Background
- Over 25,000 Ontarians in 27 remote First Nation communities have no formal paramedicine or 911 services.1
- Studies of emergency health conditions have not been conducted in this region for nearly twenty years.2
- Lack of reliable and accessible health data is a critical problem for community health, health equity, and health program development in the remote North.

Purpose
Develop an innovative approach to data acquisition and program development to deepen our understanding of emergency health issues and community-based care in remote First Nations communities.

Methods & Results
Advance a three-pronged approach that seeks data from local, regional and international sources to aid in the development of a Community-Based Emergency Care (CBEC) system for remote communities.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Research Objective</th>
<th>Preliminary Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>International systematic review</td>
<td>Understand health effects of training laypeople to deliver emergency care in underserviced populations.</td>
<td>• PROSPERO No. CRD42014009685. • Reviewers recruited. • 6,000 articles collected.</td>
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<tr>
<td>Regional medical transport (Ornge) &amp; emergency services administrative data (James Bay Ambulance Service)</td>
<td>Understand the epidemiology of emergency health conditions in remote communities.</td>
<td>• Roughly 1 air evacuation for every 10 people per year in remote Northwestern Ontario. • Multilateral ethical and data sharing agreements in development.</td>
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<tr>
<td>Local knowledge from Windigo First Nations Council (WFNC) Communities</td>
<td>Collaborate with five WFNC communities to develop strategic plan to implement a locally relevant CBEC system.</td>
<td>• Collaborative meetings with local Health Directors. • Letters of support and resolutions received from First Nations governance organizations.</td>
</tr>
</tbody>
</table>

Anticipated Outcomes
Increased knowledge about emergency response in remote contexts

International
Summary of scientific knowledge on role of laypeople in delivery of emergency care in low-resource settings.

Regional
Understanding of burden of disease & medical emergencies in remote Northern Ontario communities.

Local
Five year strategic plan to implement CBEC in seven remote communities of Windigo First Nations Council.

References

Conclusion
- Community-based approaches can be used to overcome an information vacuum, gather new data, and develop new health programs.
- This international, regional and local approach will:
  1. Deepen our understanding of emergency care issues in remote First Nations communities.
  2. Inform emergency care practice and systems in Ontario and beyond.

Development of CBEC
Community-Based Emergency Care (CBEC) is a program to address the lack of pre-nursing station care and formal response services in remote communities.
- Most people must rely on friends and family members for essential care and transport to local nursing stations.1,2,3
- With CBEC, local community members are engaged in developing and implementing first response emergency care.4
- Pilot project in Sachigo Lake First Nation provided locally appropriate first response training and enhanced the comprehensive management of medical emergencies and community resilience.4

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