PURPOSE:
Assist patients with moving the joints through available joint motion without causing pain. This procedure promotes good circulation, flexibility and mobility of joints, and prevents shortening of muscles, tendons and ligaments.

CONSIDERATIONS:
1. The patient should never perform Active Assistive Exercise without specific instructions from the nurse or therapist.
2. The patient should never move a joint beyond the point of pain. Pain is a warning sign and should be considered an indicator of impending problems. Report any new or unusual patient pain to your supervisor.
3. Exercises are performed using the flat part of the hand and fingers to support the patient's extremities. Do not grip with your fingertips due to pressure sensitivity and the risk of injury by fingernails.
4. Follow a logical sequence during the exercises so that each joint is exercised. For instance, start at the head, and work down to the feet.
5. Slow, steady and rhythmic movement of a tight joint will help the muscle relax and may increase the available joint range.
6. Include the caregiver in the AAROM exercise program so they can observe and learn the process.
7. All AAROM exercises should be performed with the uninvolved, as well as with the involved extremity.
8. All exercises are performed with the patient lying flat on the back with arms at the sides.
9. Contraindication: AAROM should not be performed on joints that exhibit unusual swelling or redness.
10. Closely observe the patient for adverse reactions such as pain, shortness of breath, swelling or redness. Report any adverse reactions to your supervisor.
11. AAROM does not involve stretching of the muscles or joint capsules.

EQUIPMENT:
Comfortable clothing

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain the procedure to the patient.
3. Have the patient perform each exercise 8 to 10 times for 2 to 3 sets or as instructed.
4. Review the specific AAROM program for the patient. The exercises to be performed will be assigned by number.
5. Raise the bed to a horizontal position, which is comfortable for your height to reduce back strain.
6. Remove any obstacles such as the bed rail, trapeze or medical equipment.
7. Use a draw sheet to move the patient close to you.
8. Expose only the body part that is being exercised.
9. Give only as much assistance as the patient needs to complete the movement.
10. Take the vital signs before and after exercise.

Exercise 1 – Shoulder: Flexion
1. Starting position: Hold the wrist with one hand. With the other hand, support the elbow joint to stabilize the joint. Turn the palm inward, facing the body.
2. Assist the patient in lifting the arm up from the side of the body.
3. Carry the arm slowly and gently towards the patient's head as far as it will go without hurting the patient.
4. The arm may be bent at the elbow if the headboard of the bed will not permit the arm to be carried all the way back.
5. Carry the arm back to the starting position and repeat the exercise.

Exercise 2 – Shoulder: Abduction
1. Starting position: Hold the patient's hand with your other hand support the elbow to stabilize the joint.
2. Keep the patient's arm straight; assist the patient in moving the arm away from the body, out to the side.
3. Continue moving the arm slowly outward then toward the head as far as it will go without hurting the patient, allowing the arm to rotate outward as you move the arm outward. Return the arm to the starting position and repeat the exercise.

Exercise 3 – Shoulder: Horizontal Abduction
1. Starting position: Place one hand under the patient's elbow.
2. Hold the patient's hand with your other hand.
3. Assist the patient in lifting the arm and carrying the arm across the patient's chest toward the opposite shoulder.
4. Return the arm to the starting position and repeat the exercise.

Exercise 4 – Shoulder: Rotation
1. Starting position: Move the arm away from the body until the elbow is at shoulder height then bend the elbow.
2. Place one hand under the elbow; hold the wrist with the other hand.
3. Assist the patient in rotating the forearm and hand slowly down toward the feet, and gently back toward the head as far as possible without causing pain, until the hand points up toward the head. Keep supporting the elbow gently against the mattress.
4. Return the arm to the starting position and repeat.

Exercise 5 – Elbow: Flexion and Extension
1. Starting position: Hold the upper arm with one hand and the forearm with the other.
2. Assist the patient in to bend the elbow so that the hand touches the shoulder.
3. Then straighten the arm all the way out.
4. Return to the starting position and repeat.
Exercise 6 – Forearm: Pronation and Supination
1. Starting position: Place one hand on the patient’s elbow and your other hand on the patient’s hand.
2. Assist the patient to rotate the forearm and hand so that the palm of the hand is toward the patient’s face.
3. Rotate the forearm and hand so that the palm of the hand is away from the patient’s face, and repeat.
   Be sure to rotate the forearm and not the hand.

Exercise 7 – Wrist and Finger: Flexion; Wrist and Finger: Extension
1. Starting position: Hold the patient’s forearm above the wrist with one hand and the patient’s hand with your other hand.
2. Assist the patient in straightening the fingers of the patient’s hand straight, while bending the hand backward.
3. Straighten the hand back to the starting position.
4. Now bend the hand forward, closing the fingers to make a fist. Open the hand and repeat the exercise.

Exercise 8 – Finger: Abduction and Adduction; Thumb: Opposition and Reposition
1. Hold the patient’s finger straight with one hand. With your other hand, bend the patient’s thumb into the palm of his hand toward the base of the little finger.
2. Assist the patient in pulling the thumb back so that it points away from the hand, and repeat the exercise. This preserves the web space between thumb and hand.
3. Holding the patient’s hand in the starting position, assist the patient in separating each finger to preserve its web space.
4. Assist the patient in moving the thumb in a circle.

Exercise 9 – Hip and Knee: Flexion; Knee: Extension
1. Starting position: Cradle the leg by placing one hand under the patient’s knee and your other hand under the heel of the foot.
2. Assist the patient to lift the leg; bend it at the knee toward the chest with the kneecap pointed toward the ceiling.
3. Move the knee slowly toward the patient's head as far as it will go without causing pain to the patient.
4. Lower the leg to the starting position and repeat the exercise.

Exercise 10 – Hip and Hamstring: Stretch
1. Starting position: Support the knee and heel as in exercise nine.
2. Assist the patient to slowly raise the leg, keeping the knee straight.
3. Only lift the leg as high as you can while maintaining a straight knee.
4. If there is any sign of discomfort, do not go any higher.
5. Lower the leg to the starting position and repeat the exercise.

Exercise 11 – Hip: Abduction; Hip: Adduction
1. Starting position: Support the knee and heel as in exercise nine. Keep the knee and foot straight, pointing the toes up toward the ceiling.
2. Lift the leg 1 to 2 inches off the bed.
3. Assist the patient to move the leg out to the side, without causing pain to the patient.
4. Move the leg back until it touches the other leg.

Exercise 12 – Hip: Internal Rotation; Hip: External Rotation
1. Starting position: Place one hand just above the knee and one hand below the knee.
2. Assist the patient to roll the leg so that the knee points towards the other leg.
3. Roll the leg so that the knee points away from the other leg.

Exercise 13 – Dorsiflexion: Plantar Flexion
1. Starting position: Cup the heel of the patient’s foot with your hand, and rest your forearm against the bottom of the patient’s foot. Place your other hand on the patient’s leg just above the ankle.
2. Assist the patient to move the forefoot toward the head and point the forefoot downward.

Exercise 14 – Foot: Inversion; Foot: Eversion
1. Starting position: Place one hand on the leg above the ankle to stabilize the leg. Place the other hand under the ball of the foot.
2. Assist the patient to turn the whole foot outward.
3. Assist the patient to turn the whole foot inward. Return to the starting position and repeat the entire exercise.

Exercise 15 – Toe: Extension; Toe: Flexion
1. Starting position: With one hand, gently grip the foot at the arch and with the other hand, place your fingers on the patient’s toes.
2. Assist the patient to pull the toes up.
3. Assist the patient to push the toes down.
4. Return to the starting position and repeat the entire exercise.

AFTER CARE:
1. Monitor the patient’s vital signs.
2. Return the bed to the lower position.
3. Return the equipment such as bed rails and trapeze to their previous placements.
4. Document in the patient’s record:
   a. Extremity(ies) ranged.
   b. Number of times AAROM was performed.
   c. Patient’s response to the procedure.
5. Inform your supervisor of any change in the patient’s condition including:
   a. Increased difficulty in performing the exercises.
   b. The patient’s noncompliance with the exercise program.
   c. Adverse reactions: pain, swelling and shortness of breath.
Muscular – Active Assistive Range of Motion (AAROM) SECTION: 6.01

Strength of Evidence Level: 1

REFERENCES:

