# Review of: "Patient prioritisation methods to shorten waiting times for elective surgery: A systematic review of how to improve access to surgery"

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In this review authors aim at synthesising global evidence on policy strategies to reduce waiting times for elective surgery. They searched 5 databases (PubMed, EMBASE, Scopus, Web of Science, and the Cochrane Library) for articles published between 2014 and 2019. The angle of this study is focusing on patient prioritisation methods to reduce waiting times, as opposed to other methods with system-wide approaches.

Before moving the discussion to single sections, the general comment is that the research strategy (not available in the manuscript but among the supplementary files) might be improved to better catch relevant literature, or that the inclusion/exclusion criteria are too rigid. The reasons of my comment are two:

- first, although possible, the reduction from 7543 records in the first search to 17 articles retained as eligible is unusual if compared to other published reviews. To put it in percentage terms, the authors retained for analysis the 0.2% of identified articles, while excluding 99.8% of them. From the article I am not able to say whether the search strategy was not well enough refined or whether the inclusion criteria were very strict, but I cannot ignore these figures;

- second, although I find many of the key articles on the topic of waiting times and elective surgery either as references or included in the analysis, I can't find the following: Lungu DA, Grillo Ruggieri T, Nuti S. Decision making tools for managing waiting times and treatment rates in elective surgery. BMC Health Serv Res. 2019 Jun 11;19(1):369. doi: 10.1186/s12913-019-4199-6. PMID: 31185989; PMCID: PMC6560774 [1]. This paper was published in 2019 so should have been identified by this review. The study provides many of the issues investigated in this review (e.g. equitable access, variation, etc.) from the Italian context, and more specifically from Tuscany region. The reason for the exclusion of this evidence appear unclear to me and I think its inclusion would have improved the comprehensiveness of this review, as none of the 17 included studies is from Italy, a country that recently made great research and practice efforts to reduce waiting times for healthcare services, especially elective surgery and ambulatory visits.

With my concerns about the selection and inclusion of studies being expressed, I will proceed with commenting each section separately.

## Introduction

The section is cleary and it adequately describes the relevant elements of the topic. A broader description of the background and current state of the art would have probably benefited the completeness of the picture for the reader, but I understand if authors chose to limit the length of the introduction due to overall length limitations. The only content comment I have regards mentioning the COVID-19 pandemic. While there is no doubt that it had an impact on waiting times for electice surgeries, the same holds true for several health care services, so the argument is not necessarily novel. Furthermore, the study does not present discussions or conclusions addressing separately the before- and during-pandemic context, so that the reference to the COVID-19 pandemic in the introduction appears not necessary.

## Methods

The methods adopted for this study appear appropriate for a systematic review. A portfolio review was registered in PROSPERO on 17.12.2019. Authors used the PRISMA flow diagram and the PRISMA statement and checklist (available as supporting information). Five major databases were searched: PubMed, EMBASE, Scopus, Web of Science, and the Cochrane Library. As for the appropriateness of the search strategy and/or the inclusion/exclusion criteria, please refer to the comment above. Although the authors motivate their decision of limiting the search to the years 2014-2019, given the low number of included studies, perhaps adopting a longer time interval would have produced a more comprehensive search? The choice of not performing a meta-analysis appears appropriate as well, as outcomes are heterogeneous and difficult to quantify due to the variability of how to measure them. The choice of quality assessment tools (ROBINS-I and CASP) appears appropriate for the study design.

## Results

The presentation of results is overall clear and it includes the PRISMA flow diagram, a summary of included studies, and the risk of bias in included studies. The first sentence of the second paragraph is in part contrasting with what has been mentioned in the methods regarding the choice of not performing a meta-analysis. Indeed, the sentence is: "Our primary outcome variable is waiting time, which was defined as the period between a surgeon placing a patient on the waiting list for a particular elective surgery and the day that the surgery is performed". At this stage, readers might be confused whether the outcome is well defined or whether it is heterogeneous and variably measured by the identified studies.

## Discussion

Authors present the discussion by developing a framework collating the core principles that were reflected in all studies. The framework is made of five main elements: I) level of focus (National or institutional/local), II) horizontal equity, III) vertical equity, IV) parameters (clinical, socio-economic, and moral considerations), and V) measurements (clinical judgement, investigations and reports, and patient-

reported facts). The use of the framework is beneficial in helping the reader to have an overview of the concepts, while the implications mentioned in the final paragraph seem broad, without further developing how these findings can help policy and practice.

**Limitations of the review**

Limitations are presented clearly, while I have already commented the choice that authors made regarding to limiting the search for articles within a six years time interval between 2014 and 2019.

**Conclusion**

Conclusions are coherent with the previous sections, and give me the opportunity to summarise the main thoughts I have regarding this work. The choice of the topic is very relevant and authors aim at contributing to knowledge about available strategies to reduce waiting time for elective surgery, a relevant issue in many countries worldwide. The study design and methods used are appropriate, while the great rejection rate (99.8%) and the exclusion of key articles rise doubts about the comprehensiveness and the precision of the search strategy and/or the inclusion and exclusion criteria. The decision to limit the search to a time period of 6 years, although motivated by authors, might have impacted the number of studies and the knowledge extracted. Finally, the link between the relevance of the topic and the current COVID-19 pandemic appears somewhat forced, as waiting times for elective surgery were a major concern for most universal healthcare systems also before the beginning of the pandemic.

## References

1. ^Daniel Adrian Lungu, Tommaso Grillo Ruggieri, Sabina Nuti. (2019). _Decision making tools for managing waiting times and treatment rates in elective surgery._ BMC Health Serv Res, vol. 19 (1). doi:10.1186/s12913-019-4199-6.