

Common Assessments for Repeated Paramedic Encounters

Submission date 14/09/2018	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 03/12/2018	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 18/08/2021	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background

Paramedic services have traditionally operated only in the emergency settings, responding to emergency calls for immediate medical treatment and transport to hospital. A new model of service delivery has emerged for non-emergency patient care called Community Paramedicine (CP). There are different types of CP programs that aim to reduce some of the challenges people face in accessing care. To date, each CP program usually creates and uses their own individual patient assessment instrument. The resulting differences between CP programs creates difficulties when trying to determine whether or not CP programs are successful. Our study is investigating if a standardized approach to patient assessments conducted by community paramedics in home-visit programs will better describe these patients and assist paramedics in deciding the best way to plan for the care they provide.

Who can participate?

All patients assessed by community paramedics in home visit programs. Both male and female patients may be included and must be aged 60 years and older. All patients will qualify for inclusion in the study as a participant at the time of their initial CP assessment, or as a part of their regularly scheduled follow-up visits. For the purposes of the study, all patients who are assessed in other CP programs will not be included in the study.

What does the study involve?

All participants that will be entered into the study will have a Common Assessments for Repeated Paramedic Encounters (CARPE) assessment completed. Community paramedics will complete a CARPE assessment for each patient either: at their initial appointment if they are a new client to the home visit program, or if they are an existing client of CP home visit program already, they will be assessed based on CARPE at their next available appointment. Follow-up assessments will be completed at 90 days. All participants will be assessed based on the same CARPE assessment, there are no different versions based for each paramedic service.

What are the possible benefits and risks of participating?

Patients will benefit from a common assessment that will be able to identify changes in health and social factors. Community paramedics will benefit by identifying areas for improvement or areas of concern through decision support tools that will assist in care planning. By completing

this study, paramedics will identify opportunities to improve functional decline, social isolation, loss of independence and repeated 911 emergency calls for the participating patients. Data from CARPE assessments will be useful for paramedic service administrators in evaluating CP home visit program performance. There are no risks associated with the CARPE assessment because it is completed as part of a normal assessment that paramedics are expected to complete already.

Where is the study run from?

McMaster University is coordinating the trial. The participating paramedic services with CP home visit programs are Dufferin County Paramedic Services, Hamilton Paramedic Services, Essex-Windsor EMS, Grey County Paramedic Services, Greater Sudbury EMS, County of Brant Ambulance Service and Norfolk County Paramedic Service; all are in Ontario.

When is the study starting and for how long?

October 2017 to April 2019.

Who is funding the study?

Canadian Institutes of Health Research, Health System Impact Fellow; Canadian Frailty Network; Hamilton Niagara Haldimand Brant Local Health Integration Network; Mitacs Accelerate Internship.

Who is the main contact?

Matthew Leyenaar, PhD(c). CRL-B106, 1280 Main St W, Hamilton, Ontario. (905) 525-9140, ext: 22844. leyenam@mcmaster.ca.

Study website

<https://bdg.mcmaster.ca/carpe/>

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

01510221650

Study information**Scientific Title**

Common Assessments for Repeated Paramedic Encounters (CARPE): A Pragmatic Prospective Cohort Study Protocol

Acronym

CARPE

Study objectives

As the elderly population grows, the traditional emergency paramedic role is changing to provide different way to provide care without ambulance transport to the Emergency Department. Community Paramedicine (CP) programs across Ontario assess and care for patients differently from municipality to municipality. The Common Assessments for Repeated Paramedic Encounters (CARPE) study aims to evaluate the same assessment instrument for all older patients assessed in CP home visit programs in seven different municipalities over a 9-month period. The CARPE study will provide a description of the characteristics and outcomes of community paramedicine clients across multiple jurisdictions. The purpose of this investigation is to identify common attributes within this patient population. In turn, the results will serve to assist community paramedic decision making and care planning. The study addresses the differences in care planning for "at-risk" older adults by harmonizing assessment practices.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Hamilton Integrated Research Ethics Board, 09/05/2018, 1650-D.

Permission to use the items in the CARPE assessment instrument for this study was obtained through a research license from interRAI. Given that this project involves the use of existing

data, paramedic service-specific research ethics clearance will be gained through data sharing agreements with all paramedic services.

Study design

Observational pragmatic prospective cohort study

Primary study design

Observational

Secondary study design

Cohort study

Study setting(s)

Community

Study type(s)

Screening

Participant information sheet

Participating paramedic services are employing the standardized assessment instrument as part of regular clinical practice as part of a quality improvement process. Participant information sheets are not required as patients consent to be treated by paramedics as part of their regular provision of care. Site-specific participant information sheets may be obtained from the respective sites.

Health condition(s) or problem(s) studied

Patient outcomes and clinimetric measures of geriatric patients assessed by Community Paramedics during home visit program assessments.

Interventions

The CARPE standardized assessment instrument will be tested in this study. It was developed to standardize intake assessments used by community paramedics when conducting home-visits. The CARPE assessment is designed for use with new or existing patients over the duration of the study, intended for application at intake and every subsequent 90 days. It includes severity scales, diagnostic screeners, risk scales and clinical action indicators intended to record medical, social, functional and cognitive conditions of patients and to assist paramedics in care planning and patient management. The information is collected by Community Paramedics through direct questioning, physical examination, and reviewing of patient medical notes. A 3-month time frame will be given to Community Paramedics to familiarize themselves with the assessment prior to data collection. Paramedic services will use the CARPE assessment instrument as part of normal clinical practice. Linkages with other health records will be used to identify changes in patient conditions over time.

Intervention Type

Other

Primary outcome measure

The internal, external, and convergent validity of the CARPE standardized assessment instrument with information collected at the time of the visit in CP home visit programs.

Secondary outcome measures

Difference between initial CARPE assessment and follow-up assessment at 90 days. Changes between assessments will be measured to test decision support tools embedded within the CARPE assessment instrument.

Overall study start date

01/10/2017

Completion date

01/06/2019

Eligibility

Key inclusion criteria

1. Patients enrolled in a community paramedicine home visit program with their respective paramedic service
2. Patients qualifying for inclusion may either enter as a participant at the time of an initial/first assessment or as part of a regularly scheduled follow-up visit
3. Aged 60 years or older

Participant type(s)

Patient

Age group

Senior

Sex

Both

Target number of participants

300

Total final enrolment

122

Key exclusion criteria

1. Aged 59 years or younger
2. Patients who are not assessed by a community paramedics program
3. Patients assessed by a community paramedicine program but not via a home visit program

Date of first enrolment

01/04/2018

Date of final enrolment

01/05/2019

Locations

Countries of recruitment

Canada

Study participating centre
Dufferin County Paramedic Service
325 Blind Line
Orangeville
Canada
L9W 5J8

Study participating centre
Hamilton Paramedic Service
1227 Stone Church Road East
Hamilton
Canada
L8W 2C6

Study participating centre
Essex Windsor EMS
360 Fairview Ave W, Suite 115
Essex
Canada
N8M 1Y6

Study participating centre
Norfolk County Paramedic Service
95 Culver Street
Simcoe
Canada
N3Y 2V5

Study participating centre
County of Brant Ambulance
303 Henry St
Brantford
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N3S 7R4

Study participating centre
Grey County Paramedic Services
595 9th Ave East
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Study participating centre
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Sponsor type
University/education

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ROR
<https://ror.org/02fa3aq29>

Funder(s)

Funder type
Government

Funder Name
Hamilton Niagara Haldimand Brant Local Health Integration Network

Funder Name

Mitacs Accelerate Internship

Alternative Name(s)

Mathematics of Information Technology and Complex Systems, Mitacs Canada

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

Canada

Funder Name

Canadian Frailty Network

Funder Name

Canadian Institutes of Health Research

Alternative Name(s)

Instituts de Recherche en Santé du Canada, Canadian Institutes of Health Research (CIHR), CIHR_IRSC, Canadian Institutes of Health Research | Ottawa ON, CIHR, IRSC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Canada

Results and Publications

Publication and dissemination plan

The study results will be published in the most appropriate journal identified by the authors at the time of analysis. Initial identified journals include Canadian Journal of Emergency Medicine, BMC Health Services Research, BMJ Open.

Intention to publish date

01/05/2020

Individual participant data (IPD) sharing plan

Data will be added to the Health Data Library at McMaster University. All data will be de-identified of patient characteristics but will include all coded entries from the CARPE assessment instrument. Data sharing agreements and confidentiality/non-disclosure forms have been completed for each of the participating paramedic services prohibiting further data sharing outside of the research team. Data will be held in the repository for 7 years. The datasets generated and analysed during this study will be included in the subsequent results publication

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		17/08/2021	18/08/2021	Yes	No