Heart Hospital Reduces Cardiac Bypass Surgery Mortality by 11%

Data analytics compared to multiple quality metrics drove improvements.

Results

Texas Heart realized an

11%

decrease in mortality rate

"Last year was our strongest quality year ever and one of our best financial performances in 10 years. They go hand in hand."

DR. DAVID PATE CEO, St. Luke's Episcopal Hospital

Background

The Texas Heart Institute is a not-for-profit cardiology and heart surgery center located within the Texas Medical Center in Houston, Texas. Founded in 1962, the Texas Heart Institute and its clinical partner, St. Luke's Episcopal Hospital, have become one of the nation's largest cardiovascular centers. Its 160-member professional staff has performed more than 100,000 open-heart operations, 200,000 cardiac catheterizations and 1,000 heart transplants.

Situation

The reality of a 1-star rating in Open Heart Surgery was concerning to leadership at the Texas Heart Institute in Houston, Texas. Partnered with St. Luke's Episcopal Hospital, Texas Heart saw a tremendous need to find out why the hospital of choice had worse-than-expected mortality rates.

CEO Dr. David Pate partnered with Healthgrades to find out:

- What variation in care was driving the poor rating?
- What processes needed to be put in place to ensure the best possible patient outcomes?



"I felt there had to be investments into the long term. It's really that focus that quality is our core business. And that led me on my journey and passion to really drive up the quality in every aspect of what we do. There are going to be hospitals that don't survive this. Eventually whoever can deliver the highest quality product at the lowest possible cost is going to be the winner."

DR. DAVID PATE CEO, St. Luke's Episcopal Hospital

Solution

Healthgrades Quality Assessment and Implementation team evaluated the cardiac surgery process. After conducting a comprehensive root cause analysis, the team identified several problems that were contributing to poor outcomes. Based on these findings, the following clinical improvement processes were put into place to remedy the situation.

- One-on-one interviews with key thought leaders and physician champions
- In-depth chart reviews to determine root cause of mortality and complications
- Data analytics comparing multiple quality metrics
 using Healthgrades administrative data to clinical
 registry data collected by St. Luke's, as well as
 internal data collected by researchers at Texas Heart,
 to drive improvement recommendations
- Assessments of current patient intake process starting at the initial phone call, with specific focus on improving readiness for transferred patients from outlying referring hospitals to St. Luke's

Healthgrades determined there was not a systematic process to assess acuity of patients being transferred. Therefore, the Healthgrades team guided the St. Luke's transfer center to deploy a clinically validated risk-assessment tool that prompted the collection of critical clinical data from the transferring hospital. This data resulted in an objective patient acuity score and was then used to promote the following discussions:

- Cardiologist and Cardiac surgeon prior to the transfer
- The Chief Medical Officer reviews the patient's acuity score prior to the transfer
- Ensure proper resources are available at the time of transfer

Conclusion

Assessing cardiovascular patients at the time of transfer prepares the facility for acuity to deploy appropriate resources in a consistent manner to improve patient outcomes.

