Reviewer's report

Title: Using Implementation Science to Manage Complexity: Use of RE-AIM to Develop a Multi-Media Facilitation Tool for the Patient-Centered Medical Home

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Reviewer: Lawrence W. W Green

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1. Is the question posed by the authors new and well defined?
The RE-AIM model has been now widely and frequently enough applied and its applications frequently enough published that another illustration of its application is only as new as the setting, population or circumstances of the application are new. Similarly, the medical home model, as the authors acknowledge, has gained considerable traction as a model to assure greater patient-centeredness. It has been widely and frequently studied and these studies are substantially described in the published literature. What is new in this presentation by Glasgow et al is the particular application of RE-AIM to an evaluation of a particular patient-centered medical home innovation addressing some notable issues in its implementation. The innovation is based on interactive behavior change technology (IBCT) with an emphasis on self-management support.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
The methods build on the experience of the authors and many others in adapting and applying RE-AIM concepts and measurements to the assessment of interventions in health care and public health settings. A summary of the publications on such considerations in conceptualizing and measuring implementation-related outcomes using RE-AIM might help orient the reader to the importance of such concepts and measures identified by the five letters in the acronym. The reader is referred to previous applications of RE-AIM in evaluating interactive technology approaches in clinical settings and their public health reach and impact (references 20;39;40). The patient-reported measures are based on guidelines of the Society of Behavioral Medicine, with a web link provided to those guidelines.

3. Are the data sound and well controlled?
This manuscript does not present the data that will be analyzed to evaluate the innovation and its implementation, but it does present a sound discussion of the features of the intervention and how each of these can be expected to achieve greater impact one or more of the RE-AIM outcomes: reach, effectiveness, adoption by the practices, implementation by the practices and the patients, and maintenance by the practices and the patients.

4. Does the manuscript adhere to the relevant standards for reporting and data
Within the limited scope of this presentation on features of the intervention, the manuscript clearly adheres to high standards of presentation and documentation of its methods and claims of potential advantages of its innovation for implementation.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion outlines the strengths and a few limitations of the methods employed to increase reach, effectiveness, adoption, implementation, and maintenance of chronic disease interventions and patient behavior change. More limitations will likely be discovered in the full implementation and evaluation of the innovation. These, presumably, are scheduled for future publication.

6. Do the title and abstract accurately convey what has been found?
The subtitle very accurately describes the scope of the manuscript’s description of a developmental process and considerations. The title might promise too much with its suggestion that the paper encompasses a broader range of “implementation science” than the manuscript or the project actually attempts to apply. The main title, before the subtitle, also might imply more specific application of complexity theory, or complexity concepts, than is offered. The abstract fairly describes the scope of the paper.

7. Is the writing acceptable?
The writing is succinct and clear, except for the proliferation of acronyms that require the reader new to RE-AIM or any of the specific components of the innovation being studied to refer back repeatedly to their first appearance. There were at least seven such acronyms introduced in the first few pages.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

None.