PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Innovative models of care for the health facility of the future: a protocol for a mixed-methods study to elicit consumer and provider views
AUTHORS	Carrigan, Ann; Roberts, Natalie; Clay-Williams, Robyn; Hibbert, Peter; Pomare, Chiara; Mahmoud, Zeyad; Maka, Katherine; Mitchell, Rebecca; Zurynski, Yvonne; Long, Janet; Rapport, Frances; Arnolda, Gaston; Loy, Graeme; Braithwaite, Jeffrey

VERSION 1 – REVIEW

REVIEWER	Ozair, Ahmad King George's Medical University, Faculty of Medicine
REVIEW RETURNED	08-Apr-2022

GENERAL COMMENTS	The authors have submitted a protocol for a study that aims to utilize mixed-methods analysis to study consumer/healthcare provider needs and expectations for the development of innovative care models for the future. The protocol is well-written and free of major errors. The planned work's results will likely be valuable for healthcare leaders. 1. Kindly reduce the introduction of the abstract. Instead, provide greater detail in the methods section of the abstract. 2. If possible, kindly attach the questionnaires (if ready) to be used as supplementary material as well. 3. There are some minor errors throughout the manuscript (for instance EIGHTS PAIRS). Please run Grammarly, a free online tool, to rid the manuscript of the same. 4. Limitations section should be expanded further. For instance, one limitation would be study enrollment - discuss also how would low rates of enrollment be tackled. 5. Within the text, software (like SPSS) needs to be cited appropriately.

REVIEWER	Burns, Diane The University of Sheffield, Management School
REVIEW RETURNED	27-Jun-2022

GENERAL COMMENTS	Please see attached.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1's comments	Author's response	Location in track changed document
Kindly reduce the introduction of the abstract. Instead, provide greater detail in the methods section of the abstract.	Thank you for your comments. The abstract introduction has been shortened and the methods expanded.	P2
If possible, kindly attach the questionnaires (if ready) to be used as supplementary material as well.	The EOI questionnaire, workshop and interview questions have been added as a supplementary file.	Supplementary file 1
There are some minor errors throughout the manuscript (for instance EIGHTS PAIRS). Please run Grammarly, a free online tool, to rid the manuscript of the same.	Thank you for pointing this out, these errors have been amended using Grammarly.	Throughout
Limitations section should be expanded further. For instance, one limitation would be study enrolment - discuss also how would low rates of enrolment be tackled.	The limitations sections has been updated; specifically, how we will address low study enrolment.	P19
Within the text, software (like SPSS) needs to be cited appropriately.	This citation has been added.	P17

Reviewer 2's comments	Author's response	Location in updates document
Imbalance: The abstract Is clearly written. However, there is some imbalance as you give greater focus to digital technologies as shown by your decision to include examples of different types of digital technology. However, other components important to innovative care models are not exemplified.	Thank you for your comments. We have removed this section in the abstract and updated with a more general sentence about the models	P2
On page 4 of the introduction you write 'Digital services allow care to be more personalised, integrated with existing models, and delivered remotely (e.g.) telemedicine.' This sentence is written as if this is a fact, without citing a source of supporting evidence from the literature and without any	We have changed this section to suggest digital services have potential benefit, rather than a factual statement.	P4

acknowledgement that digital services can also have negative consequences.		
Seven models are identified through the review of the literature as shown in Table 1. In table 2, however, there are only 6 models listed – Virtual and Consumer Focused Care have been combined. The combination of these two models is not explained in the protocol. It is important to clarify why you have taken this decision particularly as consumer focused care is not contingent on the use of digital technologies and vice versa.	The literature review suggests that consumer focus care is a common theme that underpins the other six models. As such, this will be incorporated into the other models. The introduction and Table 1 have been updated.	P6 and P7
The models used in the Facilitator Scripts for 'Consumer Focused Care' is combined with 'Digital Hospital', yet in Table 2 and Table 1 Digital Hospital is a separate model. An explanation for how and why you have combined some of the care models is required. What is your rationale for combining these models; and why are other combinations not utilised? Are the combinations informed by the literature review you completed and if so, please clearly explain the rationale used?	Thank you for noticing this error. As above, consumer focused care was integrated with the other six models. A rationale for this has been included in the introduction. The scripts have been updated.	P6 Supplementary File 2.
There is a lack of consistency within the Facilitator Scripts – you have written descriptions for 5 of the care models but for models using digital technology a positive evaluative statement is provided. The use of evaluative statements could be criticised for leading participant responses.	While this true, when discussing the model, the risks and barriers/safety will be discussed in detail and will be highlighted by many participants during the workshops (See script). Our goal is to present a model that is tangible and viable that includes information about improved patient care.	NA
In the protocol (and as shown in the Facilitator Scripts) you will ask the participants questions about how confortable they are using digital technology. An explanation for why you are asking these questions is not provided in the paper or in the Facilitator Script. A rationale for asking these questions needs to be included in the paper and I would also expect these questions to be contextualised for the	We have added a sentence to the protocol explaining the rationale for asking about digital literacy. We have also added a sentence to the script prior to the questions.	P12 and Supplementary File 2.

participants and therefore included in the Facilitator Script.		
My concern in highlighting the above issues, is that the protocol is written in a way that risks suggesting or uncritically assuming the beneficial use of digital technologies. There are criticisms in the literature of a 'pro-innovation bias' in policy and research where positive effects of digital technology are often assumed or become the focus of research while the more negative consequences for care workers and people receiving care are overlooked. it is important that any potential pro-digital technology bias should be reduced/removed from your protocol.	As addressed above, many of the questions asked about each model will probe the barriers, safety concerns and risks. The digital model of care is presented in a positive light as an example only.	NA
Need: The rationale for the study includes 'capturing the needs' of consumer and provider groups. The paper does not expand or clarify how 'needs' are defined for the purpose of this research. Can you provide your definition of need for the purpose of this study as this will increase the clarity of the protocol, particularly as the needs within consumer and provider groups are likely to differ? It would also strengthen the protocol if you explain how your understanding of need has informed the questions you will ask each group of participants in the workshops and interviews. This addition would offer a stronger rationale for the design of the study and help with replicability.	We have clarified what we mean by needs to include physical, psychosocial, rapid access to care for consumers and adequate resources and infrastructure for providers. We have also expanded the section about how the workshops will help us to understand consumer and provider needs.	P5 P14 and 15
Participants: This sub-section is a little hard to follow and contains new information not mentioned earlier in the paper. Earlier on page 11, under the sub-heading Workshops you state 16 workshops will be undertaken, eight in each stream. However, in the Participants section you refer to six workshops when discussing the potential results and then introduce for the first time an	Thank you for noticing this error. This section has been updated: 12 workshops (6 consumers, 6 providers) and an additional 2-4 for CALD and Aboriginal and Torres Strait Islander consumers.	P11

aligned wave of data collection to include consultation with Aboriginal and Torres Strait Islander Elders.		
The strategy for recruiting participants of the six specific health conditions/services is usefully included. Can you also include a few lines here on how people's health condition/services will inform which models will be discussed in the workshops?	We have added in a sentence about how those reporting specific conditions will be allocated to the one group. Providers with a similar role (e.g., nurses, general practitioners) will also be grouped together. The order in which the models will presented will be counterbalanced to minimise biases (e.g., 1 2 3, 4 5 6; 2 3 1, 5 6 4 etc.).	P 13, P 17
Interviews: The description under this sub-heading on page 16 and also on page 11, does not fully align with what is presented in Figure 2. I interpreted from Figure 2 that all participants at workshops will be contacted and invited to take part in a follow up interview and given the opportunity to decide whether to participate. This differs to what is written in this section where you explain you will invite participants who indicate an interest in taking part in an interview during the workshop	This has been changed for clarity. Figure 2 has also been updated to reflect that optional interviews are offered at the workshops.	P 11, Figure 2
The purpose of the interviews includes expanding on areas of interest and to verify the findings from the workshop data. Can you provide more details please? Whose areas of interest will the interview focus on the researchers or the participants and for what purpose?	We have added a section that explains this: the focus of the interviews will be driven by those who volunteer. For example, if a consumer has experience with a model (e.g., hospital in the home for renal dialysis) one-on-one interviews will allow us to probe further into the specific barriers and enablers of the model while maintaining participant privacy.	P17
You also say the interviews will verify the findings. Can you provide more details on what the purpose of the verification will be, as this will determine who should be taking part in an interview?	As above, the interviews will allow us to clarify the findings and probe more deeply into a specific issue or experience that the participant reports in the workshop.	P17
Analysis: Please can you expand on how the proposed method of analysis to triangulate and synthesise data will remain sensitive to varying and likely conflicting views and needs of consumers and providers?	For the qualitative analyses, two researchers will analyse individually and then work together to resolve any discrepancies. Common themes will be reported and any differing views and needs of consumers and providers will also be reported.	P18

	Triangulation will start at the data level (literature review and quantitative analysis), then be informed by the qualitative analysis, thereby integrating the findings.	
Scenarios. Please explain in more detail how the scenarios were identified/produced?	Topics were driven by the local health district's demographic data, and developed with a clinical subject matter expert. A sentence has been added.	P12
Page 3, 4th bullet point is written in the past tense.	This has been corrected.	P3
Page 9 describes the population of the catchment area and that 37% of the population was born outside Australia and 0.9% identified as Aboriginal and/or Torres Strait Islander. Perhaps this would be an appropriate place to signal that the study design discussed later in the paper includes parallel data collection and why?	A sentence has been added.	P9
Page 10, line 6, you refer to community members when describing the recruitment strategy for providers. Please clarify who the community members are.	We agree this is confusing and this term has been removed.	P10
Page 17, 1st para under sub heading Planned data analyses, the term 'focus group' (rather than workshop) is used.	This has been updated to "workshop".	P18

1

VERSION 2 – REVIEW

REVIEWER	Burns, Diane The University of Sheffield, Management School
REVIEW RETURNED	14-Oct-2022

GENERAL COMMENTS	Thank you for the opportunity to read the revised version of this paper. The author's have fully addressed my comments and queries.