

# Patients who stay in hospital less than three days after TAVR fare better

March 4 2019

---

Transcatheter aortic valve replacement (TAVR) patients who are required to stay in the hospital more than three days after the procedure are at a significantly greater risk of heart attack, stroke or death after one year, compared to patients discharged in less than 72 hours, according to a study published today in *JACC: Cardiovascular Interventions*.

TAVR is a minimally invasive procedure to replace the aortic valve. Using data from the STS/ACC TVT Registry, researchers conducted the first large-scale study looking into the length of stay after transfemoral TAVR.

"We were able to analyze four years' worth of data, beginning when the registry was established in 2011, up to 2015," said lead study author Siddharth A. Wayangankar, MD, an interventional cardiologist and researcher at the University of Florida in Gainesville. "Through this work, we discovered that rates of delayed [discharge](#) have declined during this time. Delayed discharge is associated with a significant increase in mortality even after adjusting for in-hospital complications."

Delayed discharge was defined as a discharge taking place more than 72 hours after the TAVR procedure. The analysis found that from 2011 to 2015, in a total of 24,285 [patients](#), 55.1 percent were discharged within 72 hours, while 44.9 percent were discharged beyond 72 hours. During the study period the rate of delayed discharge declined from 62 percent to 34 percent.

Researchers said this decrease followed improvements in how the procedure is performed—including techniques, devices and clinician experience—which has contributed to better outcomes and fewer complications.

However, some patients must stay longer than 72 hours. Researchers found patients who were over 85 years old, African American or Hispanic had a greater risk of delayed discharge. Prior mitral valve procedures, diabetes, home oxygen, severe symptomatic heart failure, atrial fibrillation, dialysis and severe kidney disease, were also independent predictors for delayed discharge. However, presence of prior intra-cardiac devices ([implantable cardioverter defibrillators](#) or pacemakers), prior bypass surgery, smokers and prior heart attack, were some of the independent predictors of early discharge. After adjusting for in-hospital complications, delayed discharge was an independent predictor of one-year all-cause mortality.

"Further work needs to be done to determine if predictors of early discharge could be utilized to develop length of stay scores," Wayangankar said. "These scores could be instrumental in administrative, financial or clinical policy development regarding delivery of TAVR procedures."

The study has several limitations. First, this study is observational in nature. Second, although there is standardization and uniformity in the TVT Registry, the data are only internally validated at sites and not centrally adjudicated. Third, the field of TAVR has rapidly changing practice standards. Finally, the one-year outcome data were driven from an administrative database, thus the outcomes might have been overestimated.

**More information:** *JACC: Cardiovascular Interventions*, [DOI: 10.1016/j.jcin.2018.11.015](https://doi.org/10.1016/j.jcin.2018.11.015)

Provided by American College of Cardiology

Citation: Patients who stay in hospital less than three days after TAVR fare better (2019, March 4) retrieved 5 July 2024 from <https://medicalxpress.com/news/2019-03-patients-hospital-days-tavr-fare.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.