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Title	Patient-centred innovations for persons with multimorbidity: funded evaluation protocol
Authors	Moira Stewart PhD, Martin Fortin MD; for the PACE in MM Team
Reviewer 1	Dr. Martin Dawes MBBS MD
Institution	Department of Family Practice, University of British Columbia, Vancouver, BC
General comments (author response in bold)	This is an important paper of a protocol for a patient centered intervention on people with multimorbidity. It is timely given Canada's position in health care at near the bottom of OECD countries and the increase in multimorbidity, an ageing population and increasing discrepancies in health care and outcome. The paper gives a clear description of the work to be performed and is thorough and includes sufficient detail. There are some opportunities to help the reader understand aspects of this study and why they are needed.
	1. It is not clear in the background why this is important or what has been done to address this in Canada. Many models have been tried and some data is available on evaluation but perhaps not in this mixed method approach. It should also address the point that this is a medical model delivered in the community rather than hospital or allied health professional led (if that is the case).
	2. There is little description about how care is delivered, what changes to care have been made, but there are some sentences talking about health care teams. They discuss the environmental scan but really don't describe the key elements that have been introduced. I am left wondering why the problem is important, what is the scale of the problem, and why a medical model intervention is needed. Degree of alignment was not described for the sites and no framework for the process discussed. There is not a rationale given for the use of mixed methods or even what those methods are and why they are needed as the outcomes are very unclear. I think the background needs considerable work in making a clear rationale for the study. Intuitively it feels right but the writing does not provide the level of support for the thesis. It is hard to assess what is meant by coordination with such a brief high level view.
	3. The qualitative design is presented without a defined argument for the process – what is the theoretical construct, I may have just missed this. It is also surprising not to see the patient-centered approach within the questions that are being asked. All the questions are appropriate to the qualitative approach being "what" and "how"
	4. The quantitative selection approach does not address the ethnicity issue of the population nor their deprivation index or score. Great to see both sex and gender included. The outcome measures are interesting. They do not address some of the conventional measures for disease outcomes unless I missed that – M&M, or even surrogate measures, but do include health system utilization. However, that is not really for the reviewer to focus on and is always an area of debate – the description of outcome measures is comprehensive and allows for this discussion which is the purpose of a paper. In fact it would be useful to know how the methodology was designed – steering groups etc – as this is one of very few primary care team grants.
	5. Descriptions of data analysis are described, although stratification by sex and gender seem limited. A sample size calculation is included and it is clear that the group is using individual outcomes rather than composite outcomes.
	The discussion is very brief and there is scope to compare this process with other studies in different jurisdictions. How is Canada different to other countries where this sort of work has been done, including its geography and ethnic groups. We added material requested by Reviewer #1 such as a revised Discussion section, an explicit mention of analysis by socioeconomic status.
Reviewer 2	Dr. Renee Lyons BA Med PhD
Institution	Bridgepoint Health, Bridgepoint Collaboratory for Research and Innovation, Halifax, NS
General comments (author response in bold)	Well, written and innovative research project. I liked the fact that the team is sharing the framework and methods so that others can consider this research approach in their work. The only suggestions I had were:
	 Why not have a control population? This is an experiment and the results would carry more weight. "Cognitively intact" needs a definition.
	3. Is the intervention long enough to yield results?
	4. Update the Cochrane reference to the recent updated review.
	Loved the framework and the mixed methods. This project will yield important methodological and clinical information on what works with whom. If you require the services of the best research and veal group in Canada, I would suggest Social Research and Demonstration Corporation out of Ottawa. It does experiment-based evaluation and could help you with some of the more social vs. clinical content.