PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Assessing the relevance and implementation of patient-centeredness from the patients' perspective in Germany: Results of a Delphi study
AUTHORS	Zeh, Stefan; Christalle, Eva; Hahlweg, Pola; Härter, Martin; Scholl, Isabelle

VERSION 1 – REVIEW

REVIEWER	Max Bell Karolinska Institutet, dept of Physiology and Pharmacology. Karolinska University Hospital, institution of Perioperative Medicine and Intensive Care
REVIEW RETURNED	02-Jul-2019

GENERAL COMMENTS	This is a laudable attempt at describing the relevance and implementation of patientcenteredness from (and this is the point) the patients' perspective. I like this study; it shows that PC is important, and *what parts* of PC that needs to be honed, focused on etc. To be transparent: my research and clinical work focuses on ICU patients, and the Karolinska ICU follow-up clinic is where I've encountered these issues; I expect that physicians/researchers active in other fields of medicine have more experience with regards to these issues. As an intensivist, we do not get to talk to the patients for a very long time - when they are healthy enough to engage in conversation they (usually) will be discharged. However, in the ICU outpatient follow-up clinic - at around three months post ICU we do meet the patients and their next of kin. My only criticism is this: I would have liked the authors to try and discuss if their findings are generalizable in a pan-European setting. My concerns is that the average LOS in Germany is way longer than in Sweden (and much longer than in all of Scandinavia and actually longer than in almost all other countries). This should probably be discussed, but should not alter the conclusions too much. My other concern has to do with a lack of questions regarding the pro/cons of care: I would have hoped for questions in the line of: "if you were to be sick again - would to want to have the same treatment?". What I'm getting at is that we as clinicians would be helped by getting insight into the pain/suffering/non-well-being that is associated with hospital care. I do understand that it is too late to address these issues in this study, but it might be suitable for further research?

REVIEWER	Carolyn Wallace University of South Wales/ PRIME Centre Wales, Wales.
REVIEW RETURNED	08-Jul-2019

GENERAL COMMENTS	Thank you for the opportunity to read this interesting paper. The abstract needs further attention to reflect the content of the paper, especially the conclusion which is different to the conclusion within the paper. L19-2 states that there were no major differences between sub groups. This needs further clarification to reflect the type of subgroups analysed and include a sentence on inability to analyse sub-samples. P3, L46-47 state that the assessment and evaluation of PC in healthcare from patient perspective is missing and P3, L53-56- state that what patients consider important about PC is missing. However the study aim doesn't focus on this aspect but on relevance and current degree of implementations. This aspect needs to be addressed and you may find it in the literature. A major limitation of this paper is that the model used is based on a literature review conducted in 2012, some 7 years ago. Since then there have been some interesting and important studies conducted for example Santana et al (2017) who developed a conceptual framework with a patient partner. Whilst it is acknowledged that the current concept in this paper may not have been developed in Germany and patient's were asked if anything was missing, a review of the original model and its dimensions needs to be included. Preferably this should have been completed before engaging in the Delphi process. The preferred phrases in recent years are 'person-centred' or 'people-centred' as opposed to patient-centred with the view that the concept is a 360 degree view of the person. Take a look at the WHO Framework on integrated people-centred health services https://www.who.int/servicedeliverysafety/areas/people-centred-care/en/ Consequently the type of databases used for the original review and so used for developing the original concept needs to also include databases such as ASSIA and Social Care Online. P4, L73.74 I wonder why the authors did not use a process of co-production with the patients and so including them in the research team's patient adaptation of the scientific model? As opposed to assuming that they are able to translate it into a version 'comprehensible to patients'. After all, this would have reflected some of the dimensions included in the original model and acknowledging that only patients are able to develop person-centred language used in a person-centred concept. In addition P5, L123-124 I wonder why the team didn't include patients in data analysis and interpretation? Again if this is to become a person-centred perspective then the people themselves need to be involved in those processes. Table 1, L60 'others' please could the authors include a description of this large group of identified other chronic diseases L252 In the conclusion the first line about patient perspectives needs to include relevance and implementation. This conclusion does not reflect the conclusion in the abstract.

REVIEWER	Oleksa Rewa Department of Critical Care Medicine University of Alberta

	CSB 2-124 8440 112th St NW Edmonton, AB T6G 2B7 CANADA I have received consulting honoraria from Baxter Healthcare Inc.
REVIEW RETURNED	19-Aug-2019

GENERAL COMMENTS	Zeh et al. have conducted an elegant 2 round Delphi process for to assess different dimensions from of PC from patients' perspective in Germany. However, several points need to be addressed prior to being acceptable for publication: Major 1. A Delphi process is meant to converge on the 'correct' answer after a certain amount of rounds. In this study, there were 2 pre-specified rounds, regardless of if the Delphi process 'converged' on the correct answer. While the authors comment on the reason that they choose 2 rounds, can the authors comment on the circumstances and their strategy of potentially continuing the Delphi process if the results did not 'converge on the correct answer?' 2. Can the authors include the supplementary reporting for the study? 3. The authors should comment on the generalizability of the study. One of the strengths is the broad reaching scope of patient recruitment (i.e., advertisements, social media, etc). However, this is a German study and certain characteristics important to the German population may not be translatable to other populations (i.e., Asian, North American, etc) and should be discussed. Minor 1. Can the authors comment on Ethics approval prior to the study?

REVIEWER	Marilia Silva Paulo Institute of Public health, College of Medicine and Health Sciences, United Arab Emirates University
REVIEW RETURNED	20-Aug-2019

GENERAL COMMENTS	The authors conducted a modified Delphi study to investigate the patient-centeredness relevance and implementation in Germany. Although the study was well conducted and I do not have any major concerns regarding the contents of the study, it can be improved and better detailed in some specific subheadings. Strengths and limitations of the study – please develop the sentences to provide the reader with more details on what you mean. Introduction – The introduction in brief and explain the patient-centeredness concept. Although I would like to know about the Germany context for the implementation of this concept. What is the theory/model behind the German health system? Are there any national, regional, local recommendations for the implementation of patient-centered models? Methods – I would recommend the use of CREDES (Conducting and REporting DElphi Studies guidelines) to report the present study. A flow-chart will help to illustrate the Delphi rounds. Page 3, line 64-64 – Patients were not able to discuss, perhaps to vote, share, their opinion? Page 4, line 74 – Please consider to change “interactions” by “meeting, discussion, brains storms”.

	Page 4, line 76 – What is the reason for the cognitive interviews? To validate your data collection tool? If yes, please expand on it, how it was done and provide the reader with a clear definition of why did you chose or named cognitive interviews. Page 4, Delphy study section – please reorganize the information by chronological order, the use of CREDES will help to report systematically the events. Page 4, line 94 – Did the patients receive their own median score? And the overall median score? Please detail this process. Page 5 – Please detail how the participants reached out to you, di you provide them with a website link on the adds that you shared on local stores and newspapers? Page 5, line 112 – how did they provide informed consent? Was it sent by mail with the data collection tool? How the participants that did not sign informed consent were dealt? Page 5, line 123-125 – I suggest that some of the information about the project should be added at the end of the introduction following the German health systems context. Page 7, 164-173 – can you interpret the results for the reader? What does it mean? Page 9, subgroup analysis – why there is a differentiation between Hamburg and all Germany in Table 1? Shouldn't it be in subgroup analysis? Is it just per convenience? Or there is any specificity or plan to study specifically Hamburg health care services? Page 9, Discussion, first paragraph – what does the literature say? Any similar studies? Page 9, Discussion – Please discuss the response rates. Page 9, Discussion – Are there any specific recommendations for the German health system? Any specific future studies. Best of luck.

VERSION 1 – AUTHOR RESPONSE

Reviewer #1
I like this study; it shows that PC is important, and *what parts* of PC that needs to be honed, focused on etc. To be transparent: my research and clinical work focuses on ICU patients, and the Karolinska ICU follow-up clinic is where I've encountered these issues; I expect that physicians/researchers active in other fields of medicine have more experience with regards to these issues. As an intensivist, we do not get to talk to the patients for a very long time - when they are healthy enough to engage in conversation they (usually) will be discharged. However, in the ICU outpatient follow-up clinic - at around three months post ICU we do meet the patients and their next of kin.

Thank you very much for the kind words and the acknowledgement.

My only criticism is this: I would have liked the authors to try and discuss if their findings are generalizable in a pan-European setting. My concerns is that the average LOS in Germany is way longer than in Sweden (and much longer than in all of Scandinavia and actually longer than in almost all other countries). This should probably be discussed, but should not alter the conclusions too much.

Thank you for pointing this out. Indeed, health care systems differ not only in Europe, but globally (e.g. lengths of stay, role of government, coverage, organization of the delivery system (Eurostat, 2018; Commonwealth Fund, 2017). Therefore (and in accordance with the comments of reviewer #4), we adapted the limitations accordingly: "Furthermore, it is unclear if the results are generalizable to other countries. Since health care systems differ substantially between countries (e.g. role of government, coverage, organization of the delivery system, lengths of stay) [20,31] patients' perspective on PCC might also differ. Further research is needed to evaluate the patients' perspective in other countries."

My other concern has to do with a lack of questions regarding the pro/cons of care: I would have hoped for questions in the line of: "if you were to be sick again - would to want to have the same treatment?". What I'm getting at is that we as clinicians would be helped by getting insight into the pain/suffering/non-well-being that is associated with hospital care. I do understand that it is too late to address these issues in this study, but it might be suitable for further research?

Thank you for this important clinical comment. It is indeed too late to address it in this particular study, but we agree that it is an important aspect and we will keep it in mind for our future research.

Reviewer #2
The abstract needs further attention to reflect the content of the paper, especially the conclusion which is different to the conclusion within the paper.

Thank you for your feedback. We revised the abstract and specifically its conclusion:

Objective
Patient-centeredness (PC) has particularly grown in relevance in health services research as well as in politics and there has been much research on its conceptualization. However, conceptual work neglected the patients' perspective. Thus, it remains unclear which dimensions of PC matter most to patients. This study aims to assess relevance and current degree of implementation of PC from the perspective of chronically ill patients in Germany.

Methods
We conducted a Delphi study. Patients were recruited throughout Germany using community-based strategies (e.g. newspapers and support groups). In round one, patients rated relevance and implementation of 15 dimensions of PC anonymously. In round two, patients received results of round one and were asked to re-rate their own results. Participants had to have at least one of the following chronic diseases: cancer, cardiovascular disease, mental disorder, or musculoskeletal disorder. Furthermore, patients had to be at least 18 years old and had to give informed consent prior to participation.

Results
226 patients participated in round one, 214 patients in round two. In both rounds, all 15 dimensions were rated highly relevant, but currently insufficiently implemented. Most relevant dimensions included "patient safety", "access to care" and "patient information". Due to small sizes of sub-samples between chronic disease groups, differences could not be computed. For the other subgroups (e.g. single disease vs. multi-morbidity), there were no major differences.

Conclusion
This is one of the first studies assessing patient-centeredness from patients' perspective in Germany. We showed that patients consider every dimension of PC important, but currently not well implemented. Our results can be used to foster patient-centered health care delivery and to develop patient-reported experience measures to assess patient-centeredness of health care in Germany.

L19-2 states that there were no major differences between sub groups. This needs further clarification to reflect the type of subgroups analyzed and include a sentence on inability to analyze sub-samples.

Due to the word count, we cannot include every subgroup comparison in the abstract. However, we added a sentence in the abstract, explaining that analyses were unfeasible: “Due to small sizes of sub-samples between chronic disease groups, differences could not be computed. For the other subgroups (e.g. single disease vs. multi-morbidity), there were no major differences”.

P3, L46-47 state that the assessment and evaluation of PC in healthcare from patient perspective is missing and P3, L53-56- state that what patients consider important about PC is missing. However the study aim doesn’t focus on this aspect but on relevance and current degree of implementations. This aspect needs to be addressed and you may find it in the literature.

We discussed how to best consider your suggestion. Unfortunately, we are not sure if your comment results from a misunderstanding (we used the terms “important” and “relevant” synonymously) or not. For the case that your comment just refers to those two terms, we replaced the terms „important“ / “importance” with the terms „relevant“ / “relevance” throughout the whole manuscript. For the case that your comment does not solely refer to different terms, please see below:
Although we consider your concern very important, we think that assessing relevance and current degree of implementation of different aspects of PC are the first steps in achieving our goal. As you mentioned, our goal was to get an insight into what patients consider important. We achieved that with letting patients rate relevance. Additionally, the first assessment of PC in health care from the patients’ perspective was to ask them how they would rate the current degree of implementation. Nonetheless, in order to use your thoughtful comment, we added in the introduction: “Assessing relevance and current degree of implementation of different aspects of PC can therefore be seen as the first steps in achieving a more patient-centered health care.” .

A major limitation of this paper is that the model used is based on a literature review conducted in 2012, some 7 years ago. Since then there have been some interesting and important studies conducted for example Santana et al (2017) who developed a conceptual framework with a patient partner. Whilst it is acknowledged that the current concept in this paper may not have been developed in Germany and patient’s were asked if anything was missing, a review of the original model and its dimensions needs to be included. Preferably this should have been completed before engaging in the Delphi process.

Thank you for your comment. As the framework by Santana et al. was published in November 2017, we were not able to consider it in this study, as our preparations for the development of the lay version had already started at this time point. We definitely agree with you that, within the last years, there are interesting developments in the field of PCC. Nonetheless, the scope of our study, which started 5 years (not 7 years) after said literature review by Scholl and colleagues (2014), was not to complete the model by another literature review, but instead to add another perspective to this model, namely the patient perspective. This does indeed mean, that we cannot guarantee that the latest frameworks on PCC are included. Instead, we focused on making this state of knowledge available to patients so we could ask them for their opinion and also ask them to complete the model where they felt, that we were missing something with our rather scientific perspective.
To address your comment, we added the following information to the limitation section:
“Additionally, as our study focused on adding the patient perspective to the concept of patient-centered care, we based our study on the integrative model of patient-centeredness, which integrates over 400 definitions and models published between 1969 and 2012 [12]. We did not take into account further conceptual work published since (e.g. the framework developed by Santana and colleagues [30]) which can be considered a limitation of this study.”

The preferred phrases in recent years are ‘person-centred’ or ‘people-centred’ as opposed to patient-centred with the view that the concept is a 360 degree view of the person. Take a look at the WHO Framework on integrated people-centred health services
https://www.who.int/servicedeliverysafety/areas/people-centred-care/en/

Thank you for that input. Indeed, both terms are being used in the literature. Sometimes, they are even used synonymously (Louw et al., 2017; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5675925/) and both converge around central ideas (Eklund et al., 2019; https://www.sciencedirect.com/science/article/pii/S0738399118306232). In particular, it is interesting that patient- and person-centered care share the same themes while person-centered goals revolve around a more meaningful life, patient-centered goals focus more on a functional life. Thus, the similarity between the two terms is evident. However, we introduced the term "patient-centeredness" to our participants in the first place and we consider the a posteriori change of terminology from "patient-centered" to "person-centered" difficult. Therefore, we would like to keep our term (especially, because the terms share the exact same themes). Nevertheless, we added a more precise description to address this aspect:
"Over the last years, the concept of patient-centeredness (PC) has been widely discussed. More and more, the terms person-centeredness [1,2] and people-centeredness [3] also appear in the literature, either being used synonymously to patient-centeredness or converging around central ideas."

Consequently the type of databases used for the original review and so used for developing the original concept needs to also include databases such as ASSIA and Social Care Online.

As we discussed above, the focus was not to complete the model by scientific literature, but rather to add the patient perspective to the already existing model by Scholl and colleagues. Therefore we are afraid, we were not able to include the aforementioned databases.

P4, L73.74 I wonder why the authors did not use a process of co-production with the patients and so including them in the research team's patient adaptation of the scientific model? As opposed to assuming that they are able to translate it into a version 'comprehensible to patients'. After all, this would have reflected some of the dimensions included in the original model and acknowledging that only patients are able to develop person-centred language used in a person-centred concept. In addition P5, L123-124 I wonder why the team didn't include patients in data analysis and interpretation? Again if this is to become a person-centred perspective then the people themselves need to be involved in those processes.

You mention extremely important points, thank you for providing us the possibility to address this. We involved patients in the adaptation of the scientific model by interviewing them in order to develop a comprehensible patient version. However, we agree that this was rather at a lower level of patient participation in research and that our study could have benefitted from a higher level of co-production. This is a limitation of our study and we therefore, amended the limitation section as follows: "Finally, another limitation of our study was the relatively low level of co-production with patients. As patients are recipients of PCC, this study could have benefitted from a higher level of patient participation (e.g. [32])."

Table 1, L60 'others' please could the authors include a description of this large group of identified other chronic diseases

We revised the footer of Table 1. However, listing every other chronic disease (group) would inflate the footer. We thus included the rest with the frequencies in an online supplement: "Other chronic diseases included for example diabetes (n = 12), sleep apnea (n = 5) and hypothyroidism (n = 4). Please see the online supplement S1 for a comprehensive overview of other diseases.

L252 In the conclusion the first line about patient perspectives needs to include relevance and implementation. This conclusion does not reflect the conclusion in the abstract.

Yes, thank you for that suggestion. We agree. We adapted accordingly (and in concordance with the adaptation above): “In summary, our study provides the patients’ perspective on PC by assessing relevance and current degree of implementation and enriches therefore current conceptualizations of PC. We showed that patients consider every dimension of PC important, but currently not well implemented. (…) Furthermore, these results can be used for developing comprehensive questionnaires like patient-reported experience measures regarding patient-centered care.”

Reviewer #3
Zeh et al. have conducted an elegant 2 round Delphi process for to assess different dimensions from of PC from patients' perspective in Germany. However, several points need to be addressed prior to being acceptable for publication:

Thank you for your feedback, we appreciate it.

Major
1. A Delphi process is meant to converge on the 'correct' answer after a certain amount of rounds. In this study, there were 2 pre-specified rounds, regardless of if the Delphi process 'converged' on the correct answer. While the authors comment on the reason that they choose 2 rounds, can the authors comment on the circumstances and their strategy of potentially continuing the Delphi process if the results did not 'converge on the correct answer?'

Indeed, we pre-specified the rounds because we estimated, compared to results from other studies (e.g. Zill et al. (2015) or van Rijssen et al. (2019)) and recommendations (Hasson et al. (2000) and Jünger et al. (2017)), that the ‘converged’ answers should be perceivable after two rounds. However, if we had seen major discrepancies after two rounds, we could have performed another round, if necessary. Therefore, we added: “Like Zill and colleagues [14] or van Rijssen and colleagues [25], we planned to perform two rounds prior to conducting the first round. However, if we had seen major discrepancies after two rounds, we would have performed another round, if necessary.”

2. Can the authors include the supplementary reporting for the study?

We do not understand what you mean by „supplementary reporting“. Please clarify.

3. The authors should comment on the generalizability of the study. One of the strengths is the broad reaching scope of patient recruitment (i.e., advertisements, social media, etc). However, this is a German study and certain characteristics important to the German population may not be translatable to other populations (i.e., Asian, North American, etc) and should be discussed.

We agree and revised the discussion as follows: “Furthermore, it is unclear if the results are generalizable to other countries. Since health care systems differ substantially between countries (e.g. role of government, coverage, organization of the delivery system, lengths of stay) [20,31] patients’ perspective on PCC might also differ. Further research is needed to evaluate the patients’ perspective in other countries.”. Please see also response to comment 2 of reviewer #1.

Minor
1. Can the authors comment on Ethics approval prior to the study?

Of course we sought ethics approval prior to the start of data collection and added this information to the revised manuscript: “The study had been approved by the Ethics Committee of the Medical Association Hamburg (study ID: PV5724) prior to the start of data collection.”

Reviewer #4
The authors conducted a modified Delphi study to investigate the patient-centeredness relevance and implementation in Germany. Although the study was well conducted and I do not have any major concerns regarding the contents of the study, it can be improved and better detailed in some specific subheadings.

Thank you very much for your review.

Strengths and limitations of the study – please develop the sentences to provide the reader with more details on what you mean.

We extensively revised this section, also in relation to suggestions by reviewer #1 and #3:

Major strengths of this study are the diverse sample from all over Germany and the possibility to anonymously generate a group consensus by performing a Delphi study. By doing so, ratings of each individual weren't affected by dominant people in group discussions, and therefore, are more likely to be unbiased. Furthermore, another strength of this study are the response rates indicating little drop out from round one to round two. This could be ascribed to the internal motivation of participating patients to ameliorate health care services in Germany. Another explanation could be the financial compensation, which they only received after having completed both rounds. Nonetheless, there was little variation within ratings of relevance of the dimensions of PC. This could indicate a lack of specification in the descriptions. Patients might have been unable to differentiate between sub-aspects of a single description. Thus, they might have rated the whole dimension as relevant even if they considered only some parts relevant enough to give a high score. Therefore, additional qualitative approaches (e.g. by conducting semi-structured interviews) could help to enrich findings and further explain results by specifying relevant aspects instead of broad dimensions.
Furthermore, it is unclear if the results are generalizable to other countries. Since health care systems differ substantially between countries (e.g. role of government, coverage, organization of the delivery system, lengths of stay) [20,31] patients' perspective on PCC might also differ. Further research is needed to evaluate the patients' perspective in other countries. Another limitation of our study was the relatively low level of co-production with patients. As patients are recipients of PCC, this study could have benefitted from a higher level of patient participation.
Regarding future studies or specific recommendations, policy makers or other stakeholders, interested in fostering patient-centered health care, should therefore not only focus on the ratings of relevance of experts but consider the patients rating, too. In their opinion, every dimension of patient-centeredness is relevant. These results should not be neglected. When implementing patient-centered care, a wholesome perspective is therefore needed.

Introduction – The introduction in brief and explain the patient-centeredness concept. Although I would like to know about the Germany context for the implementation of this concept. What is the theory/model behind the German health system? Are there any national, regional, local recommendations for the implementation of patient-centered models?

According to your suggestion, we added a brief section describing the health system in Germany: "It is a system in which, health care coverage is universal, mandatory and offers extensive services. Government delegates decision-making powers to self-regulated organizations of payers and providers. While outpatient care is mainly delivered in one- or two-physician practices on a fee-for-service payment model, hospitals mainly deliver inpatient care on case-based payment model [20,21]."
We already cited the publication by Härter et al. (2017), which illustrates the long way of patient-centered health care in Germany. To adhere to your suggestion, we also added the following information to the revised manuscript: "In Germany, the Law on Patients' Rights [5] mandates certain

aspects of patient-centered care, like the right for comprehensible and comprehensive patient information. However, there is no national recommendation for the implementation of patient-centered care in Germany yet."

Methods – I would recommend the use of CREDES (Conducting and REporting DElphi Studies guidelines) to report the present study. A flow-chart will help to illustrate the Delphi rounds.

We agree and we added a flow chart illustrating the procedure: "In Figure 2, an overview illustrates the procedure".

Page 3, line 64-64 – Patients were not able to discuss, perhaps to vote, share, their opinion?

We are not sure how to interpret your comment. If you wanted us to replace the term "discuss" with another term like "vote" or "share", we revised the sentence as follows: "This procedure generates the possibility for participants to share their opinion from different regional locations without the threat of some participants dominating the discussion [17]". Or did you criticize the fact that patients were not able to discuss? If so, here is our response to that issue:
Unfortunately, they were not. One of the biggest advantages of Delphi studies is the possibility to share an opinion/rating anonymously without being dominated by other participants. Therefore, we decided that patients should not be able to discuss or vote with direct interaction. See also: "This procedure generates the possibility for participants to discuss their opinion from different regional locations without the threat of some participants dominating the discussion [17]. It aims to reach high group consensus through a structured and anonymous group discussion."

Page 4, line 74 – Please consider to change "interactions" by "meeting, discussion, brains storms".

There seems to be a misunderstanding. We wrote "iterations" in the manuscript instead of "interactions". Do you still suggest to change the word "iterations"?

Page 4, line 76 – What is the reason for the cognitive interviews? To validate your data collection tool? If yes, please expand on it, how it was done and provide the reader with a clear definition of why did you chose or named cognitive interviews.

The reason for the cognitive interviews was to test comprehensibility, as we mentioned: "We then tested comprehensibility of the new version through cognitive interviews with patients". We wanted to know whether the description of our model was understandable for patients and we asked them to rephrase the model in their own words as described: "Participants were asked to read each dimension step by step and explain in their own words how they understood the description.". Is the reasoning in the original manuscript clear enough or do you want us to emphasize more on the goal of the cognitive interviews?

Page 4, Delphy study section – please reorganize the information by chronological order, the use of CREDES will help to report systematically the events.
Thank you for providing this helpful guideline. We followed the guideline thoroughly and we saw that some of the 16 aspects could still be made more explicit. We made the following revisions:

"Like Zill and colleagues [14] or van Rijssen and colleagues [25], we planned to perform two rounds prior to conducting the first round. However, if we had seen major discrepancies after two rounds, we would have performed another round, if necessary."
"Conducting the Delphi study as well as reporting of methods and results were based on the

recommendations of Hasson and colleagues [18] as well as of Jünger and colleagues [28].”
“Since no member of the research team had direct contact with participants, the possibility of having influenced the participants’ judgements was reduced.”
“In Figure 2, an overview illustrates the procedure.” (see above for the new Figure 2 which is the flow-chart)
“Consensus was defined as the degree to which patients rated dimensions in agreement and was predefined as reached if it was higher than 50%. That means that consensus was reached when at least 50% of the patients rated dimensions to be very or not very relevant (tertile from 7 to 9 or 1 to 3, respectively).”

Page 4, line 94 – Did the patients receive their own median score? And the overall median score? Please detail this process.

We rephrased according to your suggestion to the following: “In the second round of the Delphi study, patients received their own ratings from the first round again. Furthermore, we gave them the median rating of other participants in comparison. Following, we then asked participants to repeat their rating.”.

Page 5 – Please detail how the participants reached out to you, di you provide them with a website link on the adds that you shared on local stores and newspapers?

We added the following information: “Participants could reach out to SZ and EC with the contact information provided on the notices and in the emails.”.

Page 5, line 112 – how did they provide informed consent? Was it sent by mail with the data collection tool? How the participants that did not sign informed consent were dealt?

We added the following information: “Participants were included if they gave their informed consent by signing the informed consent letter (mail version) or by choosing „yes“ in a dropdown menu after a question whether they consent (online version)”.

Page 5, line 123-125 – I suggest that some of the information about the project should be added at the end of the introduction following the German health systems context.

We amended the final part of the introduction as suggested: “This Delphi study was conducted as part of the study “Assessment of patient-centeredness through patient-reported experience measures (ASPIRED)” [22]. Within the study ASPIRED, a patient-reported experience measure will be developed to foster patient-centered care.”

Page 7, 164-173 – can you interpret the results for the reader? What does it mean?

We added the following sentences for better understanding: “In general, every dimension of round 1 was rated as very important and as insufficiently implemented. Furthermore, patients were united in their rating because of the high consensus”.

Page 9, subgroup analysis – why there is a differentiation between Hamburg and all Germany in Table 1? Shouldn’t it be in subgroup analysis? Is it just per convenience? Or there is any specificity or plan to study specifically Hamburg health care services?

We wanted to show that a substantial part of the participants was not from Hamburg in Table 1. We adapted the Table and included frequencies for every federal state of Germany.
Residence

Hamburg
Baden-Wuerttemberg
North-Rhine Westphalia
Rhineland-Palatinate
Saarland
Saxony
Saxony-Anhalt
Schleswig-Holstein
Thuringia
Bavaria
Berlin
Brandenburg
Bremen
Hesse
Mecklenburg-Western Pomerania
Lower Saxony
59 (26.1 %)
13 (5.8%)
23 (10.2%)
3 (1.3%)
3 (1.3%)
13 (5.8%)
4 (1.8%)
10 (4.4%)
1 (0.4%)
22 (9.7%)
14 (6.2%)
11 (4.9%)
4 (1.8%)
14 (6.2%)
19 (8.4%)
13 (5.8%)

Page 9, Discussion, first paragraph – what does the literature say? Any similar studies?

Unfortunately, there are not any similar studies published in Germany. Our study has been the first of its kind. Therefore, a comparison to the already existing literature is impossible.

Page 9, Discussion – Please discuss the response rates.

As the high response rates represent a strength, we added: “Response rates indicate little drop out from round one to round two. This could be ascribed to the internal motivation of participating patients to ameliorate health care services in Germany. Another explanation could be the financial compensation, which they only received after having completed both rounds.”

Page 9, Discussion – Are there any specific recommendations for the German health system? Any specific future studies.

We added a specific recommendation: Regarding future studies or specific recommendations, policy makers or other stakeholders, interested in fostering patient-centered health care, should therefore not only focus on the ratings of relevance of experts but consider the patients rating, too. In their opinion, every dimension of patient-centeredness is relevant. These results should not be neglected.

When implementing patient-centered care, a wholesome perspective is therefore needed. For the specific future studies, we already had written the following sentence in the section "Strengths and limitations": "Therefore, additional qualitative approaches (e.g. by conducting semi-structured interviews) could help to enrich findings and further explain results by specifying relevant aspects instead of broad dimensions". Does this suffice?

Reference list
1 Louw JM, Marcus TS, Hugo JFM. Patient- or person-centred practice in medicine? - A review of concepts. African J Prim Heal care Fam Med 2017;9:e1–7. doi:10.4102/phcfm.v9i1.1455
2 Håkansson Eklund J, Holmström IK, Kumlin T, et al. "Same same or different?" A review of reviews of person-centered and patient-centered care. Patient Educ Couns 2019;102:3–11. doi:https://doi.org/10.1016/j.pec.2018.08.029
3 World Health Organization (WHO). WHO Framework on integrated people-centred health services. https://www.who.int/servicedeliverysafety/areas/people-centred-care/en/
4 Härter M, Dirmaier J, Scholl I, et al. The long way of implementing patient-centered care and shared decision making in Germany. Z Evid Fortbild Qual Gesundhwes 2017;123–124:46–51. doi:10.1016/j.zefq.2017.05.006
5 Bundesrat. Gesetzesbeschluss des deutschen Bundestages. Gesetz zur Verbesserung der Rechte von Patientinnen und Patienten (Patientenrechtegesetz). Retrieved from http://www.bmjv.de/SharedDocs/Downloads/DE/pdfs/Gesetze/Gesetz_zur_Verbesserung_der_Rechte_von_Patientinnen_und_Patienten.pdf;jsessionid=1185B669A9CD4A090FDE13ABA75890D2.1_cid297?__blob=publicationFile [cited 2014 04.12.2014]: 2013.
6 Baumgart J. Ambivalentes Verhältnis. Dtsch Arztebl 2010;107:2554–7.
7 Rathert C, Wyrwich MD, Boren SA. Patient-centered care and outcomes: a systematic review of the literature. Med care Res Rev 2013;70:351–79. doi:10.1177/1077558712465774
8 Epstein RM, Franks P, Fiscella K, et al. Measuring patient-centered communication in patient-physician consultations: Theoretical and practical issues. Soc Sci Med 2005;61:1516–28.internal-pdf://epstein_2005-3931253760/Epstein_2005.pdf
9 Mead N, Bower P. Patient-centredness: A conceptual framework and review of the empirical literature. Soc Sci Med 2000;51:1087–110.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=11005395
10 Ouwens M, Hermens R, Hulscher M, et al. Development of indicators for patient-centred cancer care. Support Care cancer 2010;18:121.
11 Stewart MA, Brown JB, Weston W, et al. Patient-centered medicine - Transforming the clinical method. Abingdon: : Radcliffe Medical Press 2003.
12 Scholl I, Zill JM, Härter M, et al. An integrative model of patient-centeredness - A systematic review and concept analysis. PLoS One 2014;9:e107828. doi:10.1371/journal.pone.0107828
13 van Dulmen S. Patient-centredness. Patient Educ Couns 2003;51:195–6. doi:10.1016/S0738-3991(03)00039-9
14 Zill JM, Scholl I, Härter M, et al. Which Dimensions of Patient-Centeredness Matter? - Results of a Web-Based Expert Delphi Survey. PLoS One 2015;10:e0141978. doi:10.1371/journal.pone.0141978
15 Bensing J, Rimondini M, Visser A. What patients want. Patient Educ Couns 2013;90:287–90. doi:10.1016/j.pec.2013.01.005
16 Hudon C, Fortin M, Haggerty J, et al. Patient-centered care in chronic disease management: a thematic analysis of the literature in family medicine. Patient Educ Couns 2012;88:170–6. doi:10.1016/j.pec.2012.01.009
17 Luxford K. What does the patient know about quality? Int J Qual Heal Care 2012;24:439–40. doi:10.1093/intqhc/mzs053
18 Maassen EF, Schrevel SJC, Dedding CWM, et al. Comparing patients' perspectives of "good care" in Dutch outpatient psychiatric services with academic perspectives of patient-centred care. J Ment Heal 2017;26:84–94. doi:10.3109/09638237.2016.1167848

19 Yasein NA, Shakhatreh FM, Shroukh WA, et al. A Comparison between Patients' and Residents' Perceptions of Patient Centeredness and Communication Skills among Physicians Working at Jordan University Hospital. Open J Nurs 2017;07:698–706. doi:10.4236/ojn.2017.76052
20 Busse R, Riesberg A, World Health Organization. Health care systems in transition: Germany. Copenhagen: WHO Regional Office for Europe 2004.
21 Mossialos E, Djordjevic A, Osborn R, et al. International Profiles of Health Care Systems. Published Online First: 2017. doi:10.1056/NEJMp0910064
22 Christalle E, Zeh S, Hahlweg P, et al. Assessment of patient centredness through patient-reported experience measures (ASPIRED): Protocol of a mixed-methods study. BMJ Open 2018;8:9–13. doi:10.1136/bmjopen-2018-025896
23 Boulkedid R, Abdoul H, Loustau M, et al. Using and reporting the delphi method for selecting healthcare quality indicators: A systematic review. PLoS One 2011;6:e20476. doi:10.1371/journal.pone.0020476
24 Hasson F, Keeney S, McKenna H. Research guidelines for the Delphi survey technique. J Adv Nurs 2000;32:1008–15.
25 van Rijssen LB, Gerritsen A, Henselmans I, et al. Core Set of Patient-reported Outcomes in Pancreatic Cancer (COPRAC): An International Delphi Study Among Patients and Health Care Providers. Ann Surg 2019;270:158–64. doi:10.1097/SLA.0000000000002633
26 Bundesministerium für Arbeit und Soziales. Leichte Sprache - Ein Ratgeber. 2014.
27 Limesurvey GmbH. An Open Source survey tool /LimeSurvey GmbH, Hamburg, Germany.
28 Jünger S, Payne SA, Brine J, et al. Guidance on Conducting and REporting DElphi Studies (CREDES) in palliative care: Recommendations based on a methodological systematic review. Palliat Med 2017;31:684–706. doi:10.1177/0269216317690685
29 IBM SPSS Statistics for Windows. 2015.
30 Santana MJ, Manalili K, Jolley RJ, et al. How to practice person-centred care: A conceptual framework. Heal Expect 2018;21:429–40. doi:10.1111/hex.12640
31 Eurostat. Hospital discharges and length of stay for inpatient and curative care. 2018;:1–16.http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do
32 Sacristan JA, Aguaron A, Avendaño C, et al. Patient involvement in clinical research: why, when, and how. Patient Prefer Adherence 2016;10:631–40. doi:10.2147/PPA.S104259

VERSION 2 – REVIEW

REVIEWER	Carolyn Wallace University of South Wales, Wales, UK.
REVIEW RETURNED	18-Oct-2019

GENERAL COMMENTS	Thank you for the opportunity to review your paper. I enjoyed reading it with your responses.

REVIEWER	Oleksa Rewa Department of Critical Care Medicine University of Alberta Edmonton, Alberta Canada
REVIEW RETURNED	10-Oct-2019

GENERAL COMMENTS	Zeh et al have done a very good job at refining their manuscript and fully describing their Delphi study, as well as the results determined from their Delphi process. However, some aspects remain which need to be addressed before the manuscript is suitable for publication: Major comments:

	1. Limitations - patients were recruited based on advertisements. While these were broad ranging, there still is an element of selection and volunteer bias with this method of recruitment. This should be stated in the limitations section. 2. Future studies - I would put this in its own section, especially since one of the strengths of this study is the broad scope of patients from Germany. This would highlight this section well. 3. Conclusion - I would refine your final sentence to reflect your finding explicitly regarding a message for using this data to develop healthcare policy based on patient-centerdness.

VERSION 2 – AUTHOR RESPONSE

Reviewer: 2
Thank you for the opportunity to review your paper. I enjoyed reading it with your responses.
Thank you very much for this feedback.

Reviewer: 3
Zeh et al have done a very good job at refining their manuscript and fully describing their Delphi study, as well as the results determined from their Delphi process. However, some aspects remain which need to be addressed before the manuscript is suitable for publication:
Major comments:
1. Limitations - patients were recruited based on advertisements. While these were broad ranging, there still is an element of selection and volunteer bias with this method of recruitment. This should be stated in the limitations section.
Thank you for this very fitting description of the limitation. We added: "However, although the notices were spread out widely, a participation bias (i.e. only people with a higher interest in the topic would contact us) could have occurred by this method of recruitment".
2. Future studies - I would put this in its own section, especially since one of the strengths of this study is the broad scope of patients from Germany. This would highlight this section well.
Indeed, we agree and we thus split the future studies into another section at the end:
"(…) As patients are recipients of PCC, this study could have benefitted from a higher level of patient participation (e.g. [32]).
Future studies
Regarding future studies or specific recommendations (…)"
3. Conclusion - I would refine your final sentence to reflect your finding explicitly regarding a message for using this data to develop healthcare policy based on patient-centerdness.
Thank you for this input, we tried to adapt the section accordingly and added the following: "Thus, this data can be used to deduce health care policies which tackle the insufficient implementation of patient-centeredness from the patients' perspective."

VERSION 3 – REVIEW

REVIEWER	Oleksa Rewa University of Alberta Canada
REVIEW RETURNED	26-Nov-2019

GENERAL COMMENTS	Zeh et al have conducted a robust Delphi process to address patient centerdness in Germany. Previous versions of their manuscript required revisions. However, these have all been addressed and I believe the manuscript is now suitable for publication.