Enabling Aging in Place Promising Practices : CP@clinic

CP@clinic CP@home Health Canada Canada

McMaster University Family Medicine

The following promising practice was prepared following interviews with the McMaster Community Paramedicine (MCP) research team during the summer of 2023. Healthcare Excellence Canada (HEC) would like to formally acknowledge the generosity of

Model description

The Community Paramedicine at Clinic (CP@clinic) program is an innovative, evidence-based chronic disease prevention, management and health promotion program

c o m m rpgram wasu created by Dr. Gina Agarwal, wh

Paramedicine (MCP)R e s

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o -income olderf adults living in social housing. It is implemented in localo communities by local community paramedic services through a partnership with the MCP research team.

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The following reflects how the CP@clinic program fulfils HEC's Enabling Aging in Place program principles:

Access to specialized healthcare services – The CP@clinic program completes health assessments and connects older adults with necessary health services and community resources to enable older adults to manage health conditions and promote overall health.

Access to social and community support – The CP@clinic program reduces social isolation by offering services in communal settings, providing opportunities to connect and interact with peers and increasing self-efficacy and resiliency through education and health-management strategies.

Access to system navigation support – The CP@clinic program supports system navigation by providing information, direction and referrals to community resources and health services. If appropriate, older adults are supported with direct referral services.

Adaptive and responsive – The CP@home program is an adaptation available to older adults who cannot attend a CP@clinic session in communal spaces or where communal spaces are unavailable within the housing unit. The support offered by paramedics is responsive to individual health-assessment results and the available evidence and resources in their community.

Equitable – The CP@clinic program is provided for low-income older adults living in community housing. It provides enhanced access to preventative health services that are proportionate to the level of need among older adults living in social housing.

High value – An economic evaluation estimated that for every $1.00 spent on the CP@clinic program, the emergency care system sees $2.00 in benefits while demonstrating improved quality of life for older adults living in social housing. This means that emergency care resources, which are limited, can be reallocated and older adults are able to access the care they need.

Funding

Health Canada provides funding for the research team to sustain and scale the CP@clinic program. The Ontario Ministry of Long-Term Care (MLTC) has also provided funds to paramedic services to care for people on LTC wait lists. Paramedic services implement the CP@clinic programs as part of their community paramedicine programming. Other funding sources (for example, local municipalities), support CP@clinic implementation for other target populations, such as vulnerable sectors of the community, refugees and immigrants, and those precariously housed.

Partnerships: The CP@clinic Program has formal partnerships at this time with 28 paramedic services/authorities across Ontario and British Columbia, including:

- Brant/Brantford Paramedic Service
- British Columbia Emergency Health Services
- Chatham-Kent Emergency Medical Services
- Cochrane District Social Services Board Paramedics
- Region of Durham Paramedic Service
- Essex-Windsor Emergency Medical Services
- Frontenac Paramedic Services
- City of Greater Sudbury Paramedic Services
- Grey Country Paramedic Services
- Guelph-Wellington Paramedic Service
- Halton Region Paramedic Services
- Hamilton Paramedic Services
- Hastings-Quinte Paramedic Services
- Kenora District Services Board, Northwest EMS
- Middlesex London Paramedic Service
- Naotkamegwanning Emergency Medical Service
- Niagara Emergency Health Services
- Norfolk County Paramedic Services
- Oxford County Paramedic Services
- Peel Regional Paramedic Services
- Peterborough County-City Paramedics
- United Counties of Prescott and Russell Emergency Services
- Sault-Saint Marie Paramedic Services
- County of Simcoe Health and Emergency Service
- District of Timiskaming Social Services Administration Board
- Weeneebayko Area Health Authority Paramedic Services
- York Region Paramedic Services

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Evaluation and Impact [1]

9-11 calls: Research demonstrated that the CP@clinic program contributed to a direct reduction in 911 calls. On average, the number of monthly ambulance calls was lowered by 19–25 percent in buildings where CP@clinic programs were held compared to control buildings without the program. Recent statistics show:

- 19 percent fewer calls in the CP@clinic multi-site randomized control trials[1]
- 22 percent fewer calls in the three intervention buildings in Hamilton, ON[2]
- 25 percent fewer calls in the CP@clinic pilot study[3]

Emergency department visits: Information on the CP@clinic program's role in reducing unnecessary emergency department visits is forthcoming. The initial findings from a randomized controlled trial of 13 social housing buildings suggest a cost benefit to implementing the CP@clinic program. It is estimated that for every $1.00 spent on the CP@clinic program, the emergency care system sees $2.00 in benefits. [4]

Chronic disease risk: CP@clinic program participation has been shown to decrease blood pressure among participants with high blood pressure, a key risk factor for cardiovascular disease. In randomized control trials, 40.5 percent of participants with high blood pressure at their first CP@clinic session had their blood pressure normalized after attending several CP@clinic sessions.[5] Participants had an average decrease of 5.0 mmHg systolic and 4.8 mmHg diastolic after the 2nd and 4th sessions. This decrease was sustained across 10 or more visits.[6]

Quality of life: Research demonstrated that the CP@clinic program has improved participants' quality-adjusted life years (QALY).[7] QALY measures how well medical treatments lengthen or improve patients' lives. Improvements included self-care (for example, washing and dressing themselves), engagement in activities and improvements in pain and discomfort. These increases led to improved coping skills and increased resiliency among participants.

Program staff experience: A forthcoming paper will highlight that paramedics found their role

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Participant experience: Participants spoke highly of the program in an ethnographic study of a social housing building that implemented the CP@clinic program.[8] The following major themes emerged from the study:

- CP@clinics are filling a health care need

to assess the program's impact on key indicators such as 911 calls, hospital admissions and LTC admissions.

Key challenges

Stable funding: The main challenge faced by the CP@clinic program is the capacity of participating paramedic services. The provincial and municipal funding bodies did not fund community paramedicine during the randomized control trial. The paramedic service relied on modified-duty paramedics to administer the program, which was not sustainable. Recognizing this, the CP@clinic Team and participating paramedic services began advocating for dedicated funding from provincial and municipal governments. The call for additional funding was supported by the program's flexibility and the research evidence that showcased the CP@clinic program's efficacy.

References

[1] Agarwal G, et al. Reducing 9-1-1 emergency medical service calls by implementing a community paramedicine program for vulnerable older adults in public housing in Canada: A multi-site cluster

[7] Agarwal G, et al. Reducing 9-1-1 emergency medical service calls by implementing a community paramedicine program for vulnerable older adults in public housing in Canada: A multi-site cluster randomized controlled trial. Prehospital Emergency Care. 2019;23(5): 718-729.

[8] Brydges M, Agarwal G, Denton M. The CHAP-EMS health promotion program: a qualitative study on participants' views of the role of paramedics. BMC Health Service Research. 2016;16(435).