These guidelines, treatments, and milestones have been established to assist in guiding rehabilitation based on the most current available evidence. They are not intended to be substitute for sound clinical judgement with consideration of the individual contextual features of the patient and the demands of various functions/sports.

Pre-Physical Therapy / Home Therapy Phase (Approximately Weeks 0 – 2)

Milestone to advance to next phase: MD appointment for follow-up

Sling or immobilizer at all times¹ except to exercise, and shower/bathe
Home program: perform minimum of 3 times/day: AROM cervical spine, elbow, wrist, hand

Initiation of mobility – Phase 1 (Approximately Weeks 2 – 6)

Milestone to advance to next phase: Passive ER to 30°
Passive FF in scapular plane to 130°
Discontinue use of sling or immobilizer
Minimal pain and inflammation

Suggested Interventions
Scar mobility, Diaphragmatic breathing, MLD of the UE for edema management²³
PROM

Recommended precautions:
Limit passive ER to 30°, horizontal abduction and extension to neutral⁴–⁶
Limit passive FF to the scapular plane
Limit passive IR to the scapular plane

Aerobic conditioning⁷
Scapular retraction⁸

Progression Toward Functional ROM Phase 2 (Approximately Weeks 6-10)

Milestone to advance to next phase: Passive FF to 150°
Passive ER to 60°
Active supine FF to 90°, ER to 45°⁹
Optimal humeral head control
Minimal to no pain with light ADLs
**Anatomic Total Shoulder Arthroplasty Rehabilitation**

Saint Louis University – SSM Health Physical Therapy Orthopedic Residency
in Collaboration with Dr. Scott Kaar and Dr. Christopher Kim

**Suggested Interventions:**

- Passive & Active assisted ROM\(^{10}\)
- Recommended precautions:
  - FF in scapular plane (wall slides\(^{8}\) wand exercises, pulleys\(^{11}\))
  - ER (gentle beyond 30° to respect subscapularis healing)
- FF AROM in supine
- Manually resisted scapular side-lying stabilization exercises\(^{12}\)
- Initiate PNF patterning supported such as wall slides\(^{13}\)

**Isometrics:**

- Deltoid in neutral
- ER (modified neutral) ROM < 30°
- IR (modified neutral)

**Aerobic conditioning including UBE\(^{7}\)**

**Optimizing Functional Range of Motion/Early Strengthening Phase 3 (Approximately Weeks 10-16)**

**Milestone to advance to next phase:**

- Axioscapular muscle strength grades 4/5 MMT
- Optimal scapulohumeral rhythm to 90° elevation
- Minimal pain and inflammation with application of the soreness rules\(^{14}\) for intensity of exercise

**Suggested Interventions**

- Progress ROM as tolerated\(^{11}\)
- Uniplanar flexibility exercises into extension and internal rotation
- PNF patterning
  - Recommended precaution: in supine or supported until week 12\(^{15}\)
- Isotonic strengthening:
  - Emphasis on axioscapular muscles (scapular rows\(^{16}\))
  - Continued attention to humeral head control and scapulohumeral rhythm with as load progresses

**Return to Full Function Phase 4 (Approximately Weeks 16 to Discharge)**

**Milestone to discharge:**

- Optimal ROM
- Full Independent ADLs
- Optimal scapulohumeral rhythm to > 120° elevation
- Home program with dosing per application of the soreness rules\(^{14}\) for intensity of exercise

**Suggested Interventions**

- Flexibility exercises: towel stretch (IR), posterior capsule stretch
- Progressive resistive strengthening:
  - Dumbbells
  - Progressive resistive equipment
  - Elastic band IR/ER
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For questions regarding the patient’s medical care, new orders, or insurance questions please
contact your physician’s office directly.

For additional questions, comments, or concerns regarding the implementation of these physical
therapy guidelines, please contact:
Chris Sebelski, PT, DPT, PhD, OCS
SLU SSM Health Physical Therapy Orthopedic Residency Program Director
chris.sebelski@health.slu.edu, 314 977 8724

Please respond to our anonymous survey regarding these guidelines to assist in improving patient care
and advocacy. https://slu.az1.qualtrics.com/jfe/form/SV_bpX7Z9AaVTzGblj

Appendices of referenced assessments

<table>
<thead>
<tr>
<th>Soreness Rules Adapted from Fees et al. 1998</th>
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<tbody>
<tr>
<td><strong>Criterion</strong></td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>1. Soreness during warm-up that continues</td>
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<tr>
<td>2. Soreness during warm-up that goes away</td>
</tr>
<tr>
<td>3. Soreness during warm-up that goes away from redevelops during session</td>
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<tr>
<td>4. Soreness the day after lifting (not muscle soreness)</td>
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<tr>
<td>5. No soreness</td>
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</tbody>
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References:


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