AAOS
American Academy of Orthopaedic Surgeons

Review Period Report

Evidence-Based Clinical Practice Guideline on the Management of Rotator Cuff Injuries

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Overview of the Review Period

The reviews and comments related to this clinical practice guideline are reprinted in this document and posted on the AAOS website. All reviewers are required to disclose their conflict of interests.

Review Process:

AAOS contacted 8 organizations with content expertise to review a draft of the clinical practice guideline during the three-week peer review period in February 2025.

Additionally, the draft was also provided to members of the AAOS Board of Directors (BOD), members of the Council on Research and Quality (CORQ), members of the Board of Councilors (BOC), members of the Board of Specialty Societies (BOS) and members of the Committee on Evidence-Based Quality and Value (EBQV) for review and comments.

- Ten (10) individuals provided comments via the electronic structured peer review form. No reviewers asked to remain anonymous.
- Five reviews were on behalf of a society and/or committee.
- The work group considered all comments and made some modifications when they were consistent with the evidence.

Reviewer Key

Each reviewer was assigned a number (see below). All responses in this document are listed by the assigned peer reviewer's number.

Table 1. Reviewer Key

Reviewer Number	Name of Reviewer	Society/ Committee Being Represented
1	Scott Magnes, MD< FAAOS, FACSM	American College of Sports Medicine
2	Lindsey Colbert, PT, DPT, OCS	American Society of Shoulder and Elbow Therapists
3	John Wickman, MD	
4	Abdulaziz Ahmed, MD	American Orthopaedic Society for Sports Medicine (AOSSM)
5	Robert Lindeman, MD	
6	Robert Litchfield, MD	Key Opinion Leader for Smith & Nephew
7	Gregory Carolan, MD	
8	Mohamed Sherif Ali Ahmed, MBBCh	
9	Joe Godges, DPT, MA	American Physical Therapy Association
10	Dafang Zhang, MD	American Society for Surgery of the Hand

Reviewer Demographics

Table 2: Reviewer Demographics

Reviewer Number	Name of Reviewer	Primary Specialty	Work Setting
1	Scott Magnes, MD, FAAOS, FACSM	Sports Medicine	Non-Military Government or Public
2	Lindsey Colbert, PT, DPT, OCS	Shoulder and Elbow	Clinical Hospital
3	John Wickman, MD	Shoulder and Elbow	Academic Practice
4	Abdulaziz Ahmed, MD	Shoulder and Elbow	Academic Practice
5	Robert Lindeman, MD	Sports Medicine	Academic Practice
6	Robert Litchfield, MD	Shoulder and Elbow	Academic Practice
7	Gregory Carolan, MD	Sports Medicine	Academic Practice
8	Mohamed Sherif Ali Ahmed, MBBCh	Trauma	Academic Practice
9	Joe Godges, DPT, MA	Orthopaedic Physical Therapy	Academic Practice
10	Dafang Zhang, MD	Hand	Academic Practice

Reviewers' Disclosure Information

All reviewers are required to disclose any possible conflicts that would bias their review via a series of 10 questions (see Table 3). For any positive responses to the questions (i.e., "Yes"), the reviewer was asked to provide details on their possible conflict.

Table 3. Disclosure Question Key

Disclosure Question	Disclosure Question Details
A	A) Do you or a member of your immediate family receive royalties for any pharmaceutical, biomaterial or orthopaedic product or device?
B	B) Within the past twelve months, have you or a member of your immediate family served on the speakers bureau or have you been paid an honorarium to present by any pharmaceutical, biomaterial or orthopaedic product or device company?
C	C) Are you or a member of your immediate family a PAID EMPLOYEE for any pharmaceutical, biomaterial or orthopaedic device or equipment company, or supplier?
D	D) Are you or a member of your immediate family a PAID CONSULTANT for any pharmaceutical, biomaterial or orthopaedic device or equipment company, or supplier?
E	E) Are you or a member of your immediate family an UNPAID CONSULTANT for any pharmaceutical, biomaterial or orthopaedic device or equipment company, or supplier?
F	F) Do you or a member of your immediate family own stock or stock options in any pharmaceutical, biomaterial or orthopaedic device or equipment company, or supplier (excluding mutual funds)
G	G) Do you or a member of your immediate family receive research or institutional support as a principal investigator from any pharmaceutical, biomaterial or orthopaedic device or equipment company, or supplier?
H	H) Do you or a member of your immediate family receive any other financial or material support from any pharmaceutical, biomaterial or orthopaedic device and equipment company or supplier?
I	I) Do you or a member of your immediate family receive any royalties, financial or material support from any medical and/or orthopaedic publishers?
J	J) Do you or a member of your immediate family serve on the editorial or governing board of any medical and/or orthopaedic publication?

Table 4. Reviewer's Disclosure Information

Reviewer Number	Name of Reviewer	Disclosure Available via AAOS Disclosure System	A	B	C	D	E	F	G	H	I	J
1	Scott Magnes, MD, FAAOS, FACSM	Yes										
2	Lindsey Colbert, PT, DPT, OCS	No	No	No	No	No	No	No	No	No	No	No
3	John Wickman, MD	Yes	No	No	No	No	No	No	No	No	No	No
4	Abdulaziz Ahmed, MD	Yes	No	Yes	No	No	No	No	No	No	No	Yes
5	Robert Lindeman, MD											
6	Robert Litchfield, MD											
7	Gregory Carolan, MD											
8	Mohamed Sherif Ali Ahmed, MBBCh		No	No	No	No	No	No	No	No	No	No
9	Joe Godges, DPT, MA		No	No	No	No	No	No	No	No	No	No
10	Dafang Zhang, MD											

Reviewer Responses to Structured Review Form Questions

All reviewers are asked 16 structured review questions which have been adapted from the Appraisal of Guidelines for Research and Evaluation (AGREE) II Criteria*. Their responses to these questions are listed on the next few pages.

Table 5. Reviewer Responses to Structured Review Questions 1-4

Reviewer Number	Name of Reviewer	1. The overall objective(s) of the guideline is (are) specifically described.	2. The health question(s) covered by the guideline is (are) specifically described.	3. The guideline's target audience is clearly described.	4. There is an explicit link between the recommendations and the supporting evidence.
1	Scott Magnes, MD, FAAOS, FACSM	Strongly Agree	Strongly Agree	Strongly Agree	Agree
2	Lindsey Colbert, PT, DPT, OCS	Strongly Agree	Strongly Agree	Agree	Agree
3	John Wickman, MD	Agree	Agree	Agree	Neutral
4	Abdulaziz Ahmed, MD	Strongly Agree	Strongly Agree	Agree	Agree
5	Robert Lindeman, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
6	Robert Litchfield, MD	Strongly Agree	Agree	Strongly Agree	Agree
7	Gregory Carolan, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
8	Mohamed Sherif Ali Ahmed, MBBCh	Strongly Agree	Agree	Agree	Agree
9	Joe Godges, DPT, MA	Strongly Agree	Strongly Agree	Strongly Agree	Agree
10	Dafang Zhang, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree

Table 6. Reviewer Responses to Structured Review Questions 5-8

Reviewer Number	Name of Reviewer	5. Given the nature of the topic and the data, all clinically important outcomes are considered.	6. The patients to whom this guideline is meant to apply are specifically described.	7. The criteria used to select articles for inclusion are appropriate.	8. The reasons why some studies were excluded are clearly described.
1	Scott Magnes, MD, FAAOS, FACSM	Agree	Strongly Agree	Agree	Strongly Agree
2	Lindsey Colbert, PT, DPT, OCS	Neutral	Neutral	Agree	Agree
3	John Wickman, MD	Neutral	Neutral	Agree	Agree
4	Abdulaziz Ahmed, MD	Agree	Strongly Agree	Strongly Agree	Strongly Agree
5	Robert Lindeman, MD	Agree	Strongly Agree	Strongly Agree	Strongly Agree
6	Robert Litchfield, MD	Agree	Agree	Strongly Agree	Strongly Agree
7	Gregory Carolan, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
8	Mohamed Sherif Ali Ahmed, MBBCh	Agree	Agree	Neutral	Neutral
9	Joe Godges, DPT, MA	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
10	Dafang Zhang, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree

Table 7. Reviewer Responses to Structured Review Questions 9-12

Reviewer Number	Name of Reviewer	9. All important studies that met the article inclusion criteria are included	10. The validity of the studies is appropriately appraised.	11. The methods are described in such a way as to be reproducible	12. The statistical methods are appropriate to the material and the objectives of this guideline
1	Scott Magnes, MD, FAAOS, FACSM	Neutral	Strongly Agree	Strongly Agree	Strongly Agree
2	Lindsey Colbert, PT, DPT, OCS	Neutral	Neutral	Neutral	Neutral
3	John Wickman, MD	Agree	Neutral	Agree	Agree
4	Abdulaziz Ahmed, MD	Strongly Agree	Agree	Strongly Agree	Strongly Agree
5	Robert Lindeman, MD	Neutral	Strongly Agree	Strongly Agree	Strongly Agree
6	Robert Litchfield, MD	Agree	Agree	Strongly Agree	Strongly Agree
7	Gregory Carolan, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
8	Mohamed Sherif Ali Ahmed, MBBCh	Neutral	Agree	Agree	Agree
9	Joe Godges, DPT, MA	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
10	Dafang Zhang, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree

Table 8. Reviewer Responses to Structured Review Questions 13-16

Reviewer Number	Name of Reviewer	13. Important parameters (e.g., setting, study population, study design) that could affect study results are systematically addressed.	14. Health benefits, side effects, and risks are adequately addressed.	15. The writing style is appropriate for health care professionals.	16. The grades assigned to each recommendation are appropriate.
1	Scott Magnes, MD, FAAOS, FACSM	Neutral	Agree	Strongly Disagree	Agree
2	Lindsey Colbert, PT, DPT, OCS	Disagree	Disagree	Agree	Neutral
3	John Wickman, MD	Agree	Agree	Agree	Agree
4	Abdulaziz Ahmed, MD	Neutral	Strongly Agree	Strongly Agree	Strongly Agree
5	Robert Lindeman, MD	Strongly Agree	Strongly Agree	Agree	Neutral
6	Robert Litchfield, MD	Agree	Agree	Strongly Agree	Agree
7	Gregory Carolan, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
8	Mohamed Sherif Ali Ahmed, MBBCh	Agree	Agree	Strongly Agree	Strongly Agree
9	Joe Godges, DPT, MA	Strongly Agree	Strongly Agree	Neutral	Agree
10	Dafang Zhang, MD	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree

Reviewers' Recommendation for Use of this Guideline in Clinical Practice

Would you recommend these guidelines for use in clinical practice?

Reviewer Number	Name of Reviewer	Would you recommend these guidelines for use in clinical practice?
1	Scott Magnes, MD, FAAOS, FACSM	Strongly Recommend
2	Lindsey Colbert, PT, DPT, OCS	Unsure
3	John Wickman, MD	Recommend
4	Abdulaziz Ahmed, MD	Strongly Recommend
5	Robert Lindeman, MD	Strongly Recommend
6	Robert Litchfield, MD	Strongly Recommend
7	Gregory Carolan, MD	Strongly Recommend
8	Mohamed Sherif Ali Ahmed, MBBCh	Strongly Recommend
9	Joe Godges, DPT, MA	Strongly Recommend
10	Dafang Zhang, MD	Strongly Recommend

Reviewer Detailed Responses and Editorial Suggestions

Reviewer #1, Scott Magnes, MD, FAAOS, FACSM

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
1	Scott Magnes, MD, FAAOS, FACSM	American College of Sports Medicine	A. As per the direction of AAOS staff during our phone conversation, I am providing feedback/suggestions below for any and all facets of the CPG that I feel could be improved in any way. B. Title: r.e. “Management of Rotator Cuff Injuries”—All recommendations in this CPG are in reference to rotator cuff tears except for the hyaluronic acid injection recommendation. Furthermore, lines 453-456 state, “This clinical practice guideline is based on a systematic review of published studies with regard to the management of rotator cuff tears.” Also, lines 475-479 state, “To assist them, this clinical practice guideline consists of a systematic review of the available literature regarding the management of rotator cuff tears.” Therefore, “Management of Rotator Tears” or “Management of Partial-Thickness and Full-Thickness Rotator Cuff Tears” would be a more appropriate title for this CPG. C. Line 131: Might be helpful to change "Evidence to Decision Framework" to "Evidence to Decision (EtD) Framework" with this initial use of the phrase in order to define this abbreviation that is used elsewhere in the document. D. 136: Would be helpful to define "small", "medium", and rotator cuff tears. E. 213: Not clear what "(3 months; up to 1 year)" means in this sentence. F. 241: Define "high-grade." G. 252: Remove comma after "therapy." H. 270-271 & 278-279 provide conflicting information regarding patient reported outcomes. I. 319. Define "short term."

			J. 413-414: Define "low-grade or intermediate grade." K. 479, 486, etc: CPG topic is rotator cuff injuries; therefore, I would recommend changing the wording from "rotator cuff tears" to "rotator cuff injuries" in all instances where this discrepancy occurs. L. 527: replace "and / or" with "and/or" (i.e. no spaces required). M. 535: since this sentence talks about the patient or advocate communicating with the physician, it may be more appropriate to reword to "the physician" or "the patient's physician" rather than "his/her physician." N. 538: Substitute 'non-operative" for "conservative." O. 552-558: Are chronic shoulder & chronic knee pain more of an economic burden than back pain? P. 572: Change "QUALYs" to "quality-adjusted life years (QUALYs)" Q. 583: "payments. (Mather, 2013)"--eliminate "." after "payments" and adjust spacing. R. 585: "$3,442,750,000."-- change "." to a "," S. 594: change "broken collarbone" to "fractured clavicle" T. 596-597: change "a wearing down" to "deterioration" or "degradation" U. 611: change "RCT" to "rotator cuff tear (RCT)" V. 616-621: What was the age ranges at time of death and mean age for these cadavers? W. 625-628: This statement does not explain why the age of =>40 is used. Also, substitute "gradual deterioration due to age and use" for "normal wear and tear that goes along with aging." X. 628-630: change to "People who do repetitive lifting or overhead activities, e.g. painters and carpenters, are also at higher risk for rotator cuff tears." Y. 634-636: Eliminate sentence, "Painters, carpenters, and others who do overhead work also have a greater chance for tears."

			Z. 647: "rotator cuff tears, including, but not"--remove comma after "including" AA. 645-652: change to, "There are risks associated with both operative and non-operative treatment of rotator cuff tears. For example, surgical complications include infection, stiffness, and potentially increased recovery time, and non-operative complications include potential increased structural damage over time and possible functional limitations." BB. 653-654: Change to, "Treatment contraindications vary widely based on the specific condition and individual patient characteristics." CC. 660: change "non-treatment" to "non-operative treatment" DD. 662-664: Replace with "Ideally, studies will have a minimum of 5-years of follow-up in order to better understand the efficacy of each treatment." EE. 664-669: Change to, "Future studies should focus more on how comorbidities such as diabetes mellitus, hypertension, hypercholesterolemia, smoking, and BMI affect RC injury outcomes." FF. 676-680: r.e. "The repair of high-grade partial rotator cuff tears has been widely adopted by the orthopedic community, but there exists minimal evidence to support this choice." However, lines 250-255 give a 4-star strong recommendation to repair, i.e. "PARTIAL ROTATOR CUFF TEAR Debridement or repair of high-grade partial-thickness cuff tears that have failed physical therapy, can be performed; however, repair of high-grade partial tears can improve outcomes. Quality of Evidence: High Strength of Recommendation: Strong" The overall recommendation regarding treatment of partial thickness RCTs (lines 250-255) is not supported by the statement (lines 676-680). GG. 685-689: Change to, "The use of either allograft or xenograft patches for augmentation of rotator cuff repair or for superior capsular reconstruction has yet to be scientifically proven." HH. 700-704: Eliminate as already stated in lines 664-649. II. 712-713: remove ", transparent," as this was already stated in the previous sentence JJ. 720: change “injuries” to “tears”

			KK. 721: change “AAOS” to “AAOS’s” LL. 786: period should precede the quotation marks MM. 790: period should precede the quotation marks NN. 795: period should precede the quotation marks OO. 799 insert comma prior to "respectively" PP. 822: replace "possible" with "likely" QQ. 833: replace "kind" with type" RR. 835: replace "kind" with type" SS. 856: my understanding is that "simple majority" means 50%, not 60% TT. 876: discard parentheses UU. 881: comma after "interventions" VV. 884: replace "nor" with "or" WW. 989: remove comma XX. 1011-1018: This sentence does not make sense, and it is unclear what is trying to be conveyed. YY. 1020: replace "he" with "The" ZZ. 1061-1066: this has been already stated previously AAA. 1082: remove hyphen BBB. 1084 add hyphen after "10" CCC. 1088: change "from for treatment of patients" to "in those patients with" DDD. 1088: replace "the" with "in regard to"

			EEE. 1093: r.e. " (10 visits; 3 months)"-- does this mean 10 visits over 3 months' time? If so, probably clearer to state this FFF. 1099: I think this means in all groups. Need to specify this. GGG. 1105: replace "wis" with "wish" HHH. 1107: replace "cross" with "crossed" III. 1107-1108: change to "outcomes, but the Constant score was significantly less (i.e. 10.0 points, p = 0.03) compared with that of the primary tendon repair group." JJJ. 1110: change "non-operative physical therapy management" to "non-operative treatment with physical therapy." The original phrasing can be interpreted as meaning that P.T. can also be an operative treatment. KKK. 1113-1114: change to "Additionally, studies with patient outcomes beyond 5 years are needed to better understand the true effectiveness and efficacy of each treatment over the long term." 5-year follow-up may not allow one to "fully" understand as longer term follow-up data may differ from data obtained at 5 years. The way this sentence was written may lead one to incorrectly infer that follow-up > 5 years is not warranted. LLL. 1125: change to "5-" MMM. 1126: change "have showed" to "have shown" NNN. 1132: remove "of patients" OOO. 1133: remove "of patients" PPP. 1133: change from "Kukkonen, et.al., reported" to " Kukkonen et al., reported", i.e. remove the comma after Kukkonon & the period after "et" QQQ. 1136: change "suggestive" to ""suggestive of" or "suggesting" RRR. 1129: change "(Moosmayer 2019)" to "(Moosmayer, 2019)" The format should probably be a comma after the author's last name followed by the year of the citation for all citations in this CPG.

			SSS. 1125-1146: For most of the data presented, it is not noted whether the referenced differences reached statistical significance or not. Please add p values. TTT. 1139: change "the" to "in" UUU. 1141: change "81points" to "81 points" VVV. 1144: change "outcome" to "outcomes" WWW. 1144: change "repeated" to "serial" XXX. 1146: change " would later be considered." to "remains a viable option." YYY. 1149: change "sizes with pre-and postoperative advanced imaging studies." to "sizes with pre-and postoperative advanced imaging studies are needed." ZZZ. 1150: change to "progression and if tear progression and/or tissue degeneration can potentially progress sufficiently in order to preclude future repair and subsequent resolution of" AAAA. 1154: change "patient- reported" to "patient-reported" BBBB. 1163: "change to "treatment of small to massive full-thickness rotator cuff tears" CCCC. 1166: change to "Moosmayer et al. (2019)" DDDD. 1170-1173: change sentence to "In contrast, in the 32 patients that underwent sonography at 5-year and 10-year follow-up who were treated with physical therapy only, the patients with tear progression of >10 mm had a Constant score of 63.9 points, an outcome that was inferior by 14.0 points (95% CI, 4.1 to 24.0 points; p = 0.007) compared with the score of 78 points in patients with tear progression <10 mm (Moosmayer, 2019)." EEEE. 1175-1178: change to "In summary, tear progression occurs in some patients treated non-operatively over time, and the degree of tear size progression correlates negatively with patient outcomes Retears also occur in some patients who undergo surgical repair, which also negatively impacts patient outcomes. This appears to occur to a lesser extent in the long-term. FFFF. 1178: define "long term"

			GGGG. 1181: change to "In a prospective randomized trial with a 10-year" HHHH. 1187: change "between" to "comparing" IIII. 1188: comma after "sizes" JJJJ. 1190: change "would be" to "is" KKKK. 1193: change "suggested" to "recommended" LLLL. 1206: change "arcomiplasty" to "acromioplasty" MMMM. 1208: change "patients" to "patient" or to "patients' " NNNN. 1208: replace comma after "outcomes with a semi-colon OOOO. 1210: insert "a" after "had" PPPP. 1213-1214: change to "acromioplasty is needed to optimize visualization and/or for technical optimization during a RTC repair (i.e., suture passing and shuttling, anchor insertion, and cannula placement). QQQQ. 1220-1221: change to "Long-term studies with pre- and postoperative advanced imaging studies comparing RC repair with/without acromioplasty in patients with larger tears are needed." The original sentence references physical therapy, but this recommendation is unrelated to P.T. RRRR. 1221-1222: "The long-term consequences of a persistent rotator cuff tear or a re-tear is currently not known."--this statement is not related to the recommendation under which it appears, i.e. whether to perform acromioplasty or not when doing a RC repair; therefore, I recommend removal. SSSS. 1226-1227: "Clinical examination can be useful to diagnose or stratify patients with rotator cuff tears; however, combination of tests will increase diagnostic accuracy."--need "a" prior to "combination" and need to define "stratify" as its meaning in this sentence is unclear TTTT. 1235: change "to diagnosis full- thickness rotator cuff tear" to "to diagnose a full-thickness rotator cuff tear"

			UUUU. 1236-1240: criteria utilized for capitalization vs. small letters regarding the names of the tests is not consistent throughout this list VVVV. 1240-1241: change "Generally, these tests are better to diagnose (rule in), than screening (rule out) full thickness rotator cuff tears." to ". Generally, these tests are better at ruling in than ruling out full-thickness rotator cuff tears." WWWW. 1244 and 1247: I do not understand what "concomitant procedures" means so cannot comment on the accuracy of the statement. XXXX. 1265: is the author's last name "Dirkx" spelled correctly? YYYY. 1289: remove comma after "tears" ZZZZ. 1296: I think "CT" was meant not "ultrasound" AAAAA. 1299: change "demanded clinically where MRI is not available." to "desired if MRI and ultrasound are not available." BBBBB. 1305: change to "medium-sized" CCCCC. 1306: change " between early mobilization and delayed mobilization" to "regarding early mobilization vs. delayed mobilization" DDDDD. 1313-1316: change "In certain patient populations, outcomes are not adversely affected with immediate weaning from sling use allowing active motion for ADLs, compared to prolonged sling use as it yields similar post-operative healing, functional outcomes, and patient-reported outcomes following arthroscopic rotator cuff repair." to "Following arthroscopic rotator cuff repair in certain patient populations, outcomes are not adversely affected with immediate weaning of sling use to allow active ROM for ADLs compared to prolonged sling use because similar post-operative healing, functional outcomes, and patient-reported outcomes are achieved." EEEEE. 1324: change "post-operative" to "postoperative" (recurring error) FFFFF. 1330-1331: change "patient reported" to "patient-reported" (recurring error) GGGGG. 1335: incomplete sentence. Was "6 weeks" meant? HHHHH. 1339: change to "and/or" This is a recurrent error whereby spaces are placed before or after the "/", so these all need to be corrected throughout the entire document

			IIIII. 1342: change comma to "and" JJJJJ. 1342-1343: change to "active-assistive" KKKKK. 1343: change from "yields" to "yield" LLLLL. 1347: remove 2nd semicolon MMMMM. 1347: did the authors mean, "Two prospective randomized trials (Sheps 2019; Littlewood 2021) examined early mobilization defined as discontinuation of sling use." ? NNNNN. 1348: add "a" after "from" OOOOO. 1350: remove comma after "passive" PPPPP. 1352: comma after "groups" QQQQQ. 1352: remove semicolon RRRRR. 1353: add "continuous" after "the" SSSSS. 1354: remove the 1st comma and the word "and" TTTTT. 1356: remove hyphen and 1st comma UUUUU. 1357: remove comma VVVVV. 1358: add "continuous" after "of" WWWWW. 1364: remove "the surgeon and" XXXXX. 1365: add "in order" after "healing" YYYYY. 1367: I do not understand what "This question using the term mobilization was updated to include" means in this context. ZZZZZ. 1379: comma after "repair" AAAAAA. 1380: inset "a" after "of"

			BBBBBB. 1381: insert "should be utilized" after "living" CCCCCC. 1384: change to patient-centric DDDDDD. 1385: change to disease-specific EEEEEE. 1392: "(3 months; up to 1 year)"--please define what this means FFFFFF. 1403: move period to after ")" GGGGGG. 1403-1404: change to "A randomized trial of patients having undergone arthroscopic repair for small rotator cuff tears compared a single session..." HHHHHH. 1403: define "small tears" (this is a recurrent issue whereby the terms "smal", "medium" & "large" tears often are not quantified in this CPG) IIIIII. 1408 & 1417: "multimodal" instead of "multi-modal" JJJJJJ. 1411-1412: change to "The results showed that at 6, 12 and 24 weeks postoperative," KKKKKK. 1413: remove "a" LLLLLL. 1419 change "result in greater" to "resulted in improved" MMMMMM. 1421: change "post-operative" to "postoperative" NNNNNN. 1421-1423: I do not understand the meaning of this sentence. OOOOOO. 1425: change to "short- and long-term" PPPPPP. 1425 change "comparing" to "and compare" This is a very long sentence and difficult to understand. QQQQQQ. 1431: change from "home directed" to "home-directed" RRRRRR. 1431-1433: change to "Future studies that are stratified by tear size are also needed. The one high-level study referenced above was done on a small tear population only and may not be applicable to larger tears.

			SSSSSS. 1447: "change "moderate- quality" to "moderate-quality" TTTTTT. 1454: change "4/8/12/24" to "4, 8, 12, and 24" UUUUUU. 1454: change to "physical therapy (PT)" VVVVVV. 1455: change to "short-term" WWWWWW. 1456: change to "patient-reported" (recurrent error) XXXXXX. 1456: change "when addressing" to "regarding" YYYYYY. 1458-1459: change to "When comparing CS to hyaluronic acid (HA), there are two high- (Hsieh, 2021 and Penning, 2021) and one moderate- quality (Lin, 2014) studies." ZZZZZZ. 1459: change "with regards to" to "in regard to" AAAAAAA. 1459: define "CM" BBBBBBB. 1459-1460: change to "The treatment results reported by Hsieh et al. varied based on outcome measure and follow-up duration." CCCCCCC. 1462: Mentioning the potential for increased risk of infection regarding CS injections in relationship to surgery (along with the data) should be added. (See same recommendation for line 1926). DDDDDDD. 1464-1466: r.e. "Considering that rotator cuff diagnoses are clinical, a single corticosteroid injection may be given to confirm the presence of a symptomatic rotator cuff tear but may adversely affect outcomes if performed in temporal proximity to surgical intervention." a. suggest removing ""Considering that rotator cuff diagnoses are clinical" as this is confusing. If the diagnoses were indeed clinical, why are we often reluctant to make the diagnosis of FT RC tear w/o imaging? b. the pain relief from a CSI may be similar in patients with RC tendinosis to those with RC tears at certain points post-injection so I don't think this statement is true. c. should specifically address the increased risk of infection as well as quantitate the time period as best as possible. EEEEEEE. 1473: change "tear" to "tears"

			FFFFFFF. 1483: change "CS" to "a CS injection" (recurrent error); alternatively, use CSI as an abbreviation for corticosteroid injection GGGGGGG. 1485: remove comma after ")" HHHHHHH. 1486: change "versus" to "than" IIIIIII. 1491: change to "Repair of In-situ transtendinous RC tears or conversion of transtendinous RC tears to full-thickness tears with repair can be performed in patients that failed conservative management with high-grade partial thickness rotator cuff tears." JJJJJJJ. 1500-1501: change to "Kim 2015 noted no difference in either clinical outcomes or re-tear rates comparing transtendinous RC repair versus tear completion with RC repair in Ellman III partial thickness rotator cuff tears." KKKKKKK. 1501: change to "retear" (recurrent error) LLLLLLL. 1502 & 1503: insert comma after "groups" MMMMMMM. 1504-1505: change to "Castagna 2015 looked at a total of 74 patients randomized to transtendinous repair versus tear completion with repair." NNNNNNN. 1505: change from "2013felt" to "2013 felt" OOOOOOO. 1506: change to "transtendinous repair and tear completion with repair." PPPPPPP. 1508-1510: change to "Additional high-quality Level I studies with longer follow-up would be helpful in determining the longevity of these procedures, as well as establishing the risk of retears." QQQQQQQ. 1514-1516: r.e. "Debridement or repair of high-grade partial-thickness cuff tears that have failed physical therapy, can be performed; however, repair of high-grade partial tears can improve outcomes." The rationale that is provided below these lines indicates that both debridement & repair improve outcomes, so a more accurate statement might be, "For those with a suboptimal response to PT, both debridement and repair of high-grade partial-thickness RC tears improve outcomes."

			RRRRRRR. 1515: remove comma after therapy SSSSSSS. 1522: change to "randomized controlled trial (RCT)" TTTTTTT. 1522: change "vs" to "versus" UUUUUUU. 1524-1525: r.e. “There was a significantly in the SSC muscle strength in the repair group compared with the debridement group at 5-year follow-up.” This sentence is non-sensical & I am unable to surmise what is meant. Please rewrite more clearly. VVVVVVV. 1527: change to “bursal-sided partial-thickness” (recurring error) WWWWWWW. 1532: change to “partial-thickness” XXXXXXX. 1533: change to “the available data suggests” YYYYYYY. 1553: change to "Ten high- and seven moderate-quality studies" (recurring error) ZZZZZZZ. 1556: remove "that" AAAAAAAA. 1573-1574: The recommednation conflicts with the data presented as well as lines 1601-1603. Based on the rationale supplied for this recommendation, a better recommendation might be, "Double row rotator cuff repair constructs are not recommended over single row repair constructs in RC tears < 3 cm in size; however, there may be some benefits to double row repair in RC tears > 3 cm in size." If this recommendation is approved, 1601-1603 will need to be reworded. BBBBBBBB. 1586: need a "." after ")" CCCCCCCC. 1595: change to "> 3 cm" (recurrent error) DDDDDDDD. 1605: add "based" after "rates" EEEEEEEE. 1613: change “favored” to “better” FFFFFFFF. 1627: change to “thickness;” GGGGGGGG. 1628: change to “the pooled results did not reach statistical significance.”

			HHHHHHHH. 1630-1632: this statement conflicts with the data above (1627-28) stating, “When re-tears are defined as full thickness, however, while the studies trended in favor of double row repairs, the pooled results were not significant.” IIIIIIII. 1634-1635: change to “Future research should be performed to evaluate failure rates based on imaging and reoperation rates when comparing single row to double row repair for full thickness rotator cuff tears." JJJJJJJJ. 1642-1643: define “larger tear sizes” KKKKKKKK. 1651: 2 periods in a row—remove one period LLLLLLLL. 1659: change to “Future studies should involve enough patients” MMMMMMMM. 1665-1667: state why porcine allograft is not recommended NNNNNNNN. 1674: insert comma after “small” OOOOOOOO. 1679: remove comma at end of line PPPPPPPP. 1682: “high” instead of “High” QQQQQQQQ. 1705: “a” instead of “an” RRRRRRRR. 1707: change to “a lower” SSSSSSSS. 1710-1716: this refers to dermal allografts, not bioinductive implants—uses same verbiage as 1684-1690 TTTTTTTT. 1721: change to “however, the” UUUUUUUU. 1722: define short-term” VVVVVVVV. 1741-1742: change to “mini-open repair which showed no difference in PROs between techniques. WWWWWWWW. 1752: change to “differences” XXXXXXXX. 1752: insert comma after “scores” YYYYYYYY. 1780: remove “all”

			ZZZZZZZZ. 1781: change to “reviewing” AAAAAAAAA. 1782: change to “rank order” BBBBBBBBB. 1788: change to “opiate-sparing pain medicine regimens.” CCCCCCCCC. 1789: change “scares” to “scores” DDDDDDDDD. 1810: change ”modal” to “mode” EEEEEEEEE. 1814: change to “risk-benefit” FFFFFFFFF. 1819: change from “as they are compared” to “in comparison” GGGGGGGGG. 1832-1833: Neither the recommendation nor the supporting information indicates the location of the injection site (i.e. intraarticular vs. subacromial). Please specify. This recommendation is intended to include all other references to injections, regardless of substance, contained in this CPG, as well. HHHHHHHHH. 1844-1846: explain why it undermined the results and conclusions IIIIIIII. 1845: change to “study’s” JJJJJJJJ. 1850: change “study” to “studies” KKKKKKKKK. 1851: change to “et al.’s” LLLLLLLLL. 1861: change to “rotator cuff” MMMMMMMMM. 1872-1873: change to “partial-thickness tears.” NNNNNNNNN. 1872-1886: the word “exercise” is used several times. Does this refer to physiotherapy exercise? If so, would state in this fashion. OOOOOOOOO. 1895: change to “a trend” PPPPPPPPP. 1901: change “regards” to “regard” QQQQQQQQQ. 1907: change “Further” to Additional”

			RRRRRRRRR. 1914: change “attempts at” to “results of” SSSSSSSSS. 1926: Mentioning the potential for increased risk of infection regarding CS injections in relationship to surgery (along with the data) should be added. (See same recommendation for line 1462). TTTTTTTTT. 1928-1929: r.e. “Considering that rotator cuff diagnoses are clinical, a single corticosteroid injection may be given to confirm the presence of a symptomatic rotator cuff tear”--I previously commented on a similar statement above UUUUUUUUU. 1929-1930: r.e. ”but may adversely affect outcomes if performed in temporal proximity to surgical intervention.” While I share this concern, this conclusion is not supported by the “rationale” section above. Also “temporal proximity” should be quantitated, if possible. VVVVVVVVV. 1938: change to “nonoperative” (recurring error) WWWWWWWWW. 1978: remove “My recommendation would be to arrive at a potential consensus statement.” XXXXXXXXX. 1979: change “worse” to “inferior” YYYYYYYYY. 1985: change to period before the end quotation marks ZZZZZZZZZ. 1987: change to “allografts” AAAAAAAAAA. 1987, 1989: change to “nonsignificant” BBBBBBBBBB. 1988: change to “pseudoparalysis” CCCCCCCCCC. 1991-1995: r.e. “Those patients who are directed towards the nonsurgical path may not experience appreciable improvement in pain relief and/or function impacting his/her quality of life including independence with ADLs. Each surgical option has distinct risks and potential outcomes which may not be acceptable to the patient, thus requiring additional surgical intervention/revision.”—recommend removal as these are true regarding choosing b/w op. & nonop. options for all conditions & are not specific to the issue being addressed in this section. 1997-1998: r.e. “surgical versus surgical modalities”—phrasing is not clear

			DDDDDDDDDD. 2002: change “workgroup” EEEEEEEEEE. 2020-2024: r.e. “Those patients who undergo RSA may not experience complete resolution of his/her shoulder symptoms and may not achieve clinically significant improvement. Additionally, this specific surgical option has distinct risks, complications, and potential outcomes which may not be acceptable to the patient, thus requiring additional surgical intervention/revision.”—recommend removal as this is true of any surgical procedure. FFFFFFFFFF. 2032: Both “workgroup” & “work group” are used in the CPG. Although both are correct, recommend uniformity (I think workgroup is preferred). GGGGGGGGGG. 2045: change to “cuff tear arthropathy” (recurring error) HHHHHHHHHH. 2056: change “partial-thickness” to partial thickness (recurring error) IIIIIIIII. 2066: Change to “No studies that compared PT versus surgery outright were identified,” JJJJJJJJJ. 2067-2068: r.e. “Evidence here is most likely in the “impingement” evidence, but these studies did not get radiologic evidence of partial tears so cannot be used here.”—the meaning of this sentence is unclear KKKKKKKKK. 2072: needs a period at the end of the sentence

Workgroup Response to Reviewer #1

Reviewer # 1 Dear Scott Magnes, MD, FAAOS, FACSM,

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. The scope of the CPG allowed for review of any rotator cuff injury, with individual PICOs further defining the injury as necessary. The introduction was edited to make this clearer.
C. Thank you for your review. Abbreviations were included as necessary.
D. Thank you for your review. Tear sizes were defined whenever included literature allowed.
E. Thank you for your review. The recommendation statement language was edited.
F. Thank you for your review. Additional information is included in rationale.
G. Thank you for your review, this edit has been made to the manuscript.
H. Thank you for your review. Information was added to recommendation titles to clarify the distinctions between the two recommendations.
I. Thank you for your review. The rationale contains further information.
J. Thank you for your review. Tear sizes were defined whenever included literature allowed. This recommendation lacked included evidence, and the workgroup chose to use the included language.
K. Thank you for your review. The workgroup has opted to retain its original verbiage.
L. Thank you for your review, this edit has been made to the manuscript.
M. Thank you for your review, this edit has been made to the manuscript.
N. Thank you for your review. The workgroup has opted to retain its original verbiage.
O. Thank you for your review. No edit necessary.
P. Thank you for your review, this edit has been made to the manuscript.
Q. Thank you for your review, this edit has been made to the manuscript.
R. Thank you for your review, this edit has been made to the manuscript.
S. Thank you for your review. The workgroup has opted to retain its original verbiage.
T. Thank you for your review. The text was edited.
U. Thank you for your review, this edit has been made to the manuscript.
V. Thank you for your review, this edit has been made to the manuscript.
W. Thank you for your review. Information was included here as general background and the workgroup has opted to retain the original verbiage.
X. Thank you for your review. The text was edited.
Y. Thank you for your review, this edit has been made to the manuscript.
Z. Thank you for your review, this edit has been made to the manuscript.
AA. Thank you for your review, this edit has been made to the manuscript.
BB. Thank you for your review, this edit has been made to the manuscript.
CC. Thank you for your review, this edit has been made to the manuscript.
DD. Thank you for your review, this edit has been made to the manuscript.
EE. Thank you for your review, this edit has been made to the manuscript.
FF. Thank you for your review, this edit has been made to the manuscript.
GG. Thank you for your review, this edit has been made to the manuscript.
HH. Thank you for your review, this edit has been made to the manuscript.
II. Thank you for your review, this edit has been made to the manuscript.
JJ. Thank you for your review. The scope of the CPG allowed for review of any rotator cuff injury, with individual PICOs further defining the injury as necessary. The introduction was edited to make this clearer.

KK. Thank you for your review, this edit has been made to the manuscript.
LL. Thank you for your review, this edit has been made to the manuscript.
MM. Thank you for your review, this edit has been made to the manuscript.
NN. Thank you for your review, this edit has been made to the manuscript.
OO. Thank you for your review, this edit has been made to the manuscript.
PP. Thank you for your review, this verbiage is part of our standard methodology text.
QQ. Thank you for your review, this edit has been made to the manuscript.
RR. Thank you for your review, this edit has been made to the manuscript.
SS. Thank you for your review, the text was edited accordingly.
TT. Thank you for your review, this edit has been made to the manuscript.
UU. Thank you for your review. No edit necessary.
VV. Thank you for your review. No edit necessary.
WW. Thank you for your review, this edit has been made to the manuscript.
XX. Thank you for your review, this verbiage is part of our standard methodology text.
YY. Thank you for your review, this edit has been made to the manuscript.
ZZ. Thank you for your review, this verbiage is part of our standard methodology text.
AAA. Thank you for your review, this edit has been made to the manuscript.
BBB. Thank you for your review, this edit has been made to the manuscript.
CCC. Thank you for your review, this edit has been made to the manuscript.
DDD. Thank you for your review, this edit has been made to the manuscript.
EEE. Thank you for your review, this edit has been made to the manuscript.
FFF. Thank you for your review, this edit has been made to the manuscript.
GGG. Thank you for your review, this edit has been made to the manuscript.
HHH. Thank you for your review, this edit has been made to the manuscript.
III. Thank you for your review, this edit has been made to the manuscript.
JJJ. Thank you for your review, this edit has been made to the manuscript.
KKK. Thank you for your review, this edit has been made to the manuscript.
LLL. Thank you for your review, this edit has been made to the manuscript.
MMM. Thank you for your review, this edit has been made to the manuscript.
NNN. Thank you for your review, this edit has been made to the manuscript.
OOO. Thank you for your review, this edit has been made to the manuscript.
PPP. Thank you for your review, this edit has been made to the manuscript.
QQQ. Thank you for your review, this edit has been made to the manuscript.
RRR. Thank you for your review, this edit has been made to the manuscript.
SSS. Thank you for your review. All included data and significance can be found in eAppendix 2.
TTT. Thank you for your review, this edit has been made to the manuscript.
UUU. Thank you for your review, this edit has been made to the manuscript.
VVV. Thank you for your review, this edit has been made to the manuscript.
WWW. Thank you for your review, this edit has been made to the manuscript.
XXX. Thank you for your review, this edit has been made to the manuscript.
YYY. Thank you for your review, this edit has been made to the manuscript.
ZZZ. Thank you for your review. Workgroup determined no edit was unnecessary.
AAAA. Thank you for your review, this edit has been made to the manuscript.
BBBB. Thank you for your review. Workgroup determined no edit was unnecessary.
CCCC. Thank you for your review, this edit has been made to the manuscript.
DDDD. Thank you for your review. Workgroup determined no edit was unnecessary.
EEEE. Thank you for your review, this edit has been made to the manuscript.
FFFF. Thank you for your review. Workgroup determined no edit was unnecessary.
GGGG. Thank you for your review, this edit has been made to the manuscript.
HHHH. Thank you for your review, this edit has been made to the manuscript.
IIII. Thank you for your review, this edit has been made to the manuscript.

JJJJ. Thank you for your review.
KKKK. Thank you for your review. This verbiage is part of our standard methodology for use of language stems.
LLLL. Thank you for your review, this edit has been made to the manuscript.
MMMM. Thank you for your review, this edit has been made to the manuscript.
NNNN. Thank you for your review, this edit has been made to the manuscript.
OOOO. Thank you for your review, this edit has been made to the manuscript.
PPPP. Thank you for your review, this edit has been made to the manuscript.
QQQQ. Thank you for your review, this edit has been made to the manuscript.
RRRR. Thank you for your review, this edit has been made to the manuscript.
SSSS. Thank you for your review. The included articles varied in intervention(s) studied so the workgroup chose to reflect this in the statement, with additional information included in the rationale.
TTTT. Thank you for your review, this edit has been made to the manuscript.
UUUU. Thank you for your review, this edit has been made to the manuscript.
VVVV. Thank you for your review, this edit has been made to the manuscript.
WWWW. Thank you for your review, the manuscript was edited.
XXXX. Thank you for your review. It was determined no edit is necessary.
YYYY. Thank you for your review, this edit has been made to the manuscript.
ZZZZ. Thank you for your review, this edit has been made to the manuscript.
AAAAA. Thank you for your review. It was determined no edit is necessary.
BBBBB. Thank you for your review, this edit has been made to the manuscript.
CCCCC. Thank you for your review. The recommendation language has been edited.
DDDDD. Thank you for your review. The recommendation language has been edited.
EEEEE. Thank you for your review, this edit has been made to the manuscript.
FFFFF. Thank you for your review, this edit has been made to the manuscript.
GGGGG. Thank you for your review, this edit has been made to the manuscript.
HHHHH. Thank you for your review, this edit has been made to the manuscript.
IIIII. Thank you for your review, this edit has been made to the manuscript.
JJJJJ. Thank you for your review, this edit has been made to the manuscript.
KKKKK. Thank you for your review, this edit has been made to the manuscript.
LLLLL. Thank you for your review, this edit has been made to the manuscript.
MMMMM. Thank you for your review, this edit has been made to the manuscript.
NNNNN. Thank you for your review, this edit has been made to the manuscript.
OOOOO. Thank you for your review, this edit has been made to the manuscript.
PPPPP. Thank you for your review, this edit has been made to the manuscript.
QQQQQ. Thank you for your review, this edit has been made to the manuscript.
RRRRR. Thank you for your review, this edit has been made to the manuscript.
SSSSS. Thank you for your review, this edit has been made to the manuscript.
TTTTT. Thank you for your review, this edit has been made to the manuscript.
UUUUU. Thank you for your review, this edit has been made to the manuscript.
VVVVV. Thank you for your review, this edit has been made to the manuscript.
WWWWW. Thank you for your review, this edit has been made to the manuscript.
XXXXX. Thank you for your review, this edit has been made to the manuscript.
YYYYY. Thank you for your review, the manuscript was edited for clarity.
ZZZZZ. Thank you for your review, this edit has been made to the manuscript.
AAAAAA. Thank you for your review, this edit has been made to the manuscript.
BBBBBB. Thank you for your review, this edit has been made to the manuscript.
CCCCCC. Thank you for your review, this edit has been made to the manuscript.
DDDDDD. Thank you for your review, this edit has been made to the manuscript.
EEEEEE. Thank you for your review. The recommendation language has been edited.

FFFFFF. Thank you for your review, this edit has been made to the manuscript.
GGGGGG. Thank you for your review, this edit has been made to the manuscript.
HHHHHH. Thank you for your review, this edit has been made to the manuscript.
IIIIII. Thank you for your review, this edit has been made to the manuscript.
JJJJJJ. Thank you for your review, this edit has been made to the manuscript.
KKKKKK. Thank you for your review, this edit has been made to the manuscript.
LLLLLL. Thank you for your review, this edit has been made to the manuscript.
MMMMMM. Thank you for your review, this edit has been made to the manuscript.
NNNNNN. Thank you for your review. No action needed
OOOOOO. Thank you for your review, this edit has been made to the manuscript.
PPPPPP. Thank you for your review, this edit has been made to the manuscript.
QQQQQQ. Thank you for your review, this edit has been made to the manuscript.
RRRRRR. Thank you for your review, this edit has been made to the manuscript.
SSSSSS. Thank you for your review, this edit has been made to the manuscript.
TTTTTT. Thank you for your review, this edit has been made to the manuscript.
UUUUUU. Thank you for your review, this edit has been made to the manuscript.
VVVVVV. Thank you for your review, this edit has been made to the manuscript.
WWWWWW. Thank you for your review, this edit has been made to the manuscript.
XXXXXX. Thank you for your review, this edit has been made to the manuscript.
YYYYYY. Thank you for your review, this edit has been made to the manuscript.
ZZZZZZ. Thank you for your review, this edit has been made to the manuscript.
AAAAAAA. Thank you for your review, this edit has been made to the manuscript.
BBBBBBB. Thank you for your review, this edit has been made to the manuscript.
CCCCCCC. Thank you for your review. The workgroup determined no edit was necessary as the information was addressed elsewhere in the rationale.
DDDDDDD. Thank you for your review. The workgroup determined no edit was necessary as there is variability in the literature as to the time recommended for surgery after an injection to mitigate infection risk (shoulder arthroscopy). The time range spans from one month to several months. The statement in its edited form provides latitude for the treating physician without providing a specific time frame.
EEEEEEE. Thank you for your review, this edit has been made to the manuscript.
FFFFFFF. Thank you for your review, this edit has been made to the manuscript.
GGGGGGG. Thank you for your review, this edit has been made to the manuscript.
HHHHHHH. Thank you for your review, this edit has been made to the manuscript.
IIIIIII. Thank you for your review. The workgroup determined no edit was necessary as the information was addressed elsewhere in the rationale.
JJJJJJJ.Thank you for your review, this edit has been made to the manuscript.
KKKKKKK. Thank you for your review, this edit has been made to the manuscript.
LLLLLLL. Thank you for your review, this edit has been made to the manuscript.
MMMMMMM. Thank you for your review, this edit has been made to the manuscript.
NNNNNNN. Thank you for your review, this edit has been made to the manuscript.
OOOOOOO. Thank you for your review, this edit has been made to the manuscript.
PPPPPPP. Thank you for your review, this edit has been made to the manuscript.
QQQQQQQ. Thank you for your review. The workgroup chose language to reflect included literature and added further information in the rationale accordingly.
RRRRRRR. Thank you for your review, this edit has been made to the manuscript.
SSSSSSS. Thank you for your review, this edit has been made to the manuscript.
TTTTTTT. Thank you for your review, this edit has been made to the manuscript.
UUUUUUU. Thank you for your review, this edit has been made to the manuscript.
VVVVVVV. Thank you for your review, this edit has been made to the manuscript.
WWWWWWW. Thank you for your review, this edit has been made to the manuscript.

XXXXXXX. Thank you for your review, this edit has been made to the manuscript.
YYYYYYY. Thank you for your review, this edit has been made to the manuscript.
ZZZZZZZ. Thank you for your review, this edit has been made to the manuscript.
AAAAAAAA. Thank you for your review. The workgroup chose language to reflect included literature. Tear sizes and patterns were considered/defined whenever included literature allowed.
BBBBBBBB. Thank you for your review, this edit has been made to the manuscript.
CCCCCCCC. Thank you for your review, this edit has been made to the manuscript.
DDDDDDDD. Thank you for your review, this edit has been made to the manuscript.
EEEEEEEE. Thank you for your review. The workgroup chose language to reflect included literature.
FFFFFFFF. Thank you for your review.
GGGGGGGG. Thank you for your review, this edit has been made to the manuscript.
HHHHHHHH. Thank you for your review. The workgroup chose language to reflect included literature and added further information in the rationale accordingly.
IIIIIIII. Thank you for your review, this edit has been made to the manuscript.
JJJJJJJJ. Thank you for your review. The workgroup chose language to reflect included literature. Tear sizes and patterns were considered/defined whenever included literature allowed.
KKKKKKKK. Thank you for your review, this edit has been made to the manuscript.
LLLLLLLL. Thank you for your review.
MMMMMMMM. Thank you for your review. Information was included in the rationale discussing porcine allografts.
NNNNNNNN. Thank you for your review, this edit has been made to the manuscript.
OOOOOOOO. Thank you for your review, this edit has been made to the manuscript.
PPPPPPPP. Thank you for your review, this edit has been made to the manuscript.
QQQQQQQQ. Thank you for your review, this edit has been made to the manuscript.
RRRRRRRR. Thank you for your review, this edit has been made to the manuscript.
SSSSSSSS. Thank you for your review. The text has been edited.
TTTTTTTT. Thank you for your review, this edit has been made to the manuscript.
UUUUUUUU. Thank you for your review. The rationale contains further information.
VVVVVVVV. Thank you for your review, this edit has been made to the manuscript.
WWWWWWWW. Thank you for your review, this edit has been made to the manuscript.
XXXXXXXX. Thank you for your review, this edit has been made to the manuscript.
YYYYYYYY. Thank you for your review.
ZZZZZZZZ. Thank you for your review, the text in question was referring to the Literature Review process.
AAAAAAAAA. Thank you for your review, this edit has been made to the manuscript.
BBBBBBBBB. Thank you for your review, this edit has been made to the manuscript.
CCCCCCCCC. Thank you for your review, this edit has been made to the manuscript.
DDDDDDDDD. Thank you for your review. No edit is necessary; verbiage maintained to agree with rationale text.
EEEEEEEEE. Thank you for your review, this edit has been made to the manuscript.
FFFFFFFFF. Thank you for your review, this edit has been made to the manuscript.
GGGGGGGGG. Thank you for your review. Additional information was added to the rationale.
HHHHHHHHH. Thank you for your review. Verbiage had been added to the manuscript for clarity.
IIIIIIIII. Thank you for your review, this edit has been made to the manuscript.
JJJJJJJJJ. Thank you for your review, this edit has been made to the manuscript.
KKKKKKKKK. Thank you for your review. Citations follow standard CPG methodology.
LLLLLLLLL. Thank you for your review. The text was edited.
MMMMMMMMM. Thank you for your review, this edit has been made to the manuscript.
NNNNNNNNN. Thank you for your review. Terminology was edited for consistency.
OOOOOOOOO. Thank you for your review, this edit has been made to the manuscript.

PPPPPPPPP. Thank you for your review, this edit has been made to the manuscript.
QQQQQQQQQ. Thank you for your review, further research is standard verbiage for each future research section.
RRRRRRRRR. Thank you for your review. The workgroup chose language to reflect included literature.
SSSSSSSSS. Thank you for your review. Verbiage has been added to the manuscript.
TTTTTTTTT. Thank you for your review. Verbiage has been added to the manuscript for clarity.
UUUUUUUUU. Thank you for your review. The workgroup determined no edit was necessary as there is variability in the literature as to the time recommended for surgery after an injection to mitigate infection risk (shoulder arthroscopy).
VVVVVVVVV. Thank you for your review, this edit has been made to the manuscript.
WWWWWWWWW. Thank you for your review, this edit has been made to the manuscript.
XXXXXXXXX. Thank you for your review. No edit necessary.
YYYYYYYYY. Thank you for your review, this edit has been made to the manuscript.
ZZZZZZZZZ. Thank you for your review. The grammar was retained.
AAAAAAAAAA. Thank you for your review, this edit has been made to the manuscript.
BBBBBBBBBB. Thank you for your review, this edit has been made to the manuscript.
CCCCCCCCCC. Thank you for your review. The workgroup chose to include a broader discussion of topics in this consensus statement.
DDDDDDDDDD. Thank you for your review, this edit has been made to the manuscript.
EEEEEEEEEE. Thank you for your review. The workgroup chose to include a broader discussion of topics in this consensus statement.
FFFFFFFFF. Thank you for your review, this edit has been made to the manuscript.
GGGGGGGGGG. Thank you for your review, this edit has been made to the manuscript.
HHHHHHHHHH. Thank you for your review. Hyphens were maintained throughout the manuscript to denote compound adjectives preceding a noun.
IIIIIIIII. Thank you for your review, this edit has been made to the manuscript.
JJJJJJJJJ. Thank you for your review. Edits were added to the manuscript for clarity.
KKKKKKKKK. Thank you for your review, this edit has been made to the manuscript.

Reviewer #2, Lindsey Colbert, PT, DPT, OCS.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
2	Lindsey Colbert, PT DPT, OCS	American Society of Shoulder Therapists	A. The AAOS Guidelines are a well respected set of recommendations for many topics. However, this document leaves me with many questions regarding the integrity of past research that guide our current clinical practices on these topics, as well as the quality/strength of the studies being published more recently (it seems that many studies have been excluded due to a lack of quality). I appreciate that many sections provided a well-rounded discussion outside of the given study's results, but some statements may be too generalized for the evidence presented (see the comments below). Overall, I think this document could use a few edits, but is certainly a call for our field to improve our research on this matter. B. Line 146: please define "may progress" – how likely are these tears to progress? C. Line 154: as this statement reads, it contradicts the "management of small to medium tears" recommendations in 2 sections above- maybe consider rewording this. D. Line 164- is acromioplasty recommended for large tears? Why are only small/medium tears included? E. Line 211-215: this statement is confusing. Why is PT being prescribed to supervise a patient's home program? Was this study looking at compliance with an HEP? Because supervision of home exercises is not considered skilled care, and therefore is an inaccurate representation of physical therapy interventions and treatment methods. F. Line 252: how much "can" this improve outcomes? Minimal? Moderate? G. Line 270: define the tear size/type for this statement H. Line 278: this statement contradicts itself. Double row repairs lower retear rates, but they're not favored?? Consider rewording this statement for your reader. I. Line 289: define "may decrease", how confident? J. Line 328: "non-opiod individual modalities can be considered"- consider saying "can be safely considered" or "can be moderately/significantly effective in reducing postoperative pain". K. Line 359: "Multiple"- how many? "Integrity of the rotator cuff"- is this repaired? Unrepaired?

			L. Line 617-620: “from their study of 306 cadavers, Lohr and Uhthoff noted a 19% and 32% prevalence of full and partial thickness tears respectively” – in what population or demographic of patients? Or is this a general statement across a total population? M. Line 1105: correct “wis” to “wish”? N. Line 1068-1114: in this section, was tear pattern considered in this recommendation? O. Line 1132: “fatty infiltration in 41% (15/37) of patients” – what grade fatty infiltration was found here? And is 37 patients enough to make a generalization for a CPG statement? P. Line 1139: reword “that had an increase the tear size <5mm” Q. Line 1147: Future Research section- this section could use a discussion on natural history of rotator cuff tears, particularly on those tears that progress faster than others (and thus those who may benefit from surgery vs. PT sooner). Consider including comments on factors that lead to rotator cuff tear progression, including job/activity level, age, comorbidities, etc. What population of patients/demographic should this be used in? R. Line 1175: define “a proportion of patients” S. Line 1181: Capitalize the start of this sentence- “In a prospective randomized…” T. Line 1186: Future Research Section- consider including a discussion here on comparing unhealed asymptomatic tears, as some cuff repairs fail but the patient’s outcome is still positive as compared to their pre-operative PRO’s and functional scores. U. Line 1220: remove question mark from “Continued long term comparative studies between physical therapy ? or acromioplasty and surgical repair…” V. Line 1220: Future Research section- add the results and a review of the potentially negative consequences of acromioplasty on recovery, function, and PRO’s W. Line 1307: Consider changing the “up to 8 weeks” in this statement, as it reads that differences between early mobilization and delayed mobilization is only relevant in the first 8 weeks, rather than 6 months as listed in the paragraphs below that. Or, reword to say something like “timing of mobilization before 8 weeks in small to medium sized tears yields similar post operative clinical and patient-reported outcomes.” X. Line 1313: “in certain patient populations” – this needs to be better defined for a CPG statement Y. Line 1326: “mobilization exercises of their shoulder” – was this passive range of motion? AAROM? And do we that the exercises prescribed in each of these studies were accurately categorized as passive vs active assisted based on MVIC recommendations?

			Z. Line 1335: include “months” at the end of “but these differences were negligible by 6…” AA. Line 1342: “defined by initiation of passive, active assistive range of motion interventions with supervised physical therapy” – include this information earlier in the section to clear up confusion in line 1326 BB. Line 1348: reword “defined as sling use” to something like “defined by discontinuation of sling use” CC. Line 1348: Tear size, tear type, repair type, and surgeries being performed by fellowship trained surgeons from Sheps 2019 & Littlewood 2021 should be included in this statement for point of reference to the reader. But also would be a good place for unbiased discussion on factors that impact outcomes and conclusions from previous meta analyses (such as Kluczynski 2016)- or this may be considered for the “risks and harms” section. There may also need to be comment about type of sling, as the Shep study excluded repairs using an abductor pillow. DD. Line 1352: From the ASSET guideline on postoperative RC repair: “Although early, unrestricted initiation of exercise does produce increased ROM, with gains of 7°-15° of forward elevation (FE) and 5°-10° of external rotation (ER) at 3 and 6 months postoperatively, respectively, these relatively small differences in ROM do not seem to improve patient function even during these early time frames (Chang 2015)” EE. Line 1355: “The retear rate did not differ between groups at 3 months (Littlewood 2021), and 12-months postoperative (Sheps 2019)”- Sheps 2019 states in their limitations that the statistics regarding the integrity of the repair couldn’t be powered. FF. Line 1356: This may be a good place for the “in certain populations” statement from the recommendation statement to be discussed, because this line reads that outcomes following no arthroscopic rotator cuff repairs require a sling or precautions for mobilization. GG. Line 1366: Future Research- this is really well done. Kudos on this thought process. HH. Line 1415: an additional limitation in Hayes 2004 was their missing data, which accounted for 0-31% of assessment results for the PT group, and 0-44% of assessment results for the HEP group, which impacts their statistical analysis. Furthermore, this study states that “subjects in the individualized physiotherapy group and standardized home exercise group reported mean residual functional deficits of 14% and 32% respectively at 24 weeks post-operation”… II. Line 1421: note that supervision of the same exercises done independently at home is not considered skilled care by any payer and therefore is considered

			"maintenance" therapy and typically not covered by even Medicare. It's unclear why this is being included in this CPG.

Workgroup Response to Reviewer #2

Reviewer #2 Dear Lindsey Colbert, PT, DPT, OCS,

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. Additional information was discussed in the rationale.
C. Thank you for your review. The rationales provide further context for reader on tear size and for whom the recommendations apply.
D. Thank you for your review. Tear sizes are defined whenever included literature allows. Further information is included in the rationale.
E. Thank you for your review. The recommendation statement was edited accordingly.
F. Thank you for your review. Additional information is included in rationale.
G. Thank you for your review. Tear sizes were defined whenever included literature allowed.
H. Thank you for your review. The workgroup chose wording to reflect included literature as retear can be defined as full-thickness or partial thickness. Additional information was also added to the rationale discussing significance.
I. Thank you for your review. Supporting evidence reported an increase in healing rates in patients with larger tears, but the evidence lacked the specificity required to make a more explicit statement.
J. Thank you for your review. A section discussing risks and harms is included in rationale.
K. Thank you for your review. Because the studies didn't all utilize the same treatments, the workgroup opted to used the terminology, "multiple".
L. Thank you for your review. Additional information was added to the introduction.
M. Thank you for your review, this edit has been made to the manuscript.
N. Thank you for your review. Tear sizes and patterns were considered and defined whenever included literature allowed.
O. Thank you for your review, this edit has been made to the manuscript. The grading and evaluation of the study takes into account sample size, among many other criteria to make the statement
P. Thank you for your review, this edit has been made to the manuscript.
Q. Thank you for your review. The workgroup determined no change was necessary as they feel the future research section provides adequate information as part of a recommendation rationale.
R. Thank you for your review. Workgroup determined no edit was unnecessary.
S. Thank you for your review, this edit has been made to the manuscript.
T. Thank you for your review. Workgroup determined no edit was unnecessary.
U. Thank you for your review, this edit has been made to the manuscript.
V. Thank you for your review, this edit has been made to the manuscript.
W. Thank you for your review. The recommendation language was edited.
X. Thank you for your review. The workgroup has chosen to retain the current language to allow clinican discretion to take into account all relevant factors and patient preferences based on the level of evidence.
Y. Thank you for your review. Information describing this is included in the text further in this section.
Z. Thank you for your review, this edit has been made to the manuscript.
AA. Thank you for your review, information describing this is included in the text.
BB. Thank you for your review, this edit has been made to the manuscript. The grading and evaluation of the study takes into account sample size, among many other criteria to make the statement
CC. Thank you for our review, details regarding enrolled patient tear size characteristics were added to the rationale.
DD. Thank you for your review. This evidence cannont be incorporated into the CPG as these are consensus guidelines without graded levels of evidence or quality assessments for the included references.
EE. Thank you for your review. Additional information was added for reader interpretation.
FF. Thank you for your review. Details regarding characteristics of patients and tears were added.

GG. Thank you for your review.
HH. Thank you for your review, the edit has been made to the manuscript.
II. Thank you for your review. The workgroup determined no edit was needed.

Reviewer #3 John Wickman, MD.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
3	John Wickman, MD		A. Overall the guidelines are well done in respect to the chosen topics and the literature review. In recommendations that use industry produced products including PRP, dermal allograft, bioinductive implants, and other augmentation products there needs to be disclosure of bias in the review of the literature. Much (almost all) of this data is from studies that are sponsored by industry with direct conflict of interests and have clear biases. This needs to be included in the guideline and decrease the strength of the recommendation unless high quality study has been completed with no conflict of interest. B. The definition of a small or medium sized tear is not universally agreed-upon and should be defined within this document when recommendations are being made for small or medium size tears. C. "Double row rotator cuff repair constructs are not recommended for improving patient reported outcomes compared to single row repair constructs"- This is misleading. There is no data to suggest a double row repair is not recommended for small or medium sized tears. Needs to be reworded to state that double row repair and single row repair have no difference in PRO in small and medium tears and the construct should be based on surgeon preference. D. On page 44 lines 1542-45 the guideline is misleading. The reported literature contradicts the recommendation. The guideline states that there is limited evidence suggesting improvement with liquid PRP. The reported literature states that there is no difference in patient reported outcomes or retear rates with use of PRP. There is no mention of a study showing improved retear rates.

Workgroup Response to Reviewer #3

Dear John Wickman, MD

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review. All literature included in the CPG is appraised for quality and monitored for potential conflict of interest. All appraisal reports for the included literature can be found in eAppendix II.
B. Thank you for your review. Tear sizes were defined whenever included literature allowed. Workgroup chose language to reflect included literature.
C. Thank you for your review. Edits were made to recommendation titles to distinguish the repair statements.
D. Thank you for your review. The workgroup has opted to retain its original verbiage. Additional information was included in the rationale.

Reviewer #4 Abdulaziz Ahmed, MD.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
4	Abdulaziz Ahmed, MD	American Orthopaedic Society for Sports Medicine	A. I would like to extend my appreciation to the workgroup for their extensive effort in developing this well-conducted Clinical Practice Guideline (CPG) for rotator cuff injuries. The methodology is clearly described and well-executed, with no concerns from my perspective. While the manuscript is generally well-written, a few minor typographical errors require correction. The following recommendations are well-balanced, with appropriate rationale and a clear statement on potential harms of implementation: 1. Management of small to medium tears (Line 1068) 2. Long-term non-operative treatment (Line 1115) 3. Operative vs. non-operative management (Line 1152) 4. Acromioplasty and cuff repair (Line 1191) 5. Clinical examination (Line 1223) 6. Imaging (Line 1248) 7. Postoperative mobilization timing (Line 1301) 8. Supervised vs. unsupervised exercise (Line 1388) 9. Prolotherapy (Line 1470) 10. Partial rotator cuff tears (Line 1511) 11. Biological augmentation with PRP (Line 1539) 12. Marrow stimulation (Line 1638) 13. Dermal allografts 14. Open vs. arthroscopic repairs (Line 1717) 15. Postoperative pain management (Line 1769) 16. The consensus options are appropriate as well. Recommendations with comments to be addressed: B. 1. Corticosteroid Injections for Rotator Cuff Repairs (Line 1458-1461) The statement regarding corticosteroid (CS) vs. hyaluronic acid (HA) appears disconnected from the overall recommendation and does not add value. I recommend removing this section for clarity.

			C. 2. High-Grade Partial Thickness Rotator Cuff Tears (Line 1505) The phrase “Franceschi 2013 felt that outcomes and re-tear rates were comparable” should be revised. The word felt is not scientifically rigorous; I recommend replacing it with reported for greater precision. D. 3. Single-Row vs. Double-Row Repair – Patient-Reported Outcomes (Line 1573) The title of this recommendation should be more specific. While patient-reported outcomes (PROs) do not generally favor double-row (DR) over single-row (SR) repair, evidence suggests that DR achieves better PROs in tears >3 cm. The current title is too broad and may misrepresent the available data. E. 4. Single-Row vs. Double-Row Repair – Retear Rates (Line 1628) This is an appropriate recommendation. However, it would be beneficial to include statistical values in the rationale (similar to Line 1627) to better reflect the trend in favor of DR repair. F. Bioinductive Implants (Line 1691) The two high-quality studies on bioinductive implants specifically utilize the Regeneten implant, which is bovine-derived. These studies were funded by the manufacturer, introducing a potential risk of bias. While the studies are well-conducted, caution is warranted. If adjustments cannot be made to the recommendation, a statement acknowledging this potential bias should be included to help practicing orthopaedic surgeons make informed decisions. G. Line 1710-1713: The terminology should be revised from “dermal allograft” to “bovine allograft” to accurately reflect the nature of the implant. H. Thank you again for your hard work in compiling this important guideline. I appreciate the opportunity to provide feedback.

Workgroup Response to Reviewer #4

Reviewer #4 Abdulaziz Ahmed MD.

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. The rationale was edited accordingly.
C. Thank you for your review, this edit has been made to the manuscript.
D. Thank you for your review. The title was updated to include Patient -reported Outcomes as a delineator for readers and additional information was included in the rationale.
E. Thank you for your review, this edit has been made to the manuscript.
F. Thank you for your review, this edit has been made to the manuscript.
G. Thank you for your review. The rationale was edited accordingly.
H. Thank you for your review.

Reviewer #5 Robert Lindeman, MD.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
5	Robert Lindeman, MD		A. Overall I think the recommendations as a whole are appropriate. I do, however, feel that there are some areas that could be clarified or potentially reworded in a way that more closely aligns with the evidence quality that is presented. See my line based comments below. B. 143 – I would consider stating this as simply progressing over time and leave out the specific time frame in the recommendation. This may be misleading C. 153 – review this – should the comparison just be between operative and non operative rotator cuff management? I would state this way – Rotator cuff repair shows improved patient reported outcomes compared to physical therapy, and healed repairs have greater improvement compared to unhealed tears. D. Line 163 – The evidence as presented does not support the recommendation written this way. This suggests that it should not be done. I would state the recommendation in a way that says the following: Routine use of acromioplasty as concomitant treatment in the setting of rotator cuff repair for small to medium sized full thickness rotator cuff tears has not been shown to provide evidence of improved outcomes compared to rotator cuff repair alone. The evidence did not demonstrate any harm to the inclusion of acromioplasty…therefore the CPG should not specifically recommend against its use. E. Line 189 - 199 I think somehow these 2 recommendations can be combined like they are in 1301 -1316. The evidence suggests that sling use is largely up to the provider based on outcomes being equivalent. F. 233 – may be worthwhile to include small description of prolotherapy G. Line 343- may consider limited evidence supporting the use of hyaluronic acid over steroid for non operative management of rotator cuff pathology in the absence of tears? H. Line 359 – Would rephrase this since the evidence is limited. …. Limited evidence suggests potential harm to the rotator cuff with repeated steroid injections.

			I. Line 377 – this is a jumbled mess of recommendations. I think it suffices to say that arthroscopic management may be considered for these tears. J. Thats about all I have to say. Thank you for this opportunity to review! RL

Workgroup Response to Reviewer #5

Dear Robert Lindeman, MD,

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. The workgroup determined including timing was important to distinguish in the recommendation and added language accordingly.
C. Thank you for your review. The workgroup has opted to retain its original verbiage.
D. Thank you for your review. The recommendation statement has been edited.
E. Thank you for your review. The manuscript has been formatted to reflect this.
F. Thank you for your review. The workgroup has opted to retain its original verbiage.
G. Thank you for your review. AAOS Clinical Practice Guideline development methodology utilizes the Evidence to Decision Framework which enables a variance in evidence strength and recommendation strength as appropriate. Due to this, the use of evidence descriptors within recommendation language is at times inappropriate.
H. Thank you for your review. AAOS Clinical Practice Guideline development methodology utilizes the Evidence to Decision Framework which enables a variance in evidence strength and recommendation strength as appropriate. Due to this, the use of evidence descriptors within recommendation language is at times inappropriate.
I. Thank you for your review. The workgroup chose to create separate, specific consensus statements for each topic based in the included literature.
J. Thank you for your review.

Reviewer #6 Robert Litchfield, MD.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
6	Robert Litchfield, MD		A. Congratulations to the committee on a thorough and comprehensive review in establishing these draft guidelines. The peer review responses above reflect my positive support for the evidence selected and the interpretation of literature. The following are a few suggestions. B. Line 684-689: Would you consider a sentence in support of Bioinductive Implants which is supported later in the recommendations? C. Line 1575-1599: In the Risk and Harms section indicates differences based on tear size with respect to single versus double row. Perhaps this entire section should be split into two separate recommendations based on tear size? D. Lines 1710-1713: This appears to be a duplicate of the Risk and Harms section from dermal allograft section. E. I appreciate the challenge in wording these guidelines but in general it would be good to avoid high level of recommendation with a high quality of evidence for interventions that don't work so that when the title of the recommendation is read it is more intuitive to interpret. Thank you for this opportunity.

Workgroup Response to Reviewer #6

Dear Robert Litchfield, MD

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. The workgroup has opted to retain its original verbiage.
C. Thank you for your review. The workgroup chose language to reflect included literature and added further information in the rationale accordingly.
D. Thank you for your review, the sections were added as intended.
E. Thank you for your review.

Reviewer #7 Gregory Carolan, MD.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
7	Gregory Carolan, MD		A. I applaud the efforts of the committee, as well as appreciate the resources allocated to the development of this CPG. I think the group did an incredible job. I was asked to provide feedback and have listed the three items of feedback for the group to consider. I am happy to discuss this further and respect the decision of the group if they feel my input is not valid. Thank you Gregory F. Carolan, MD FAAOS Department of Orthopaedic Surgery St. Luke's University Health Network Bethlehem PA 18015 Gregory.carolan@sluhn.org B. Line 1829 The use of hyaluronic acid injections may be considered in the non-operative treatment of rotator cuff pathology with no tear. Evidence: High Recommendation: Limited Studies quoted are all low level of evidence and provide conflicting results (and/or are non-heterogenous). LOE would be Moderate based on criteria. Based on the literature provided one would not think a "Limited" recommendation is warranted and would consider this as Consensus as it is not really supported by any clear evidence C. Line 1934 PRP injection in full thickness tears Evidence: Moderate (despite "no supporting evidence" as stated in description (Line 1942). Should be corrected to Limited or None (as stated above) D. Line 1999 Massive Unrepairable Tears with Arthropathy (Reverse Arthroplasty) Evidence: Limited Recommendation: Consensus Significant evidence exists that support rTSA in this cohort. Articles cited in the description include rTSA with tendon transfers (which is not the topic). Below is at least one high level systematic review that supports rTSA in this cohort (this was not included in the literature review of the working group).

			This would increase the Evidence to Moderate if not High and allow the Recommendation to be upgraded as well. Kira L. Smith, Luc M. Fortier, Margaret A. Sinkler, Monish S. Lavu, Jacob G. Calcei, Robert J. Gillespie, Raymond E. Chen,Mid- to long-term outcomes of reverse total shoulder arthroplasty: a systematic review, Seminars in Arthroplasty: JSES,Volume 34, Issue 4,2024, Pages 953-963,ISSN 1045-4527, https://doi.org/10.1053/j.sart.2024.07.011.

Workgroup Response to Reviewer #7

Dear Gregory Carolan, MD

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. Included studies for this recommendation were appraised as high quality, meeting the criteria of High LOE. AAOS methodology allows for a single level upgrade or downgrade, except in instances of an imprecision of evidence in which the recommendation strength can be downgraded twice. This recommendation was downgraded twice, the maximum allowable by AAOS methodology.
C. Thank you for your review. Included studies for this recommendation were appraised as moderate quality, meeting the criteria of Moderate LOE. AAOS methodology allows for a single level upgrade or downgrade, except in instances of an imprecision of evidence in which the recommendation strength can be downgraded twice. This recommendation was downgraded twice, the maximum allowable by AAOS methodology.
D. Thank you for your review. This study was published after our final literature search was performed, so it is unable to be included in the evidence for this CPG. Additionally, systematic reviews are not included as direct evidence in CPGs, but their reference lists are searched for all applicable primary literature.

Reviewer #8 Mohamed Sheri Ali Ahmed, MD.

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
8	Mohamed Sherif Ali, MD		A. My one suggestion for improvement remains the same: include a concise summary of study exclusion criteria in the main document. B. But overall, this guideline is a winner. It's a well-researched, thoughtfully constructed, and highly practical resource that will help clinicians make informed decisions about the management of rotator cuff tears. I wholeheartedly recommend it! After this deep dive into the "SUMMARY OF RECOMMENDATIONS" and "SUMMARY OF OPTIONS," I'm even more impressed with this guideline. The explicit link between recommendations and evidence, the comprehensive consideration of outcomes, the attention to patient characteristics, and the use of a transparent and rigorous grading system all make it a valuable tool for healthcare professionals. This would increase the Evidence to Moderate if not High and allow the Recommendation to be upgraded as well. C. After this thorough review, I'm even more confident in the value of these guidelines. The transparent link between recommendations and evidence, the wide-ranging consideration of outcomes, the attention to patient characteristics, and the well-designed grading system make it a valuable tool for healthcare professionals. D. If I could change one thing, it would be to include a brief summary of the study exclusion criteria in the main document. E. In short, this guideline is a fantastic resource. It's built on solid research, thoughtfully constructed, and genuinely practical. It empowers clinicians to make informed decisions about rotator cuff tear management and improves patient care. I give it my strongest recommendation!

Workgroup Response to Reviewer #8

Dear Mohamed Sherif Ali Ahmed, MBBCh

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review. To streamline the manuscript and maintain clarity, exclusion criteria can be found in eAppendix 1.
B. Thank you for your review.
C. Thank you for your review.
D. Thank you for your review. To streamline the manuscript and maintain clarity, exclusion criteria can be found in eAppendix 1.
E. Thank you for your review.

Reviewer #9 Joe Godges, DPT, MA

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
3	Joe Godges, DPT, MA		A. The appendices with the article inclusion and exclusion criteria and the data extraction tables are comprehensive, well-designed, and helpful for the reviewer. B. Page 7, line 127 The "Summary of Recommendations" in this CPG provide an excellent summary of the literature, but they do not provide recommendations of actions the clinician should perform. In other CPGs, recommendations are actions that the "Clinician "must," "should," "should not," or "may....." perform. C. Page 10, line 259 It seems odd for a recommendation to say .....products is not recommended ..... (with strong evidence) and then slip in: "however, limited evidence supports the use of ..... It would probably be clearer to have one recommendation with a strong grade and separate recommendation with limited or weak evidence. D. Page 11, Line 287 Another "Strong" "does not" recommendation for using a product - with a "however" this procedure "may" under another condition, without a reference to the strength of the literature supporting this "may" statement. E. Page 18, Line 497 It would be helpful for the reader to know what period of time the search covered, that is, from ____ _____ to June 2024, and not just when the search was conducted. F. Page 32, Line 1181 ". in" should be ". In"

			G. Page 34, line 1232 Seventeen tests are listed. It would be helpful for the reader to know which one, two, or three - or combination - had the best diagnostic accuracy. In essence, should the clinician spend the time (and potentially irritate the patient's inflamed tissues) performing 15 tests when the same diagnostic criteria data can be obtained by performing 2 of them? H. Page 34, Line 1244 I do not see why "reoperation rates" is a relevant concern when there is no mention of an original operation associated with this recommendation. I. Page 37, Line 1335 "...these differences become negligible by 6" - - - 6 what? J. Page 45, Line 1514 It is reported that there is no difference between the outcomes of two different types of surgeries for subscapularis tears. Then, it is described that there is "strong" evidence to recommend action that one "can" perform either type of surgery. As a reader, I would be more confident that this is a good plan of care if, in summary, there was some indicator of the quality of the outcomes, that is, was there no difference with both surgeries having bad outcomes or both surgeries having good outcomes?. K. The appendices with the article inclusion and exclusion criteria and the data extraction tables are comprehensive, well-designed, and helpful for the reviewer.

Workgroup Response to Reviewer #9

Dear Joe Godges, DPT, MA

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review.
B. Thank you for your review. The workgroup chose language they deemed appropriate to the topics based on the included evidence.
C. Thank you for your review. Additional information is included in rationale.
D. Thank you for your review. The workgroup chose language to reflect included literature; further information was included in the rationale.
E. Thank you for your review, this edit has been made to the manuscript.
F. Thank you for your review, this edit has been made to the manuscript.
G. Thank you for your review. The included articles varied in intervention(s) studied so the workgroup did not feel it was appropriate to be more specific in the recommendation.
H. Thank you for your review, the manuscript was edited accordingly.
I. Thank you for your review, this edit has been made to the manuscript.
J. Thank you for your review. The workgroup chose language to reflect included literature. Further information was included in rationale.
K. Thank you for your review.

Reviewer #10 Dafang Zhang, MD

Reviewer Number	Reviewer Name	Society or committee you are representing	Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline: The response(s) below also includes all editing suggestions received from the Additional Comments section of the structured review form.
10	Dafang Zhang, MD		A. The AAOS CPG on Management of Rotator Cuff Injuries is clearly articulated and well supported by the evidence. B. On page 50, in the section on Open vs. Arthroscopic Repairs, pertaining to the recommendation that "Evidence shows no difference in long-term (>1 year) patient-reported outcomes of cuff healing rates between open and arthroscopic repairs; however, arthroscopic-only technique is associated with better short-term improvement in post operative recovery of motion and decreased visual analog scale (VAS) scores." is rated as high quality of evidence. However, the latter part of the statement, "however, arthroscopic-only technique is associated with better short-term improvement in post operative recovery of motion and decreased visual analog scale (VAS) scores," is supported by only moderate evidence (Liu et al. 2017 and Van der Zwaal et al. 2013). The work group may consider downgrading the quality of evidence to moderate.

Workgroup Response to Reviewer #10

Dear Dafang Zhang, MD,

Thank you for your expert review of the Management of Rotator Cuff Injuries Evidence-Based Clinical Practice Guideline. We will address your comments by guideline section in the order that you listed them.

A. Thank you for your review. The workgroup chose language to reflect included literature.
B. Thank you for your review

Appendix A – Structured Review Form

Review Questions (REQUIRED)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The overall objective(s) of the guideline is (are) specifically described.	○	○	○	○	○
2. The health question(s) covered by the guideline is (are) specifically described.	○	○	○	○	○
3. The guideline's target audience is clearly described.	○	○	○	○	○
4. There is an explicit link between the recommendations and the supporting evidence.	○	○	○	○	○
5. Given the nature of the topic and the data, all clinically important outcomes are considered.	○	○	○	○	○
6. The patients to whom this guideline is meant to apply are specifically described.	○	○	○	○	○
7. The criteria used to select articles for inclusion are appropriate.	○	○	○	○	○
8. The reasons why some studies were excluded are clearly described.	○	○	○	○	○
9. All important studies that met the article inclusion criteria are included.	○	○	○	○	○
10. The validity of the studies is appropriately appraised.	○	○	○	○	○
11. The methods are described in such a way as to be reproducible.	○	○	○	○	○
12. The statistical methods are appropriate to the material and the objectives of this guideline.	○	○	○	○	○
13. Important parameters (e.g., setting, study population, study design) that could affect study results are systematically addressed.	○	○	○	○	○
14. Health benefits, side effects, and risks are adequately addressed.	○	○	○	○	○
15. The writing style is appropriate for health care professionals.	○	○	○	○	○
16. The grades assigned to each recommendation are appropriate.	○	○	○	○	○

Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline:

Would you recommend these guidelines for use in clinical practice? (REQUIRED)

- ○ Strongly Recommend
- ○ Recommend
- ○ Would Not Recommend
- ○ Unsure

Additional Comments regarding this clinical practice guideline?