

## Peer Review File

Article information: <http://dx.doi.org/10.21037/jtd-21-87>.

### Reviewer A:

Comment 1: The authors have submitted a well-written narrative review on target with the requested topic.

- This sentence: "Unfortunately, disparities in screening and stage at presentation still exist likely contribute to disparities in outcomes of CRC." Add an "and" between exist and likely.
- Change "The" to "They" in the following: "Finally, the found that rural counties experienced ~5 more deaths per 100,000 population even after controlling for screening rates"
- Change "black" and "white" throughout the manuscript to "Black" and "White"
- typo: " impovrished" should be "impoverished" (line 314)

Reply 1: The authors appreciate the reviewer's feedback and have made the appropriate changes to the corresponding sections.

### Reviewer B:

Comment 1: This is a very well-written review that covers a broad topic.

My only suggestion is to make a summary Table for each section (cancer), divided by treatment/outcome and screening.

Reply 1: The authors thank the reviewer for their feedback and have added summary tables for each cancer sub-section.

### Reviewer C:

Comment 1: This is clearly an important topic, but I'm not certain that your research fills an evidence gap. There has been tremendous work studying cancer disparities, such that contemporary reviews answer pointed and focused research questions. And while the research you present is quite thorough and comprehensive, the methodology lacks reproducibility and is not described to evaluate the rigor of the analysis. This narrative review, if condensed, could serve well as an introduction to an analytical study or review, aiming to answer a specific question.

I would recommend revising the current research question to more specifically address thoracic cancer disparities. Consider identifying specific interventions, policies, or vulnerable groups to focus on. Then, I would recommend designing a rigorous and reproducible review methodology, following-best practice guidelines.

Reply 1: We thank the reviewer for this thoughtful response. We agree that this review does not necessarily add to existing data or strengthen existing data. Additionally, we agree that this could serve as the introduction to a new study or a background to a proposal to expand the existing focus of study to the implementation of several programs that could potentially address the summarized disparities in cancer care. These aims, however, are outside of the expertise of the authors to provide in the time period allotted for revision and are outside of the scope of this invited narrative review.

### Reviewer D:

Thank you for the opportunity to review this nice summary on socioeconomic/racial-ethnic disparities in cancer care access and outcomes. In my view, the future direction/conclusion is still premature. I have included my suggestions below for authors consideration.

Comment 1: The title should include an “outcome” element since it is one of the main areas discussed.

Reply 1: Thank you for this suggestion, the authors have adjusted the title to better reflect “outcomes.”

Comment 2: For prostate cancer, to be clearer about the current recommendations with regards to prostate cancer screening, a notion of overdiagnosis/overtreatment risk should be included.

Reply 2: We have revised our manuscript to reflect the current stance of the USPSTF as well as the American Urological Association recommendations regarding prostate cancer screening including a discussion on the risk of screening for early detection.

Comment 3: Future direction should be elaborated further.

Reply 3: We have elaborated the ‘Future Direction’ section to reflect the authors’ opinions as well as to create a comparison with the current state of sociodemographic disparities in lung cancer care.

Comment 4: Lines 345-348 “One study by Siegel et al concluded that the disparity in distant-stage mortality rates accounted for approximately 60% of the overall black-white mortality disparity in colorectal cancer. ...” This should be part of the section on CRC. The future direction should rather be the authors’ points of view rather than narrative summary of the existing studies in my view.

Reply 4: The authors have edited this line of the manuscript according to the reviewer recommendations.

Comment 5: Also, it seems to lack discussions or conclusions about how these findings can relate to lung cancer disparities (as the authors state “As we look to address these disparities in patients with lung cancer, ...” line 54-55).

Reply 5: We have drawn comparisons in the section entitled, ‘Future Directions’ to disparities in lung cancer care.

Comment 6: Are there studies identifying to screening for the socioeconomic or racial-ethnic group with lower participation rates?

Reply 6: We have, in each section, cited several studies that have examined barriers to screening for patients with breast, colon, and prostate cancer. These barriers include distance to healthcare facilities, race, socioeconomic status, insurance status, among other risk factors.

Comment 7: I suggest the authors to include discussions about distance/travel time barriers to cancer care. There are many studies on this topic. This can help highlight the health system-related barriers or solutions.

Reply 7: We thank the reviewer for this suggestion and have now referenced studies that have examined an association between distance traveled and disparities in cancer care.