

LETTER

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Response to letter to the editor

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Dear Editor,

We would like to thank you for the opportunity to respond to Dr. Glasgow's letter and clarify issues regarding our scoping review. We also want to thank Dr. Glasgow and his colleagues for taking an interest in our publication and expressing their concerns.

The focus of our scoping review was to provide clarity through the categorization of knowledge translation (KT) theories, models, and frameworks (TMFs) to help navigate the sometimes confusing and challenging field [1]. In the scoping review, we used the approach categorization definitions provided by Nilsen to categorize each original KT TMF [2]; within this framework, RE-AIM was categorized and described as an evaluation framework; and thus, following the protocol outlined in our paper, we have not mischaracterized RE-AIM. As we and Nilsen note, these categorizations are meant to be a guideline; the distinctions among the categories are imprecise and these categories are not always recognized as separate types of approaches in the literature [2]. However, this categorization provides a starting point for users attempting to search for and select KT TMFs.

We appreciate the further clarification that has been provided by Dr. Glasgow and colleagues as developers of RE-AIM on its application as a qualitative tool, its dimensions, time intervals, and how these have evolved over time with references to the subsequent publications, presentations, and the RE-AIM website. Unfortunately, the 20-year review paper on RE-AIM was

published in March 2019 after the scoping review search strategy and was not captured in the search [3]. Further, the Practical, Robust, Implementation and Sustainability Model (PRISM) was identified in the scoping review by Striffler et al. but did not fit the definition of "full-spectrum" [4]. It was therefore not included in the scoping review.

We agree that it is important to consider any subsequent iterations on KT TMFs. Papers citing further refinements to KT TMFs were captured within the limits of our search strategy and included in the relevant categories of the scoping review. To that point, the scoping review does state that there may be more updated versions of KT TMFs or variations of KT TMFs to contemplate and select from. This comment does address the issue raised by Glasgow and colleagues to ensure that readers retrieve and evaluate any subsequent papers on KT TMFs since their original publication.

We share similar goals with Dr. Glasgow and colleagues in the effort to provide further clarity to KT TMFs and their evolution over time. Dr. Glasgow and colleagues themselves have indicated that it is not possible to review the entire literature on each KT TMF. Given the depth and breadth of KT TMFs that are available to users, it may be useful to develop a "living" repository/catalog of KT TMFs that provide the seminal paper, subsequent iterations of the KT TMF, and papers that cite its application. We invite the Implementation Science community to consider the development of such a resource.

Sincerely,

Rosmin Esmail, Heather M Hanson, Jayna Holroyd-Leduc, Sage Brown, Lisa Striffler, Sharon E Straus, Daniel J. Niven and Fiona M. Clement.

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Competing interest

The authors declare that they have no competing interests.

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References

1. Esmail R, Hanson HM, Holroyd-Leduc J, Brown S, Striffler L, Straus SE, et al. A scoping review of full-spectrum knowledge translation theories, models, and frameworks. *Implement Sci.* 2020;15(1):11.
2. Nilsen P. Making sense of implementation theories, models and frameworks. *Implement Sci.* 2015;10:53.
3. Glasgow RE, Harden SM, Gaglio B, Rabin B, Smith ML, Porter GC, et al. RE-AIM planning and evaluation framework: adapting to new science and practice with a 20-year review. *Frontiers in Public Health.* 2019;7(64).
4. Striffler L, Cardoso R, McGowan J, Cogo E, Nincic V, Khan PA, et al. Scoping review identifies number of knowledge translation theories, models and frameworks with limited use. *J Clin Epidemiol.* 2018;100:92–102.

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