

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Leadership competencies for medical education and healthcare professions: population based study
<b>AUTHORS</b>	Fadil Çitaku, Claudio Violato, Tanya Beran, Tyrone Donnon, Kent Hecker and David Cawthorpe

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Professor Peter Spurgeon, Director Institute of Clinical Leadership, Medical School, University of Warwick, U.K. I have no competing interests.
<b>REVIEW RETURNED</b>	23/01/2012

The reviewer completed the checklist but made no further comments.

<b>REVIEWER</b>	Dr Thelma Quince Educational Research Associate General Practice & Primary Care Research Unit Department of Public Health & Primary Care I declare that I have no competing interests.
<b>REVIEW RETURNED</b>	01/02/2012

<b>GENERAL COMMENTS</b>	<p>I think this article is valuable because it addresses the important, but relatively neglected, issue of leadership. A systematic review of medical student attitudes towards leadership and management with which I was involved recently revealed a dearth of high quality research.</p> <p>The authors rightly point to the difficulty associated with operationalising the concept of leadership. Leadership is frequently observed but poorly defined, which makes the task of developing appropriate curriculum inputs difficult.</p> <p>The work has been well executed and is methodologically robust. I have a number of queries. Were Wagner et al's longer definitions for each item presented in the survey? It is interesting to note the similarities with Wagner et al's dimensions and I wonder the extent to which these themselves could have been adapted to fit the medical education context. In particular the removal of the "Leading others" as a separate dimension in the final model I feel is unfortunate.</p> <p>There have been other attempts to identify relevant competencies and to group these into domains, for example in the UK " Medical Leadership Competency Framework: Enhancing Engagement in Medical Leadership" 3rd Edition 2010, NHS Institute for Innovation and Improvement, University of Warwick, Coventry UK. I think this study would have benefited greatly from incorporation of these other</p>
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	<p>attempts. Competencies identified by this study unfortunately become a mix of personal qualities, skills, orientations and activities which may well reflect the reality of leadership but do little to inform curriculum development.</p>
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## VERSION 1 – AUTHOR RESPONSE

### Response to Reviewers

Reviewer: Dr Thelma Quince

1. Were Wagner et al's longer definitions for each item presented in the survey?

Answer: Yes, in our survey we used the same long definitions as did Wagner et al. Because of space considerations, we used brief descriptions in the tables. We have now included Appendix A which contains all of the Wagner et al items and an indication of which we retained in the present study and which we did not use. (See page 10 of the MS and pgs 28-31)

2. It is interesting to note the similarities with Wagner et al's dimensions and I wonder the extent to which these themselves could have been adapted to fit the medical education context. In particular the removal of the "Leading others" as a separate dimension in the final model I feel is unfortunate.

Answer: There are similarities between our study and the study of Wagner et al. We wanted to know the extent to which the 107 items of Wagner et al. would be selected by experts (all MDs and other health professionals that additionally were graduates "Master of Medical Education"), for medical education leadership. As indicated on pages 9-10 of the MS, a consensus approach was used. Four raters (80%) had to agree in order for the competency to be retained. The questionnaire was reduced to 63 competencies applicable in medical education. Inter-rater reliability for these procedures was high (80%). The reduced survey (63 items) in the present study also provides evidence of content validity, as the 63 items were chosen by experts who identified the items as important to very important.

The items of Leading Others in Wagner et al. model are found in our results as well, but are spread across several factors. If a leader demonstrates high social responsibility, innovation, self-management, task-management and justice orientation, these competencies will support him or her to efficiently lead others. (See page 15 of the MS)

3. There have been other attempts to identify relevant competencies and to group these into domains, for example in the UK " Medical Leadership Competency Framework: Enhancing Engagement in Medical Leadership" 3rd Edition 2010, NHS Institute for Innovation and Improvement, University of Warwick, Coventry UK. I think this study would have benefited greatly from incorporation of these other attempts.

This work in the UK has also resulted in a classification of "clinical leadership" competencies that are in concordance with the present findings (page 17 of the MS and page 20).

4. Competencies identified by this study unfortunately become a mix of personal qualities, skills, orientations and activities which may well reflect the reality of leadership but do little to inform curriculum development.

Of course it is true that the competencies identified by our study are a mix of personal qualities, skills, orientations and activities which does reflect the reality of leadership. These results do reflect the reality of leadership and can also contribute to pedagogy and curriculum development. The five dimensions of competencies for leadership in medical education can serve as a model. These competencies can also be used to select persons with the appropriate personal qualities for leadership roles. Additionally, curriculum can be designed to enhance and clarify these leadership competencies.