Reviewer’s report

Title: Rationale and methods of an Evaluation of the Effectiveness of the Community Paramedicine at Home (CP@home) program for frequent users of emergency medical services in multiple Ontario regions: a study protocol for a randomized controlled trial

Version: 0 Date: 30 Oct 2018

Reviewer: Vincent Cheng

Reviewer’s report:

This a well-written manuscript describing a pragmatic trial, which investigates and resolves frequent users of emergency medical services in Ontario regions. I only have a few comments:

1. There were a few discrepancies in patient criteria and outcomes between the NCT register and this manuscript. Please update and correct to have one consistent version.

2. The sample calculation did not take account of potential drop-outs. This study needs 522 out of 1450 patients, which is considerably high with 36% of total potential patients in the region.

3. What if most participants prefer the intervention (CP@home) and refuse to participate?

4. Page 12, Line 266: the cited reference does not contain the number for the resource savings of $1626.0 per participant. The correct reference might be Agarwal, G. 2017 BMC Emergency Medicine. doi.org/10.1186/s12873-017-0119-4

5. Page 12-14: Could the authors make the inclusion/exclusion criteria more clear: 1) if a participant makes EMS calls during the intervention phase; 2) what if a participant is hospitalised; 3) any existing/new health conditions (i.e. uncontrolled epilepsy, sickle cell disease or certain mental disorders)

6. How to prevent/eradicate the effects of CP@Clinic, which has been implemented in the same region?

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