# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

#### ARTICLE DETAILS

TITLE (PROVISIONAL)	What do women and healthcare professionals expect of decision
	aids for breast cancer screening? A qualitative study in France.
AUTHORS	Amélie, Aïm-Eusébi; Ruelle, Yannick; Frèche, Bernard; Houllemare, Mélanie; Bonillo, Aurélie; Bouaziz, Laurie; RAT, Cédric; Gocko, Xavier; Cerisey, Catherine; Aubin-Auger, Isabelle; ferrat, emilie

#### VERSION 1 – REVIEW

	The University of Queensland, Surgery
REVIEW RETURNED	27-Nov-2021
GENERAL COMMENTS	I cannot see an Ethics Committee approval. The research question is well answered - It is to explore themes of acceptability of a Decision Aid. The Decision Aid is used where there is equipoise in decision making. I'm not sure that the "negative" side of the equation is addressed in questioning the participants, and how acceptable they found this. I cannot see from the discussion whether the "harms" of screening are discussed. From the attached DA figures, there seems to be this issue addressed - but not in the paper? the concept of "over diagnosis" does not seem to be addressed. Other countries may have similar aids -how is this one superior? Otherwise, it seems to prove what it set out to prove - thematic input into the acceptability of a decision aid from professionalstakeholders and consumers

REVIEWER	Rue, Montserrat University of Lleida, Basic Medical Sciences
REVIEW RETURNED	04-Dec-2021

GENERAL COMMENTS	General comment The study aimed at exploring women's and healthcare professionals' expectations of a decision aid (DA) for breast cancer screening in France. The information was obtained from semi- structured individual interviews to 40 participants, 13 women and 27 health professionals. The response of the participants was positive to the use of DA, although the lack of familiarity with shared decision making or other factors may limit its use.
	In my opinion, studies like this are needed to ensure that women and health care professionals receive reliable information that will allow them to weigh the benefits and harms of breast cancer screening and also to have a tool to start conversations for Shared

Decision Making (SDM). I think that the study was well designed and well done, but there is lack of information in relation to some aspects of qualitative studies.
Specific comments
Abstract and article summary No changes suggested.
I would include "decision aid" instead of "decision support" as a keyword
Strengths and limitations of the study OK
Introduction
1) I suggest updating the breast cancer incidence data. Now breast cancer is the leading cause of cancer incidence in the world. https://gco.iarc.fr/today/data/factsheets/cancers/20-Breast-fact-sheet.pdf
2) I suggest adding the systematic review by Marmot MG, Altman DG, Cameron D, Dewar J, Thompson SG, Wilcox M. The benefits and harms of breast cancer screening: an independent review. British Journal of Cancer. 2013;108: 2205–2240. doi:10.1038/bjc.2013.177
Methods
In the study strengths and limitations section (Discussion and summary) the authors state that they complied with the Consolidated Criteria for Reporting Qualitative Research (COREQ) throughout the study. Nevertheless, I do not see reported some of the criteria listed in COREQ.
For example in the Study design section, the authors say "The team of investigators was composed of eight researchers trained to lead interviews and perform qualitative analysis All semi-structured interviews were led by an investigator." The authors should have specified: - Who did the interviews - If the interview guide was pilot tested - If data saturation was discussed. The authors say that data sufficiency was achieved. How did they know? - In the interview guides, adverse effects of screening were not mentioned. Did they appeared only when the DA were provided?
In the Participant sampling section, the authors mention that diversification criteria were applied. Can the authors specify what diversification criteria were used? The characteristics that appear in Table 1? Or were these characteristics collected "a posteriori"?
The authors say that nobody refused to participate. It is surprising to me that all the invited participants accepted. How was the invitation process?
Results
Tables

	Table 1: I would use a decimal point instead of decimal comma. In gender, I would delete the Male row and write Female N (%) in the Female row. What does "Practices" mean? The previous mammography and the history of breast cancer can be presented in one line each. Example: Previous mammography use (Y/N) 8/5. In the interview duration (Table 1) indicate the time units.
	I would include the verbatim sentences in tables, under the main themes.
	Discussion It surprises me that the adverse effects of screening are hardly mentioned in the study. Maybe French women already have knowledge about them. That was not the case in Spain. The authors mention that when the SDM concept was explained, some women thought it was of value. I think that if the interviewers had introduced adverse effects of screening to women (overdiagnosis or false positive results), most women would have understood the need for SDM. I suggest that the authors discuss what views emerged about benefits and adverse effects of screening, when they DA were given to women.
	<ul> <li>Bibliography</li> <li>Some references have errors:</li> <li>Reference 3: What does InVS mean? Santé Publique France should be mentioned at the beginning.</li> <li>Besides references 4 and 5, a systematic review such as the one from the UK independent panel by Marmot et al, could be cited.</li> <li>References 6, 8, 10 and 12: Do not capitalize each word.</li> <li>References 9 and 17 are the same. Reference 9 is better written than reference 17.</li> <li>Reference 18: number of authors should be reduced.</li> </ul>
	Supplementary material Fine.

REVIEWER	Eden, Karen
	Oregon Health and Science University
REVIEW RETURNED	11-Dec-2021
GENERAL COMMENTS	General Comments:
	This article is novel in that addresses an important problem of understanding
	expectations of women and clinicians of a breast cancer screening decision aid in
	France. Additionally, the investigator's explored expectations related to breast cancer,
	diagnosis, and screening. The future decision aid development process would follow the IPDAS.
	In the course of the interviews, participants were shown published decision aids. It
	would be helpful to know which decision aids were shown as these vary considerably.
	Additionally, adding citations to the decision aids would help the reader understand if
	the selected decision aids have been shown effective at better informing patients.

nationt knowledge or improving the decision making process. It
would also help the
reader understand the context of some of the quotations. There is
a large number of
a large number of
inages from the decision alds used in the study in the appendix. Is
It possible to embed
the figures hear the quotes that are in reference to them? without
this context it is hard
to know what the quote means.
While the purpose is to create a decision aid in French, will BMJ
readers be able to
follow the French language in the images?
The introduction refers to older evidence. "Even though the results
of large,
randomized, controlled trials have highlighted a significantly lower
breast cancer
mortality rate among women undergoing regular mammogram
screening [4, 5] the riskbenefit balance is subject to debate [6, 7]."
There are many more recent articles by
Heidi D. Nelson (2015 and later) that would reduce/eliminate this
debate
It is not clear what ago group this study is to represent and shared
desision making
differe by any group. The outhers should be clear shout the are
differs by age group. The authors should be clear about the age
group when they
discuss shared decision making. The women who participated
appeared to be from a
large age group. The USPSTF has evidence-based
recommendations that differ by age
group (40-49; 50-74). For 40-49, the shared decision making is
around whether to
begin before age 50. For those 50-74, the shared decision making
is around whether to
screen yearly or every 2 years. It is not clear throughout which age
group comments
are in reference to. Any future decision aid that is designed should
be tailored by age
group.
There is discussion about presenting asymmetric information so as
to convince women
to screen. The authors should instead consider presenting the
evidence in plain
language and framing the decision by the age group. The decision
for women whe are
101 WOMEN WID die 50.74 jan <sup>2</sup> t really about whether to acroon it is about how often to
50-74 isn't really about whether to screen, it is about now often to
screen (yearly vs
every 2 years.)
Finally, the tools that the group evaluated likely are designed for
women at average risk.
Women who are at increased risk would be misled if they used a
tool for women at
average risk. There is no mention of risk assessment prior to use a
decision aid that is
designed to prompt shared decision making around whether to
screen. This could be a
limitation to the current approach.
Specific comments:
Page 9, lines 8-10; Please provide more details about the
examples of decision aids
shown and citations of the decision aids

Page 14, line 15: Provide context to why a women commented, "I wouldn't let them
read this by themselves, because It's scary. What was shown that prompted this
comment? Some tools are designed for use with a clinician and others are designed for
patients to use themselves prior to a visit. Can the images in the Appendix be used to
show the reader what the participants saw when they made the comment?
Throughout, healthcare vs health care. It would be best to pick one and be consistent
throughout.
Throughout, the authors use the word, "harmonise". Does this
mean to create a
standard practice for all clinicians?

## **VERSION 1 – AUTHOR RESPONSE**

Reviewer: 1 Dr. Chris Pyke, The University of Queensland Comments to the Author:

I cannot see an Ethics Committee approval: We have added the written agreement of the ethics committee in the supplementary files.

The research question is well answered - It is to explore themes of acceptability of a Decision Aid. Thank you.

The Decision Aid is used where there is equipoise in decision making. I'm not sure that the "negative" side of the equation is addressed in questioning the participants, and how acceptable they found this. I cannot see from the discussion whether the "harms" of screening are discussed.

You are right; we have not highlighted this point enough in our article.

We added the information "before" or "after the presentation of the tools" after the verbatim to clarify this point.

We completed the paragraph in the "Comparison with the literature data" section in discussion: "In our study, the perception of screening seems to be modified by the presentation of the tools. Indeed, participants tend to cite the harms of screening more often after the tools have been presented to them. On the contrary, the presentation of the tools may have strengthened some participants in their conviction that screening was essential and its value indisputable. These data are consistent with the literature."

Data from the literature show that women exposed to DAs feel more knowledgeable, better informed, and clearer about their values. We detailed them below:

"When compared with standard care in a broad variety of decision contexts, women exposed to DAs feel more knowledgeable, better informed, and clearer about their values; as such, they probably have a more active role in decision-making and a more accurate perception of risks.[12] Breast cancer screening DAs are known to improve levels of knowledge and promote informed decisions.[18] For this reason, DAs do not necessarily increase screening participation rates.[19] For example, the large-scale Decideo study of breast cancer screening demonstrated that exposure to the DA reduced the participation rate by almost 2% because the women felt better informed.[20] The above-mentioned Spanish qualitative study found that the provision of information on overdiagnosis is controversial among healthcare professionals.[16] An Australian study about overdetection in breast

cancer screening recommended a staged approach to development and piloting of decision aids to further improve understanding of overdetection and support informed decision-making about screening.[21] The creation and deployment of a DA tool must therefore be accompanied by training for healthcare professionals on SDM."

From the attached DA figures, there seems to be this issue addressed - but not in the paper? The concept of "over diagnosis" does not seem to be addressed.

Indeed we have clarified this point, which was not explicit enough in our article. Participants did talk about the benefits and risks of screening in the interviews.

In the interview guide we discussed the concept of over diagnosis after presenting the DA figures: Interview guide women (Table S1):

Q5. "Were you already aware of this information about the advantages and risks?"

Q7. "Do they help you to understand not only the advantages but also the risks associated with screening?"

Interview guide GP (Table S2):

Q5. "Do they help you to better understand not only the advantages but also the risks associated with screening?"

We added a paragraph in "Disagreements about the tool: balanced or biased information?" of the result section:

"Opinions on breast cancer screening

The participants pointed out the sub-optimal effectiveness of breast cancer screening because of the harm associated with overdiagnosis and overtreatment.

"What surprised me was the ability to diagnose something that wasn't there and treat someone who didn't need it." (Woman 12, before the presentation of the tools)

"I am devastated by the results of the mammogram. Despite the double reading which I was inclined to give credit to..." (GP 3, before the presentation of the tools)

On the other hand, overtreatment could be seen as acceptable either because it applies to small tumours treatment or because it could save lives.

"They are cared for anyway, it's not useless..." (Woman 9, after the presentation of the tools)

"I don't play the game of overdiagnosis. [...] Honestly, I don't believe in overdiagnosis." (Radiologist 3, before the presentation of the tools)

Sometimes it is even difficult for professionals to distance themselves from their personal experience.

"If it's someone in my family or even me personally, I'd rather know about something and do a biopsy for nothing" (Gynaecologist 4, before the presentation of the tools).

Some participants considered the benefit-risk balance favourable, while others found it questionable. In this second case, the attitudes towards the tool differed according to the participants."

Other countries may have similar aids -how is this one superior?

Our tool is probably not better than those existing in other countries but it is adapted to the organization of care in France and to French cultural and cognitive aspects.

We added this sentence in the main document in section "Implications for clinical practice" of discussion:

"Our results should help to create an appropriate, added-value tool for use in this field and adapted to French context."

Otherwise, it seems to prove what it set out to prove - thematic input into the acceptability of a decision aid from professional stakeholders and consumers Thank you for your remark.

Reviewer: 2 Prof. Montserrat Rue, University of Lleida, IRBLLEIDA Comments to the Author:

## General comment

The study aimed at exploring women's and healthcare professionals' expectations of a decision aid (DA) for breast cancer screening in France. The information was obtained from semi-structured individual interviews to 40 participants, 13 women and 27 health professionals. The response of the participants was positive to the use of DA, although the lack of familiarity with shared decision making or other factors may limit its use.

In my opinion, studies like this are needed to ensure that women and health care professionals receive reliable information that will allow them to weigh the benefits and harms of breast cancer screening and also to have a tool to start conversations for Shared Decision Making (SDM). I think that the study was well designed and well done, but there is lack of information in relation to some aspects of qualitative studies.

Thank you for your comments.

Specific comments

Abstract and article summary No changes suggested.

I would include "decision aid" instead of "decision support" as a keyword Thank you for your suggestion; we changed it in the main document.

Strengths and limitations of the study OK

Introduction

1) I suggest updating the breast cancer incidence data. Now breast cancer is the leading cause of cancer incidence in the world. https://gco.iarc.fr/today/data/factsheets/cancers/20-Breast-fact-sheet.pdf

Thank you for the reference. We updated the article.

2) I suggest adding the systematic review by Marmot MG, Altman DG, Cameron D, Dewar J, Thompson SG, Wilcox M. The benefits and harms of breast cancer screening: an independent review. British Journal of Cancer. 2013;108: 2205–2240. doi:10.1038/bjc.2013.177 Thank you for the reference, we added it in the introduction. In the study strengths and limitations section (Discussion and summary) the authors state that they complied with the Consolidated Criteria for Reporting Qualitative Research (COREQ) throughout the study. Nevertheless, I do not see reported some of the criteria listed in COREQ. The COREQ list is completed in the supplementary files.

We added a sentence on this subject in the method section of the article:

"The method referred to the criteria listed in COREQ throughout the work."

For example in the Study design section, the authors say "The team of investigators was composed of eight researchers... trained to lead interviews and perform qualitative analysis... All semi-structured interviews were led by an investigator." The authors should have specified:

- Who did the interviews

Thank you for your vigilance. We specified which investigator led each different interviews in section "Study design" in methods:

"MH and AB led women's interviews; AB and MH led GP's interviews and LB led healthcare professionals' interviews."

- If the interview guide was pilot tested:

Yes it was. We specified it more precisely in the main text in section "Data collection" of Methods part: "A woman with history of breast cancer helped to build the interview guide of women's and GP's groups and pilot tested it. The interview guide evolved during the study (Supplementary Tables S1 to S4)."

In addition, we specified in the article that the interview guide evolved throughout the study in method section:

"The interview guide evolved during the study."

- If data saturation was discussed. The authors say that data sufficiency was achieved. How did they know:

We specified how we achieved the data sufficiency in section "Data analysis" of methods:

"Data collection was achieved for each kind of participants after two interviews without new codes."

- In the interview guides, adverse effects of screening were not mentioned. Did they appeared only when the DA were provided?

We chose not to mention it directly to the participants so as not to influence their thoughts and they spontaneously mentioned it during the interviews even before presenting the DA tools. When the DA was provided, the topic was often brought up again. In the interview guide we discussed the concept of over diagnosis after presenting the DA figures:

Interview guide women (Table S1):

Q5. "Were you already aware of this information about the advantages and risks?"

Q7. "Do they help you to understand not only the advantages but also the risks associated with screening?"

Interview guide GP (Table S2):

Q5. "Do they help you to better understand not only the advantages but also the risks associated with screening?"

In the Participant sampling section, the authors mention that diversification criteria were applied. Can the authors specify what diversification criteria were used? The characteristics that appear in Table 1? Or were these characteristics collected "a posteriori"?

Yes, the criteria that were used are specified in Table 1 "Characteristics of the study participants" in Results section. Diversification criteria were discussed with the research team for all participants and

were completed during data collection. Age and location were important to explore different expectations and access to the healthcare system. For the women: previous history of breast cancer and screening and educational were identified to suggest different attitudes of screening. For the other healthcare professionals, gender appeared to be crucial for different attitudes. We added this sentence in the section "Participant sampling" of Methods:

"Diversification criteria were discussed with the research team for all participants and were completed during data collection (Table 1). »

The authors say that nobody refused to participate. It is surprising to me that all the invited participants accepted. How was the invitation process?

Yes, you are right. Snowball sampling was a good way to engage the participants.

We added this sentence in the "Study strengths and limitations" part of the discussion:

"Fifthly, nobody refused to participate to the study; we think that snowball sampling was a good way to engage participants."

Results

Tables

Table 1: I would use a decimal point instead of decimal comma. Thanks you for your awareness. We changed for the decimal comma.

In gender, I would delete the Male row and write Female N (%) in the Female row. We changed in the table in the way you suggested.

What does "Practices" mean? It is to refer to doctor's offices.

The previous mammography and the history of breast cancer can be presented in one line each. Example: Previous mammography use (Y/N) 8/5.

Thank you for your proposal. We changed in in the table in the way you suggested.

In the interview duration (Table 1) indicate the time units. The time units are minutes and seconds. We mentioned it in the table and we deleted the seconds.

I would include the verbatim sentences in tables, under the main themes. Thank you for bringing up this discussion. We have chosen to illustrate the themes and ideas within each theme with the verbatim sentences just below. We found that both uses were possible in the review, so we have chosen to keep the original presentation.

Discussion

It surprises me that the adverse effects of screening are hardly mentioned in the study. Maybe French women already have knowledge about them. That was not the case in Spain. The authors mention that when the SDM concept was explained, some women thought it was of value. I think that if the interviewers had introduced adverse effects of screening to women (overdiagnosis or false positive results), most women would have understood the need for SDM. I suggest that the authors discuss what views emerged about benefits and adverse effects of screening, when they DA were given to women.

Indeed we have clarified this point, which was not explicit enough in our article. Participants did talk about the benefits and risks of screening in the interviews. We added the information "before" or "after the presentation of the tools" after the verbatim to clarify these results.

We added a paragraph in "Disagreements about the tool: balanced or biased information?" of the result section:

"Opinions on breast cancer screening

The participants pointed out the sub-optimal effectiveness of breast cancer screening because of the harm associated with overdiagnosis and overtreatment.

"What surprised me was the ability to diagnose something that wasn't there and treat someone who didn't need it." (Woman 12, before the presentation of the tools)

"I am devastated by the results of the mammogram. Despite the double reading which I was inclined to give credit to..." (GP 3, before the presentation of the tools)

On the other hand, overtreatment could be seen as acceptable either because it applies to small tumours treatment or because it could save lives.

"They are cared for anyway, it's not useless..." (Woman 9, after the presentation of the tools)

"I don't play the game of overdiagnosis. [...] Honestly, I don't believe in overdiagnosis." (Radiologist 3, before the presentation of the tools)

Sometimes it is even difficult for professionals to distance themselves from their personal experience.

"If it's someone in my family or even me personally, I'd rather know about something and do a biopsy for nothing" (Gynaecologist 4, before the presentation of the tools).

Some participants considered the benefit-risk balance favourable, while others found it questionable. In this second case, the attitudes towards the tool differed according to the participants."

We discussed these opinions that emerged when the tools were given to participants. We clarified this point in the "Comparison with the literature data" section of the discussion:

"In our study, the perception of screening seems to be modified by the presentation of the tools. Indeed, participants tend to cite the harms of screening more often after the tools have been presented to them. On the contrary, the presentation of the tools may have strengthened some participants in their conviction that screening was essential and its value indisputable. The latter found it questionable to tell women about the adverse effects of screening as this could reduce their motivation to undergo screening. These data are consistent with the literature. When compared with standard care in a broad variety of decision contexts, women exposed to DAs feel more knowledgeable, better informed, and clearer about their values; as such, they probably have a more active role in decision-making and a more accurate perception of risks.[12] Breast cancer screening DAs are known to improve levels of knowledge and promote informed decisions.[18]"

## Bibliography

Some references have errors:

- Reference 3: What does InVS mean? Santé Publique France should be mentioned at the beginning. It means « Institut de Veille Sanitaire ». We added the meaning in the references of the main text. The InVS became Santé Publique France since they wrote this document. We added the name of the latter at the beginning of the reference.

- Besides references 4 and 5, a systematic review such as the one from the UK independent panel by Marmot et al, could be cited.

Thank you for the reference, we added it in the introduction.

- References 6, 8, 10 and 12: Do not capitalize each word. We corrected these references.

- References 9 and 17 are the same. Reference 9 is better written than reference 17. Thank you for your vigilance, we deleted the reference 17.

- Reference 18: number of authors should be reduced. We reduced the number of authors to three.

Supplementary material Fine.

Reviewer: 3

General Comments:

This article is novel in that addresses an important problem of understanding expectations of women and clinicians of a breast cancer screening decision aid in France. Additionally, the investigator's explored expectations related to breast cancer, diagnosis, and screening. The future decision aid development process would follow the IPDAS.

In the course of the interviews, participants were shown published decision aids. It would be helpful to know which decision aids were shown as these vary considerably.

You are totally right; we forgot to reference the DAs.

DA 1 was an extract from the leaflet published by the Cochrane, updated in 2012. DA 2 was used in Canada and published in 2011 by the Canadian Task Force. DA 3 was a document published in Decideo study. Dr Jean-Baptiste Blanc created DAs 4 and 7 from Cochrane data (DA 4) and from a document produced by the US National Cancer Institute Division of Cancer Prevention (DA 7). DA 5 was published in the French journal Prescrire DA 6 was created by the editors of the website "Hard to swallow" based on the Cochrane and an article from Prescrire.

We referenced the tools in the method section of the main text.

In the supplementary files, in Table S4, we added the reference of each tool after it.

Additionally, adding citations to the decision aids would help the reader understand if the selected decision aids have been shown effective at better informing patients, patient knowledge or improving the decision making process.

Our objective was to explore women's and healthcare professionals' expectations of a breast cancer screening DA. We did not explore the improvement of their knowledge after the presentation of the DA. We cannot therefore answer your legitimate question; another work would be interesting to answer it.

It would also help the reader understand the context of some of the quotations. There is a large number of images from the decision aids used in the study in the appendix. Is it possible to embed the figures near the quotes that are in reference to them? Without this context it is hard to know what the quote means.

Yes, it would surely have been clearer that way; we embed the number of the figure near the quote that is reference to it. We added the information "before" or "after the presentation of the tools" after the verbatim to clarify these results.

While the purpose is to create a decision aid in French, will BMJ readers be able to follow the French language in the images?

You are totally right; we inserted the tools in their original versions when it was English, in the appendix instead of their translation in French. For the French language tools, we included them in their original language as they were intended to be catalysts for reflection on the future tool created and not to obtain a specific critique of the tool presented.

The introduction refers to older evidence. "Even though the results of large,randomized, controlled trials have highlighted a significantly lower breast cancer mortality rate among women undergoing regular mammogram screening,[4, 5] the risk-

benefit balance is subject to debate.[6, 7]." There are many more recent articles by Heidi D. Nelson (2015 and later) that would reduce/eliminate this debate.

Thank you for the reference, we integrated them in the main text. Even if the debate is currently less lively concerning the benefit-risk balance of breast cancer screening, we believe that the shared medical decision remains interesting around this issue. In this regard, a public consultation on breast cancer screening took place in 2015 on the evolution of breast cancer screening in terms of how the benefit/risk balance of screening will ultimately be assessed. The proposals for change included the establishment of a more personalised pathway, based on information for women (Institut National du Cancer (InCa). Rapport du comité d'orientation sur la concertation citoyenne et scientifique sur le dépistage du cancer du sein. Sept 2016.

file:///Users/Amelimelo/Downloads/Depistage%20cancer%20sein%20-

%20rapport%20concertation%20-%20sept%202016.pdf)

REVIEWER

This is a French reference, an institutional report, grey literature, which is why we have not included it in the main text. If you think it is useful we can add it.

It is not clear what age group this study is to represent and shared decision making differs by age group. The authors should be clear about the age group when they discuss shared decision making. The women who participated appeared to be from a large age group. The USPSTF has evidence-based recommendations that differ by age group (40-49; 50-74). For 40-49, the shared decision making is around whether to begin before age 50. For those 50-74, the shared decision making is around whether to screen yearly or every 2 years. It is not clear throughout which age group comments are in reference to. Any future decision aid that is designed should be tailored by age group. There is discussion about presenting asymmetric information so as to convince women to screen. The authors should instead consider presenting the evidence in plain language and framing the decision by the age group. The decision for women who are 50-74 isn't really about whether to screen, it is about how often to screen (yearly vs every two years). Your discussion on age limits is very interesting. In the breast cancer screening DA currently being created, the age limits will be indeed integrated. The aim of our study was to collect the expectations of women of all age groups about the form and type of information they wanted to find in this DA. Now that we know what kind of information users want and how to distribute it, we build the tool taking into account the age limits.

We added a sentence in the "Implications for clinical practice" section of the discussion: "The future tool will allow adapting the information according to the age group of the patient."

Pvke, Chris

	The University of Queensland, Surgery
REVIEW RETURNED	07-Feb-2022
GENERAL COMMENTS	All of the concerns from my previous review have been addressed
REVIEWER	Rue, Montserrat
	University of Lleida, Basic Medical Sciences
REVIEW RETURNED	22-Jan-2022

## VERSION 2 – REVIEW

GENERAL COMMENTS	Thanks for including my suggestions to the new version of the manuscript. Just a very minor comment and one correction.
	Comment: In the interview duration (Table 1) now the time units (minutes) are specified. I would indicate them in the first column, but , for simplicity, I would not include them in all the cells of the row.
	Correction: In the References section, reference 26 is empty. The following reference numbers need to be corrected.

## **VERSION 2 – AUTHOR RESPONSE**

Reviewer: 1 Dr. Chris Pyke, The University of Queensland Comments to the Author: All of the concerns from my previous review have been addressed.

Thank you very much. We are delighted to have been able to respond to all your comments.

Reviewer: 2

Prof. Montserrat Rue, University of Lleida, IRBLLEIDA Comments to the Author: Thanks for including my suggestions to the new version of the manuscript. Just a very minor comment and one correction.

Comment:

In the interview duration (Table 1) now the time units (minutes) are specified. I would indicate them in the first column, but , for simplicity, I would not include them in all the cells of the row.

Thank you for your suggestion. You are totally right, it's much clearer this away. We changed it in Table 1.

Correction:

In the References section, reference 26 is empty. The following reference numbers need to be corrected.

In our document the reference 26 (which is now number 27 because we added one reference before) is not empty. It's:

27. Hersch J, Jansen J, Barratt A, et al. Overdetection in breast cancer screening: development and preliminary evaluation of a decision aid. BMJ Open 2014 25;4(9):e006016. We hope it will be visible in the new revised version.