

July 2016

## Range of Motion

**Date:**

**Instructor:**

**Description:** This inservice gives information on consequences of limited range of motion, and how to safely perform active and passive range of motion exercises.

**Objectives:**

On completion of this inservice, participants will be able to:

Define range of motion

Describe the consequences of losing normal range of motion

Demonstrate how to safely perform range of motion exercises

**Outline:**

Range of Motion

Definition

Degrees of limitation

Consequences of losing normal ROM

Active and passive ROM

General instructions and safety precautions

ROM Exercise Descriptions, Demonstration, and Practice

Neck

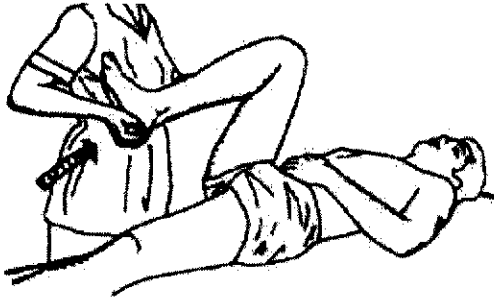
Shoulder and elbow

Forearm and wrist

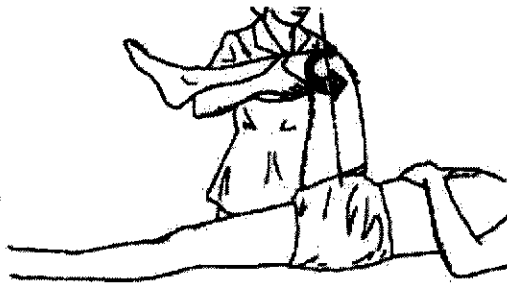
Hand and finger

Ankle and foot

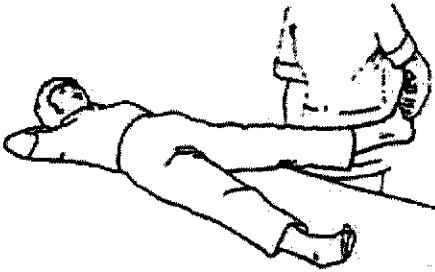
Range of Motion Outline



**Hip and Knee Flexion**



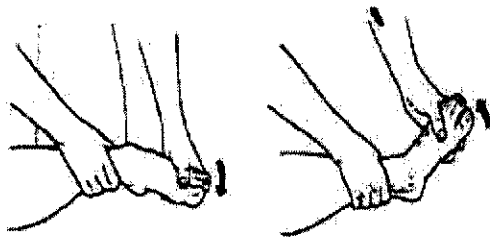
**Hip Rotation**



**Hip Abduction**



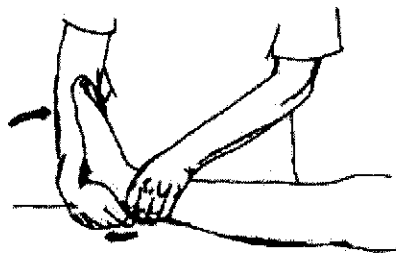
**Lumbar Rotation**



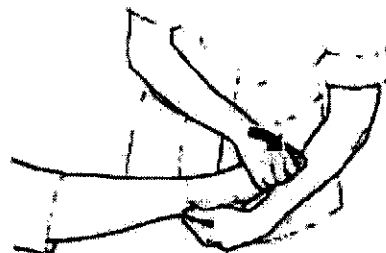
**Ankle Rotation**

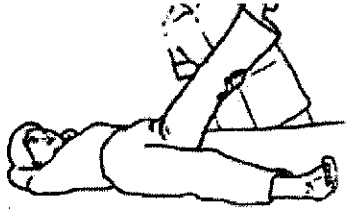


**Toe Flexion and Extension**



**Heel-Cord Stretching**





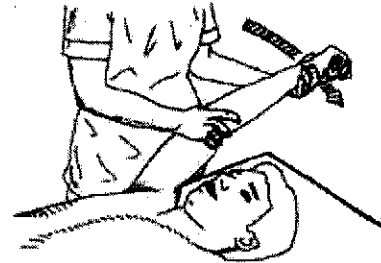
**Hamstring Stretch**



**Shoulder Internal and External Rotation**



**Elbow Flexion and Extension**



**Shoulder Flexion and Extension**



**Neck Rotation**



**Neck Flexion**



**Finger and Wrist Flexion and Extension**

## Range of Motion

### Lesson Plan and Speaking Notes

Range of Motion describes the amount of motion a person has at a joint.

Joints that are not moved will lose their normal range of motion. Many of our patients have limited mobility, and do not move their extremities enough to maintain normal range of motion.

This varies from patient to patient, and one patient may have greater range of motion in some joints and less in others:

Limitation on one side  
Limitation on both sides  
Partial loss  
Full loss

Neck  
Shoulders  
Arms  
Hands  
Fingers  
Hips  
Knees  
Ankles

#### Consequences of Losing Normal Range of Motion

Limited mobility and dexterity  
Stiffness  
Pain  
Contractures  
Skin Breakdown  
Loss of ability to perform Activities of Daily Living  
Loss of ability to ambulate

We certainly want to prevent any loss of range of motion, and we can almost always gradually increase the range of motion in joints. Every increase in range of motion will be an increase in the patient's quality of life.

### Orders for Range of Motion

Many of our patients are evaluated by the Physical Therapy, and will have range of motion orders for every day exercises. This will be recorded in the patient's plan of care and on the home health aide assignment sheet. Stay informed of the patient's current orders, and if you have any doubts, discuss them with the charge nurse.

### Active Range of Motion

Exercises patient does without any physical help or support

Most patients though will need reminding to do the exercises, cueing, or supervision of the entire exercise sequences.

### Passive Range of Motion

Performed for the patient by a caregiver

A patient may require a combination of active and passive range of motion exercises.

### General Instructions

Perform all exercises in moderation

Move slowly and gently

Never force movements

Move only to the point of slight resistance

Stop whenever there is any pain or if the patient shows any expression of pain

Perform on one joint at a time

Always do each exercise on both sides of the body, right and left

Place one hand just above the joint to stabilize it, and place the other hand below the joint to support it while it is moved

Do the exercises once per day, and only more if specifically prescribed

If the patient's endurance is low, break the exercises down into segments over the day

Gradually build up repetitions

Try to incorporate the exercises into other daily activities, such as while watching television or after bath

To really understand these exercises, we're going to do them together.

### Neck Exercises

Support the back of the patient's head with one hand and support the patient's chin with the other hand. Bend the patient's neck backward so the patient is looking up at the ceiling. Then bend the patient's chin toward the chest.

Put one hand on each side of the patient's face. Tilt the patient's head to the side bringing the right ear toward the right shoulder. Then slowly tilt the head back toward the left shoulder.

Put one hand on each side of the patient's face. Turn the head toward the right as if the patient were looking over his right shoulder. Then slowly turn the head toward the left.

### Shoulder and Elbow Exercises

Put one hand under the patient's elbow, and hold the wrist with the other hand. Keep the elbow straight. Bring the arm forward and upward over the patient's head until the arm touches his ear. Bend the elbow if necessary so the forearm reaches above his head. Bring the arm back down to his side.

Raise the arm sideways and upward over the patient's head as far as possible. Bring the arm back down to his side and then swing across the body toward the opposite shoulder. Swing the arm back down to his side.

With the patient's arm at his side turn the palm of his hand face up. Bend the arm at the elbow and touch the fingertips to the front of the shoulder on the same side. Move his arm back down to his side, then bend the arm and touch the opposite shoulder.

Hold the arm out at shoulder level with the palm facing up. Bend the elbow to bring the patient's fingertips to the top of the shoulder on the same side, or as close as possible.

### Forearm and Wrist Exercises

Hold the wrist and hand of the right arm with the palm face down. Keeping the elbow on the bed, lift the forearm up.

Hold the hand and bend it back toward the wrist. Then bend the hand down. Rock the hand back and forth sideways. Gently twist the hand from side to side in a circle.

### Hand and Finger Exercises

Hold the patient's hand with one hand, keeping his wrist straight. Use your other hand to do the hand and finger exercises.

Gently straighten each finger. Then place your hand on the back of the patient's fingers and gently bend his hand into a fist.

Gently straighten out his fingers. Spread the fingers wide apart one at a time, and then bring the fingers back together.

Pinch the thumb together with each of his fingers, one at a time.

Use the thumb to draw circles.

### **Hip and Knee**

Place the patient's leg flat on the bed with knee and hip straight and toes pointed forward. Put one hand under ankle and the other hand under the knee. Slowly bend hip and knee up toward chest. Slide your hand out from under knee so the knee can bend completely. Straighten leg and return it to a flat position on the bed.

Move the leg out to the right. Then return the leg to the middle and cross over the opposite leg.

### **Ankle and Foot Exercises**

Hold the right ankle firmly with one hand and put your other hand on the bottom of the foot. Push the foot toward the patient's head. Then put your hand on the top of the foot and push the foot down.

Hold the ankle firmly with one hand and hold the foot firmly with your other hand. Turn the foot and ankle in circles.

Holding the ankle firmly with one hand, curl the toes toward the sole of the foot with your other hand. Then straighten and stretch the toes.

Spread the toes apart one at a time and then bring them together again.

## Post-Test

<b>Title: Range of Motion</b>
<b>Name:</b>
<b>Date:</b>
<b>1. It is inevitable that a patient will lose some range of motion in joints.</b>
<b>True    False</b>
<b>2. What are two consequences of losing normal range of motion?</b>
<b>3. Passive range of motion exercises are performed for the patient by a caregiver.</b>
<b>True    False</b>
<b>4. List two safety precautions to use when performing range of motion exercises.</b>