

Review of: "Coronary Artery Bypass Graft Surgery Clinical Quality: A Network-DEA approach"

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Potential competing interests: No potential competing interests to declare.

21.1.2023

Dear Editor:

Thank you very much for giving me an opportunity to review this original study. Review notes for the paper titled: "Coronary Artery Bypass Graft Surgery Clinical Quality: A Network-DEA approach" is provided as follows:

- This paper has a strong potential to contribute to the existing knowledge about quality and efficiency by emphasizing on a special type of surgery by using an original dataset.
- It will be useful to support study findings by considering original contributions of this study into the quality and efficiency assessment knowledge in Coronary Artery Bypass Graft Surgery.
- As author(s) cited reference 26: "*additional knowledge into the field that the number of studies using patient clinical data and assessing clinical outcomes has been limited*"; it is recommended to emphasize strengths of this study with this regard.
- Some of the references are old it is recommend for the author(s) to revise old references and change with recent ones.
- Some confusing statements needs revision such as: "*A 2017 WHO report states that 17.9 million people died from cardiovascular diseases in 2019 [34]*" ?
- I strongly advice to enhance the aim/objective of this study. Quality and efficiency assessment for clinical data and outcomes *efficiency assessment for not common DMUs* is the originality of this study. I advise to add this to the objective part also.
- More details necessary about sampling procedure.
- It is necessary to add details about efficiency analysis in patient level. What are the methodological differences between efficiency analysis in patient outcome level and traditional and commonly used hospital level ?
- What kind of efficiency analysis used in this study? Give more methodological details and support these statements with existing references.
- It is strongly recommended to add references for selected input and output variables of DEA model.
- What is behind reason and motivation of selection of "two-stage NDEA method"?
- It is necessary to add equation numbers into the formulas.
- Why did you write U test in page 8 in bold, please revise writing style.

- Page 9: “the desired clinical quality level was not achieved in these DMUs.”What is desired clinical quality level?
Please clarify your statements.
- Cost variables are rare indicators in efficiency analysis due to data availability problems. Please emphasize more on cost variables and study findings interrelated with cost variables.
- What is the original currency unit of this study US dollar (\$) or not? Please provide footnotes at the end of the table.
- Could you please enhance these very nice following recommendations (page 17): “*This study recommends the creation of disease-specific standard data packages that include disease-specific structure, process, and outcome measures, and to use multiple measures simultaneously in the evaluation of clinical quality*”.
- Very nice limitations section thank you very much, but writing style seems different please revise writing style.
- Small writing mistakes exists please revise the text considering small writing mistakes. Ex: use small letter page 12;
Preoperative period

This study has a great potential to the existing knowledge about efficiency analysis by incorporating quality indicators by using patient level data. The study needs minor revision and also it will be useful to check the quality of English.

I wish author(s) the best.

DECISION: Minor revision.