## 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

TITLE (PROVISIONAL)	Why clinicians don't refer patents to online decision support tools:
	interviews with front line providers in the NHS.
AUTHORS	Elwyn, Glyn; Rix, Andrew; Holt, Tom; Jones, Deborah

### **VERSION 1 - REVIEW**

REVIEWER	Janice Johnston Associate Professor School of Public Health University of Hong Kong Hong Kong I have no competing interests.
REVIEW RETURNED	09-Jul-2012

THE STUDY	The participants are not described except in very general terms. What is the age, gender, years of experience of the clinical staff/patients? Who are the interviewed clinical staff? This should be in a table form. The guided interview questions should be included. How were the questions derived - ie. What informed these research questions? What is the format of the web log data. How accurate is this data? How could this data be used as an alternative outcome variable? How were patients recruited? As patients from phase 2 were not recruited - the study is incomplete and the reliability of the conclusions drawn very limited. This is a 'failed' process and as such may be very informative for future research. This should be fully discussed and the limitations clarified. The authors should provide concrete suggestions on how to improve the recruitment in future work of this type. \ How were the surveys constructed and validated? - If not validated this raises a significant scientific criticism for this study. The english language writing needs improvement. Box and table labels should provide a more clear description of the content. The title is poor and should be revised.
RESULTS & CONCLUSIONS	Given the methodological problems - the results are not able to answer the research question except in the negative and may not be
	credible. This should be fully discussed. In some qualitative papers the results and discussion sections are merged. This would be
	appropriate for this paper as the discussion section is somewhat
	repetitive of the results.
	What is credible and trustworthy in a qualitative study? This needs to be discussed here and the authors need to provide justification as to
	why the results are valid and meaningful.
	Prior research should inform the discussion of the results.

GENERAL COMMENTS	I am not sure if this is a major revision or a reject as it is unclear at
	present how the authors can address the comments above. I will
	leave this decision to the editors.

REVIEWER	Dr Kristina Bennert Senior Qualitative Researcher Department of Primary Health Sciences University of Oxford and Research Associate School of Social and Community Medicine
	University of Bristol UK
	no competing interests
REVIEW RETURNED	02-Aug-2012

THE STUDY	This is a mixed methods study reporting clinician and patient views on DESIs in six different healthcare contexts. No statistical methods were used. Instead, numbers and percentages of patients directed to DESIs, accessing DESIs and using them for >30 min are reported. The authors themselves highlight the difficulties they had in collecting qualitative interview data from clinicians and patients in a systematic fashion, so sampling was uneven and patchy. No patients were interviewed for 3 of the 6 examined contexts and no clinician views could be elicited for one condition. Exclusion/inclusion criteria are insufficiently described, e.g. not clear whether all patients referred or only those accessing/using were approached for interview, and which clinicians were approached/selected for interview and why. In the thematic analysis of the results section, quotes are mostly too short and insufficiently contextualised with the results of the overall analysis and participants are insufficiently identified to judge whether the articulated views can be regarded as representative for the health context or for clinicians'/patients' views of DESIs at large. While the study was well-designed, the poor response in my view has severely hampered the representativeness of the qualitative data obtained. However, I also agree with the authors' position that lack of interest by clinicians to be actively involved in this kind of research is itself a finding worth reporting.
RESULTS & CONCLUSIONS	The research question was adapted in light of the poor referral and response rates. The findings confirm some of the known barriers to the implementation of DESIs. However the presentation of the findings from thematic analysis of interview data in the results section is poorly presented and organised in my view. Anaysis stays descriptive and superficial and does not probe sufficiently into connections between themes. Some of the data extracts don't match well with the thematic headings under which they are discussed. For example, under theme 2: 'we already do sdm', clinicians seem to raise concerns about the extent to which genuine involvement is possible/desirable and the trade off between time spent with a tool vs time spent with clinicians. Perceptions of DESIs as complements vs replacements of consultation time would have been interesting to explore further here. Similarly, the theme 'organisational resistance' is too broad to be genuinely informative and glosses over the very different ethical and organisation concerns in different healthcare contexts that may prevent clinicians from fully emrbacing DESIs in their practice. The iauthors' interpretations in my view are not

	sufficeintly grounded in the data presented. While I realise this may be partly due to space restrictions it is probably also a consequence of trying to generalise from a wide range of different clincial perspecitves and contexts, at the cost of uncovering the more complex issues that may prevent referral and uptake of DESIs in each setting. After all, 'limited motivation' as a theme does not really explain anything! On the other hand, the amniocentesis intervention appears as a 'deviant case' with far better referral and uptake than the other interventions, so it would have been desirable to explore in greater depth what were the facilicating factors in this context. In short, I feel that by spreading their analysis very thinly across so many different healthcare contexts, the authors have robbed themselves of the chance to say something novel and more informative about barriers to the use of DESis in specific contexts. None of the themes are surprising but they are insufficeintly elaborated to form a basis for key messages about how to tackle change.
<b>REPORTING &amp; ETHICS</b>	mixed methods study - no agreed upon reporting statement
GENERAL COMMENTS	I think this is a very worthwhile and important study to publish. I have read it with great interest and hope that my comments will be helpful in sharpening the focus and explanatory power of the thematic analysis.

# **VERSION 1 – AUTHOR RESPONSE**

reviewer Johnston

1. What were the questions asked?

Response: We have clarified the questions we asked in the following paragraph:

Interviews with health professionals: After informed consent was obtained, semi-structured interviews were conducted with medical and nursing specialists responsible for implementing the intervention at each clinic. The respondents were asked their views about the web-based patient decision support and whether they had referred patients to them, we asked about the role they might play in their work. Interviews were conducted at the start, mid-point and end of the pilots, audio-recorded and transcribed. Results from the evaluation of the first phase led to a change of focus for the evaluation of the second phase.

2. Concern re patient data and recruitment.

Response: We agree that the data from patients is not as clear and we have therefore removed all mention of patient level data in this article.

3. The English language writing needs improvement. Box and table labels should provide a more clear description of the content.

Response: We have edited the paper to improve and have added clearer labels on box and tables.

4. The title is poor and should be revised.

#### Response: We have changed the title to:

Why clinicians don't refer patents to online decision support tools? Interviews from front line clinics in the NHS.

5. Other issues raised.

Response: We feel the reviewer has not appreciated that this was a pragmatic evaluation of a rapidly introduced set of NHS Direct web based tools. We were able to conduct qualitative semi-structured interviews with 57 NHS staff and the data are derived from these interviews. Coupled with the low patient visits to the online tools, we are confident that we are representing the challenges of implementing web-based decision support tools for patients.

Response to reviewer Bennert that there was low uptake of the intervention and that patient recruitment was lacking.

1. I also agree with the authors' position that lack of interest by clinicians to be actively involved in this kind of research is itself a finding worth reporting.

Our response: we agree – and especially as they were volunteer clinics. The reaction in clinics that did not self-select to take part in such studies might be even more challenging. We do not now mention the patient level data and agree that is not robust enough to be included.

2. The research question was adapted in light of the poor referral and response rates. The findings confirm some of the known barriers to the implementation of DESIs. However the presentation of the findings from thematic analysis of interview data in the results section is poorly presented and organised in my view. Anaysis stays descriptive and superficial and does not probe sufficiently into connections between themes. Some of the data extracts don't match well with the thematic headings under which they are discussed. For example, under theme 2: 'we already do sdm', clinicians seem to raise concerns about the extent to which genuine involvement is possible/desirable and the trade off between time spent with a tool vs time spent with clinicians. Perceptions of DESIs as complements vs replacements of consultation time would have been interesting to explore further here. Similarly, the theme 'organisational resistance' is too broad to be genuinely informative and glosses over the very different ethical and organisation concerns in different healthcare contexts that may prevent clinicians from fully emrbacing DESIs in their practice. The iauthors' interpretations in my view are not sufficiently grounded in the data presented. While I realise this may be partly due to space restrictions it is probably also a consequence of trying to generalise from a wide range of different clinicial perspecitives and

contexts, at the cost of uncovering the more complex issues that may prevent referral and uptake of DESIs in each setting.

Our response: We have worked to tie the themes to the data. See examples in para below that show that the clinicians believe they are already providing patients with the opportunity to be engaged in decisions. Parallel literature from the patient perspective indicates clearly that patients do not share these views and wish to have both more information and more involvement in dec

### Theme 2 'We already do shared decision making'

The interviews revealed a widely held belief that decisions were already shared with patients and that this was occurring without the need for patient decision support. As one nurse commented, "I don't know how much more they could be involved [in decisions]" (antenatal screening nurse, clinic 7). An antenatal specialist stated that: "... we moved away from the patriarchal ideal of telling people what to do 20 years ago" (specialist, clinic 7). Many clinicians espoused the view that: "... you wouldn't replace the time you spend with patients by giving them a decision tool ... and the shared decision making process ... isn't dependent on having this kind of tool" (breast care nurse, clinic 4).

After all, 'limited motivation' as a theme does not really explain anything! On the other hand, the amniocentesis intervention appears as a 'deviant case' with far better referral and uptake than the other interventions, so it would have been desirable to explore in greater depth what were the facilicating factors in this context. In short, I feel that by spreading their analysis very thinly across so many different healthcare contexts, the authors have robbed themselves of the chance to say something novel and more informative about barriers to the use of DESis in specific contexts. None of the themes are surprising but they are insufficiently elaborated to form a basis for key messages about how to tackle change.

Our response: We have worked to give our analysis more depth and have included more relevant quotes. We disagree that we are not saying anything novel. Very few studies have reported real life efforts to implement web-based tools (we have reviewed them all (article under review) and cite that in this new version.

REVIEWER	Dr. Kristina Bennert
	Senior Qualitative Researcher
	Health Experiences Research Group,
	Department of Primary Health Care,
	University of Oxford,
REVIEW RETURNED	15-Oct-2012

#### **VERSION 2 – REVIEW**

GENERAL COMMENTS	Lenioved reading the revised version of this manuscript My
GENERAL COMMENTS	I enjoyed reading the revised version of this manuscript. My impression is that taking out the patient interview data has helped to streamline the paper without reducing the persuasiveness of its key points. In the results section, I agree that the paragraphs illustrating each of the analytic themes are much improved and I have no further comments on any others sections of the paper. My only issue remains with the theme titles as I feel they are currently not as elucidating as they could be. I therefore make the following suggestions for adapting them (page 7): Theme 1: Replace "limited motivation to use patient decision support" with "Misperceptions about the purpose of patient decision support" As the analysis points out, clinicians seem to perceive DESIs mainly in terms of additional info for patients and don't seem to appreciate their role in supporting the development of value-based preferences - that MAY be one reason why they lack motivation to refer patients to DESIs, as –linking to points made under Theme 2 and Theme 4–
	they believe that giving info to patients may be better done by the clinician in the consultation (P7, line 27) and that patients' having more info won't make their decisions any easier(P8, line 10/11).
	Theme 2: Replace "we already do shared decision-making" with "Belief that DESIs are tangential to SDM" Actually, I do like the theme title in its current form as it so closely echoes the typical clinician response, but the point that this is kind of barrier is mainly about a lack of imagination of how DESIs could comfortably fit into the existing consulting process should be given more emphasis in my view.
	Theme 3: Replace "Perceived patient barriers to involvement in decision-making" with "Assumptions about patients' ability and motivation to access DESIs" and "Assumptions about patients' involvement preferences" This theme really includes two subthemes, both relating to clinicians' assuming rather than checking patient preferences and abilities.
	Theme 4: Replace Organisational resistance to patients' involvement in decision making" with "???" Again, there seem to be two subthemes under this heading: one relating to organisational pressures or barriers (e.g. lack of time, needing a decision quickly) and the other relating to a lack of true clinical equipoise from the clinicians' point of view (linking to Mulley, Trimble & Elwyn's recent King's Fund report on "preference misdiagnosis"), and thus a perception of reduced need for supporting patients in adequately considering all treatment
	alternatives. These are my suggestions only and I obviously don't want to dictate any precise wording. I also realise that my suggestions for rephrasing the theme title are quite clunky, and hope the might be able to improve their linguistic elegance while maintaining the precision. I hope my comments will not be perceived as nit-picking, but feel that that care needs to be taken to get these headings as precise as possible as they might be the headings that future work citing this paper will be quoting as the key barriers to clinicians referring their patients to DESIs. As such, I think it important to differentiate the underlying issues as clearly as possible on the basis of the presented analysis.

We considered the reviewer's suggestion and have made changes to the titles of the themes. We have not followed the suggestions entirely but made adjustments that we feel are consistent with the data from the interviews on file.