

Peer Review

Review of: "Pathways of Elderly People Aged 75 and Over Hospitalized in the Geriatric Department of the University Hospital of Bordeaux"

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1. The title should include the study design.
2. In the abstract and results, confidence intervals should be used for the interpretation of results as they are more informative to the reader.
3. The relevance of this study is not entirely clear from reading the background; please extend on the thought process and relevant contextual information so that the aim and research questions are clear.
4. Specifically, in the Introduction, a reform is described that was introduced in 2019; however, the data used in the study is from almost two decades ago, so why was this research necessary? Particularly, as the first sentence describes the flow of patients to the ED, and this is based on a reference from 2022.
5. The healthcare system should be described in the introduction to clarify the context and strengthen the rationale for the research. This will help to clarify the distinction between hospitalization from the emergency and direct unplanned hospitalizations (which is either uncommon in other contexts or goes by a different term; either way, it should be clearly defined). Also, what the patient outcomes are from these different types of hospitalization.
6. Further, in the "Introduction," a study is referenced that focuses on childhood pneumonia; considering that this study is focused on those 75 years and older, is this the most pertinent reference? The authors should expand their literature review to fit the study and support the aim.
7. The concept of "sub-acute" is brought up in the background, and there is no mention of the acute conditions which the authors include in the analysis.

8. In-hospital mortality is also not adequately addressed in the background.
9. The use of the older data in this study needs to be justified in the methods; why was this data chosen, and why is it appropriate for the research questions and aim? Considering the background says nothing that would help the reader understand this decision.
10. Why was only the first hospitalization included? An explanation is needed in the methods to clarify the rationale for this decision.
11. It is unclear when reading the analysis what the primary and secondary outcomes are; this should be rectified. I think the vague and poor overview in the background does not help.
12. The study design needs to be clarified, specifically the follow-up being the date of death.
13. Was any sample size calculation performed, given the study sample seems quite small and was further reduced through stratification? Are there any power issues?
14. In the results section, “there were 3,021 patients...” the authors should use appropriate symbols: “N” for the study population and “n” for the sample from the study population. This is confusing, particularly as the study design is poorly described.
15. The flowchart included in the results section should be moved to the methods, as it describes the study population.
16. In the results section, there are many overly long sentences, and unconcise language is used. An extensive rewrite and edit are needed.
17. Further, there are many incomplete sentences, grammatical issues, and some areas where the English needs to be improved throughout the manuscript.
18. The findings depicted in Figure 2 are unclear, and this part of the analysis was not well described in the methods/analysis section. Particularly, in the legend, “outpatient death,” what does this refer to? Or is it a typo?
19. Figure 3 would be more readable if the estimates and confidence intervals were included; moreover, the p-value only informs statistical significance but says nothing relating to practical significance, the estimates, and corresponding confidence intervals.
20. In the Discussion section, the first sentence should reiterate the study aim, and then the main points relating to the aim should be outlined.
21. On page 14, you refer to a “global ansllysis”; what global analysis was conducted?
22. The limitations of this study need to be expanded upon in the discussion, as there are limitations in terms of measurement bias, cohort, and period effects that are not acknowledged in the discussion.

23. There is a weird sentence on page 15, the paragraph before the conclusion, which states the UDA patients were identified based on keywords because structured variables were not available due to information system changes that took place in 2022. Firstly, this needs to be better described in the Methods section; why was older data selected, as this is a huge source of measurement bias, and what does this mean for the internal and external validity of this study?

Declarations

Potential competing interests: No potential competing interests to declare.