of Thunder Bay)



Method – Collaborative Evaluation

Northeast Only (Manitoulin-Sudbury, Cochrane)

- Analysis of program statistics
- Site visits / observations

All Four Paramedic Services

- Discussions with partners & paramedics
- Patient/caregiver survey (preliminary results)

CP Services

- **Assess and Refer** (province wide – all paramedics)
 - Use of 3-question PERIL tool to identify at-risk Seniors
 - Refer to Community Care Access Centre (CCAC)
- **Home Visits**
 - ***Paramedic-directed “ad-hoc” home visits*** (e.g. frequent users, follow-up of patients)
 - ***Referrals from Circle of Care providers***
 - » Post hospital discharge check-ups
 - » In-home assessments could include vitals; home safety assessment, falls risk assessment, mobility assessment (TUG), MMSE
- **Wellness Clinics**
 - Check ups (vitals), medication reviews, health education & promotion, referrals
 - Patient record booklet

“Informal CP”

Key learning from site visits / review meetings – (a limitation of program statistics!)

- **Rural Paramedic - Dual Role:** both paramedic *and* community member (friend/neighbor, family member)
 - Facebook friends could also be patients! Get news of patients’ health status and other needs on social media.
- **In some communities, (informal) CP is not a new activity!**
 - But seen as “just being a good neighbor” – often not recognized as CP
- **Regular informal interactions with past patients, family members**
 - Grocery store, Tim Horton’s - Receive patient updates, give information, advice
- **Much CP activity is unreported**
 - Paramedics performing CP activities, but not recognizing them as CP (such as visiting a former patient at home) → Not documented / included in stats!

Lessons Learned

- Program Challenges
- Program Opportunities
- Perceived Benefits
- Sustainability Issues

Program Challenges (1)

1. **Proximity Paradox:** CP only available for patients who live near the EMS base, yet those who live further away may have greater need.
2. **Service Interruption:** Scheduled CP activities may be interrupted by 911 calls.
3. **Informal CP:** Preferred by some paramedics, not documented
4. **Culture Change:** Paramedics must shift between “urgent reactivity” and “non-urgent proactivity.”
5. **Fairness/Equity Issues:** All regular duty paramedics have the same responsibilities, but all paramedics are not equally interested in / effective at performing CP activities.

Program Challenges (2)

6. **Paramedic-Patient Relationship:** Dual role & boundary challenges; grief when a patient passes away
7. **Transient Staffing:** High turnover in some communities can result in fewer paramedics with long-term ties to a community
8. **Limited Training:** Paramedics must have the knowledge and skills to be effective at performing CP.

Potential Solutions and Opportunities

1. **Scheduling:** Schedule extra shifts for coverage during key times of CP activities (i.e. wellness clinics or home visits to outlying areas). Requires extra funds
2. **Collaborating:** Collaborate with other providers who can continue services if paramedics are dispatched (e.g. nurses or pharmacists).
3. **Volunteering:** Paramedics may volunteer to conduct home visits, check-ins, or wellness clinics when off-duty.
4. **Resourcing:** Use paramedics on modified “light” duty to perform CP activities.
5. **Specializing:** Have a dedicated community paramedic to serve areas distant from the station.
6. **Remote Monitoring:** Expanding service with innovative technological support.
7. **Reviewing:** Regular review meetings for accountability, sharing results, program improvement, and new learning / discoveries
8. **Partnering:** Partner with First Nation community leaders to explore the possibility of implementing culturally relevant CP services.

Perceived Benefits of the Model (1)

1) Patient Benefits

- Better healthcare – new services & better access to existing services
- Improved patient-provider communication - paramedics have the time to listen and explain, facilitate communication with busy physicians who have no time → more effective care
- Practical – reduces need to travel, wait in ED
- Reassurance, social interaction, reduced anxiety (esp. for those living alone)
- Proxy support due to younger family members outmigrating for economic opportunities
- High satisfaction – paramedics are described as friendly, patient, polite, respectful, and good listeners

Perceived Benefits of the Model (2)

(2) Community Benefits

- Fills care gaps in underserved communities (very limited home care); addresses specific needs of the community
- Provides social interaction opportunities for residents
- In communities with no hospital, can reduce gaps in EMS coverage by reducing unnecessary transport to a distant ED.

(3) Health System Benefits

- More efficient use of existing skilled providers (optimize discretionary time)
- Additional health services for no/little additional cost
- Decreased utilization of 911 and ambulance services, ED & hospital admissions, physician services (if CP is effective)

Perceived Benefits of the Model (3)

4) For Paramedics

- Feedback from data/statistics & following up on patient outcomes - “Closing the loop”
- Higher utilization of skills in diverse contexts
- Increased professional satisfaction from helping patients
- More fun!

5) For Paramedicine

- Optimize discretionary time with increased utilization of on-duty paramedics
- Positive social, television, radio, & print media coverage
- Information & best practices exchange informally and at conferences and forums

Sustainability Issues

1. Funding Uncertainty

- Unspecified commitment from MOHLTC and other sources (municipalities) to continue CP funding
- Resulted in reorganization of roles, systems, and programs

2. CP Champion in a leadership or coordinator role

- Protected time for CP management duties including patient assessment and enrolment
- Review and follow-up of CP activities in communities
- Tracking, monitoring, & scheduling

3. Engaging Circle of Care Partners

- Understanding & appreciation of CP & paramedics as CoC partners
- Increasing referrals & continuous system improvement
- Allied agency cross-training

4. Adding CP to the college curriculum

Conclusion: Is it sustainable?

- **Provisionally sustainable**

- Programs using regular duty paramedics have been able to continue without new Ministry funds
- Most of the discussed solutions and desired service enhancements will require extra funding
- Possible loss of momentum without funded manager/coordinator position

What's next?

- **URGENT / IMMEDIATE focus needed on sustainability issues**
 - Interim transition planning within each paramedic service
- **Continued collaboration and support with union**
 - Ongoing dialogue and strategic/operational planning related to CP activities
- **Support ongoing research & evaluation activities**
 - Patient / caregiver survey (ongoing)
 - Paramedic Survey, Circle of Care Providers Survey (later this year)
 - Identifying “Best Practices”
 - Impact analysis (planned) – with Institute for Clinical Evaluative Sciences (ICES)

Patient Voices

“There are chronic people in the community, e.g. MS patients, stroke, etc., patients with severe mobility problems who need routine monitoring and assessment and even a renewal of prescriptions. A paramedic would be a good idea for these people, as they could be monitored and even treated at home and only have to go to the doctor if absolutely necessary.”

“I like the fact that these young men and women are so polite and caring. They take time out of their day to take my vitals and just talk about what’s going on in my life.”

“Because you can take more time, be heard, and receive a very good explanation without waiting in the emergency department.”

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