# Barriers to Implementation of Concomitant Ablation Survey

Start of Block: Default Question Block

Q0 Thank you for starting the survey. If you have any questions, please contact Michaela Berens at mgb2zzb@virginia.edu

Q1 How long have you been in cardiac surgery practice?

- <5 Years (1)
- 5-10 Years (2)
- 11-20 Years (3)
- >20 Years (4)

Q2 Which of the following best describes your practice?

- >90% Adult cardiac surgery (1)
- >90% Adult cardiac surgery with a majority subspecialty focus on valvular surgery (2)
- >90% Adult cardiac surgery with a majority subspecialty focus other than valvular surgery (3)
- Mixed adult cardiac and general thoracic, vascular, or congenital surgery (4)

Q3/4 How many of the following operations have you performed per year over the past two years?

0 20 40 60 80 100 120 140 160 180 200

| | |
|---|---|
| Mitral valve operations (isolated or concomitant) () |  |
| Surgical ablations for Atrial Fibrillation (AF) () |  |

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Q5 When referred patients with AF for mitral valve surgery how often does the referring physician discuss concomitant ablation?

- Never (0%) (1)
- Rarely ( (2)
- Sometimes (11-50%) (3)
- Usually (51-89%) (4)
- Almost always (>90%) (5)

Q6 Does one surgeon in your practice/group perform the majority of referral mitral valve operations?

- Yes (1)
- No (2)

*Display This Question:*

*If Does one surgeon in your practice/group perform the majority of referral mitral valve operations? = Yes*

Q6.5 Are you the surgeon in your practice/group that does the majority of referral mitral valve operations?

- Yes (23)
- No (24)

Q7 What percent of your mitral valve operations are performed through the right chest (Mini/Robot)?

0 10 20 30 40 50 60 70 80 90 100

| | |
|---|---|
| % () |  |

Q8 Did you have significant exposure to surgical AF ablation during fellowship?

- Yes (1)
- No (2)

Q9 Did you receive advanced training in arrhythmia surgery?

- No (1)
- Yes (2)
- Other (Please fill in blank) (4) _____

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Q10 How likely are you to perform concomitant biatrial ablation (COX MAZE IV) in:

| | Open Atrial Surgery (Mitral Valve) | | | | | Closed Atrial Surgery (CABG, Aortic Valve Other) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Never | Rarely 11-40% (2) | Sometimes 41-60% (3) | Usually 61-80% (4) | Always >80% (5) | Never | Rarely 11-40% (2) | Sometimes 41-60% (3) | Usually 61-80% (4) | Alw >8 (5 |
| Patient with Persistent AF (1) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Patient with Paroxysmal AF (2) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Patient without clear history of AF (3) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

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Q11 How likely are you to perform concomitant left sided lesions/pulmonary vein isolation in:

| | Open Atrial Surgery (Mitral Valve) | | | | | Closed Atrial Surgery (CABG, Aortic Valve Other) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Never | Rarely 11-40% (2) | Sometimes 41-60% (3) | Usually 61-80% (4) | Always >80% (5) | Never | Rarely 11-40% (2) | Sometimes 41-60% (3) | Usually 61-80% (4) | Alw >8 (5 |
| Patient with Persistent AF (1) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Patient with Paroxysmal AF (2) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Patient without clear history of AF (3) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

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Q12 How likely are you to perform concomitant left atrial appendage ligation in:

| | Open Atrial Surgery (Mitral Valve) | | | | | Closed Atrial Surgery (CABG, Aortic Valve Other) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Never | Rarely 11-40% (2) | Sometimes 41-60% (3) | Usually 61-80% (4) | Always >80% (5) | Never | Rarely 11-40% (2) | Sometimes 41-60% (3) | Usually 61-80% (4) | Alw >8 (5 |
| Patient with Persistent AF (1) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Patient with Paroxysmal AF (2) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Patient without clear history of AF (3) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

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Q13 Do you perform stand-alone AF procedures?

- Yes (1)
- No (2)

Q14 The 2017 HRS/EHRA/ECAS/APHRS/SOLAECE expert consensus considers concomitant surgical ablation for AF at the time of mitral valve surgery a Class I recommendation.

- True (1)
- False (2)

Q15 The 2017 Society of Thoracic Surgeons clinical practice guidelines recommend concomitant surgical ablation for AF at the time of mitral valve surgery as Class IA.

- True (1)
- False (2)

Q16 How much have recommendations or guidelines increased your use of concomitant ablation?

- Very Little (Rarely Performed) (1)
- Somewhat (More likely to Perform) (2)
- Very Much (Very likely to Perform) (3)
- Very Little (Already Performed) (4)

Q17 How would you rate your comfort/experience with ablation techniques?

| | Level of Comfort/ Experience | | |
|---|---|---|---|
| | Uncomfortable/ Do Not Use (1) | Somewhat Comfortable/ Rarely Use (2) | Very Comfortable/ Frequently Use (3) |
| Cryoablation (1) | ○ | ○ | ○ |
| Radiofrequency Unipolar (2) | ○ | ○ | ○ |
| Radiofrequency Bipolar (3) | ○ | ○ | ○ |
| Cut and Sew (4) | ○ | ○ | ○ |
| Other (Laser/Microwave/US) (5) | ○ | ○ | ○ |

Q18 Do you have ready access to ablation devices at your institution?

- ○ Yes (1)
- ○ No (2)

Q19 Does your institution have ready access to ablation device industry representatives for support if needed?

- ○ Yes (1)
- ○ No (2)

Q20 Rank the following barriers from most to least impactful on your decision to perform concomitant ablation in patients with AF undergoing mitral valve surgery. (1= most impactful, drag and drop options)

_____ I do not think it works (1)
_____ Adds additional cross clamp time (2)
_____ Worsens arrhythmias (3)
_____ My patients are not good candidates (4)
_____ My patients are too high risk (5)
_____ I am not very comfortable with ablation (6)
_____ I do not have proper equipment at my hospital (7)
_____ I do not have staff or device representative support (8)
_____ Adds additional risk to my patients (9)
_____ I do not get paid for it (10)
_____ Other (Please fill in blank) (11)
_____ No barriers (12)

Q21 Rank the following interventions you feel would benefit your ability to overcome barriers to performing concomitant surgical ablation (rank from most to least beneficial, 1= most beneficial)

_____ Stronger clinical data supporting benefit (1)
_____ More education about guidelines (2)
_____ More education on how to perform the ablation (3)
_____ Mentorship from surgeons who perform ablation (4)
_____ Financial incentive to perform ablation (5)
_____ Support from Cardiology/EP (6)
_____ Other (Please fill in blank) (7)

Q22 Rank the following educational approaches from most to least beneficial for overcoming barriers to concomitant surgical ablation. (1=most beneficial)

_____ Educational videos (1)
_____ In person proctors (2)
_____ Visits to centers (3)
_____ Simulation (4)
_____ Dinner lectures (5)
_____ Other (Please write in blank) (6)

Q23 Would you be willing to discuss further with our team the barriers you face and potential interventions we could implement to overcome these barriers to optimize guideline directed use of concomitant ablation?

- Yes (1)
- No (2)

*Display This Question:*

*If Would you be willing to discuss further with our team the barriers you face and potential interve... = Yes*

Q24 Click to write the question text

- Name (First, Last) (1) _____
- Phone # (2) _____
- What time/day is best to contact you? (3) _____

**End of Block: Default Question Block**