

Modern anesthesia protocols, top-trained leaders drive better patient outcomes

A level I trauma center and teaching hospital in North Central Texas was looking for a cardiothoracic surgery anesthesia partner to help them overcome significant challenges they'd encountered in the past few years.

Hospital beds: 550+ | Anesthesia points of service: 20+ | Annual discharges: 23K



“The Sound Anesthesia cardiothoracic team was created with fellowship-trained, echo-boarded anesthesiologists – very important to achieving good results with increasingly complex cardiac surgical cases”.

– Hospital's director of cardiothoracic surgery.



OPPORTUNITY

The hospital's cardiothoracic surgery team recognized the need to measurably improve care for patients as well as restore a sense of pride among the surgical team with these goals in mind:

Creating more efficiency around surgery start times and turnovers. Challenges in the operating room caused frustration, disengagement, and rising dissatisfaction among surgeons.

Improving patient outcomes. The surgery team, which follows the standard metrics set by The Society for Thoracic Surgeons (STS), was missing the mark on extubation times, length of stay, and readmission rates, as well as experiencing a high rate of renal failure.

TRANSFORMATIVE CHANGE

The Sound Anesthesia team brought clinical rigor and collaborative leadership to the hospital, helping to knit the team together and work confidently in lockstep. As the team blended anesthesiologists and CRNAs, they were more agile and efficient when it came to managing ICU support, where needed, and turnover times. The team partnered with the hospital to:

- **Lead and educate as fellowship-trained cardiothoracic anesthesiologists**, with more than a decade of experience in cardiothoracic surgery and certified in transesophageal echocardiography
- **Reduce unnecessary variation in care** by universally adopting TEE for more reliable images and decision support to help inform surgical choices and by coming to consensus on standardizing anesthetic protocols.
- **Standardize handoff**, developing a tool specifically for patient transfer between cardiothoracic surgery and ICU teams that accounts for bleeding risk, extubation times, and sedation plans.
- **Create a multidisciplinary workgroup** to evaluate outcome metrics and develop strategic interventions to improve those outcomes.
- **Support engagement and retention** of the cardiothoracic anesthesiology team by keeping them focused on their specialty.

KEY RESULTS

52%

REDUCTION IN
STS O/E* RATIO

.21

REDUCTION IN MAJOR
COMPLICATIONS O/E*

45 min.

REDUCTION IN
ANESTHESIA CASE
START TIME

*observed to expected (O/E)

For patients receiving an arterial line or preoperative nerve block, anesthesia-related delays to cardiothoracic surgery “in-room time” were brought to zero. And the “time out” to “anesthesia ready” (fewer than 60 minutes) in the cardiothoracic operating room was consistently at 100 percent.

