The goal of the rehabilitation process is to provide greater joint stability to the patient, while decreasing their pain and improving their functional status. The goal of the surgery & rehab (bone loss, muscle loss) is joint stability and less joint mobility. The key to the success of the rehabilitation following shoulder replacement is compliance to your exercise program.

Precautions: Should be implemented for the first 12 weeks following surgery- unless the surgeon specifically advises the patient differently.

- No shoulder motion behind back (back pocket motion)
- No excessive shoulder horizontal abduction
- No active external rotation behind head or neck
- No shoulder extension beyond the body

I. **PHASE ONE - IMMEDIATE PROTECTED MOTION PHASE** (Week 0-6)

**Goals:**
- Allow early healing of capsule
- Restore passive range of motion
- Decrease shoulder pain
- Retard muscular atrophy
- Patient education

**Weeks 0-2**

**Exercises:**

- Sling during day and at night (worn for 4 weeks)
- Continuous Passive Motion (CPM)
- Passive Range of Motion
  - a. Flexion (0-60 degrees)
  - b. ER (at 30 degrees Abduction) 0 degrees
  - c. IR (at 30 degrees Abduction) 30 degrees
- Pendulum Exercises
- No active shoulder motion
- Elbow/Wrist AROM
- Gripping Exercises
- Isometrics
  - a. Abductors
  - b. ER/IR
- Cryotherapy for pain
  - *When laying supine use pillow under arm to support glenohumeral joint*

**Weeks 3-4**

- Continue sling as needed
- Continue PROM
  - a. Progress flexion to 90 degrees
  - b. ER/IR at 30 degrees abd scapular plane
- May initiate AAROM IR/ER
- Pendulum exercise
- Rope and pulley week 3 to 4
II. PHASE TWO - ACTIVE MOTION PHASE (Week 6-12)

Goals:
- Improve Shoulder Strength
- Gradually progress Active/Passive Range of Motion
- Decrease Pain/Inflammation
- Increase Functional Activities
- Do not over stress healing tissue

Weeks 6-8
Exercises:

- Progress PROM
  a. Flexion to 90-115 degrees
  b. ER/IR at 45 degrees abduction scapular plane
  c. IR
- Progress AAROM ER/IR at 45 degrees abd
- **Do not aggressively push ROM into ER**
- Continue rope and pulley to tolerance
- Pendulum exercises
- Continue isometrics
  a. ER/IR
  b. Rhythmic stabilization
  c. Initiate deltoid flexion/ext
- Ice as needed

Weeks 9-12

- Progress PROM to tolerance
  a. Flexion to 120-125 degrees
  b. ER/IR at 90 degrees abduction (goal is 45-50 degrees of ER motion)
  c. ER/IR at 45 degrees abdution
- Progress AAROM to tolerance
  a. ER/IR at 45 degrees abd
  b. Initiate flexion supine L-bar
- Initiate AROM exercises
  a. Sidelying flexion
  b. Supine flexion
  c. Sidelying ER
- Continue strengthening and stabilization
  a. Tubing ER/IR
  b. Supine ER
  c. Standing full can
  d. Prone exercise
  e. Biceps
- May perform pool exercises
- Continue rhythmic stabilization
  a. Supine flex/ext
  b. Supine ER/IR
III. PHASE THREE – MODERATE STRENGTHENING/ACTIVITY PHASE (WEEKS 12-16)

Goals:
- Gradually increase PROM
- Initiate active light strengthening exercises
- Gradually initiate functional activities
- Continue precautions with excessive GH joint motion

Exercises:
- continue all exercises listed above
- Initiate light active ROM exercises
- Initiate fundamental shoulder program

IV. PHASE IV – RETURN TO ACTIVITY PHASE (WEEKS 16-26)

- Initiation of this phase begins when patient exhibits:
  1) PROM: Flexion 0-145 degrees
     ER (at 90 degrees Abduction) 33-55 degrees
     IR (at 90 degrees Abduction) 45-55 degrees
  2) Strength level 4/5 for ER/IR/abd
- Note: Some patients will not be able to enter this phase

Goals: Improve strength of shoulder musculature
- Improve and gradually increase functional activities
- Gradual restoration of functional activities
- Independent home exercise program

Exercises:
- fundamental shoulder exercise program
- May continue pool exercises
- Should exercise daily
- May initiate interval sport program (golf, swim) Physician must approve