PROGRAM REVIEW | HOSPITAL ADMINISTRATION

Evolution of Our TAVR Program

From general anesthesia to nurse-led conscious sedation

A minimalist pathway: shorter cases, lower cost per case, and a sustainable staffing model

By: Eric Thomassee

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Structural Heart is important!

TAVR is not just a procedure – it is a strategic component of the CV service line that improves patient access, strengthens the hospital's market position and generates downstream value

Our TAVR program (and structural heart in general) became a regional gateway to advance CV care and one of the hospital's most valuable platforms for future growth.

Our Lady of Lourdes – Heart Hospital: Path to Building a High-Quality Sustainable Program

Who we are…

Located: Lafayette Louisiana

Originally a physician owned hospital

- 32 inpatient beds, 2 operating rooms, 3 cath labs
- Primary CV surgery, cardiology and vascular procedures

Adaptions our program needed to ensure access to AS care:

Factors we considered

  - Efficiencies – clinic, cath lab, disposition
  - Financial responsibilities
  - Support services
- Without change in high-quality patient care

Timeline

2015- first TAVR cases – GA, TEE
2017
- Problem – low DRG payments
- Solution – reduce supplies/services thought to be nonessential
- Plan – minimalist approach as described by Emory
- Result – reduce use of supplies, 3rd party vendors

2020 – COVID
2023 – cath lab remodel – reduce procedural spaces
2025 – cath lab remodel – again
2027+ - unknown

Your story is unique!

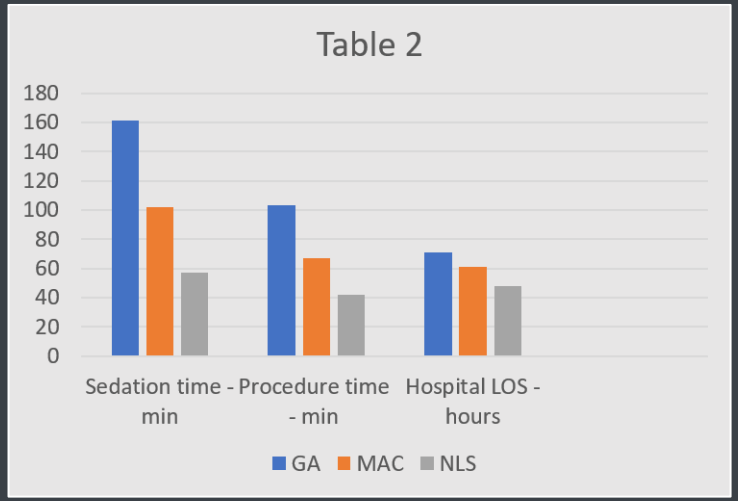
Nurse Led Sedation Results in reduced sedation and procedure time and LOS

Evaluating Clinical Outcomes of Nurse-Led Anesthesia in Patients Undergoing Transcatheter Aortic Valve Replacement

Critical care Nurse

Manuscript pending

GA 33 patients
MAC 100 patients
NLS 200 patients
2015-2021



For appropriately selected patients, Nurse-Led Sedation is an excellent option; however, it may not be appropriate for every patient.

Minimalist TAVR Reduces Procedural Costs

Circulation: Cardiovascular Interventions

ORIGINAL ARTICLE

Economics of Minimalist Transcatheter Aortic Valve Replacement: Results From the 3M-TAVR Economic Study

Neel M. Butala, MD, MBA; David A. Wood, MD; Haiyan Li, MS; Khaja Chinnakondepalli, MS; Sandra B. Lauck, Janarthanan Sathananthan, MBCHB; John A. Cairns, MD; Elizabeth A. Magnuson, ScD; Madeleine Barker, M John G. Webb, MD; Robert Welsh, MD; Anson Cheung, MD; Jian Ye, MD; James L. Velianou, MD; Harindra C. Wijeysundera, MD; Anita Asgar, MD; Susheel Kodali, MD; Vinod H. Thourani, MD; David J. Cohen on behalf of the 3M-TAVR Investigators

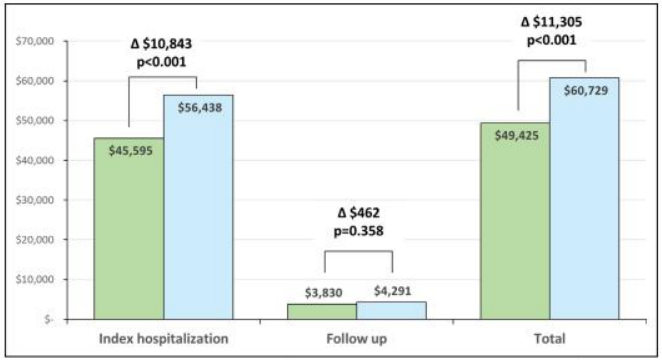


Figure. Mean costs and cost differences for the 3M-TAVR (3M-Transcatheter Aortic Valve Replacement) and S3i (PARTNER SAPIEN-3 Intermediate Risk) groups during the index hospitalization, 30-d follow-up period, and total study period.
Index hospitalization and follow-up costs were each trimmed at the 99th percentile before summation. 3M-TAVR=green and S3i=blue.

Evolution of TAVR

General Anesthesia
Perfusion in room
Trans Esophageal Echo (TEE)
10 staff in room
Central venous lines, arterial lines

2 TAVRs by 4pm
ICU
3 day AVG LOS



Nurse led sedation
No perfusion in room
Trans-thoracic echocardiogram (TTE)
5 staff in room

Results in 3-4 TAVRs before 11am
Early ambulation
Next day discharge
High patient satisfaction

Outcomes similar to STS registry
ACC TAVR accreditation center

Minimalist modifications Supported Program Growth and Increase Access

