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 times except to exercise, and shower/bathe

Home program: perform minimum of 3 times/day: AROM cervical spine, elbow, wrist

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
Scarf mobility, Diaphragmatic breathing, MLD of the UE for edema management
PROM

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

Aerobic conditioning
Scapular retraction

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°
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 Karr and Dr. Christopher Kim

Suggested Interventions:

Passive & Active assisted ROM\textsuperscript{10}
Recommended precautions:
- FF in scapular plane (wall slides\textsuperscript{8} wand exercises, pulleys)\textsuperscript{11}
- ER (gentle beyond 30° to respect subscapularis healing)

FF AROM in supine
Manually resisted scapular side-lying stabilization exercises\textsuperscript{12}
Initiate PNF patterning supported such as wall slides\textsuperscript{13}
Isometrics:
- Deltoid in neutral
- ER (modified neutral) ROM < 30°
- IR (modified neutral)
Aerobic conditioning including UBE\textsuperscript{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\textsuperscript{14} for intensity of exercise

Suggested Interventions

Progress ROM as tolerated\textsuperscript{11}
Uniplanar flexibility exercises into extension and internal rotation
PNF patterning
- Recommended precaution: in supine or supported until week 12\textsuperscript{15}
Isotonic strengthening:
- Emphasis on axioscapular muscles (scapular rows\textsuperscript{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\textsuperscript{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
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:
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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

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<tbody>
<tr>
<td>1. Soreness during warm-up that continues</td>
<td>2 days off, drop down 1 step</td>
</tr>
<tr>
<td>2. Soreness during warm-up that goes away</td>
<td>Stay at step that led to soreness</td>
</tr>
<tr>
<td>3. Soreness during warm-up that goes away from redevelops during session</td>
<td>2 days off, drop down 1 step</td>
</tr>
<tr>
<td>4. Soreness the day after lifting (not muscle soreness)</td>
<td>1 day off, do not advance program to the next step</td>
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<tr>
<td>5. No soreness</td>
<td>Advance 1 step per week or as instructed by healthcare professional</td>
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References:


