Reviewer’s report

Title: Feasibility of using risk prompts to prevent falls, dehydration and pulmonary aspiration in nursing homes: a clinical study protocol

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Reviewer: Heather Barry

Reviewer's report:

Review of manuscript PAFS-D-17-00088 "Feasibility of using risk prompts to prevent falls, dehydration, and pulmonary aspiration in nursing homes: a clinical study protocol"

Thank you for asking me to review this manuscript. In this study protocol, the authors outline the background and methods for the above study, which aims to evaluate the feasibility of using a set of written signs (prompts) to caution against falls, dehydration and pulmonary aspiration risks in a nursing home population. This manuscript could be of interest to the readership of the Journal, although it does require significant work to address my concerns, and editorial input is needed to improve the level of English, should it be accepted for publication. The authors do not appear to have adhered to the SPIRIT checklist as a guide for reporting (and there is no SPIRIT figure included); use of this would help to improve the quality of the manuscript and reporting procedure. I have provided detailed comments forthwith with reference to the page/line number:

Title
1. The title is OK and is reflective of the study

Abstract (most of these comments will also be applicable to the main body of the manuscript)

2. Page 2, Line 4: Health professionals - what professional groups are you referring to here?

3. Page 2, Line 10: Abbreviation of CNS - what does this mean?

4. Page 2, Line 10/11: What are the inclusion criteria?

5. Page 2, Line 13: What do 'events' refer to?

6. Page 2, Line 14: Interview assessments: with whom are these going to be conducted?
7. Page 2, Line 14: 'Data of events' - again, what do the authors mean by this exactly?

8. Page 2, Line 18: Provide ethics reference please

9. Page 2, Line 18: Is this written informed consent? Please stipulate

10. Page 2, Line 19: The authors state this study is unique - why so?

Introduction

11. Page 3, Lines 5 and 7: what do the authors mean by 'health care facilities'?

12. Page 3, Line 8: Please provide clarification on the multidisciplinary team members to whom you are referring in this context

13. The authors then go on to write about the use of written risk prompts, however I was still unsure as to who initiate these prompts usually, e.g. is it management? And who are they aimed at - are they for the patients, staff or both? Who is privy to the information on them? What do they look like? I know that further information is later provided in the methods section but the reader does need to know some of this early on in the introduction so that the rest of the paper makes sense! How exactly are they meant to work? If better context was provided in relation to these 'prompts' I think I would have understood the protocol and it's aims/purpose better. More detail and background needs to be provided here.

14. Only one reference appears to be provided (number 8; Colon-Emeric et al., 2013) for most of the introductory section. Is this the only work that has been done in the area? What exactly is known already? Again, I think this could be better expanded upon to provide a richer and more detailed context and background for the reader.

Methods/Design

15. Page 3, Line 30: National - where?

16. Page 3, Line 31: '3' should be written as 'three'. All numbers under ten should be written out in full.
17. The aim and primary/secondary objectives are then listed. These should really be at the end of the introductory section.

18. I think there needs to be some re-organisation of headings/material presented in the methods section. The authors could provide some further information with regard to setting of the study, explaining about where the study is set and how representative this is of long-term care facilities in Portugal.

19. Page 3, Line 17: I think this heading would sound better if termed 'Sampling' rather than 'patient population'.

20. Page 3, Line 18: Again, CNS...??? What does this stand for, what does it mean? Why is only one nursing home being used? How representative is this of nursing home care/older nursing home population? Again this feeds into my earlier comment around needing to provide context for the study setting.

21. Page 3, Line 19: Add 'listed below/listed forthwith' after ...'if they fulfil inclusion criteria'.

22. Page 3, Line 20: What exactly is meant by the 'multidisciplinary team'? Again, you need to be explicit for the international readership as to the multidisciplinary team members from the nursing home to whom this intervention is aimed.

23. Page 3, Line 23: Is there any stipulation as to how long patients need to have been resident in the nursing home, in order to participate in the study?

24. Page 3, Lines 24/25: What is this brief screening assessment? Is there a reference that can be provided here?

25. Page 3, Line 26: Reword to 'Willing to participate in the study'.

26. Page 3, Line 27: 'Willing to provide written informed consent'.

27. Page 3, Lines 29/30: This point has already been stated above - and I wonder if this is an inclusion criterion? It is more about how patients have been identified/screened.
28. Page 4, Line 10: What is this clinical screening assessment?

29. Page 4, Line 11: The authors describe 'significant active' psychiatric problems - how have they qualified these terms? How long does the problem have to have been active for?

30. Page 4, Line 15: I think there could be better wording for this subheading 'study supplies'

31. Figures 1 and 2 are very helpful to the reader to visualise what these prompts actually look like. However, I have no idea if these are standard/have they been used before, or have these been invented/design by the research team?

32. Can you explain a bit more about how each of these prompts are actually utilised? For example, who wears the bracelets? What do they actually say? What do the signs actually say/show?

33. Page 4, Line 24: Again, who are these healthcare professionals exactly? Who are these teaching sessions aimed at? Are they run as multidisciplinary sessions? I think these paragraph needs more detail added - what form does the 60 min session take? Deal with the detail sequentially

34. Page 5: I wondered if this paragraph would be better termed as 'recruitment'?

35. Page 5, Line 1: Insert 'the aforementioned' before 'inclusion criteria'

36. Page 5, Line 3: Again, to whom are you referring when mentioning the multidisciplinary team?

37. Page 5, Line 5: Is there a contingency plan in place if a resident does not have any legal guardians to provide consent on their behalf? Will they then be excluded from the study?

38. Page 5, Line 7: Didn't understand the term 'voluntariness'

39. How long do potential participants have to consider the study information before they have to decide whether or not they will take part?
40. I then wonder if the sub-heading 'screening' is more appropriate to be inserted before the paragraph starting 'Demographic data, clinical manifestations and disease management…'?

41. Page 5, Line 24: Change 'cognition impairment' to 'cognitive impairment'

42. TUG test can also be used as an indicator of frailty in older people

43. More detail needs to be provided about some of the scale mentioned, particularly in terms of total mark/scoring procedures, e.g. MMSE has no information on scoring/scoring categories/severity of cognitive impairment as denoted by scoring

44. Page 6, Line 2: Is there a reference for these latest physiotherapy guidelines for PD?

45. Some of these screening tools are self-report measures - what happens if the resident is unable to provide a self-report? Is a proxy report used from staff member/family member? Or is the resident excluded from the study?

46. Under 'diary record' please provide detail as to who has created these documents

47. Page 7: Again, as regards information gathered during the monthly interview - what will you do if information is missing - will you go to a proxy? Have these interviews been piloted?

48. Have researchers received training in administering the screening tests listed?

49. Page 6, Line 26/27: Provide reference for SPSS in brackets

50. Page 6, Line 27: What kinds of descriptive statistics will be used?

51. Page 6, Line 28/29: Can you provide more detail as to how this figure of 20 patients/residents was decided upon? If from previous experience/studies then provide references for these

52. Page 6, Line 31: This needs to be reworded - doesn't make sense: 'performing a very weigh study…'
53. Page 6, Line 38: 'as our primary outcome we will measure patients' adherence' - this doesn't make sense to me; adherence to what exactly?

54. Page 7: In relation to data record - how/where will patient data be stored?

Discussion

55. The authors expect that use of the risk prompt displays will improve communication - how is this reflected within the outcomes, as communication is not measured directly?

56. In terms of limitations, this feasibility study will only be conducted in one nursing home. Please comment on this? How will provide you with an idea of feasibility in other nursing home settings?

References

57. See reference 14 (Folstein et al.) I think something has happened with referencing software, as '&quot' shows up twice here

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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