Author’s response to reviews

Title: The nexus of evidence, context, and patient preferences in primary care: postal survey of Canadian family physicians

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Emma Veitch
Assistant Editor
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Re: The nexus of evidence, context, and patient preferences in primary care: postal survey of Canadian family physicians

Dear Emma,

Thank you for the peer review of our work. We appreciate the opportunity to revise and resubmit our manuscript for further consideration for publication in BMC Family Practice. Also, we would like to thank our three reviewers--Drs. John Epling, Fred Tudiver, and Kieran Sweeney--for their insightful, constructive comments.

We have addressed the reviewers' comments in the form of a revised manuscript; the revisions are outlined on a point-by-point basis below.

Response to comments by Dr. John Epling

While we note that Dr. Epling recommended no compulsory revisions, we have addressed his four discretionary revisions.

Compulsory Revisions: none

Discretionary Revisions:

1. We agree that it would be helpful to comment on the extent to which performance on a written scenario reflects actual clinical practice and have added a brief discussion of the use of clinical vignettes in health care research. (See page 9: "We acknowledge that the clinical case vignette/simulated scenario cannot capture the breadth and complexity of actual physician behaviour. At the same time, however, the validity of the method has been demonstrated in a recent comparative evaluation study, in which the authors concluded: "Vignettes appear to be a valid and comprehensive method that directly focuses on the process of care provided in actual clinical practice" (Peabody et al., 2000). Moreover, the myriad associated advantages of the clinical vignette--convenience, low cost, absence of observer effect, ease of variable..."
manipulation—contribute to its continuing widespread use as a data collection tool (Hughes & Huby, 2002).

2. While it is true that the Evidence-Based Medicine Working Group did revise their original definition of EBM in the second version of "How to Practice and Teach Evidence-Based Medicine" (Sackett et al., 2000) and that the revised version does allude to clinical expertise and patient values we maintain that it was not until the publication of the editorial piece in the June/2002 issue of the British Medical Journal (Haynes, Deveraux, & Guyatt) that the role of patient preferences and the clinical context were explicitly emphasized in the theoretical model of EBM. The suggestion by Haynes and colleagues in the BMJ editorial that EBM might in fact be more aptly termed "research enhanced health care" is testimony both to the continuing evolution of the model and to the increasing emphasis on factors other than the research evidence (i.e., patient factors and clinical circumstances). We interpret our findings as supportive of the new definition of EBM in which research evidence is no longer the "base" but rather one factor among many to be considered in clinical decision-making.

3. The reviewer's insightful comments regarding the issue of response bias were appreciated. The suggestion that there could be "a deficiency of reflective practice" among non-respondents is an interesting possibility, and we have added it to our discussion of the representativeness of our achieved sample. (See page 8: "Present concerns regarding sampling bias and low external validity should be assuaged by the fact that our achieved sample does not differ significantly from the target sample on important demographic factors (age, gender, and practice setting); however, the possibility remains that non-respondents could differ from respondents in other respects, such as degree of reflexivity in clinical practice, model of medical training program, etc.")

4. As noted above, we agree that the use of clinical vignettes/scenarios cannot capture the breadth and complexity of actual physician behaviour; in fact, this was noted in the Conclusions section of our original manuscript. In order to address the reviewer's concern, in the revised manuscript we cite several articles demonstrating the utility of vignettes as a method for measuring clinical behaviour and we have reworded several passages to reflect the fact that we did not observe actual clinical behaviour. (See page 12: "It is important to bear in mind that the findings reported here are based not on observations of actual clinical behaviour, but rather on simulated clinical scenarios that do not by any means exhaust the possible ways in which diagnostic and treatment decisions can be influenced by patient expectations and other contextual factors.")

Response to comments by Dr. Fred Tudiver

We thank Dr. Tudiver for his suggested revisions, which we have addressed in the revised manuscript as follows:

Introduction
In response to the reviewer's comment regarding the breadth of our literature review, we have added a brief summary of the literature on the influence of physician- and patient-related factors on clinical decision-making in which we cite a number of key articles. (See page 4)

Method
Dr. Tudiver is correct in pointing out that the development of the survey instrument was not fully explained in the original manuscript. We have therefore provided additional detail in the revised manuscript. (See page 5: "The first section comprised 10 Likert-type items measuring physicians' attitudes toward the practice of EBM in primary care. These 10 items were adapted from a British postal survey of general practitioners [8], whereas the remainder of the questionnaire was developed by the authors for the purposes of the present study.")
Likewise, as requested, we have added further information to supplement the description of our analysis strategy. Our strategy regarding the "target" sample size was dependent more upon considerations of statistical power in our regression analyses than of issues pertaining to response rate. (See page 5: "In order to ensure stable estimates in multiple regression analysis, a minimum of 15 data points per predictor is preferred (Stevens, 2002). Assuming a response rate of approximately 50%, we estimated that no fewer than 400 completed questionnaires would be required. On this basis, the initial survey package was mailed to 1134 family physicians in February, 2002.")

Results
We agree that our description of the sampling procedure was vague. We have reworded this section to include the additional details requested. (See pages 4-5: "The sampling frame, which was provided by the College of Family Physicians of Canada (CFPC), comprised a computer-generated random list of 1134 family physicians. The inclusion criteria required that participants be a Certificant of the College of Family Physicians (CCFP) and in active practice at the time of study. The sample was stratified to reflect the age, gender, and rural/urban composition of the CFPC membership (n=15,000).")

We acknowledge that the response rate was low, but still maintain that we have obtained a random sample of a random sample and that our results can therefore be generalized to the CFPC membership. As suggested, we have deleted the sampling figure and replaced it with a sentence explaining the deletions from the original target sample. (See page 6: "There were 97 deletions from the 1134 in the original target sample: 63 were not practicing family medicine, 23 had moved (incorrect mailing address), and 11 were retired or on leave of absence.")

Discussion
As suggested, we have made reference to the scholarly literature on the influence of physician- and patient-related factors on clinical decision-making. In the revised manuscript, we cite a number of articles reporting on the nature of the doctor-patient relationship.

The reviewer challenges our statement that "these findings suggest the presence of a disconnect between physician attitudes and day-to-day clinical practice." While we maintain that the present results are suggestive of such a disconnect, we concur with the reviewers' observation that our findings also serve to underscore the complex nature of the doctor-patient relationship and have added a statement to that effect. (See page 8.)

Conclusions
The reviewer had no suggested revisions to this section.

Response to comments by Dr. Kieran Sweeney

While we are pleased that Dr. Sweeney found our paper to be "a professionally presented, tightly written, well organised piece of work," we are distressed by his ultimate dismissal of the study as "superficial" and not "presenting anything really new." We also find it unfortunate that the reviewer failed to provide advice or criticisms that would open the possibility of revising the paper in order to strengthen the analysis. There is an obvious philosophical difference at play that we respect.

As for the novelty of the study, a comprehensive literature review found no similar published papers. The discovery of a five-fold increase in reported ordering of screening mammography when demanded by an 80-year-old woman with congestive heart failure seems to us a striking finding, as does the observed gradient among the semantic choices (wonder, request, demand) and that 80% of Canadian family physicians reported teaching BSE, despite it being given a D rating by the most authoritative "evidence rating" body in the nation. (We believe the observed gender differences in
the teaching of BSE are noteworthy, as well).

We acknowledge the limitations of vignette studies such as ours. In the revised manuscript, we discuss the limitations of this methodology, but also cite the evidence supporting the utility of the clinical case vignette as a valid data collection tool.

At least from the standpoint of those advocating EBM, we have uncovered and quantified something important. As a clinician, I often receive demands from patients and find this to be an opportunity for dialogue and discussion, rather than being cornered. The interpretive milieu, we suppose, varies from clinician to clinician.

As for applying emergent or metaphysical evidence in clinical practice, the study is not designed to either illuminate or adjudicate this issue. Clearly, there are complexities involved in clinical practice and these issues are germane at important levels. Dr. Sweeney’s review summarizes some of the deliberations necessary to understand the issues, but fails to relate them back to the precepts of EBM with which the study is concerned. We have attempted to engage these issues in previous studies and philosophical critiques published elsewhere (including the qualitative study that compliments this survey) and we hope an ongoing discourse can be fostered.

Closing

Again, we would like to thank Drs. Epling, Tudiver, and Sweeney for their time and effort in reviewing our manuscript. We believe we have addressed their comments and suggestions and, moreover, we believe that these revisions have added greatly to the strength and quality of the work. We look forward to hearing an editorial decision on the revised manuscript in due course.

Sincerely yours,

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