**Revisor A:**

I completed with considerations that can ameliorate the manuscript and are along the text in commentary

Title – instructive and short. Summarizes the manuscript

Abstract - reflect the contents of the manuscript, is well structured and efficiently summarize the content

Introduction - the objectives are clearly described and explains the relevance of the study

Methods - describes how the objectives were reached; the study design and methodology were appropriate to its objectives; I didn’t find methodological failures; the statistical method is accurate; the methodology epidemiological based manuscripts were adequate.

Results: data presentation and analysis is accurate, the results are clear and convincing, the charts and tables legible and correctly designed.

Discussion: explains the relevance of the results, describe limitation because he study was done in a acute mental hospital unit.

Conclusions: conclusions are relevant (in this field of an acute mental hospital unit), related to the objectives and based on the results.

References: literature review adequate and actualized.

Tables / Figures: we made commentary to ameliorate the paper

Acknowledgments

EXTENSION: no alteration proposed

PRESENTATION: manuscript is clear and logically presented.

RECOMMENDATION REGARDING PUBLICATION: Yes. Well done, statistic correct, a matter with interest.

PRIORITY REGARDING PUBLICATION: I don’t think this matter is so important to deserve to be in the first 10% but deserves publication in AMP.

RE: Thank you for the comments. We introduced the suggestions to improve the text.

**Revisor C:**

Facultar aos médicos prescritores TODA a informação sobre a medicação dos seus doentes, é sem dúvida a melhor forma de se evitarem “erros de medicação” resultantes de sobreposições desnecessárias e dispendiosas, mas sobretudo para se evitarem INTERACÇÕES que podem ser perigosas ou mesmo fatais. Os Autores definem como o objectivo deste trabalho “avaliar as potenciais contribuições das principais fontes de informação disponíveis para obter a Melhor História Farmacoterapêutica Possível (MHFP) que é uma etapa crucial da Reconciliação da Medicação”.

1- Introdução e Objectivos.

O conceito de reconciliação medicamentosa não é explicitado, nem a sua importância é referida no sumário. Por outro lado, o extenso termo Melhor História Farmacoterapêutica Possível (MHFP) não é também definido. O leitor da Acta Médica pode não estar familiarizado com estes conceitos e sua importância.

RE: O limite de palavras exigido no sumário infelizmente impede a explicitação destes conceitos. Se o editor nos autorizar a ultrapassar o limite de 250 palavras do *abstract*, com todo o gosto apresentaremos as definições solicitadas. No entanto, foi feita uma revisão da introdução, no corpo do texto, para tornar estes pontos mais claros.

Embora os Autores refiram na introdução que “Medication reconciliation has demonstrated to improve safety and efficacy of medication prescribed between transitions of care, and reducing the risk of adverse events and consequently patients’ medication-related morbidity and mortality”, nunca é citada a palavra “INTERACÇÕES”, principal causa de morbilidade/mortalidade terapêutica.

RE: Foi feita uma revisão do texto para clarificar este ponto, embora a literatura coloque as interações medicamentosas em terceiro lugar em relação à morbi-mortalidade iatrogénica, depois dos efeitos adversos e da descontinuação de medicamentos necessários.

2-Método.  
a) Na página 6, sobre as fontes de informação não é referido onde foram consultados os “Electronic health records – EHR (PDS)”.

RE: O texto foi corrigido e clarificámos que o local de aceso foi a unidade de psiquiatria.

b) Na página 6 é usada a sigla “ATC” a propósito duma classificação farmacológica, sem que a mesma seja explicada.

RE: O texto foi corrigido e colocámos por extenso a abreviatura.

c) Na página 6 em “data analysis” nada é explicado sobre o teste usado “Shapiro-Wilk test plus visual analyses of the Q-Q plots” nem são referidas as razões da sua escolha. Talvez pela minha ignorância sobre o referido teste, que possivelmente o leitor da AMP também terá, não consegui perceber como os Autores detetaram as omissões de informação terapêutica nas diversas fontes de informação.

RE: Apagámos a menção ao teste de Shapiro-Wilk uma vez que não fizemos inferências que requeressem uma avaliação do ajuste à normalidade.

3- Na discussão dos resultados, que indicam os EHRs (Electronic Health Records) como a melhor fonte de informação para o prescritor, não são referidas as fragilidades desta fonte de informação:

a) Será que os sistemas informáticos das diversas instituições são compatíveis de forma a partilharem a informação terapêutica? Pelo que tenho ouvido de alguns colegas que usam o sistema informático de hospitais do SNS, nem sempre se consegue obter informação de outros hospitais do SNS. Que dizer da informação dos doentes tratados nos hospitais privados, ou em consultórios médicos.

RE: Adicionámos uma frase na discussão, identificando que podem existir problemas de transferências de informação devido à existência de diferentes sistemas informáticos nos hospitais.

b) Por outro lado, os EHRs nada informam sobre automedicação, sobretudo com “produtos naturais” que podem interferir com a medicação prescrita. Estas fragilidades dos EHRs são seguramente os pontos fortes das entrevistas aos doentes ou cuidadores. É pena que os Autores não tenha feito uma discussão sobres estas vantagens e inconvenientes nas diversas fontes de informação analisadas.

RE: Aceitámos a sugestão e acrescentámos uma frase acrescentando o papel de cada uma das fontes de informação na BPMH.

4- Questão linguística.

Na página-4,  onde está “The purpose of this guideline was to encourage the implementation of medication reconciliation – the formal process in which health care professionals partner with patients to ensure accurate and complete medication information transfer at interfaces of care” talvez fosse mais correcto usar o verbo “to share”, pois “partner” é um substantive sinónimo de “parceiro”.

RE: Humildemente discordamos do revisor uma vez que “partner” é também um verbo com significado de atuar como parceiro numa atividade. Para além disso, é a definição presente na referência citada.

5- Conclusão

Pelo que acima ficou exposto, pensamos que este trabalho tem algum interesse para publicação, mas deveriam ser corrigidas os aspectos acima referidos.

RE: Agradecemos os comentários e esperamos ter respondido de forma clara a todos os comentários.

**Revisor D:**

RELEVANCE: Is the manuscript globally important for the clinical practice? Will it help physicians improving their practice and therefore their approach to patients? Does it involve clinical, scientific, social, political and economic factors affecting healthcare?

Re: This manuscript is important to alert clinicians that transitions of care are an important aspect that can negatively impact patient safety. The use of multidisciplinary teams in health care can help increase the quality of care provided.

RE: Thank you for the comment.

ORIGINALITY: What does this manuscript add to the current knowledge?

Re: This manuscript demonstrates that transitions of care can be an issue in Portuguese hospitals, and that medication reconciliation should be common practice. In many countries, hospital pharmacists arenresponsible for conducting a medication reconciliation at admission and discharge, ensuring a smooth transition between the inpatient and outpatient settings, preventing emergency department visits and hospitalizations. A quick search on PubMed using the strategy &lt;&lt;medication reconciliation AND Portugal&gt;&gt; retrieved 7 articles, none of which addressing the best method to create the best possible medication list or the description and evaluation of a transitions of care program. Thus, this study is a first step toward providing data for the Portuguese reality, so that decisions are not made solely based on data from other countries.

RE: Thank you for the comment.

MISCONDUCT: Plagiarism, fraudulent and unreliable data, double or bias in publication.

Re: No evidence of plagiarism.

STRUCTURE OF THE MANUSCRIPT

Title: Is it instructive and short? Does it summarize the manuscript?

Re: Yes.

Abstract: Does it reflect the contents of the manuscript? Is it well structured? Does it efficiently summarize the content?

Re: Yes, for the most part. My only comment is that it is not clear how the information you present in the Results of the abstract allows you to draw the conclusion that the 6-month time-frame for the retrospective collection of medication information to create the BPMH is the best cut-off.

RE: The length limitation of the abstract hampers providing more results. We hope the selection is clear in the results of the main text.

Palavras-chave: should it be ‘reconciliação terapêutica’ instead of ‘reconciliação da medicação’?

RE: We used the MeSH term vocabulary to guide the selection of keywords.

Introduction: Are the objectives clearly described? Does it explain the relevance of the study?

Re: Yes, the objectives are clearly described and the relevance of the study is explained. In the third paragraph, the authors use the terms hospital medical records (HMR) and electronic medical records (EMR) – what is the difference between these two?

RE: To clarify this terminology we preferred using the term shared electronic health record (SEHR) instead of electronic health record (EHR).

Also, please note the repetition of the word ‘increasingly’ in the following sentence: “EHRs are increasingly used worldwide proving to reduce the number of medication errors and their role in the provision of health care is increasingly recognized”.

RE: The text was corrected.

Aim: wasn’t one of the aims of the study to also assess the best timeframe to analyze medication information when conducting a medication reconciliation?

RE: We re-worded the objective to clarify this.

Methods: Does it describe how the objectives were reached? Are the study design and methodology appropriate to its objectives? Are there any methodological failures? Is the statistical method accurate? Is the methodology in epidemiological based manuscripts adequate?

Re: See comments below.

Suggest naming the first heading ‘Population and Setting’ given that you describe the hospital/unit where the study took place.

RE: The text was corrected and we named the first heading ‘Population and Setting’.

Suggest including the data collection form used during the patient interview as an appendix.

RE: We will include the data collection form used during the patient interview as an appendix.

The different data sources should be better explained for those who may not be familiar with them.

1. Hospital medical records – I am assuming this is the information included in the hospital’s electronic medical record. Is this correct? Who collects the medication and comorbidities at the time of admission – the physicians, the nurses, the pharmacists…?

RE: We clarify this at the methods section. We only used the information contained in the HMR, commonly used at the hospital. No intervention from the researchers was done in the HMR data.

2. Electronic health records – who enters information into the PDS? How is the information here different from the information included in the hospital system? Does the information from hospital medical records get transferred to the PDS?

RE: We added two sentences in the introduction to clarify this.

The terminology ‘hospital medical records’ and ‘electronic health records’ is confusing – I suggest naming the source ‘electronic medical record’ something like ‘patient portal’ or similar. To me, the electronic medical record is the computer system used in hospitals and clinics to document the encounter and patient health information.

RE: As explained before we changed to shared electronical health record (SEHR).

The following sentence is unclear to me: “This data source contains a large amount of information, which creates the need to define the best time cut-off to enable an efficient and feasible consultation in clinical practice.” After reading the manuscript in its entirety, I know what you mean, but the sentence should be revised to improve clarity.

RE: We re-worded the sentence to clarify this.

You used the time points of the preceding 3, 6, 9 and 12-months. I think it is important to provide some context for why you chose these time-points. It is not until one reaches the discussion that we learn that different authors suggested different time cut-offs. “Medicines omitted from 6- to 9-months analysis and from 9- to 12-months analysis were classified by analysing the medical records…” – why were time points grouped this way?

RE: We added a sentence in method section explaining that the Portuguese PDS contains information since 2012. We also re-worded the objectives to clarify the cut-off analysis. The selection of 3-, 6-, 9-, and 12-months cut-offs was arbitrarily selected corresponding to trimesters.

Data analysis: why was normality assessed if no results from inferential statistical analysis are presented?

RE: We deleted the sentence that mentioned the normality test.

Results: Is data presentation and analysis accurate? Are the results clear and convincing? Are the charts and tables legible and correctly designed?

Re: See comments below.

Suggest renaming the heading ‘EHR best time cut-off’ for something more informative, for example: ‘Best retrospective time cut-off for medication reconciliation’

RE: We renamed the heading ‘EHR best time cut-off’ to ‘SEHR best retrospective time cut-off’.

“Table 2 provides the proportion of medicines omitted if EHR analysis considers only the shorter periods of time resulting the four time cut-offs.” – this sentence in unclear

RE: We re-worded the sentence to clarify this.

What is the rational for presenting the proportion of medicines omitted for 3m vs 6m, 6m vs 9m, 9m vs 12m? This needs to be better explained in methods (data analysis section) and throughout the manuscript. How will you determine what the best time cut-off is? I am assuming it is based on the largest % increase, but this has not been explained before.

RE: We added a sentence in the methods section explaining the cut-off selection process.

The authors state that “Comparing the 3-months cut-off versus the 6-months cut-off, the information obtained increased 44.3%...” According to my calculations, the increase between 3 months (n=778) and 6-months (n=1397) would be 79.6% [(1370-778)/778]. Is this correct?

RE: You were right in the calculations. Our error was in the text of the sentence, because we always calculated the percentage of information lost when switching from one cut-off to the immediately lower. [(1370-778)/1370]. We corrected the sentence.

Contribution of each information source to BPMH – the authors identified 653 medicines that would have been lost in the preceding 6 months had PDS not been analyzed. Was this time period selected based on information from the previous section? This should be made clear here and in the methods.

RE: we re-worded the paragraph to clarify this.

Discussion: Does it explain the relevance of the results? Does it describe any limitation? Does it describe any areas in need of further study?

Re: More information is needed on the implications for future practice and research. See below more specific comments.

“Of these 351 drugs lost when comparing the 6-months and the 9-months cut-offs, only 55 (15.7%) were real omissions, with 15 medicines (4.3%) considered as potential serious omissions (anticoagulant, antiplatelet and antihypertensive drugs).” – this should be part of Results, not discussion

RE: In fact the majority of this information was already included in table 2 and table 3. We added the specific detail of potentially serious omissions in table 3.

I am curious as to why the PDS had so much more information than the patients/caregivers. From the 3 sources, what was the most accurate? Can you be sure that the patient was taking the medications that were in the PDS, which they did not mention during the interview?

RE: With this study we cannot evaluate patient medication adherence. However one of the strengths of our study is that the PDS compiles the medicines actually prescribed. If a patient abandoned a treatment more than six months ago, this medication would not be included in the BPMH when using the PDS six months cut-off.

The discussion section is superficial. I would like to have seen more explanation as to why the patients provide so little information compared to PDS, how these findings compare with previous literature, what the implications of this study to practice and research are, the role of multidisciplinary teams in transitions of care to address system-wide issues, whether medication reconciliation in transitions of care should be a consistent practice in every hospital, examples of transitions of care models in other countries, etc.

RE: Some of these features are out of the scope of our study. We may have positive opinions about the reconciliation in transitions of care, but this cannot be supported with the results of this study. We only focused on the first step of reconciliation process, which is the creation of BPMH.

Conclusions: Are conclusions relevant? Are these related to the objectives? Are these based on the results?

Re: Yes, the conclusions reflect the findings and tie with the objectives of the study.

RE: Thank you for the comment.

References: Was the literature review considered adequately? Does it follow AMP’s style? The main objective of peer-review is to ensure the accuracy of the manuscript and therefore reference should be checked. Do the citations actually contain the information described in the manuscript? Was any recent or relevant article omitted? Is the percentage of recent references adequate?

Re: This section is adequate.

RE: Thank you for the comment.

Tables / Figures: Is the message clear enough so that any reference in the main text is not necessary? Are they clearly identified and legible? Are all the abbreviations and acronyms described in footnotes?

Re: Table 1: are the F numbers diagnostic codes? I suggest creating a column for diagnostic codes and another for diagnosis.

RE: We clarify the title of the table 1.

Table 2: I suggest clarifying the name of the second column to read “Number of medicines registered in the EHR in the preceding months”. Both the terms “drugs” and “medicines” are used throughout the manuscript – suggest using the same for consistency. The percent at the bottom for the proportion of omissions in the period 3m vs 6m should be 44.3% (dot) and not 44,3% (comma).

RE: We made these changes in table 2.

Table 3: why is information for 3m vs 6m not presented?

RE: We excluded the option of the 3-month cut-off manly based on the first criterion, which is the percentage of medicines omitted. Thus the analysis of the causes of drugs omission were not relevant in this comparisons.

Table 4: “Overall information from three sources” is this number of drugs or number of omissions? What is the cut-off period considered here? Consider adding percentages to the table.

RE: We modified the heading to clarify this. We added the percentages in table 4.

Figure 1: including the % in addition to absolute frequencies would be helpful.

RE: We added the percentages in Figure 1

Acknowledgments: Is any financial support declared? Are any conflicts of interest declared?

Re: Yes.

EXTENSION: Can the manuscript be shortened without removing any crucial aspects? Can any figures/tables be removed or improved?

Re: The manuscript has adequate length.

PRESENTATION: Is the manuscript clearly and logically presented? If not, can it be improved? How?

Re: Details provided in the questions above.

RECOMMENDATION REGARDING PUBLICATION: Do you think the manuscript should be published in AMP? Why? Why not?

Re: Yes, I believe that the manuscript is worth publication because there is a scarcity of data for the Portuguese reality for basic issues, such as transitions of care. Health care is evolving towards multi- disciplinarity and it is important that all clinicians (not just physicians) are aware of issues that may be related with other aspects that they are less familiar with.

RE: Thank you for the comments. We introduced the suggestions to improve the text.