

Background

The East Side Surgeons

In an effort to improve patient outcomes, 10 surgeons from our group of 15 have formed the “East Side Surgeons” group. The purpose is to meet at regular intervals and share information on clinical practice and patient outcomes. Lectures in best practices and findings from the literature and meetings are presented to the group.

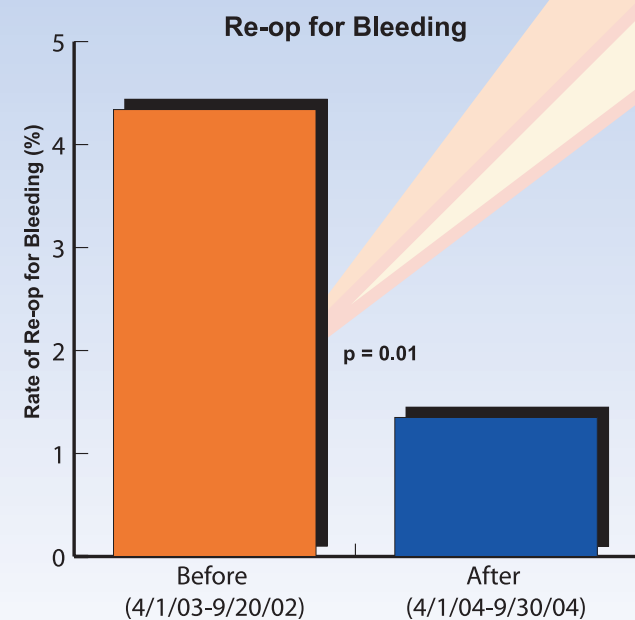
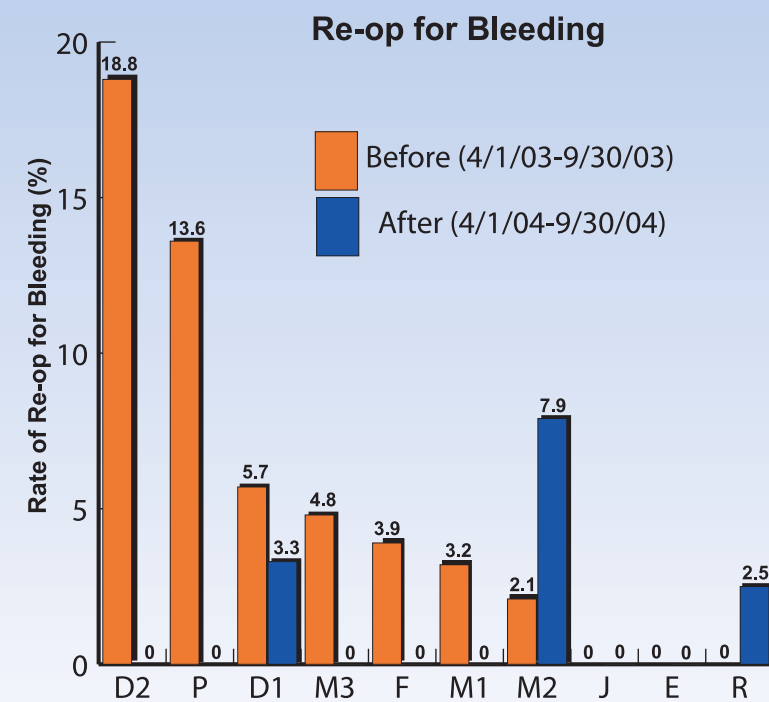
To test the effectiveness, we analyzed some of the early data from the group. One area showed significant improvement while another was resistant to this approach. We outline an alternative approach being tested.

Methods

- Analysis of STS approved database
- Analyze Re-op for Bleeding over 6 month period
- Sub-set data by surgeon
- Two with lowest rate discuss practices at meeting
- Re-analyze data for 6 month period after meeting date
- Similar analysis for Post-op A-Fib data

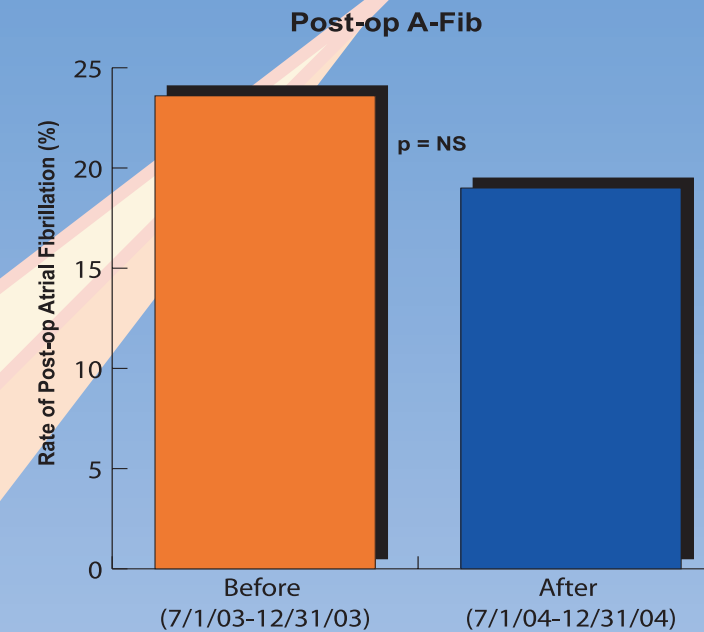
Results

Re-operation for Bleeding

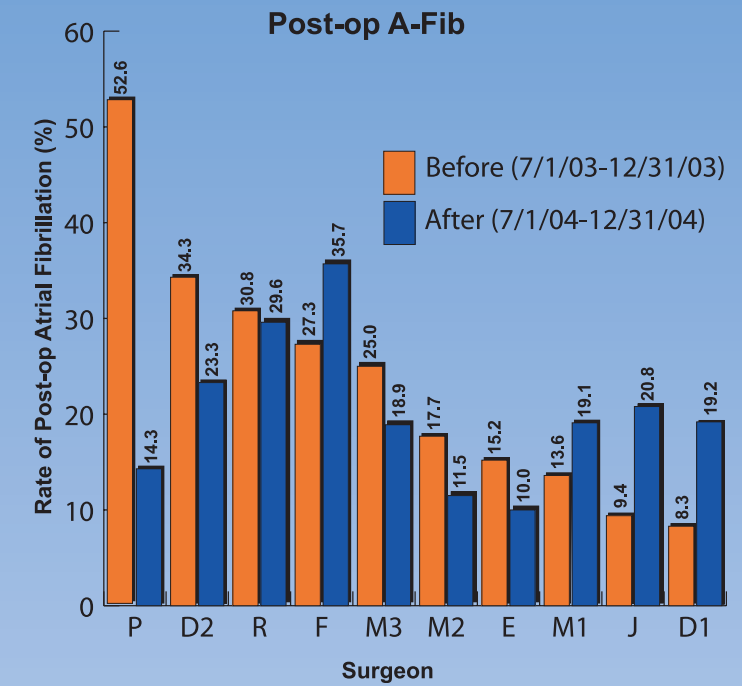


- Initial rate = 4.32% (17 / 392)
- Surgeons varied 18.8% to 0% (3 surgeons)
- After meeting rate = 1.35% (5 / 371)
- Surgeons varied 7.9% to 0% (7 surgeons)
- Improvement statistically significant p = 0.01

Post-operative Atrial Fibrillation



- Initial rate = 23.6% (88 / 373)
- Surgeons varied 52.6% to 8.3%
- After meeting rate = 19.0% (60 / 316)
- Surgeons varied 35.7% to 10%
- Improvement not statistically significant



Future Directions for Improvement of Post-op A-Fib

- Plan to develop A-Fib risk algorithm
 - Use pre-op risk factors
 - Risk algorithm will produce a probability for each patient based on their pre-op risk factors
 - Divide into 3 groups (low, medium and high risk)
- Logistic regression is used to calculate weightings for statistically significant factors that contribute
- Use randomly selected 2/3 of CAB only patient records (approx 15,000) to develop weightings
- Test on remaining 1/3 of CAB only patients
- Prophylactic treatment to start at end of surgery for high risk patients
- Clinical Trial: Compare observed fraction with expected

Discussion

Analysis of database information leading to discussions of ‘best practices’ may lead to improved outcomes (Re-op Bleed) but may only identify the problem, as in the case of A-Fib. Database information can then be used in a different approach (development of risk algorithm) to attempt to resolve the problem and improve patient outcomes.