

Peer Review File

Article information: <https://dx.doi.org/10.21037/asj-21-51>

Reviewer A

This review provides a concise but clear review of the resource allocation considerations for developing congenital heart surgery programs in variable resource contexts.

Thank you for your excellent review. The ethical concepts are both utilized appropriately and applied in a clear and logical manner that will be easy for clinical and health care administrative teams to understand, whilst not giving up the quality of ethical analysis.

I think the introduction is good for engaging the audience in the "why" so that they are more likely to engage in the ethical considerations which often come off as inaccessible or impractical to a clinical audience.

I appreciate the question and answer style, I think this adds engagement for the audience, and while it might not work in many instances, it is appropriate for such a concise review and enables the author to progress the arguments in a quick, unobscured fashion.

Author response: Thank you. I made some minor edits to this style based on the recommendation of another reviewer but tried to otherwise maintain this tone.

Some academic ethicists will debate the broad application of autonomy as respect for persons in this way, but I completely agree that this is both appropriate to the Beauchamp/Childress intent and the correct consideration for health care considerations, and will be both embraced and accepted by a clinical audience without side treatises or qualifying statement.

Author response: Thank you. I have also heard some criticism of this application from some ethicists, particularly those from a philosophy background, however it does seem useful from the perspective of clinical experience.

The transition from public health to consequentialist arguments is appropriately staged and applied.

Author response: Thanks!

Conclusion is accurate to the arguments presented, clear, and compelling.

Author response: thanks!

Minor edits: in the abstract - "Beginning with the principles of bioethics (beneficence...)" I would alter to be "Beginning with the principlist bioethics (beneficence...)". This is a tiny but important point, as much of the medical ethics education continues to propagate an implication that there are ONLY four principles. I think therefore important to denote "the four principles" within the system from which they originate. I think this is more readily identifiable and less problematic in the text,

although an emphasis that the four principles are derived from the commonly used principlist system may be helpful along the same line of reasoning above.

Author response: thank you. This is a helpful clarification which has been incorporated into both the abstract (page 2, line 7) and main text (page 4, line 10).

I think this is timely and important with ongoing efforts at global outreach for cardiac centres in high income countries.

Reviewer B

The author utilizes a good approach to an important topic. The discussion of the principles of bioethics is done well, but the discussions of population health and consequentialist ethics (+ cost effectiveness) are not as clear or concise. Overall, there was reasonable description of the various ethical frameworks and principles but limited application of those principles to the topic at hand, and the conclusions presented do not follow directly from the rest of the text.

Author response: thank you. The conclusion section has been substantially expanded to clarify how the discussion of the different ethical frameworks applies to the recommendations, and to make the recommendations more clear (page 12, lines 2-12). The reviewer's comments are greatly appreciated as this significantly improves the clarity of the manuscript.

More specific points to address:

- In Background and Conclusion, the improvement in CHD outcomes in wealthy nations and disparities between wealthy and resource limited countries are noted and thus create some foundation for the importance of this discussion, however, no detail is provided. These claims should be expanded upon.

Author response: Thank you. Details, including an additional reference, have been added to the background section (page 3, lines 14-18).

- Could consider some discussion of the AHRQ Triple (or Quadruple) Aim in the Population Health section as framework within which ethical principles are applied and evaluated at population or health system level

Author response: Thank you! This is an important addition to this section of the paper. A discussion of the Triple Aim, with two additional references, has been added to the population health ethics section (page 8, lines 14-20).

- At several points (Background and Consequentialist ethics sections), financial costs/burdens are mentioned before patient outcomes (death, disability, QoL). Patient outcomes should always be presented first, unless having a discussion primarily regarding finances.

Author response: Thank you, I completely agree. The text has been revised in several places to reflect the primary importance of patient outcomes (page 3, lines 10-12; page 5, line 6; page 9 lines 10-12 and 22-23, page 10, lines 1-3).

- The Background section reads somewhat like an advert. Readers will already be interested in the topic if reading the text, so recommend removing transitions such as "Yet, there is some good news!" or "Or, is it?" and just presenting information and ethical questions more directly.

Author response: These transitions have been removed, however, based on the suggestions of another reviewer, the overall conversational tone of the manuscript has been otherwise maintained.