

## Core Strength Exercises Bank

Sponsored by the Keck School of Medicine (KSOM) of University of Southern California (USC)  
Primary Care Program (PCP)

### Format Template

Each exercise program/routine should contain:

1	Warmup, stretching	
2	Upper extremity (UE) strengthening	<ul style="list-style-type: none"><li>• Select 2 of each (6 exercises total)</li><li>• Repeat each exercise about 15-20 times or for a duration of 30 seconds</li><li>• Cycle through all 6 exercises twice if time permits before moving on to cooldown and stretching</li></ul>
3	Lower extremity (LE) strengthening	
4	Abdominal (Ab) strengthening	
5	Cooldown, stretching, balance	

### Exercises

Select specific exercises from the bank below

#### **UE #1 – Upper Arms, Back**



1. Standing with one leg forward, loop the band under the leading foot
2. Lean forward slightly and, with the resistance band in both hands, pull your hands back while keeping your torso still and squeezing your shoulder blades together
3. Slowly release back to the starting position
4. Repeat 15-20 times

*MODIFICATION—sitting in a chair*

1. *Sit with your legs extended and place the center of the band under both feet*
2. *Grab the ends of the band with both hands, arms extended, and palms facing each other*
3. *Sitting with your back straight, bend at the elbows, squeezing the shoulder blades together and tightening your abdominal muscles*
4. *Slowly release back to the starting position*
5. *Repeat 15-20 times*

## **UE #2 – Rotator Cuff**



1. Start with your hands in front of you holding the band a little more than shoulder width apart
2. Hold your left arm straight in front of you at shoulder height
3. With your right arm, stretch to the “1 o’clock position” then back to center, to the “3 o’clock” position” then back to center, and to the “5 o’clock position” then back to center
4. Repeat 15 times
5. Switch arms so that your right arm stays centered and your left arm moves to the “11 o’clock” position, “9 o’clock” position and “7 o’clock position”
6. Repeat 15 times

### UE #3 – Shoulders, Chest



1. Stand on the band with the two ends crossed so that the band makes an “X”
2. Start with both hands by your sides
3. Lift both arms up and outward all the way to shoulder level. Hold for a brief moment.
4. With control, slowly lower your arms back down to your sides
5. Repeat 20 times

### UE #4 – Chest, Upper Back, Shoulders



1. Stand with your feet a bit further than hip-width apart
2. With your arms straight, at shoulder level, hold your resistance band with both hands a little more than shoulder width apart
3. Pull the band apart as far as you can while squeezing your shoulder blades together in your back
4. Slowly bring your hands back together in front of you
5. Repeat 15-20 times
6. Now, raise your arms above your head holding the resistance band

7. Pull the band apart as far as you can
8. Slowly bring your hands back together above your head
9. Repeat 15-20 times

#### **UE #5 – Chest**



1. Stand in front of a wall a little over an arm's length away
2. Stand with your feet shoulder-width apart with your arms out and palms against the wall at shoulder height
3. Lean your body forward while inhaling, bending the elbows, and keeping your feet on the floor
4. Exhale as you push out, back to the starting position
5. Repeat 15-20 times

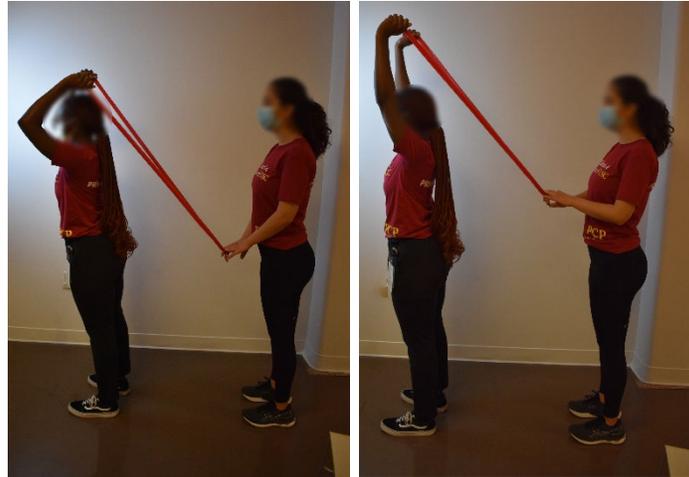
#### **UE #6 – Triceps**



1. Place your hands behind you on a chair or other stable surface that is at about the height of your knees. Your hands should be palm down, fingers facing forward

2. Keep your arms extended and your feet in front of you about shoulder-width apart with knees bent about 90 degrees
3. Slowly bend your arms to 90 degrees and lower your upper body towards the ground keeping your back straight and keeping your arms close to your body
4. Straighten your arms and lift your body back up to starting position
5. Repeat 15-20 times

### UE #7 – Triceps



1. Stand with your back straight and your arms extended above your head
2. Hold a weight in both hands or hold onto an anchored resistance band with one or two hands
3. Keeping your arms close to your ears, bend at the elbows to about 90 degrees
4. Slowly straighten your arms to lift the weight above your head again or to extend the resistance band
5. Repeat 15-20 times

### UE #8 – Upper Arms, Shoulders



1. Stand with good posture and slightly bent knees
2. Hold weights/cans/water bottles in both hands with your arms bent, elbows close to your body, and hands at the level of your ears
3. Reach your right hand up towards the left, extending your arm across your body and rotating your torso to the left, then return to starting position
4. Repeat in the other direction, reaching your left hand and arm across to the right
5. Repeat 15 times on each side

### UE #9 – Shoulders, Upper Back



1. Stand with your feet shoulder width apart and with a weight in each hand
2. Pull your shoulders down and squeeze your shoulder blades together in your back
3. Lift both arms up into a “Y” position while keeping good posture and avoiding shoulder shrugging
4. Repeat 15-20 times

### UE #10 – Upper Arms, Shoulders, Chest



1. With your right hand, hold a weight or resistance band at hip level on your left side. If you are using a resistance band, use the left hand to anchor the resistance band

2. Lift the weight or pull the band diagonally across your body as if you are drawing a sword. Avoid bending your elbow.
3. Repeat 15-20 times
4. Repeat this motion on the opposite side 15-20 times

### LE #1 – Calf Muscles



1. Stand upright with your feet flat on the ground and about shoulder width apart. You can hold onto a wall or chair in front of you for balance if needed
2. Slowly raise your heels so you are on your tiptoes
3. Stay there for a moment before slowly lowering down
4. Repeat 20-30 times

### LE #2 – Hamstrings

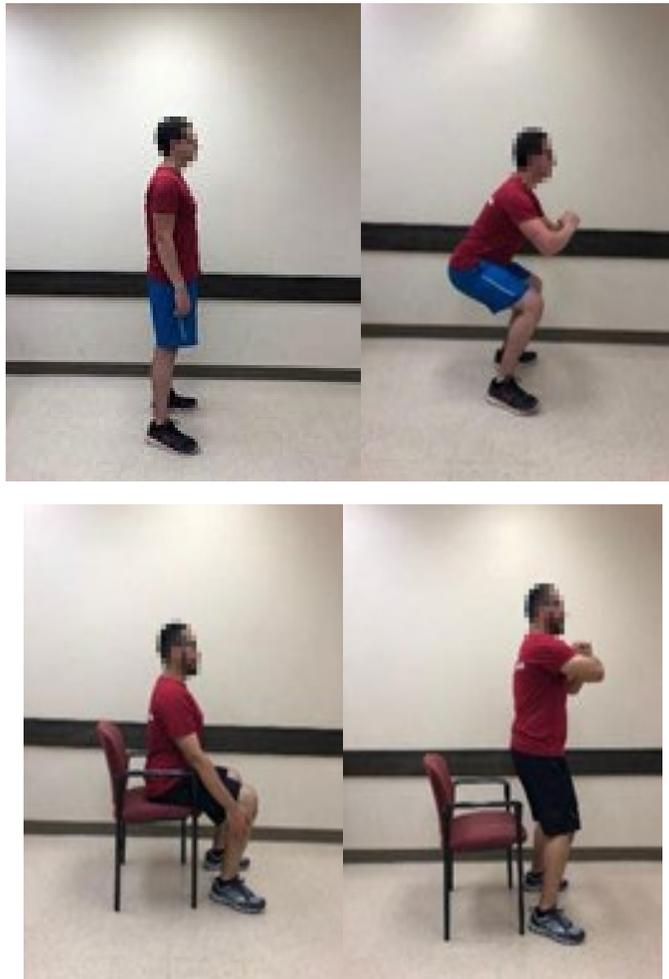


1. While sitting in a chair, lift up your right foot and wrap the resistance band around the foot
2. Grip the band on either side of the foot with one hand on each side. Holding the band closer to the foot will make the exercise more challenging

3. Lift the right leg and pull the band upwards and towards you
4. While keeping your right leg up and off the chair, push your foot out against the resistance band until your leg is straight
5. Slowly bend your knee back towards your chest.
6. Repeat 15-20 times
7. Switch legs by lifting up your left leg and keeping your right foot on the floor. Wrap the band around your left foot and begin. Repeat 15-20 times.

*MODIFICATION: this exercise can be done using only body weight. Follow the same motions above but without a resistance band*

### **LE #3 – Thigh Muscles**



1. Stand with your feet shoulder width apart
2. Lower your waist down as if sitting, keeping your back straight. Bend your knees, avoid the knees going over/in front of the toes
3. Straighten your legs and come back to the starting position
4. Repeat 15-20 times

*MODIFICATION—Using a chair*

1. *Sitting in a chair, set your feet hip-width apart*
2. *Slowly stand up out of the chair keeping your stomach muscles tight and your back straight. If you can, cross your arms in front of you to avoid using your arms to help lift your body*
3. *Slowly lower yourself back down onto the chair*
4. *Repeat 15-20 times*

**LE #4 – Outer Thighs, Glutes**



1. Stand behind a chair, holding onto the back of the chair for balance
2. Keeping your leg straight, lift your right leg out to the side while keeping your torso still
3. Hold for a moment, then bring the leg back to center position
4. Repeat 15-20 times
5. Repeat the same motion with the other leg. Repeat 15-20 times

**LE #5 – Anterior Thighs, Hamstrings, and Glutes**



1. Stand in a lunge position with one foot in front, flat on the ground, and your other foot behind you, heel lifted off the ground.
2. Keep your hands clasped in front of you at your chest if you can, or hold onto a chair or wall for balance if you need to
3. Bend both knees to about 90 degrees and lower your body towards the floor. Avoid your knee going over/in front of the toes of the front foot
4. Repeat 15-20 times
5. Once you are finished with the first side, switch your leg position and repeat the same motion on the other side. Repeat 15-20 times

### LE #6 – Lower Legs



1. Sit in a chair and tie a resistance band into a loop around both ankles. The band should be moderately tight
2. Extend both legs out in front of you keeping both feet flat on the floor
3. Draw one foot into a bent knee position while your other foot stays still
4. Slowly return to the extended position
5. Repeat 15-20 times
6. When you finish with one side, repeat the same motion with the other leg. Repeat 15-20 times

### LE #7 – Lower Legs



1. Stand behind a chair and put your hands palm down on the chair for balance
2. With your legs about shoulder width apart, raise your toes and the front of your feet as you bend at your ankle
3. Slowly lower back down so that the feet are flat on the floor
4. Repeat 20-30 times

### LE #8 – Outer Thighs



1. Tie a resistance band into a loop around both thighs. The band should be moderately tight
2. Bend your knees and step to the side (3-4 steps) while keeping tension on the band the entire time
3. After taking side steps in one direction, reverse the direction taking side steps until you return to the starting position.
4. Repeat 5-10 times in each direction

### LE #9 – Hamstrings, Hips



1. Stand behind a chair, holding onto the back of the chair for balance

2. Keeping your legs straight, lift one leg straight back while keeping your back straight and tightening your core. Try not to lean too far forward with your upper body
3. Hold for a moment, then bring the leg back to center position
4. Repeat 15-20 times
5. Repeat the same motion with the other leg. Repeat 15-20 times

### Ab #1 – Abdominal Muscles



1. Sitting on the floor or in a chair, lift your feet off the ground with your knees together. If you can, keep your hands clasped in front of you to avoid using them for support
2. Lean back slightly while keeping your back straight and pulling your bellybutton towards your back
3. Twist your torso to the left, pause, then twist to the right, pause, then back to center
4. Repeat 10-15 times on each side

### Ab #2 – Abdominal Muscles



1. Lie on the ground on your back, bend your knees, and put your arms palm-down by your sides
2. Lift up your left leg, hold, and then gently lower to just above the ground before raising it back up
3. Repeat 15-20 times

4. After you finish with your left leg, take a short break, then repeat the above motions with the right leg. Repeat 15-20 times

### Ab #3 – Abdominal Muscles



1. Sit on a chair with your back straight and your hands braced on the chair, knees bent and with feet on the floor in front of you
2. Lift your knees up off the ground, then slowly straighten your legs while keeping your feet off the ground
3. Slowly bend your knees back in
4. Repeat 15-20 times

### Ab #4 – Abdominal Muscles



1. Stand facing a partner and raise your arms with your palms facing down
2. Have your partner do the same but with palms facing up
3. Keep your arms straight and push down using your core muscles while your partner pushes up
4. Hold tension for 30 seconds, pause, then repeat twice more (total of 3 times)

**MODIFICATION:** Push down on your partner's shoulders, using your core muscles

## Ab #5 – Abdominal Muscles



1. Sit on the end of your seat with good posture (back straight, about 90 degree flexion at the hip)
2. Slowly lift your opposite arm and leg simultaneously, keeping the arm straight and the leg bent at the knee. Avoid leaning back
3. Slowly bring the arm and leg back down
4. Repeat 15-20 times
5. Repeat on the other side. Repeat 15-20 times

## Ab #6 – Abdominal Muscles, Upper Arms, Thighs, Lower Back



1. Position yourself on your hands and knees on the floor with your arms extended and knees bent
2. Slowly raise and extend one arm and the opposite leg while keeping your back straight
3. Slowly lower the arm and leg
4. Repeat 15-20 times
5. Repeat these movements on the other side. Repeat 15-20 times

## Ab #7 – Abdominal Muscles



1. Sit in a chair with your feet touching the floor and your back straight
2. Place your fingers on the lower sides of your abdomen
3. Tighten your abdominal muscles by “drawing in” your belly button towards your spine. Use your fingers to feel the tension in your muscles
4. Hold the tension about 20 seconds, then relax
5. Repeat 3-5 times

## Ab #8 – Abdominal Muscles



1. Sit on the edge of a chair with your back straight, your knees bent at 90 degrees, and your feet flat on the ground
2. Keeping your knee bent, slowly lift one leg and tighten your abdominal muscles
3. Slowly lower the leg back to the ground
4. Repeat 15-20 times

5. Repeat these movements on the other side. Repeat 15-20 times

**Ab #9 – Abdominal Muscles, Hips**



1. Sit on the edge of a chair with good posture (back straight, about 90 degree flexion at the hip)
2. Use both hands to push down on one knee
3. Keeping your knee bent, flex your leg up at the hip, pushing against the downward pressure from your hands and arms. Keep your back straight and avoid leaning back.
4. Hold the resistance for 3-5 seconds, then release
5. Repeat 10-15 times
6. Repeat the same movements on the other side. Repeat 10-15 times

**Ab #10 – Abdominal Muscles, Arms, Back**



1. Start by holding a medicine ball (or other weight) with both hands by your ankle, knee, or thigh (depending on how flexible you are)
2. Tighten your abdominal muscles, twist your torso, and raise your weight diagonally across your body to above your head on the opposite side
3. Slowly return back to starting position
4. Repeat 15-20 times
5. Repeat the same motions on the other side. Repeat 15-20 times

### **Stretching #1 – Hamstrings**



1. Sit with your back straight on the edge of a chair
2. Bend one leg with the foot on the ground close to your body and extend the other leg out in front of you with the heel on the floor and toes pointing up
3. Gently lean forward until you feel a stretch behind your knee/thigh
4. Hold the stretch for 30 seconds
5. Repeat on the other side. Hold for 30 seconds

### **Stretching #2 – Inner Thighs**



1. Stand with one leg on the ground and the other extended to the side, resting on a chair or other stable surface. Hold onto a wall or another chair if you need to for balance
2. Keeping both legs straight, gently bend sideways towards the lifted leg until you feel a stretch on the inside of the thigh

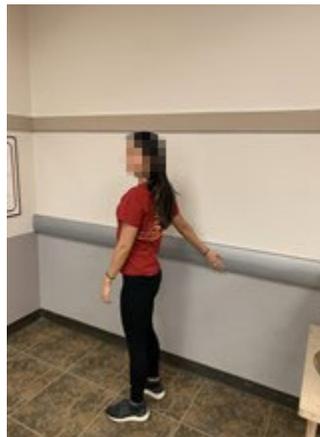
3. Hold the stretch for 30 seconds
4. Repeat on the other side. Hold for 30 seconds

### Stretching #3 – Chest



1. Stand next to a wall, raise your arm to the level of your shoulder, and bend your elbow 90 degrees with your palm and forearm on the wall
2. Gently twist your torso to the opposite side while keeping your palm and forearm flat on the wall
3. Hold the stretch for 30 seconds
4. Repeat on the other side. Hold for 30 seconds

### Stretching #4 – Anterior Shoulders



1. Stand next to a wall with your arms down and place your palm on the wall at about hip level
2. Gently twist your torso to the opposite side while keeping your palm flat on the wall
3. Hold the stretch for 30 seconds
4. Repeat on the other side. Hold for 30 seconds

## Stretching #5 – Thighs



1. Stand behind a chair and use your right hand to grip the chair
2. With your left hand, grab the ankle of your left foot, bending the left leg at the knee
3. If you feel comfortable, let go of the chair with your right hand and use your core to balance
4. Hold the stretch for 30 seconds
5. Repeat on the other side. Hold for 30 seconds

### *MODIFICATION—Use two chairs*

1. Stand between two chairs. Use both hands to hold onto the chair in front of you
2. Raise one leg, bend it at the knee, and rest your foot on the chair behind you
3. Hold the stretch for 30 seconds
4. Repeat on the other side. Hold for 30 seconds

## Stretching #6 – Posterior Shoulders



1. Bring your left arm diagonally across your chest

2. Bend your right arm and use your right forearm to pull your extended left arm towards you until you feel a stretch in the back of your shoulder.
3. Hold the stretch for 30 seconds
4. Repeat on the other side. Hold for 30 seconds

### **Stretching #7 – Neck**



1. Stand up straight and tuck your chin into your chest
2. Bend your head towards one side, moving your ear towards your shoulder, while pulling your head lightly with your arm to deepen the stretch
3. Hold the stretch for 30 seconds
4. Repeat on the other side. Hold for 30 seconds