

Outcomes of Transcatheter Aortic Valve Implantation: Does Time Matter?



In a recent issue of the American Journal of Cardiology, Finkelstein et al¹ compared the efficacy and safety of transcatheter aortic valve implantation (TAVI) in low surgical risk (LSR) versus intermediate-to-high surgical risk (I-HSR) patients. The authors concluded that procedural outcomes were comparable between LSR and I-HSR TAVI patients, whereas the rates of short- and long-term mortality, as well as the safety outcome, were lower in LSR patients.¹

First, we would like to congratulate the authors for their study which covers an important scientific gap.¹ We would also like to highlight an essential parameter that could have also played a key role in patients' outcome after TAVI, affecting mortality too. The wait-time period until the patients undergo the procedure as previously reported,^{2,3} can significantly influence patients' outcome.

In 2018, Elbaz-Greener published their study on temporal trends and clinical consequences of wait-times for TAVI in a population of Canadian patients with aortic stenosis during 2010 to 2016.³ They found that "the cumulative probability of wait-list mortality and heart failure hospitalization at 80 days was approximately 2% and 12%, respectively, with a relatively constant increase in events with increased wait-times."³ Furthermore it was reported that during the study period, the average wait-time (almost 3 months) was significantly associated with increased morbidity and mortality, suggesting a need for greater capacity and access.³

Also the functional and clinical status of some patients (especially the elder and most frail individuals) may dramatically deteriorate during the time between referral and procedure,⁴ because of the rapid disease progression of severe aortic stenosis and the varying wait-times for treatment in different countries due to policy and economical restrictions.

Thus, it is very important to know what was the wait-time (i.e., time from

referral to procedure) and to further co-evaluate its effect on patients' survival and clinical outcome. It could be speculated that in this study,¹ the I-HSR patients might have had a shorter wait period until TAVI compared with the subgroup of very LSR or even LSR patients. Thus, those who finally undergo TAVI after a longer wait-time may have an aggravated health status versus those (i.e., higher risk) who undergo TAVI or even surgical aortic valve replacement in much shorter period of time.

Unfortunately, wait-time of patients with severe aortic stenosis until TAVI or surgical aortic valve replacement has been mostly overlooked in survival studies and also has never been explored in cost-effectiveness analyses of TAVI, probably due to lack of the relevant data. Hence, it could be recommended to report what is the wait-time (i.e., time from referral to procedure) and to further evaluate its impact on patients' outcome following aortic valve replacement.

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Usefulness of a Rounding Cardiologist in a Skilled Nursing Facility to Improve Patient Satisfaction



To the Editor—Patient satisfaction is an indicator of quality of medical care and has been associated with lower patient mortality and hospital readmissions.¹ On October 1, 2012 the Centers for Medicare and Medicaid Services began withholding hospital's Medicare reimbursement based on surveys evaluating patient satisfaction.² Recently, we conducted a retrospective study of 1,032 patient records at a skilled nursing facility (SNF) and examined change in hospital readmission rates 1 year before and 1 year during employment of a rounding cardiologist.³ Total 30-day hospital readmission rates decreased 3% (11% to 8%), and hospital readmissions due to heart failure decreased 6% (14% to 8%) during the year that the cardiologist was rounding. This resulted in a 27.3% and 42.9% improvement in 30-day hospital readmission rates, respectively. The current study examined a subset of these data by comparing the satisfaction of these patients at the SNF 1 year before and 1 year during the rounding cardiologist.

Patient satisfaction data were assessed for 190 patients (48 men, 142 women) aged 85.2 ± 9.4 years using My Inner-View, a quality measurement and satisfaction survey created by the National Research Corporation that is commonly used in nursing and assisted living homes.⁴ Survey data were retrospectively examined for patients receiving long term care 1 year before (May 2013 to April 2014; n=98) and during the Cardiologist's first year (May 2014 to April 2015; n=92). The Cardiologist rounded approximately 7 hours a week (over 2 to 3 days). The survey asked 2 questions and provided a section for comments. Question 1 asked patients to rate their "overall satisfaction" during their experience at the SNF. Question 2 asked the patients to select a "level of recommendation" that they would provide to others regarding the SNF. For questions 1 and 2, patients selected either "excellent," "good," "fair," or "poor." The comment section consisted of the patient's