

## Passive ROM / Active ROM

- Perform all exercises slowly in order to limit muscle activation
- Perform all exercises within a comfortable range of motion (ROM)
- Keep all incisions dry and above the water unless your physician has cleared you to submerge your shoulder under water up to your chin

1

### Flexion

Begin with arm at your side and slowly raise arm directly forward. Keep thumb pointing up. Slowly return to starting position. Perform \_\_\_\_\_ reps



2

### Extension

Begin with a slight forward lean with your arm in front of you and slowly move your arm directly backward. Keep thumb pointing forward. Slowly return to starting position. Perform \_\_\_\_\_ reps.



3

### Abduction

Begin with arm at your side and slowly raise your arm out to the side. Slowly return to starting position. Perform \_\_\_\_\_ reps



4

### Abduction (w/ board)

Begin with arm resting on board at your side. Slowly slide the board away from your body while leaning trunk to the side. Slowly return to starting position. Perform \_\_\_\_\_ reps.



5

### Flexion (w/board)

Begin with both arms resting on board directly in front of you. Slowly slide the board forward while leaning trunk forward. Slowly return to starting position. Perform \_\_\_\_\_ reps.



6

### Horizontal Abduction/Adduction (w/board)

Begin with arm resting on board directly in front of you. Slowly slide the board out to your side, keeping your arm straight. Slowly return to starting position. Perform \_\_\_\_\_ reps.



7

### Internal Rotation/External Rotation

Begin with hand resting in front of you on the water, with your palm flat, thumb up and elbow bent, next to your side. Slowly slide hand out to the side, while keeping your elbow at your side. Slowly return to starting position.



# AQUATIC SHOULDER THERAPY

Perform \_\_\_\_\_ reps.

## Strength

- Perform all exercises at a comfortable speed in order to provide resistance
- Exercises should be pain free
- Exercises may be performed with dumbbell, kickboard, open hand, or hand paddle

1

### Flexion/Extension

Begin with your arms extended and holding the board down in front of your waist. Raise the board toward the surface of the water while keeping the arms straight. Return to starting position by pulling board toward you with straight arms.

Perform \_\_\_ sets of \_\_\_ reps



2

### Abduction/Adduction

Begin with holding the edge of the board with your hand and holding the board under your arm at your side. Raise the board toward the surface of the water while keeping your arm straight. Return to starting position by pulling board toward your side with your arm straight and repeat.

Perform \_\_\_ sets of \_\_\_ reps.



3

### Internal Rotation/External Rotation

Begin with holding the edge of the board with your elbow bent at 90 degrees and the board tucked between your arm and against your side. Rotate your arm out to your side while keeping your elbow positioned at your side. Then rotate your arm back across the front of your trunk, maintaining a 90 degree bend in your elbow. Repeat entire motion.

Perform \_\_\_ sets of \_\_\_ reps.



4

### Horizontal Abduction/Adduction

Begin holding dumbbell directly in front of you with elbow extended. Pull your arm out to the side while keeping your elbow extended. Drag your arm back across the front of your trunk, maintaining the extended elbow position. Repeat entire motion.  
Perform \_\_\_ sets of \_\_\_ reps.



5

### Biceps/Triceps

Begin with holding the side of the board with both hands, keeping your elbows bent to 90 degrees and board directly in front of you. Push the board down into the water while straightening your arms. Return to starting position by pulling the board back up toward you. Keep your elbows at your side the entire time. Repeat.  
Perform \_\_\_ sets of \_\_\_ reps.



6

### Chest Press / Rows

Begin with holding the edges of the board with both hands and keeping the board against your chest. Extend your elbows and push the board forward against the water. Return to the starting position by pulling the board back against the water while squeezing your shoulder blades together. Repeat.  
Perform \_\_\_ sets of \_\_\_ reps.



7

### Scaption

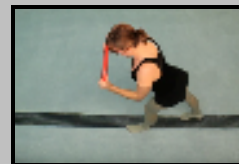
Begin holding dumbbell at your side. While keeping your arm straight, raise your arm up at approximately a 45 degree angle. Return to the starting position while maintaining elbow extension. Repeat motion.  
Perform \_\_\_ sets of \_\_\_ reps



8

### Overhead Press

Begin grasping both sides of the board and bend forward at your waist. Extend your elbows and push the board forward, above your head. Pull the board back toward your head and return to starting position. Repeat motion.  
Perform \_\_\_ sets of \_\_\_ reps.



### STRENGTH (Quick Motion)

- Perform all exercises quickly to provide increased resistance through the entire motion.
- Exercises should be pain free

# AQUATIC SHOULDER THERAPY

1

## Flexion/Extension

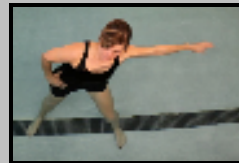
Begin holding arm straight out in front of your body and palm facing down, while maintaining a bent position at your waist. Quickly bring your arm down against the water and extend beyond your hip. Immediately raise your arm back up to the starting position. Repeat motion quickly. Perform \_\_\_ sets of \_\_\_ reps.



2

## Abduction/Adduction

Begin holding arm straight out and directly to the side while maintaining a side bend position at your waist. Quickly bring your arm straight down against the water down to your leg. Immediately raise your arm back up to the starting position. Repeat motion quickly. Perform \_\_\_ sets of \_\_\_ reps.



3

## 90/90 External Rotation

Begin holding arm out to the side with your elbow bent to 90 degrees and palm facing back while maintain a forward bend position at your waist. Quickly raise your hand to the surface of the water while keeping your palm facing down. Immediately return to the starting position. Repeat motion quickly. Perform \_\_\_ sets of \_\_\_ reps



4

## Internal / External Rotation (neutral)

Begin with elbow at your side and your arm bent to 90 degrees, forearm out to the side, with your palm facing forward. Quickly bring your hand forward across your waist while maintaining your elbow at your side. Immediately return to starting position. Repeat motion quickly. Perform \_\_\_ sets of \_\_\_ reps.



5

## Horizontal Abduction/Adduction

Begin with your arm out to your side with your elbow extended, palm facing forward. Quickly bring your hand across the front your chest while maintaining your elbow extended. Immediately return to starting position. Repeat motion quickly. (Picture is shown with a hand paddle) Perform \_\_\_ sets of \_\_\_ reps.



# AQUATIC SHOULDER THERAPY

6

## PNF Pattern – D1 Extension

Begin with arm at side with elbow extended and palm facing behind you. Quickly raise your arm up and across your body while bending your elbow and turning your palm up. Immediately return to starting position. Repeat motion quickly.

Perform \_\_\_ sets of \_\_\_ reps



## References

1. Kelly BT, Roskin LA, Kirkendall DT, Speer KP. Shoulder Muscle Activation During Aquatic and Dry Land Exercises in Nonimpaired Subjects. *Journal of Orthopedic & Sports Physical Therapy*. 2000; 30(4): 204-210.
2. Thein JM, Brody L. Aquatic-Based Rehabilitation and Training for the Shoulder. *Journal of Athletic Training*. 2000; 35(3): 382-389.
3. Wise MB, Uhl TL, Matlacola CG, Nitz AJ, Kibler WB. The Effect of Limb Support on Muscle Activation During Shoulder Exercises. *Journal of Shoulder and Elbow Surgery*. 2004; 13: 614-620.

The intent of the exercise progression is to provide guidelines for progression of rehab. It is by no means intended to serve as a substitute for clinical decision making. Progression through each phase of rehab is based on clinical criteria and time frames as appropriate. It is important that each phase of rehab is mastered prior to initiating the next phase to insure proper healing of repaired tissues. Contact the staff at HHSMC for assistance in progressing as needed