Costs of Transcatheter Versus Surgical Aortic Valve Replacement in Brazil: Preliminary Analysis

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The problem:

Aortic valve disease is a common condition, affecting 3-9% of patients over 75 years. In the last decade, Transcatheter Valve Replacement (TAVR) has been shown to be the most effective treatment for this condition.

TAVR costs have limited access to patients in low and middle income countries. In Brazil, TAVR is under evaluation as an alternative to Surgical Aortic Valve Replacement (SAVR) in the Public Health System.

The first reimbursement strategy suggested a fixed fee to reimburse TAVR in specialized centers across the country. Nonetheless, the proposed amount was not based on the actual cost to perform the procedure and the sugested fee seems to not cover the overall costs, resulting in a potential financial deficit to the hospitals.

The Brazilian Hemodynamic Society (SBHCI) led the initiative to generate accurate costs data to the Ministry of Health to sustain a more effective strategy to reimburse the TAVR at a national level

Objective:

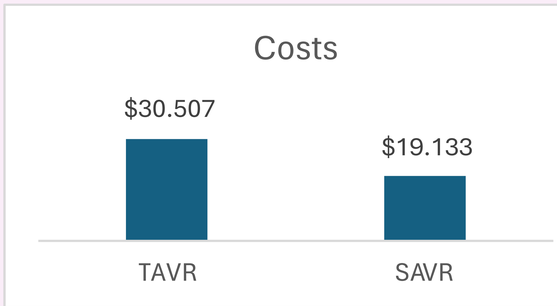
To evaluate the in-hospital and 1-year costs of patients undergoing TAVR and SAVR in reference centers in Brazil.

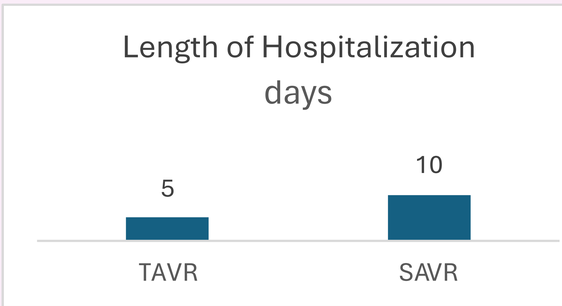
Methods:

- Data from 3 reference centers in Brazil
- All patients submitted to TAVR from January 2020 to July 2022 and 2:1 consecutive patients submitted to SAVR were included
- Microcosting study following Time-driven Activity-based was retrospectively applied.
- Descriptive and opportunity cost analyses comparing TAVR and SAVR.

Results:

409 cases (109 TAVR and 212 SAVR)





By reducing the length of stay to the TAVR parameter, it will be possible to double the procedures delivered with the same hospital structure available.

The valve mean price was Int $ 27,404, and the price ranged from Int $ 7,364 to Int $ 51,162 due to the differences in brands and purchasing processes from each center

Study Impact:

By reporting real-world cost information this study demonstrates how strategies to reduce variability can result in more population access to health technologies. These findings are essential in special in the context of Universal Health Care Systems from LMIC such as Brazil.