PEER REVIEW HISTORY

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ARTICLE DETAILS

| TITLE (PROVISIONAL) | How do hospitals engage patients and family members in quality management? A grounded theory study of hospitals in Brazil |
|---------------------|---------------------------------------------------------------------------------------------------------------|
| AUTHORS             | Saut, Ana; Berssaneti, Fernando; Ho, Linda; Berger, Simone                                                  |

VERSION 1 – REVIEW

| REVIEWER          | Jones, Bryan |
|-------------------|--------------|
| The Health Foundation |

| REVIEW RETURNED | 28-Sep-2021 |

| GENERAL COMMENTS | This is a timely study that has the potential to offer some valuable lessons in how to design, implement and sustain an effective approach to patient and family engagement in improvement – something that is priority for many healthcare provider organisations around the world. It is clear from the summary of data presented here, that the authors have captured a range of rich and illuminating insights on this topic. However, I think the results and discussion sections do not do justice to this research and need a significant amount of work, as I explain below, before this article can be published. |

Specific comments

Quality Management (QM): It would be useful to have the authors’ definition of quality management and a brief overview of how quality management systems operate in the Brazilian healthcare system.

Selection of interviewees: While the method for selecting the 7 hospitals that participated in the study is explained in some detail, very little information is provided on how and why the individual interviewees were selected. It is also unclear how many people were interviewed and the extent to which they are representative of the staff groups covered in this research.

Patient and family engagement activities in selected hospitals: It would be helpful to have an analysis of the type and range of patient and family engagement activity carried out in each hospital, and, if possible, some indication of the quality and rigour of these activities.

Table 1 – theoretical sampling: In columns 3 and 4 it is unclear whether the data included in this table is derived from the authors’ previous study alluded to on page 5 or the current study. For example, what are the ‘next interviews’ and from where did the ‘findings’ emerge? I’m also not sure that the content of column 3
adds much value as it is now – either more explanation should be included or it should be deleted.

Figure 1 on page 8 appears to be missing

Results and Table 2 (page 7): I would like to see a more detailed discussion of how the five categories have been identified, what they represent and also how readers should interpret them. While some categories appear to be enablers of effective patient and family participation (openness to change and maturity of QM system), other categories simply describe the process and structures of engagement (mechanisms of engagement and internal structure of engagement). I would suggest that either they should all be repositioned as enablers of success, or two separate fields introduced.

Table 3: This table is one of the interesting parts of this article, as it provides a helpful maturity matrix for patient and family engagement. However, I think the data could be presented in an more accessible and attractive way.

Table 4 – categories and quotations: It would be helpful to identify the job title and/ or the level of seniority of the interviewees quoted as well as the hospital in which they work, especially if there are multiple interviewees from the same hospital.

Results narrative (page 10-16): In discussing the 5 categories identified in this study, the results narrative fails, with a few exceptions, to explore the differences and similarities in the approach and attitudes to patient and family engagement in the 7 participating hospitals. I would have liked to have seen some brief case studies of at least some of the hospitals and a discussion of the extent to which their respective cultures and activities have shaped the attitudes of the interviewees. Only in the final section on external contextual factors and, albeit briefly, in the internal structure for PF engagement, are specific characteristics discussed. Exploring such local differences in greater detail, and then reflecting on their implications for others seeking to develop and strengthen a culture of patient and family engagement in their institution would significantly strengthen the value and impact of this study. As it stands, the results narrative, which provides a brief distillation of the findings from the 7 sites, feels quite superficial and high level, and does not, in my view add that much the existing body of knowledge on this topic.

REVIEWER
Araujo, Claudia A S
Universidade Federal do Rio de Janeiro, The Coppead Graduate School of Business

REVIEW RETURNED
02-Oct-2021

GENERAL COMMENTS
Thank you for the opportunity to review this article. The authors deal with a relevant topic for the health sector, but some adjustments are essential for publication.
(1) The article's purpose is not properly formulated, and the entire research trajectory is broader than the stated objective. Thus, the method is not suitable for the way the authors developed the research problem. Also, it is placed differently throughout the article. For example, in the abstract (page 3, lines 10/11), it is presented the same as the Discussion item (page 15, lines 6 to 8). However, it is different in the introduction (page 4, lines 38/39).
Morover, if the research objective is "To understand the perception of professionals about the PFE in service quality management (QM) in the hospital environment," the research subjects should have been the "professionals" and not hospitals. Hospitals are the locus, but the focus of analysis and theoretical sampling should be professionals. Additionally, the authors should have specified what they mean by "professionals" - physicians? Nurses? Both of them? Hospital managers? Who is the focus of the analysis?? 

(2) Regarding the relevance of the study. The authors did not make it clear in the Introduction which theoretical gap they intend to fill. They were pretty generic in lines 30 to 34 (page 4). The authors should have made clear the gap related to the professionals' perception regarding the analyzed topic. Do you have little study about it? What are the findings of previous research? Unclear gap. Why is it important to study this in Brazil? They didn't mention that the investigation would be done in Brazil. The information brought in the "Setting" item (page 4, line 55) should be in the Introduction. In addition, the authors should provide more information to help the reader understand why it is relevant to research this topic, specifically in Brazil.

(3) As previously mentioned (item 1), the method is not aligned to the formulated research question. Therefore, the item "Theoretical sampling and data collection" must be rewritten, considering professionals as the main subjects and the hospital as the locus of investigation. The Theoretical Sampling method should have been applied to identify professionals (and not hospitals) to be interviewed. Also, the authors did not bring enough information about the interviews: how many interviews? Selection criteria? Why them and not other professionals?

(4) The categories and concepts that emerged from data analysis are not aligned to the research question that the authors present in the article. Therefore, the discussion item is not aligned with the research objective.

(5) The conclusion is incomplete. Authors must present the limitations of the research/method, suggest future research and clearly demonstrate the study's contributions to academia, managers and society (one paragraph for each dimension).

Therefore, in general terms, there are two paths for authors: (a) to reformulate the research problem so that it adheres to the method and results achieved, or (b) to redo the research to address the formulated question adequately.
Feedback

Thank you for providing me with an opportunity to review this research. I believe that the research contributes to an important topic, although I question how novel the findings are. I believe that there is significant literature available to demonstrate the value of a patient-centred care approaches to designing health and care processes, such as the work of Dr Anthony Di Giola regarding Patient Centred Value.

With that being said, I do think that the research undertaken displays valuable findings to further enrich the requirement for a different approach to ensure that patients and families are involved in the design of their own care to better improve quality outcomes and experience.

Methods

I believe that the research question is sufficiently addressed and provides a coherent understanding of the methodologies used to reveal the findings and support the discussion and conclusions.

Sampling

As the research was conducted in a South American country, with a reasonably small sample of hospital institutions, I believe that this should be listed as a limitation to the study. I believe that to apply the results to all health and care environments may not be representative as the health systems are configured differently and thus not generalisable.

The methods of the study are well described and appropriately reference. However, I am not clear on the sample size of the study and therefore I would request clarity on this in addition to understanding how the professionals who were interviewed were selected for participation. Depending on this, comments should reflect if this is a limitation of the study. They are described as ‘Experienced Professionals’ however, I would want to understand the recruitment process better.

Further details and clarification with regards to the comment under the header Theoretical Sampling and Data Collection ‘this study used a database of a survey previously conducted by the authors’ is required. There is also no further reference provided for this. This is not clear.
Data Analysis

I am pleased to see the qualitative data provided within the detail of the research paper and how the researchers used this to form the basis of their results and discussion. This would be replicable.

Results

Clarity on how the five categorises were selected is required.

Ethics

The study appears to be ethical and notes the steps taken. Similar it does not include identifiable information and is more akin to service evaluation.

Findings and Conclusion

The conclusion is coherent, acknowledges other research to support this study.

Please review the conclusion. This study’s aim was to better understand the perspective of professionals in relation to patient and family engagement in service quality management. However, in the conclusion section it refers to the patient’s perspective which is not the intention of this research.

**VERSION 1 – AUTHOR RESPONSE**

**Reviewer 1 - Dr. Bryan Jones, The Health Foundation**

Reviewer comments:
This is a timely study that has the potential to offer some valuable lessons in how to design, implement and sustain an effective approach to patient and family engagement in improvement – something that is priority for many healthcare provider organisations around the world. It is clear from the summary of data presented here, that the authors have captured a range of rich and illuminating insights on this topic. However, I think the results and discussion sections do not do justice to this research and need a significant amount of work, as I explain below, before this article can be published.
Specific comments

Quality Management (QM): It would be useful to have the authors’ definition of quality management and a brief overview of how quality management systems operate in the Brazilian healthcare system.

Response: To clarify the concept of the quality management, it was added a definition in the begin of the methodology section.

In addition, quality management encompasses the three basic management processes described by Juran: quality planning, control, and improvement [19].

Related to quality management system in Brazil, we reviewed the subsection Setting as follow:

According to the Brazilian National Register of Health Establishments, in March 2021, there were around 7,000 hospitals (426,000 beds) in the country. Of these, 38% are public with 165,000 beds (39% of total), 36% are private with 99,000 beds (23%) and 26% non-profit with 161,000 beds (38%). Approximately 5% have at least one accreditation and most are accredited by the National Accreditation Organization (ONA). Most non-accredited institutions have not implemented the standardization of processes and indicators for process management. [20]

The Brazilian constitution establishes that health is a right of all and a duty of the Government. One of the basic principles of the healthcare system is participatory management involving the community. However, a survey carried out with healthcare institutions in Brazil showed that participation still occurs at the ‘consultation’ engagement level and the mechanisms of ‘involvement’ level can be further explored. [20]

Selection of interviewees: While the method for selecting the 7 hospitals that participated in the study is explained in some detail, very little information is provided on how and why the individual interviewees were selected. It is also unclear how many people were interviewed and the extent to which they are representative of the staff groups covered in this research.

Response: The Method section was reviewed. It was added more information about the participants. However, it is important to consider that the theoretical sampling was based on the hospitals profile. In the hospitals, the criteria for inclusion/selection of professionals considered their participation in planning or managing the quality management system of the selected institutions. As an inclusion criterion, in addition to the professional's function, a minimum time of six months in the current position was considered. The seven professionals interviewed (one representative per hospital) were appointed by the Administration and/or Research and Teaching Department of the Institution during the first contact made with the institution to invite them to participate. (Page 4 – lines 34 to 44)

Patient and family engagement activities in selected hospitals: It would be helpful to have an analysis of the type and range of patient and family engagement activity carried out in each hospital, and, if possible, some indication of the quality and rigour of these activities.

Response: The Table 2 (Pages 7 and 8) has been included and shows the quality management activities and mechanisms of engagement implemented by the participating hospitals.

Table 1 – theoretical sampling: In columns 3 and 4 it is unclear whether the data included in this table is derived from the authors’ previous study alluded to on page 5 or the current study. For example, what are the ‘next interviews’ and from where did the ‘findings’ emerge? I’m also not sure that the content of column 3 adds much value as it is now – either more explanation should be included, or it should be deleted.

Response: We kept the Table 1 and review the text as follow.

Table 1 shows that in hospitals H6 and H7 no new concepts were identified (column 3) and, consequently, no new questions arose (column 4). (Page 4 – lines 31 to 33)

Data were gathered using semi-structured interviews, following a guide developed in accordance with the study aim, literature review[25,26] and new questions that emerged during the data analysis (Table 1 – column 4). (Page 5 – lines 1 to 5)
Data collection was followed by analysis, using a circular process: analysis led to concepts; concepts generate questions; and questions lead to more data collection. For instance, the question “What is the difference in the QM processes in the Head Office (located in a large city) and in a Unit (located in a small city)?” that emerged during the analysis of the interview performed in H2 led the selection of H3 (see Table 1).

Figure 1 on page 8 appears to be missing
Response: We apologize for this inconvenience. The figure was uploaded during the article submission, and we do not know the cause of this problem. But we will be more careful in this submission and hope that there is no recurrence of the problem.

Results and Table 2 (page 7): I would like to see a more detailed discussion of how the five categories have been identified, what they represent and also how readers should interpret them.
While some categories appear to be enablers of effective patient and family participation (openness to change and maturity of QM system), other categories simply describe the process and structures of engagement (mechanisms of engagement and internal structure of engagement). I would suggest that either they should all be repositioned as enablers of success, or two separate fields introduced.
Response: To clarify the logic of grouping concepts by similarity, we have included the following excerpt. We also included a new column in the Table 3 (Page 8) identifying the group of the categories according to the contribution.
The analysis identified a total of 37 concepts, with most classified at the basic level (see Table 3). The concepts were grouped into five categories considering the interrelation between themes. The first category was named ‘partner patient’ that grouped all the concepts related to the patient, their profile, characteristics, and requirements for participation. The second one ‘mechanisms of engagement’ addressed concepts related to planning and implementation of processes, methods, techniques, and tools used to involve P/F. The other one was ‘internal structure for PFE’ grouped issues related to organizational aspects, both structural and financial. The fourth category addressed the issues of the maturity of the hospital quality management system both to support engagement mechanisms and to enable the implementation of improvement actions. Finally, the last one was named ‘oppeness to change’ and it was about cultural and human issues. In addition, six concepts are related to definition and contributions of PFE, and three were classified as contextual factors that can influence engagement. (Page 8 – lines 5 to 17)

Table 3: This table is one of the interesting parts of this article, as it provides a helpful maturity matrix for patient and family engagement. However, I think the data could be presented in an more accessible and attractive way.
Response: Considering your suggestion about Table 3 and the fact that we have created a new table (Table 2 – Hospital’s profile), we excluded the table cited in order to keep the total number of Tables and Figures in the manuscript. We have included the dimension information in Figure 1. We believe that dimensions will help the readers to better understand the properties of concepts presented in Figure 1.

Table 4 – categories and quotations: It would be helpful to identify the job title and/or the level of seniority of the interviewees quoted as well as the hospital in which they work, especially if there are multiple interviewees from the same hospital.
Response: It was added more information about the participants profile in the Method section. It is noteworthy that all participants were from the QM or related areas, had a postgraduate-level qualification (two of them have concluded a specialization course, three with a master degree and two with a PhD) , and professional experience of at least 11 years. Concerning the professionals graduation, four of them are nursing (H1, H2, H5 and H7) and three are physicians (H3, H4 and H6). (Page 4, lines 41 to 44)
Results narrative (page 10-16): In discussing the 5 categories identified in this study, the results narrative fails, with a few exceptions, to explore the differences and similarities in the approach and attitudes to patient and family engagement in the 7 participating hospitals. I would have liked to have seen some brief case studies of at least some of the hospitals and a discussion of the extent to which their respective cultures and activities have shaped the attitudes of the interviewees. Only in the final section on external contextual factors and, albeit briefly, in the internal structure for PF engagement, are specific characteristics discussed. Exploring such local differences in greater detail, and then reflecting on their implications for others seeking to develop and strengthen a culture of patient and family engagement in their institution would significantly strengthen the value and impact of this study. As it stands, the results narrative, which provides a brief distillation of the findings from the 7 sites, feels quite superficial and high level, and does not, in my view add that much the existing body of knowledge on this topic.

Response: It was added more information in the Results section

The issue of financial availability was more discussed as a point of attention by public and philanthropic hospitals than by private hospitals. (Page 13, lines 33 to 34)

It was observed that institutions that had some certification, accreditation or participated in quality award programs had processes to identify stakeholders and communicate with them, as well as standardized processes and people trained in problem-solving methodologies. This context created an environment to get closer to patients and gave agility in the implementation of improvements in services. (Page 14, lines 4 to 8)

Hospitals with small capacity seem to be able to better execute projects involving many areas (horizontal scope of action). (Page 14, lines 18 and 19)

This strategy was observed mainly in large hospitals, as this reduces the impact of the difficulty of these institutions having projects that need to have a horizontal scope of action covering many areas. (Page 14, lines 23 to 25)

Reviewer 2 - Dr. Claudia A S Araujo, Universidade Federal do Rio de Janeiro, FGV-EAESP

Comments:
Thank you for the opportunity to review this article. The authors deal with a relevant topic for the health sector, but some adjustments are essential for publication.

Response: As the investigation was focused on hospitals, the objective was reviewed. During the data collection, we looked for hospitals and situations that will provide information about the concepts to understand the phenomenon of engaging patients and family members in hospital quality management. The point-by-point responses to your comments have been provided below.

(1) The article’s purpose is not properly formulated, and the entire research trajectory is broader than the stated objective. Thus, the method is not suitable for the way the authors developed the research problem. Also, it is placed differently throughout the article. For example, in the abstract (page 3, lines 10/11), it is presented the same as the Discussion item (page 15, lines 6 to 8). However, it is different in the introduction (page 4, lines 38/39).

Response: The objective was revised throughout the article: abstract (Page 2 – lines 6 and 7), introduction (Page 3 – lines 33 to 35) and discussion (Page 16 – lines 3 and 4).

Moreover, if the research objective is "To understand the perception of professionals about the PFE in service quality management (QM) in the hospital environment," the research subjects should have been the "professionals" and not hospitals. Hospitals are the locus, but the focus of analysis and theoretical sampling should be professionals. Additionally, the authors should have specified what they mean by "professionals" - physicians? Nurses? Both of them? Hospital managers? Who is the focus of the analysis??
Response: Although the article was revised to make it clearer that the object of study was hospitals, more detailed information on the profile of the professionals interviewed was included in the methodology section. It is noteworthy that all participants were from the QM or related areas, had a postgraduate-level qualification (two of them have concluded a specialization course, three with a master degree and two with a PhD), and professional experience of at least 11 years. Concerning the professional’s graduation, four of them are nursing (H1, H2, H5, and H7) and three are physicians (H3, H4, and H6). (Page 4, lines 41 to 44)

(2) Regarding the relevance of the study. The authors did not make it clear in the Introduction which theoretical gap they intend to fill. They were pretty generic in lines 30 to 34 (page 4). The authors should have made clear the gap related to the professionals’ perception regarding the analyzed topic. Do you have little study about it? What are the findings of previous research? Unclear gap. Why is it important to study this in Brazil? They didn’t mention that the investigation would be done in Brazil. The information brought in the “Setting” item (page 4, line 55) should be in the Introduction. In addition, the authors should provide more information to help the reader understand why it is relevant to research this topic, specifically in Brazil.
Response: The literature gap was rewrite as follow (Page 3, lines 17 to 30):
Patient and family engagement (PFE) is considered an essential element of the transformation of the healthcare system [6]. Although there is recognition of the importance of PFE to improve the quality and safety of healthcare services, a fairly low number of institutions have implemented the mechanisms to engage them.[7–9] There is uncertainty about the best way to work with patients and family members to improve quality.[5,10,11] This uncertainty was considered as one of the greatest challenges to establish a partnership with patients [5], intensified by the fact that there is few studies referring to the hospital context[10]. In Brazil, this theme is still little explored, and caution must be exercised when considering theoretical models developed in other regions, as regional factors of the external context may exert an influence. PFE is characterised by its complexity and difficulty in demonstrating the obtained results.[10,12–14] In addition, knowledge gaps in this field of research could be mentioned as the theoretical limitation as studies do not address the forms of power and capital that occur in the relationships between the professionals and patients in the engagement process.[15] Related to quality management system in Brazil, we reviewed the subsection Setting as follow (Page 4, lines 6 to 17):
According to the Brazilian National Register of Health Establishments, in March 2021, there were around 7,000 hospitals (426,000 beds) in the country. Of these, 38% are public with 165,000 beds (39% of total), 36% are private with 99,000 beds (23%) and 26% non-profit with 161,000 beds (38%). Approximately 5% have at least one accreditation and most are accredited by the National Accreditation Organization (ONA). Most non-accredited institutions have not implemented the standardization of processes and indicators for process management. [20] The Brazilian constitution establishes that health is a right of all and a duty of the Government. One of the basic principles of the healthcare system is participatory management involving the community. However, a survey carried out with healthcare institutions in Brazil showed that participation still occurs at the ‘consultation’ engagement level and the mechanisms of ‘involvement’ level can be further explored. [20]

(3) As previously mentioned (item 1), the method is not aligned to the formulated research question. Therefore, the item “Theoretical sampling and data collection” must be rewritten, considering professionals as the main subjects and the hospital as the locus of investigation. The Theoretical Sampling method should have been applied to identify professionals (and not hospitals) to be interviewed. Also, the authors did not bring enough information about the interviews: how many interviews? Selection criteria? Why them and not other professionals?
Response: Please consider the remarks made at the beginning of this letter and the responses to your previous comments.

(4) The categories and concepts that emerged from data analysis are not aligned to the research question that the authors present in the article. Therefore, the discussion item is not aligned with the research objective.
Response: Please consider the remarks made at the beginning of this letter and the responses to your previous comments.

(5) The conclusion is incomplete. Authors must present the limitations of the research/method, suggest future research and clearly demonstrate the study’s contributions to academia, managers and society (one paragraph for each dimension).
Response: In the first version, limitations of the research and suggestions for further research were presented in the discussion section but following your suggestion we have moved the paragraphs to the conclusion section. (Page 17 – lines 19 to 35)
The limitations of the study are mainly related to the contemporary nature of the theme. No institutions were found to have the level of engagement known as ‘partnership and shared leadership’, which restricted the observation of the P/F’s co-leadership practices in initiatives and forums with the participation of patients. Another limitation resulting from the contemporary nature is that there may be results and intervening factors that need more time to be captured or perceived. Finally, a limitation to the study was the sample restricted to hospitals located in Brazil. As risks to the quality of the result of this research, those associated with studies that address issues of power and culture in healthcare organisations could be highlighted. The investigation can remain at the superficial levels of manifest behaviors and verbalised opinions.[35] All respondents behaved in an open and safe way to discuss these issues, so we believed that the risk was low.
A priority for further research is to investigate, in the context of the COVID-19 pandemic, how social distancing measures can impact on the mechanisms of PFE which, at first, were performed in person, such as committees. Furthermore, the limitations related to data collection mean that further research is needed to investigate specific issues around ‘partnership and shared leadership’.
Related to the study’s contribution, we added the paragraph: The result of this research shows that to effectively engage patients and family members in quality management in hospitals, the topic needs to be addressed in a more comprehensive and integrated way, considering all the essential elements related to processes and culture. (Page 17 – lines 15 to 18)

Therefore, in general terms, there are two paths for authors: (a) to reformulate the research problem so that it adheres to the method and results achieved, or (b) to redo the research to address the formulated question adequately.

Reviewer 3 - Mr. Stuart Clough, Lancashire Teaching Hospitals NHS Foundation Trust
Comments:
Feedback
Thank you for providing me with an opportunity to review this research. I believe that the research contributes to an important topic, although I question how novel the findings are. I believe that there is significant literature available to demonstrate the value of a patient centred care approaches to designing health and care processes, such as the work of the Dr Anthony Di Gioia regarding Patient Centred Value.
With that being said, I do think that the research undertaken displays valuable findings to further enrich the requirement for a different approach to ensure that patients and families are involved in the design of their own care to better improve quality outcomes and experience.

Methods
I believe that the research question is sufficiently addressed and provides a coherent understanding of the methodologies used to reveal the findings and support the discussion and conclusions.
Response: Thank you for your comment.

Sampling
- As the research was conducted in a South American country, with a reasonably small sample of hospital institutions, I believe that this should be listed as a limitation to the study. I believe that to apply the results to all health and care environments may not be representative as the health systems are configured differently and thus not generalisable.
Response: We included the limitation in the Conclusion section, as follow: “Finally, a limitation to the study was the sample restricted to hospitals located in Brazil.” (Page 17 – lines 24 and 25)

- The methods of the study are well described and appropriately reference. However, I am not clear on the sample size of the study and therefore I would request clarity on this in addition to understanding how the professionals who were interviewed were selected for participation. Depending on this, comments should reflect if this is a limitation of the study. They are described as ‘Experienced Professionals’ however, I would want to understand the recruitment process better.
Response: The Method section was reviewed. It was added more information about the participants. However, it is important to consider that the theoretical sampling was based on the hospitals profile. As ‘experienced professionals’ was vague, we excluded this statement.
In the hospitals, the criteria for inclusion/selection of professionals considered their participation in planning or managing the quality management system of the selected institutions. As an inclusion criterion, in addition to the professional's function, a minimum time of six months in the current position was considered. The seven professionals interviewed (one representative per hospital) were appointed by the Administration and/or Research and Teaching Department of the Institution during the first contact made with the institution to invite them to participate. It is noteworthy that all participants were from the QM or related areas, had a postgraduate-level qualification (two of them have concluded a specialization course, three with a master degree and two with a PhD), and professional experience of at least 11 years. Concerning the professional's graduation, four of them are nursing (H1, H2, H5 and H7) and three are physicians (H3, H4 and H6). (Page 4 – lines 34 to 44)

- Further details and clarification with regards to the comment under the header Theoretical Sampling and Data Collection ‘this study used a database of a survey previously conducted by the authors’ is required. There is also no further reference provided for this. This is not clear.
Response: The survey was conducted concurrently with this study and its data collected supported us to know the hospitals profile, to select them and to do a first contact about the interest in participating. Unfortunately, the survey results were not published yet. To avoid any doubts, we rewrite the citation.
First version: To support the selection of hospitals, this study used a database of a survey previously conducted by the authors.
Revised: To support the selection of hospitals, the institutions were previously invited to answer a questionnaire containing questions about their profile, organizational culture [19], quality management (QM) activities and mechanisms of PFE.[6,9,10,21–24] (Page 4 – lines 20 to 22)

Data Analysis: I am pleased to see the qualitative data provided within the detail of the research paper and how the researchers used this to form the basis of their results and discussion. This would be replicable.
Response: Thank you for your comment.

Results
• Clarity on how the five categorises were selected is required.
Response: To clarify the logic of grouping concepts by similarity, we have included the following excerpt.
The analysis identified a total of 37 concepts, with most classified at the basic level (see Table 3). The concepts were grouped into five categories considering the interrelation between themes. The first category was named ‘partner patient’ that grouped all the concepts related to the patient, their profile, characteristics, and requirements for participation. The second one ‘mechanisms of engagement’ addressed concepts related to planning and implementation of processes, methods, techniques, and tools used to involve P/F. The other one was ‘internal structure for PFE’ grouped issues related to organizational aspects, both structural and financial. The fourth category addressed the issues of the maturity of the hospital quality management system both to support engagement mechanisms and to enable the implementation of improvement actions. Finally, the last one was named ‘oppeness to change’ and it was about cultural and human issues. In addition, six concepts are related to definition and contributions of PFE, and three were classified as contextual factors that can influence engagement. (Page 8 – lines 5 to 17)

Ethics
• The study appears to be ethical and notes the steps taken. Similar it does not include identifiable information and is more akin to service evaluation.
Response: Thank you for your comment.

Findings and Conclusion
• The conclusion is coherent, acknowledges other research to support this study.
Response: Thank you for your comment.

• Please review the conclusion. This study's aim was to better understand the perspective of professionals in relation to patient and family engagement in service quality management. However, in the conclusion section it refers to the patient's perspective which is not the intention of this research.
Response: We rewrote the sentence to make it clearer that one of the results of PFE is reinforcing the importance of knowing the patient's perspective and that we were not referring to research finding from the patient's perspective. To drive the improvement actions based on the patient perspective is one of the main valuable results of patient engagement.
First version: The patient's perspective allows actions to be driven towards what really matters to them, ensuring quality of service and safety, obtaining a new perspective to understand and solve problems, and stimulate a sense of urgency, more empathy, and compassion in professionals.
Revised: Hospitals know the patient’s perspective allows to take improvement actions driven towards what really matters to them, ensuring quality of service and safety, obtaining a new perspective to understand and solve problems, and stimulate a sense of urgency, more empathy, and compassion in professionals. (page 17 – lines 11 to 14)
We also included a paragraph about the study’s contribution
The result of this research shows that to effectively engage patients and family members in quality management in hospitals, the theme needs to be addressed in a more comprehensive and integrated way, considering all the essential elements related to processes and culture. (Page 17 – lines 15 to 18)
Thank you for your revisions to your manuscript in response to my earlier comments. The additional text and figures (especially the new table 2) that you have included have provided a much clearer picture of the characteristics of the participating hospital sites, and the differences between them, and how you generated the categories and concepts from your data analysis.

In saying this, I am struck by the fact that you are relying on the data from a single respondent in each of the hospital sites (this was not clear to me when I first read your article). I think this should be highlighted in your discussion of the potential limitations of your study.

Second, I would suggest that you review the language of the following subsections in your results section; patient partner, mechanisms of engagement, and internal structure for p/f engagement. It is unclear from the language you in these subsections whether the assertions you make are based purely on your research data, or are based on your interpretation of the literature or your wider observations and experience. The fact that you use both the past tense, which suggests that you are reporting findings from your research, and the present tense, which suggests that you stating something that is broadly supported in the academic literature, is confusing in my view. Reviewing the language in these sections and maybe adding a few introductory sentences to explain what data you are presenting here would help to clarify matters.

Finally, on p13, lines 20-25, when you discuss the dominant organisational culture of the participating hospitals, I would like to see a more detailed justification of your assertion about the impact that particular cultures have on improvement activity. I would argue that a collaborative culture can be just as conducive to process change as a hierarchical culture, arguably more so in some cases, so it would be helpful to understand your reasoning here.

The authors made the changes as requested. As a result, the current version of the article is much more precise than the first version. However, I consider it essential that the authors develop more the article's contributions in the Conclusion section, addressing the three dimensions, as previously requested and not answered: theoretical contributions, contributions to managers, contribution to society.
Reviewer: 1 Dr. Bryan Jones, The Health Foundation

Comments to the Author: Thank you for your revisions to your manuscript in response to my earlier comments. The additional text and figures (especially the new table 2) that you have included have provided a much clearer picture of the characteristics of the participating hospital sites, and the differences between them, and how you generated the categories and concepts from your data analysis. Response: We were pleased to hear that the points reviewed met the requests of your earlier comments and suggestions. In saying this, I am struck by the fact that you are relying on the data from a single respondent in each of the hospital sites (this was not clear to me when I first read your article). I think this should be highlighted in your discussion of the potential limitations of your study. Response: The limitation of the study was mentioned in the ‘STRENGTHS AND LIMITATIONS OF THIS STUDY’ (page 2 – lines 1 to 2) and in the Discussion section (page 17 – line 26 to 27). Finally, a limitation to the study was the sample restricted to the hospitals located in Brazil and only one participant per hospital. Second, I would suggest that you review the language of the following subsections in your results section; patient partner, mechanisms of engagement, and internal structure for p/f engagement. It is unclear from the language you in these subsections whether the assertions you make are based purely on your research data, or are based on your interpretation of the literature or your wider observations and experience. The fact that you use both the past tense, which suggests that you are reporting findings from your research, and the present tense, which suggests that you stating something that is broadly supported in the academic literature, is confusing in my view. Reviewing the language in these sections and maybe adding a few introductory sentences to explain what data you are presenting here would help to clarify matters. Response: Thank you for your comment. In the Results sections and its subsections, we reported only findings from our research. We revised the subsections using past tense. In addition, as you suggest, we add an introductory paragraph to explain what information was presented (page 11 – lines 3 to 5). Finally, on p13, lines 20-25, when you discuss the dominant organisational culture of the participating hospitals, I would like to see a more detailed justification of your assertion about the impact that particular cultures have on improvement activity. I would argue that a collaborative culture can be just as conducive to process change as a hierarchical culture, arguably more so in some cases, so it would be helpful to understand your reasoning here. Response: Thank you for your comment. To clarify the results of the study, we review the phrase mentioned and added two excerpts from the interviews. The first one was from the hospital number four, with a hierarchical dominant culture, which highlights the strength of having processes, but with the difficulty of collaboration between the areas. The other one was from the hospital number five, characterized by the clan dominant culture, which emphasize the strong collaboration between areas to implement improvement actions. Most hospitals were characterised by the dominant organisational culture of either ‘hierarchy’ (oriented by controlling) or ‘clan’ (oriented by collaboration). The first type creates a more favorable environment for the change of processes and the second for culture. The first type, hierarchical dominant culture, created a more favorable environment for the change of issues related to processes (because they are clearly established and standardized), but did not promote a good communication and collaboration between the areas. On the other hand, the clan dominant culture, characterised by the collaboration between areas, could facilitate to change issues that involve people. The identification of the dominant organisational culture could help in the planning of actions for PFE, recognising the strengths and weaknesses of the institution to carry out the change. […] within that hierarchy, there is an obedience to the processes. Another example is a question that involves communication between sectors or professionals within the same sector who responds hierarchically to different departments, like nursing and administrative departments. The one from the administrative department only does what the administrative manager allows, he cannot
talk to someone from the other area [...]. He waits for a decision, an endorsement from above, so he will execute something. So, in this sense, I think it [culture of hierarchy] does interfere negatively. (H4 – hierarchical dominant culture) We have a structure here that is very collaborative, the areas and the people who come in here. The people who work here feel this very strongly, that when you have a new activity to do [...] many people want to participate, so it just doesn't more people because we have to take care of the assistance too. (H5 - clan dominant culture)

Reviewer: 2 Dr. Claudia A S Araujo, Universidade Federal do Rio de Janeiro, FGV-EAESP
Comments to the Author: The authors made the changes as requested. As a result, the current version of the article is much more precise than the first version. However, I consider it essential that the authors develop more the article's contributions in the Conclusion section, addressing the three dimensions, as previously requested and not answered: theoretical contributions, contributions to managers, contribution to society. Response: We were pleased to hear that the points reviewed met the changes as requested. In response to your suggestions, we explore more the contribution of our study in the Conclusion section, as follow (page 18 – lines 11 to 36). The main theoretical contribution of this research is to develop an integrated model based on five categories to PFE: (1) to invite and make the ‘patient a partner’ in hospital services improving; (2) to plan and implement the ‘mechanisms to patient engagement’; (3) to identify and consider in the implementation plan the issues related to the ‘internal structure’ with emphasis in organizational culture, shared information, model of care and available financial resources; (4) to connect the PFE with hospital ‘quality management system’ considering its capacity to support the processes improvement; and (5) to promote an environment in the organization that is ‘open to change’ the power relation between professionals and P/F, the fear of sharing information and the initiative to solve problems. The results may be relevant to hospital administrators and quality management professionals. To understand the variables of the theoretical model and how they are integrated can help in targeting objectives, defining internal policies, recognizing the importance of cultural aspects and planning resources and training necessary to carry out the activities. The results can allow them to identify the characteristics of the institutions' profile can facilitate or hinder the PFE. For the society and patients or family members who participate or will be involved in the activities, the results can contribute by enabling knowledge and understanding about what is expected from them, what should be encouraged and what should be avoided to facilitate working in partnership, contribute based on your point of view and ensure the achievement of the expected results. The results of this study show that people who want to contribute to quality improvement do not need to be healthcare service specialists, but rather that their contribution must be based on their experience. It is also noteworthy that the results can contribute to all those involved in the associations formed by P/F, which can contribute to the improvement of quality in hospitals with the experience of their associates.