Reviewer’s report

Title: From recommendation to action: Psychosocial factors influencing physician adoption of Health Technology Assessment recommendations.

Version: 1 Date: 6 January 2006

Reviewer: Susan Michie

Reviewer’s report:

General comments

This paper reports a cross-sectional questionnaire study of factors influencing intentions to implement HTA recommendations about prioritisation systems for surgery amongst ophthalmologists and orthopaedic surgeons. The use of a theoretical model of behaviour to guide questionnaire development is a strength of this study.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Title:

The title, like much of the rest of the paper, suggests that the subject of the reported study is behaviour; however, it is intention to act. Intention is a good proxy of behaviour only in some circumstances, and not when behaviour is habitual as is the case in much health professional practice (see Webb and Sheeran, in press, Psychological Bulletin)

Abstract:

The abstract does not provide a clear concise summary of the reported study. There are phrases that are expressed in very general terms e.g. “perception of conditions that facilitated the realization of the behaviour” and “different avenues to support the implementation of evidence-based practice with respect to the use of emerging health technologies and modalities of practice”; more specific content would strengthen the reporting of results. Although the study is of factors influencing intention, the study is reported as offering “a model to assess factors influencing the integration of scientific evidence from health technology assessment in to professional practice.” There are other instances in the body of the paper in which statements go well beyond the evidence reported.

Although the study aims to study factors influencing a behaviour, informed by a theory of behaviour, the paper does not describe the nature of the behaviour or behaviours. The recommendations studied are prioritization systems in two different clinical contexts. What does the recommendation say? Who is being asked to do what and how? Is this different in the two clinical contexts?

The abstract concludes that “behavioural determinants of EBP differ according to the specific technology considered.” However, these differences may not reflect the technology, but difference in age, gender and clinical experience between the two groups of clinician.

Background:

The terms in the phrase “instrumental, conceptual or symbolic” should be explained.
Description of the Study:
The study aims are described as “developing a multidimensional theoretical framework to assess the impact of HTA recommendations on decision-making at different levels of the healthcare system.” This is inconsistent with the aims described in other parts of the paper and inconsistent with the data. If the study is about theory development, decision making and different levels of the healthcare system, the case should be made.

Theoretical Foundations:
This section is quite confusing. How exactly was Triandis’ model altered, and why was this done? Although not described in the text, Figure 1 suggests that four out of seven associations predicted by Triandis’ model were tested, and a further two were added. It appears from the text that professional norm was added to the model, but this is not indicated in Figure 1, and it is not clear why the existing constructs were not adequate to incorporate this. The data are not analysed in terms of the original model or the amended model to assess whether the amendments improve prediction. Personal normative belief is described as separate to self-identity in the text, but as incorporating self-identity in the Figure.

Specific hypotheses or research questions should be presented.

Methods:
More details of the measures should be given e.g. number of items per construct, and the questionnaire should be “available from authors” to allow study replication.

Statistical analyses
Univariate analyses of associations between intention and age, gender and clinical experience are not presented, and these potentially confounding factors are not controlled for in the regression analyses. At the top of p.9, at the end of the Results section, we are told that these analyses were done: this should be stated in the Analysis section. The type of regression analysis is not described or justified. Were five independent variables entered into the analysis, even with an n of 35? A finding is reported in the analysis section “All associations were in accordance with theoretical hypotheses”, but we are not told what these hypotheses are.

Results:

There is a lack of connection between research questions set up in the Introduction, statistical analyses to address them, and the reporting of results. Presenting results by research question rather than type of analysis would increase the coherence of the paper. Tables 2 and 3 should be combined.

Discussion:

The Discussion would be improved by a tighter, more coherent structure.

There are several instances of conclusions going beyond the data e.g. that the theoretical framework can be adapted culturally (this was not tested), that the behavioural determinants differed according to context (differences may reflect demographic differences in clinicians within the study sample), and that the study proposes a strategy to measure the impact of HTA recommendations at the clinical decision-making level (it is not clear what exactly this means).

The statement that intention and behaviour are concordant ignores a large psychological literature over the last 10 years about the intention-behaviour gap. The response rate of 44% is described as “acceptable” without an explanation of what “acceptable” means. At the bottom of p.10, reference to a qualitative part of the study is made, but these data are not reported. These data should either be reported as a separate study within the paper, or reference to the data should be omitted.
Statistical review required: It would be useful to have statistical advice as to whether age, gender and clinical experience should be entered as a first step in a hierarchical regression, despite no univariate associations between these variables and the DV. Confounding effects may occur through interactions with other IVs.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.