

# PATIENTS WHO DO AND DO NOT FOLLOW UP 2 YEARS AFTER ROTATOR CUFF REPAIR ACHIEVE CLINICALLY SIGNIFICANT OUTCOMES AT EARLIER TIME POINTS AT A SIMILAR RATE

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# CONFLICT OF INTEREST

- Disclosures for Dr. Amini and Dr. Sykes are available on the AAOS website.
- Remainder of authors have no conflicts of interest

# INTRODUCTION

- Many journals require 2 years of follow-up data for clinical studies
- This results in high administrative burden, delay of information, high loss to follow up

# OBJECTIVE

- To determine if follow-up at 2 years is influenced by early achievement of clinically significant outcomes (CSOs) after rotator cuff repair

# METHODS

- A prospective, multicenter registry was queried for all patients that underwent RCR.
- Patients with preoperative and 6-month postoperative American Shoulder and Elbow Society (ASES) scores were included.
- CSOs for the ASES score included the minimal clinically important difference (MCID), substantial clinical benefit (SCB), and patient-acceptable symptom state (PASS)
- Patients were stratified based on whether they followed up at 1 or 2 years and their achievement of CSOs at earlier time points (6 months and 1 year, respectively).
- Fisher's exact tests were used to compare the proportion of patients who did and did not follow up based on achievement of earlier CSOs, with  $p < 0.05$  as significant.

# RESULTS

- 1825 patients identified
- 1589 (87.1%) had follow up at 1 year
- 1436 (78.7%) had follow up at 2 years

# RESULTS - MCID

- 5.9% difference in patients who followed up at **2 years** based on achievement of MCID at **1 year** (86.4% vs 80.5%,  $p=0.022$ )
- No difference in follow up at **1 year** in those who achieved or did not achieve MCID at **6 months** (87.2% vs 86.5%,  $p=0.72$ )
- No difference in follow up at **2 years** in those who achieved or did not achieve MCID at **6 months** (79.3% vs 76.2%,  $p=0.211$ )

# RESULTS - SCB

- 5.8% difference in patients who followed up at **2 years** based on achievement of SCB at **1 year** (86.8% vs 81.0%,  $p=0.009$ , OR: 0.65)
- No difference in follow up at **1 year** in those who achieved or did not achieve SCB at **6 months** (87.8% vs 85.2%,  $p=0.138$ )
- No difference in follow up at **2 years** in those who achieved or did not achieve SCB at **6 months** (79.3% vs 77.2%,  $p=0.327$ )



# RESULTS - PASS

- 8.6% difference in patients who followed up at **2 years** based on achievement of SCB at **1 year** (88.8% vs 80.2%,  $p < 0.001$ , OR: 0.51)
- 4.0% difference in patients at **6 months** (81.0% vs 77.0%,  $p = 0.036$ )
- 5.6% of patients in follow up at **1 year** based on achievement of PASS at **6 months** (90.3% vs 84.7%,  $p < 0.001$ )

# RESULTS - OVERALL

- Across all groups at any time, any significant difference noted in follow-up rates was less than 8% of that group

<b>CSO</b>	<b>Follow Up Time in Question</b>	<b>CSO Achievement at Earlier Time Point</b>	<b>Proportion of Patients Who Followed Up (%)</b>	<b>Difference</b>	<b>p-value</b>
<b>MCID</b>	1 year	+ 6m MCID	87.2	0.8	0.716
		- 6m MCID	86.4		
	2 year	+ 6m MCID	79.3	3.1	0.211
		- 6m MCID	76.2		
	2 year	+ 1y MCID	86.4	<b>5.9</b>	<b>0.022</b>
		+ 1y MCID	80.5		
<b>SCB</b>	1 year	+ 6m SCB	87.8	2.6	0.138
		- 6m SCB	85.2		
	2 year	+ 6m SCB	79.3	2.1	0.327
		- 6m SCB	77.2		
	2 year	+ 1y SCB	86.8	<b>5.8</b>	<b>0.009</b>
		+ 1y SCB	81.0		
<b>PASS</b>	1 year	+ 6m PASS	90.3	<b>5.6</b>	<b>&lt;0.001</b>
		- 6m PASS	84.7		
	2 year	+ 6m PASS	81.0	<b>4.0</b>	<b>0.036</b>
		- 6m PASS	77.0		
	2 year	+ 1y PASS	88.8	<b>8.6</b>	<b>&lt;0.001</b>
		- 1y PASS	80.2		

# DISCUSSION

- In patients who undergo RCR, the likelihood of follow-up at 1 or 2 years is similar whether or not they achieved CSOs at prior time points
- This suggests that patients who do and do not follow up have similar patient reported outcomes
- Further research is needed to understand biases that may impact loss to follow up at 1 and 2 years