

This rehabilitation program is designed to return the individual to their full activities as quickly and safely as possible, following total shoulder arthroplasty. Modifications to this guideline may be necessary dependent on physician specific instruction or other procedures performed. This evidence-based guideline is criterion-based; time frames and visits in each phase will vary depending on many factors. The therapist may modify the program appropriately depending on the individual's goals for activity following this surgery.

This guideline is intended to provide the treating clinician a frame of reference for rehabilitation. It is not intended to substitute clinical judgment regarding the patient's post-operative care based on exam/treatment findings, individual progress, and/or the presence of concomitant procedures or post-operative complications. If the clinician should have questions regarding post-operative progression, they should contact the referring physician.

## **Precautions:**

- Avoid stressing subscapularis and involved rotator cuff muscles for 6 weeks
- Avoid weight bearing with UE for 6 weeks
- Wear (sling/immobilizer) for 4-6 weeks or as directed by MD
- Remove immobilizer for exercises 3-5 x per day
- Shoulder AAROM: 4 weeksShoulder AROM: 6 weeks

Phase	Suggested Interventions	Goals/Milestones for Progression
Phase I	Suggested Therapeutic Exercise - Pain free PROM of shoulder: 20 degrees ER, 120	Goals of Phase:  1. Reduce pain and swelling in the
0-4 WEEKS POST OP	degrees flexion/scaption  - AROM of elbow, wrist, and hand with active grip squeezes  - Pain and edema management with modalities PRN  - Instruction in protected ADLs including: Protected bed mobility and Codman position for bathing  - Late phase I: add Codman pendulum exercises and scapular stabilization with depression and retraction.	post-surgical shoulder  2. Maintain active range of motion of the elbow, wrist and neck  3. Protect healing of repaired tissues and implanted devices  4. Understand how to properly don/doff sling
		Criteria to Advance to Next Phase:  1. The patient must be at least 4 weeks post-operative



Phase II	Suggested Therapeutic Exercise	Goals of Phase:
1	4 weeks: shoulder AAROM initiated in supine and sitting	Functional goals:
4-7 WEEKS POST OP	through pain free ROM 6 weeks: shoulder AROM - Dowel exercises for flexion, abduction and limited extension - Pulleys - Active wall climb - Begin closed chain weight bearing - Cervical AROM - Cervical muscle stretches	<ol> <li>Controlled restoration of passive and active assistive range of motion</li> <li>Activate shoulder and scapular stabilizers in a protected position of 0 degrees to 30 degrees of shoulder abduction</li> <li>Correct postural dysfunctions</li> </ol>
	<ul> <li>Begin isometrics for adduction, abduction, flexion, and extension</li> <li>Modalities PRN for pain relief and to reduce swelling Manual Therapy:         <ul> <li>Scapulothoracic mobilization with upper extremity supported in scapular plane and neutral rotation</li> <li>Glenohumeral joint Grade I-II for pain control (avoid over straining anterior shoulder)</li> <li>STM/IASTM to reduce muscle tension and pain</li> </ul> </li> </ul>	Criteria to Advance to Next Phase:  1. The patient must be at least 8 weeks post-operative  2. Minimal pain  3. Flexion PROM at least 120°  4. External rotation PROM at least 15-20°
Phase III	Suggested Therapeutic Exercise: - Progress to full pain free AROM.	Goals of Phase:  1. Functional shoulder active range
8-10 WEEKS POST OP	<ul> <li>Deltoid, triceps, and serratus anterior strengthening in supine.</li> <li>Begin isometric co-contractions/stabilization in supine with 90 degrees</li> <li>Dynamic isometric shoulder flexion ("don't let me move you")</li> <li>Begin light TheraBand strengthening, progressing levels each 2-3 weeks</li> <li>Manual Therapy:         <ul> <li>Continue Scapulothoracic mobilizations</li> <li>Continue Glenohumeral joint mobilizations Grade Ill-IV for ROM and capsular restrictions</li> <li>STM/IASTM to reduce muscle tension and pain</li> <li>Scar mobilization as needed</li> </ul> </li> </ul>	of motion in all planes  2. 4/5 strength in all shoulder planes 3. Correct any postural dysfunction  Criteria to Advance to Next Phase:  1. The patient must be at least 10 weeks post-operative  2. Flexion AROM at least to 90° in standing  3. Flexion PROM at least 140°  4. External Rotation PROM 30°





Phase IV	Suggested Therapeutic Exercise: - Begin mild household activities and reaching	Goals of Phase: 1. 5/5 strength in all shoulder planes
10+ WEEKS POST OP	<ul> <li>Progressive strengthening with TheraBand and free weights, slow and controlled, and pain–free.</li> <li>Prone: ER, horizontal abduction thumb up &amp; palm down</li> <li>Rows</li> <li>Serratus anterior reaching for ceiling</li> <li>Seated press-ups</li> <li>TheraBand/free weights: ER, IR, adduction, abduction, flexion, extension, PNF diagonals</li> <li>Weight bearing exercises to be started after week 12</li> <li>Continue HEP for 12-19 months post-op, 2x per day</li> <li>If patient is limited in flexion AROM, use Levy Protocol</li> </ul>	<ol> <li>Advance proprioceptive and dynamic neuromuscular control retraining</li> <li>Achieve 60-75 degrees of shoulder external rotation</li> <li>Correct postural dysfunctions with work and sport specific tasks.</li> <li>Full shoulder active range of motion in all planes and multiplane movements</li> <li>Normal (rated 5/5) strength at 90 degrees of shoulder abduction</li> <li>Achieve 140° of AROM shoulder flexion and 160° of PROM shoulder flexion</li> </ol>