PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	How can we improve Comprehensive Geriatric Assessment for older people living with frailty in primary care and community settings? A Qualitative Study
AUTHORS	Mahmoud, Aseel; Goodwin, Victoria; Morley, Naomi; Whitney, Julie; Lamb, Sarah; Lyndon, Helen; Creanor, Siobhan; Frost, Julia; DREAM, Study Team

VERSION 1 – REVIEW

REVIEWER	Choi, Jung-Yeon Seoul National University Bundang Hospital, Internal Medicine
REVIEW RETURNED	17-Dec-2023

GENERAL COMMENTS	Gathering the opinions of stakeholders is a very essential issue in order to apply CGA in a community setting further. This study, which verified this through qualitative interviews with older people and healthcare professionals, has strengths in this regard. However, several issues need to be clarified. 1. In additional files 1 and 2, there is no visible explanation or questions about CGA. Especially, questions about older people and carers (additional file 1) seem to mostly involve recent primary care experiences and questions about technology applications. On page 6, under data analysis section, it is stated that “similar ideas were coded”, it seems necessary to present data that has been coded as responses about CGA. 2. The additional file regarding technology discusses relatively clearly (1) substituting visits with technology, (2) filling in questionnaires before visits using technology, (3) using technology-assisted equipment, (4) mobile phones, and (5) wearable technology. However, there is a lack of description of preferences for these technologies at result. 3. The 'sampling and recruitment' section on page 5 mentions that patients were selected from the CARE and OPAL cohorts, and these cohorts are described as representative. However, there seems to be a need for at least a brief explanation regarding the recruitment of these existing cohorts 4. There are parts that are difficult to understand for readers who are not familiar with the UK healthcare system. A brief explanation of this seems necessary. 5. In the discussion part, it would be helpful to provide data on the recently surveyed digital literacy and preferences of older UK patients or caregivers. For example, from the face-to-face survey

	conducted from June 23 to July 22, 2022, in Korea (n = 505), pre-frail or frail respondents used social media more frequently than healthy respondents (19.4% vs. 7.4%, P < 0.001). 319 (63.2%) were not able to install or delete the application themselves, and 277 (54.9%) stated that the application was recommended by their children (or partners). Pre-frail and frail respondents used more healthcare applications to obtain health information (P = 0.002) and were less satisfied with wearable devices (P = 0.02) (J Korean Med Sci. 2024 Jan 01;39:e7. Published online Nov 27, 2023. https://doi.org/10.3346/jkms.2024.39.e7)

REVIEWER	Goulding, Rebecca The University of Manchester, Centre for Primary Care and Health Services Research
REVIEW RETURNED	18-Dec-2023

GENERAL COMMENTS	I was interested to read this qualitative study about the use of Comprehensive Geriatric Assessment (CGA) in primary and community care settings. The authors discuss barriers to and ways to support this practice but the manuscript lacks clarity about what the authors did and why. As such, there are various ways in which this could be strengthened. Specific examples are given below. Abstract 1. Reading the abstract left me with several questions about the study design, for example, why the study was focused on people aged 75+, whether the sample was stratified, and what theories were drawn on when analysing the data. Could more detail be added here. 2. There is an apparent disconnect between the results (summarised here as current issues with CGA in primary and community care) and the aim of the study (stated as an exploration of how to improve CGA). Was the aim to explore both barriers to and potential enablers of CGA in these settings or just barriers? Introduction 3. This seems a little disjointed, for example, paragraph five seems to follow on from paragraph three. The structure could be revised to build a stronger case for the research. 4. Existing points could also be expanded on to more clearly spell out why the research is needed. For example, a. Paragraph two: “evidence for the effectiveness of CGA … in the community … is mixed” - so why is this worth pursing? b. Paragraph three: “there is a need to ensure CGA best meets the needs … without compromising safety and efficacy” - why might these be compromised and what will this study do to help ensure they are not? Methods 5. There is a need for further explanation and clear justification of the approach taken. For example: a. In relation to the participants: How many of those who expressed an interest in taking part were recruited? It is noted that patient participants were selected for maximum variation in ethnicity, socioeconomic factors and frailty but this information is not reported for the sample. It also is not clear how frailty was assessed.

	b. Can you clarify why and how was the NASSS framework used? For example, it could help the reader if you are able to show how the questions in the topic guide align with this. Furthermore, can you explain why the questions in the topic guide do not appear to specifically relate to CGA? c. The approach taken for data analysis could be easier to follow if examples of both deductive and inductive codes were provided, and/or the conceptual map as well as the code categories. Can you also clarify how patient, public and healthcare professional stakeholders were involved in the analysis? The results 6. There appears to be some text missing between Table 2 and "Here we present the four domains…". As written, it is not clear what the domains are of, or how the importance of these were addressed. It is also not clear how these four domains relate to the summary of the results presented in the abstract. (After reading the abstract, I expected the results to be organised in relation to the barriers to CGA in primary / community care settings). 7. There are multiple references to the 'condition' of older people. It would be helpful to clarity what is meant by this (presumably frailty). 'In contrast' is also used in places where similarities are evident but not referenced, or in a way that implies something beyond what the authors may be intending. For example, in the section on organisation, the use of 'in contrast' implies people who value continuity do not understand the workforce challenges in the NHS. Discussion and conclusion 8. Workshops seem to be mentioned for the first time in the discussion. What were these? Please cover these in the methods 9. In this section, three key challenges and four enablers to CGA are summarised / described. It is not clear to what extent these are drawn from the results or have been extrapolated from both the results and previous literature. Where these are from the results, they could be more clearly drawn out in the relevant section of the manuscript. It would then be useful to start the discussion with a reminder of the aim(s) of the research and a summary of what has been found in relation to this/these. General 10. The language is generally acceptable but there are minor errors throughout, for example, the word 'people' appears to be missing from the third bullet point under 'strengths and limitations', several words are pluralised when they needn't be or vice versa, and the NVivo version number is given as 1.7 (I assume a more recent version was used). 11. Page numbers are not given in the COREQ checklist, and I was not able to find some of the information within the indicated sections (e.g. participant knowledge of interviewer) or some of the sections (e.g. declaration).

VERSION 1 – AUTHOR RESPONSE

Reviewer's 1 Comments	Response	Revision

In additional files 1 and 2, there is no visible explanation or questions about CGA. Especially, questions about older people and carers (additional file 1) seem to mostly involve recent primary care experiences and questions about technology applications.	Thank you for your comment. We did not use the term CGA when interviewing older people as advised by our patient and public advisory group who said to avoid technical and clinical terms and the word geriatrics. We instead used synonyms that were suggested by them, e.g. appointments instead of consultations, and long appointments, full health checks instead of CGA. Therefore, the synonyms of CGA were used in the patient topic guide, rather than words that suggested 'geriatric' and/or 'assessment', which are then reflected in the data presented here. For the healthcare professionals, we used the term assessment to encompass the broad terminology that may be used by those from different professional backgrounds. We have added CGA in brackets next to the assessment in additional file 2. However, the interviewer used prompts and encouraged the patients to describe their appointments to be able to collect data on CGA specifically. We expanded on this in the data collection section.	Methods/data collection/ Line 1
On page 6, under the data analysis section, it is stated that "similar ideas were coded", it seems necessary to present data that has been coded as responses about CGA.	We thank you for this suggestion. We added an example on coding in the data analysis section and we presented a quotation in the findings that includes data on CGA.	Methods section/data analysis/ Lines 148-153 Results/ organisation/ Lines 275-277

The additional file regarding technology discusses relatively clearly (1) substituting visits with technology, (2) filling in questionnaires before visits using technology, (3) using technology-assisted equipment, (4) mobile phones, and (5) wearable technology. However, there is a lack of description of preferences for these technologies at result.	You are correct. We did not discuss the preferences for different technologies because we aimed to explore the ease of access to different technologies and acceptability of using them among older people and healthcare professionals.	NA
The 'sampling and recruitment' section on page 5 mentions that patients were selected from the CARE and OPAL cohorts, and these cohorts are described as representative. However, there seems to be a need for at least a brief explanation regarding the recruitment of these existing cohorts seems necessary.	Additional detail has been added regarding the CARE75+ and OPAL cohorts.	Methods/ Sampling and Recruitment/ Older people/ Lines 104-116
There are parts that are difficult to understand for readers who are not familiar with the UK healthcare system. A brief explanation of this seems necessary.	We have added that the NHS is publicly funded.	Introduction/ Line 58
In the discussion part, it would be helpful to provide data on the recently surveyed digital literacy and preferences of older UK patients or caregivers. For example, from the face-to-face survey conducted from June 23 to July 22, 2022, in Korea (n = 505), pre-frail or frail respondents used social media more frequently than healthy respondents (19.4% vs. 7.4%, P < 0.001). 319 (63.2%) were not able to install or delete the application themselves, and 277 (54.9%) stated that the application was recommended by their children (or partners). Pre-frail and frail respondents used more healthcare applications to obtain health information (P = 0.002) and were less satisfied with wearable devices (P = 0.02) (J Korean Med Sci. 2024 Jan 01;39:e7. Published online Nov 27, 2023. https://doi.org/10.3346/jkms.2024.39.e7)	We have now expanded our discussion in relation to the digital literacy of older people in the UK.	Discussion lines 432-436

Reviewer's 2 Comments	Response	Tracked changes
Abstract Reading the abstract left me with several questions about the study design, for	We thank you for this suggestion. We have added more detail into the abstract. We have removed the age of	Abstract/ Lines 14-18, 21-24

example, why the study was focused on people aged 75+, whether the sample was stratified, and what theories were drawn on when analysing the data. Could more detail be added here.	older participants from the abstract due to the limited wordcount, but participant details are clearly described in the main text. We have not come across stratified sampling in qualitative research but have added we have used maximum variation sampling.	
There is an apparent disconnect between the results (summarised here as current issues with CGA in primary and community care) and the aim of the study (stated as an exploration of how to improve CGA). Was the aim to explore both barriers to and potential enablers of CGA in these settings or just barriers?	To address your suggestion, we have rephrased the aim in the abstract and the introduction.	Abstract/Lines 16-18; Introduction/Lines 86-88
Introduction This seems a little disjointed, for example, paragraph five seems to follow on from paragraph three. The structure could be revised to build a stronger case for the research. Existing points could also be expanded on to more clearly spell out why the research is needed. For example, a. Paragraph two: "evidence for the effectiveness of CGA … in the community … is mixed" - so why is this worth pursing? b. Paragraph three: "there is a need to ensure CGA best meets the needs … without compromising safety and efficacy" - why might these be compromised and what	The introduction has been restructured and expanded.	Introduction/ Lines 60-88

will this study do to help ensure they are not?		
Methods There is a need for further explanation and clear justification of the approach taken. For example: a. In relation to the participants: How many of those who expressed an interest in taking part were recruited? It is noted that patient participants were selected for maximum variation in ethnicity, socioeconomic factors and frailty but this information is not reported for the sample. It also is not clear how frailty was assessed. b. Can you clarify why and how was the NASSS framework used? For example, it could help the reader if you are able to show how the questions in the topic guide align with this. Furthermore, can you explain why the questions in the topic guide do not appear to specifically relate to CGA? c. The approach taken for data analysis could be easier to follow if examples of both deductive and inductive codes were provided, and/or the conceptual map as well as the code categories. d. Can you also clarify how patient, public and healthcare professional stakeholders were involved in the analysis?	a. We have clarified our recruitment process and note that because of the level of consent provided by different participants in the 2 cohorts we recruited from regarding personal characteristics, we were not able to consistently report all details e.g. socioeconomic factors. However, we did not restrict recruitment to only those who were deemed frail and included a range of older people. b. We have expanded on the use of NASSS in the methods section and added relevant NASSS domains to the topic guides (additional files 1 and 2). See response to reviewer 1 above regarding the topic guide and the use of the term CGA. c. We have added an example on a NASSS domain (Organisation) and provided an example of related coding categories d. We expanded on the involvement of stakeholders and PPI in the analysis.	a. Methods/ Sampling and Recruitment/ Older people/ Lines 104-116 b. Additional files 1 and 2 and Methods/ Data collection/ Lines 131-133 c. Methods/ Data analysis/ Lines 148-153 d. Methods/PPIE/Lines 100-102 + Data analysis/Lines 156-157

The results There appears to be some text missing between Table 2 and “Here we present the four domains…”. As written, it is not clear what the domains are of, or how the importance of these were addressed. It is also not clear how these four domains relate to the summary of the results presented in the abstract. (After reading the abstract, I expected the results to be organised in relation to the barriers to CGA in primary / community care settings).	We have expanded this paragraph for clarity. We have expanded on the use of the domains from the NASSS and the Framework of Acceptability in the methods section. We have added more details into the abstract for clarity.	Results/ Lines 174-179 Methods/ Data Analysis/ Lines 148-153 Abstract/ Lines 14-18, 21-24
There are multiple references to the ‘condition’ of older people. It would be helpful to clarity what is meant by this (presumably frailty). ‘In contrast’ is also used in places where similarities are evident but not referenced, or in a way that implies something beyond what the authors may be intending. For example, in the section on organisation, the use of ‘in contrast’ implies people who value continuity do not understand the workforce challenges in the NHS.	To address this, we changed the use of ‘condition’ to ‘frailty’ for clarity and rephrased relevant sections in the results.	Results section
Discussion and conclusion Workshops seem to be mentioned for the first time in the discussion. What were these? Please cover these in the methods	Workshops part of the engagement with older people, family members and healthcare professionals and we have updated relevant text throughout to provide clarity.	Methods section/ Lines 100-102 Discussion section/ Lines 379+393
In this section, three key challenges and four enablers to CGA are	We agree with your suggestion. We added an introductory paragraph to the discussion	Discussion/ Lines 371-374 and Line 379

summarised / described. It is not clear to what extent these are drawn from the results or have been extrapolated from both the results and previous literature. Where these are from the results, they could be more clearly drawn out in the relevant section of the manuscript. It would then be useful to start the discussion with a reminder of the aim(s) of the research and a summary of what has been found in relation to this/these.	section that includes the aim and summary of the results. The current challenges in CGA were highlighted by the participants in the interviews. The factors to enhance CGA were drawn from the current challenges that were explained by participants, and suggestions that they made to address them, workshop discussions with advisory group members and existing literature. We have updated relevant text throughout to provide clarity.	
General The language is generally acceptable but there are minor errors throughout, for example, the word 'people' appears to be missing from the third bullet point under 'strengths and limitations', several words are pluralised when they needn't be or vice versa, and the NVivo version number is given as 1.7 (I assume a more recent version was used).	We carefully proofread the manuscript. NVivo version 13, release 1.7	Methods/ Data analysis/ Line 142
Page numbers are not given in the COREQ checklist, and I was not able to find some of the information within the indicated sections (e.g. participant knowledge of interviewer) or some of the sections (e.g. declaration).	To address this, we expanded on the methods section and added page numbers to the COREQ Checklist.	Methods section/ Lines 91-94, 137-138, and 140 COREQ Checklist