Advances in Community Paramedicine in Response to COVID-19

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INTRODUCTION

The declaration of the COVID-19 pandemic in March 2020, and the subsequent public health measures across Canada demanded a change in service delivery models from many health care professions, including paramedics. This change particularly challenged community paramedicine programs in terms of meeting the needs of most vulnerable populations.

AIM

This study sought to identify and outline community paramedicine innovations across Canada in response to the COVID-19 pandemic and on-going needs; provide evidence-informed guidance; and suggest several areas for future consideration by paramedic services.

METHODS

- We conducted a sequential, explanatory mixed methods study, and integrated data by following threads from the review results through the interview findings to inform thematic analysis.

Scoping Review

- JBI Scoping review methodology was employed. Searches were conducted from 2020 to 2021.
- Searches were conducted in CINAHL, MEDLINE, EMBASE, Google Scholar,& several websites.
- Search terms included various combinations of keywords related to "community paramedicine," "COVID-19," "pandemic," "virtual triage," "palliative care," and other terms.
- Grey literature searches excluded news reports but not official press releases. Studies in both English and French were included. Screening was conducted by two reviewers at title/abstract and full-text level via Covidence. Backward citation chasing was performed.

Stakeholder Engagement

- Semi-structured interviews were conducted virtually in order to ensure compliance with COVID-19 protocols, allow for a wide geographical participation across Canada, and reduce the risk to vulnerable population participants.
- Interviews were audio-recorded, transcribed, and thematically analysed.
- Ethics approval from the Research Ethics Board at Fanshawe College in Ontario (#21-06-01-1).
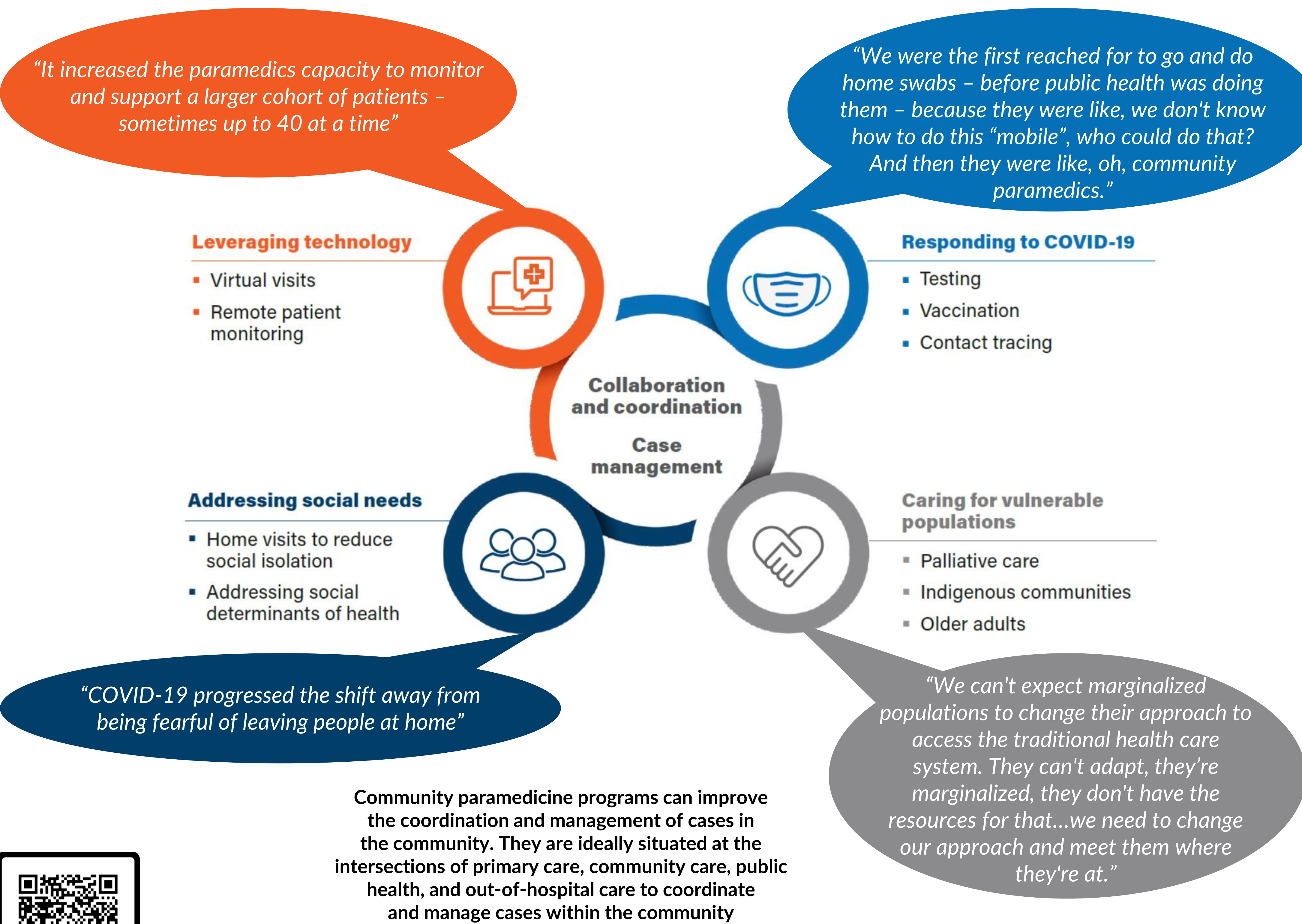
RESULTS

Scoping Review

- The search strategy identified 2,156 studies through initial searches. After removing 266 duplicates, we screened 1,890 studies and excluded 1,802. The remaining 88 underwent full-text review, during which a further 71 were rejected. An additional five documents were identified through citation chasing. Three other documents were provided by interviewees. The final 22 studies informed this study, combined with 26 grey literature sources.

Stakeholder Engagement

- We interviewed a total of ten stakeholders from diverse community care and community paramedicine settings across Canada. We interviewed participants from British Columbia, Alberta, Saskatchewan, and Ontario, as well as those representing organizations working at a federal and pan-Canadian level.

KEY FINDINGS
Community paramedicine programs have evolved to meet the needs of their communities

"It increased the paramedics capacity to monitor and support a larger cohort of patients – sometimes up to 40 at a time"

"We were the first reached for to go and do home swabs – before public health was doing them – because they were like, we don't know how to do this "mobile", who could do that? And then they were like, oh, community paramedics."

Leveraging technology
- Virtual visits
- Remote patient monitoring

Responding to COVID-19
- Testing
- Vaccination
- Contact tracing

Collaboration and coordination

Case management

Addressing social needs
- Home visits to reduce social isolation
- Addressing social determinants of health

Caring for vulnerable populations
- Palliative care
- Indigenous communities
- Older adults

"COVID-19 progressed the shift away from being fearful of leaving people at home"

"We can't expect marginalized populations to change their approach to access the traditional health care system. They can't adapt, they're marginalized, they don't have the resources for that...we need to change our approach and meet them where they're at."

Community paramedicine programs can improve the coordination and management of cases in the community. They are ideally situated at the intersections of primary care, community care, public health, and out-of-hospital care to coordinate and manage cases within the community

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