

Table E1. Answers to questions by surgeon volume

| Issue (p-value*) | | Low Volume | Mid Volume | High Volume | Total |
|--|--------------|---------------|-------------|-------------|-------------|
| Surgeon explains options/ lets patient decide (p = 0.4743) | agree | 74 (93.7%) | 101 (95.3%) | 95 (91.4%) | 270 (93.4%) |
| | no opinion | 2 (2.5%) | 3 (2.8%) | 3 (2.9%) | 8 (2.8%) |
| | disagree | 3 (3.8%) | 2 (1.9%) | 6 (5.8%) | 11 (3.8%) |
| | not reported | 0 | 0 | 1 | 1 (0.3%) |
| Rehab discussion with patients preoperatively (p = 0.45) | agree | 77 (97.5%) | 101 (96.2%) | 103 (99.0%) | 281 (97.6%) |
| | no opinion | 0 | 1 (0.95%) | 0 | 1 (0.4%) |
| | disagree | 2 (2.5%) | 3 (2.9%) | 1 (1.0%) | 6 (2.1%) |
| | not reported | 0 | 1 | 1 | 2 (0.7%) |
| Physiotherapy for full thickness RCTs treated non-operatively (p = 0.87) | agree | 64 (81.0%) | 82 (77.4%) | 83 (79.8%) | 229 (79.2%) |
| | no opinion | 5 (6.3%) | 12 (11.3%) | 11 (10.6%) | 28 (9.7%) |
| | disagree | 10 (12.7%) | 12 (11.3%) | 10 (9.6%) | 32 (11.1%) |
| | not reported | 0 | 0 | 1 | 1 (0.3%) |
| Steroid injections contraindicated in potential surgical candidates (p = 0.13) | agree | 9 (11.4%) | 19 (17.9%) | 19 (18.5%) | 47 (16.3%) |
| | no opinion | 8 (10.1%) | 8 (7.6%) | 14 (13.5%) | 30 (10.4%) |
| | disagree | 62 (78.5%) | 79 (74.5%) | 70 (68.0%) | 211 (73.3%) |
| | not reported | 0 | 0 | 2 | 2 (0.7%) |
| "Normal" shoulder expectation after RC repair (p = 0.04) | agree | 4 (5.1%) | 12 (11.3%) | 14 (13.7%) | 30 (10.5%) |
| | no opinion | 2 (2.5%) | 4 (3.8%) | 5 (4.9%) | 11 (3.8%) |
| | disagree | 73 (92.4%) | 90 (84.9%) | 83 (81.4%) | 246 (85.7%) |
| | not reported | 0 | 0 | 3 | 3 (1.0%) |
| Surgeon decides/ tells patient (p = 0.92) | agree | 12 (15.2%) | 11 (10.5%) | 21 (20.6%) | 44 (15.4%) |
| | no opinion | 13 (16.5%) | 5 (4.8%) | 5 (4.9%) | 23 (8.0%) |
| | disagree | 54 (68.4%) | 89 (84.8%) | 76 (74.5%) | 219 (76.6%) |
| | not reported | 0 | 1 | 3 | 4 (1.4%) |
| RCT repair to prevent progression of the tear (p = 0.0008) | agree | 32 (40.5%) | 58 (55.2%) | 65 (62.5%) | 155 (53.8%) |
| | no opinion | 14 (17.7%) | 15 (14.3%) | 19 (18.3%) | 48 (16.7%) |
| | disagree | 33 (41.8%) | 32 (30.5%) | 20 (19.2%) | 85 (29.5%) |
| | not reported | 0 | 1 | 1 | 2 (0.7%) |
| RCT repair to prevent osteoarthritis (p = 0.38) | agree | 23 (29.1%) | 41 (39.1%) | 26 (25.0%) | 90 (31.3%) |
| | no opinion | 14 (17.7%) | 19 (18.1%) | 17 (16.4%) | 50 (17.4%) |
| | disagree | 42 (53.2%) | 45 (42.9%) | 61 (58.7%) | 148 (51.4%) |
| | not reported | 0 | 1 | 1 | 2 (0.7%) |
| Surgeon should spend more time discussing pros and cons preoperatively (p = 0.53) | agree | 67 (84.8%) | 85 (81.0%) | 83 (81.4%) | 235 (82.2%) |
| | no opinion | 10 (12.7%) | 18 (17.1%) | 15 (14.7%) | 43 (15.0%) |
| | disagree | 2 (2.5%) | 2 (1.9%) | 4 (3.9%) | 8 (2.8%) |
| | not reported | 0 | 1 | 3 | 4 (1.4%) |

*Mantel-Haenszel chi-square test for trend (exact probability)

Figure E1: The survey.

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Rotator Cuff Survey

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|--|--|--|
| | | |
|--|--|--|

In the past year, have you treated patients or referred patients for treatment for rotator cuff tears?

Yes No **If "No" please STOP and return the survey "as is"**

Number of rotator cuff repairs that you performed in the PAST YEAR:

| |
|--|
| |
|--|

 cases

Preferred type of primary rotator cuff repair for a 2 cm full thickness tear:

Arthroscopic Mini-open Open

What do you estimate is the failure rate (defined as patient dissatisfaction) for all patients undergoing rotator cuff repair in the USA this year?

| |
|--|
| |
|--|

 %

For the following four questions, please assume any cuff pathology described has been confirmed on MR and indicate your treatment recommendation.

| |
|--|
| <p>1. A 35 yo manual laborer fell at work 4 months ago onto his dominant arm and has a painful, 50% partial-thickness rotator cuff tear involving the entire supraspinatus tendon with no demonstrable weakness. His situation is unchanged after 3 months of physical therapy. What would you suggest for this patient (choose one):</p> <p><input type="radio"/> No surgery, physical therapy <input type="radio"/> No surgery, give cortisone injection</p> <p><input type="radio"/> Recommend surgery with cuff repair <input type="radio"/> Recommend surgery without cuff repair</p> |
| <p>2. A 45 yo manual laborer has a medium (2 cm), full-thickness rotator cuff tear after an acute injury 3 months ago that involves his dominant arm with 4/5 ER weakness that is not particularly painful. What would you suggest for this patient (choose one):</p> <p><input type="radio"/> No surgery, physical therapy <input type="radio"/> No surgery, give cortisone injection</p> <p><input type="radio"/> Recommend surgery with cuff repair <input type="radio"/> Recommend surgery without cuff repair</p> |
| <p>3. An active 55 yo male with an insidious history of mild discomfort present for a year is found to have a small (1 cm), full-thickness rotator cuff tear. He has received no treatment to date. What would you suggest for this patient (choose one):</p> <p><input type="radio"/> No surgery, physical therapy <input type="radio"/> No surgery, give cortisone injection</p> <p><input type="radio"/> Recommend surgery with cuff repair <input type="radio"/> Recommend surgery without cuff repair</p> |
| <p>4. An active, previously asymptomatic 65 yo female reports a traumatic event one week ago and now cannot lift her arm. MR reveals a large retracted (5 cm) cuff tear with fatty infiltration of the involved cuff muscles. What would you suggest for this patient (choose one):</p> <p><input type="radio"/> No surgery, physical therapy <input type="radio"/> No surgery, give cortisone injection</p> <p><input type="radio"/> Recommend surgery with cuff repair <input type="radio"/> Recommend surgery without cuff repair</p> |

Please indicate whether you agree or disagree with the following statements:

| | Strongly Disagree | Disagree | Indifferent | Agree | Strongly Agree |
|---|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 5. Physiotherapy is useful for full thickness rotator cuff tears treated non-operatively. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. The use of a steroid injection is contraindicated in potential surgical candidates. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Patients should expect to have a "normal" shoulder after rotator cuff repair. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. The surgeon should decide whether the patient should have rotator cuff repair and then tell them to have (or not to have) surgery. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. When recommending rotator cuff surgery, the surgeon should explain the options and let the patient decide whether to have surgery. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. A major reason to repair rotator cuff tears is to prevent progression of the tear. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. A major reason to repair rotator cuff tears is to prevent osteoarthritis of the shoulder. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. Surgeons should spend more time discussing the pros and cons of rotator cuff repair with patients preoperatively. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. The expected frequency and duration of post-operative rotator cuff rehab should be discussed with patients preoperatively. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

14. What is the maximum number of steroid injections that can be safely given in one year?

- 1 2 3 4 5

15. My patients could be more involved in the decision-making process for rotator cuff surgery if: (check all that apply)

- They had a higher level of education
- They had longer pre-operative appointments
- They had more frequent pre-operative appointments
- They received more information (brochures, videos, computer software, internet, etc)
- I received greater reimbursement for pre-operative consultations
- My patients are already sufficiently involved in the decision-making process