The topic, *Comparative Effectiveness of Non-operative and Operative Treatments for Rotator Cuff Tears*, is not feasible for an update to or expansion of an existing comparative effectiveness or effectiveness review due to the limited data available for a review at this time.


**Key Questions:**

1. Does early surgical repair compared to late surgical repair (i.e., non-operative intervention followed by surgery) lead to improved health-related quality of life, decreased disability, reduced time to return to work/activities, higher rate of cuff integrity, less shoulder pain, and increased range of motion and/or strength?

2. What is the comparative effectiveness of operative approaches (e.g., open surgery, mini-open surgery, and arthroscopy) and postoperative rehabilitation on improved health-related quality of life, decreased disability, reduced time to return to work/activities, higher rate of cuff integrity, less shoulder pain, and increased range of motion and/or strength?

**Intervention Type** | **Intervention Comparison**
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Surgical repair | Early surgical repair vs. late surgical repair (i.e., non-operative intervention followed by surgery)

**Intervention Type** | **Intervention Comparisons**
--- | ---
Operative approaches | Open rotator cuff repair (RCR) vs. mini-open RCR
| Mini-open RCR vs. arthroscopic RCR
| Open RCR vs. arthroscopic RCR
| Open or mini-open RCR vs. arthroscopic RCR
Key Question 3. What is the comparative effectiveness of non-operative interventions on improved health-related quality of life, decreased disability, reduced time to return to work/activities, higher rate of cuff integrity, less shoulder pain, and increased range of motion and/or strength?

**Intervention Type**  **Intervention Comparisons**

**Non-operative interventions**
- Sodium hyaluronate vs. dexamethasone
- Rehabilitation vs. no rehabilitation
- Physical therapy, oral medications and steroid injection vs. phy medications and no steroid injection

Key Question 4. Does operative repair compared with non-operative treatment lead to improved health-related quality of life, decreased disability, reduced time to return to work/activities, higher rate of cuff integrity, less shoulder pain, and increased range of motion and/or strength?
**Intervention Type**  
Operative repair vs. non-operative treatment

**Intervention Comparisons**  
- Shock-wave therapy vs. mini-open RCR  
- Steroid injection, physical therapy, and activity modification vs. Physical therapy vs. open or mini-open RCR  
- Physical therapy treatment, oral medication, and steroid injection debridement vs. open repair  
- Passive stretching, strengthening, and corticosteroid injection v acromioplasty

Key Question 5. What are the associated risks, adverse effects, and potential harms of non-operative and operative therapies?

Key Question 6. Which demographic (e.g., age, gender, ethnicity, comorbidities, workers’ compensation claims) and clinical (e.g., size/severity of tear, duration of injury, fatty infiltration of muscle) prognostic factors predict better outcomes following non-operative and operative treatment?

**Considerations**

- An assessment of the 2010 report *Comparative Effectiveness of Non-operative and Operative Treatments for Rotator Cuff Tears (CER 22)* found that many of the conclusions are still valid. A scan of the literature yielded very few studies that were published since the 2010 report.

- There is limited evidence that suggests the conclusions regarding 1) the comparative effectiveness of operative techniques, specifically single row versus double row suture fixation, and 2) patient clinical prognostic factors that predict outcomes following non-operative and operative treatment are possibly out of date. However, given that the majority of the conclusions from the original report were still valid this additional evidence did not warrant an update of the 2010 report at this time.

- An AHRQ future research needs report published in 2013 highlighted the gaps in evidence addressing these topics.