



# Sample Corrective Exercise Program

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

Overhead Squat Assessment										
Anterior View		Right YES	Left YES	Lateral View (Right Side)		YES	Posterior View		Right Yes	Left YES
Foot	Foot Turns Out			LPHC	Excessive Forward Lean	X	Foot	Heel of Foot Rises		
Knee	Moves Inward	X			Low Back Arches				Foot Flattens	X
	Moves Outward				Low Back Rounds	X	LPHC	Asymmetrical Weight Shift		
				Upper Body	Arms Fall Forward					

**Visual Anatomy:** L Knee is visually calcified (more bony); L Lateral Patellar Ligament is more visible (connecting knee cap to tibia) Overdeveloped Quadriceps, Tight Hamstrings  
**Plumb line:** Forward Head Carriage, L winged scapula, R shoulder Drop, L Hip hike - *pronounced*, Slight knee bend, knee Vargas (bow-legged)  
**OHS:**  
*R Knee moves inward Under Active:* Gluts, ABDuctors (outer thigh muscles), Medial Gastrocnemius (inner calf); *Over Active:* Hamstrings, quads, Lateral Gastrocnemius (outer calf)  
*Excessive forward lean Under Active:* Glutes, Hip ADDuctors (inner thigh muscles); *Over Active:* Back Muscles, quadriceps, hamstrings, Calf muscles not decelerating the trunk and placing stress on both knee joints  
*Rounded back:* Discrepancy between strong Erector Spinae and Multifidi of back muscles and weak Glutes not decelerating the trunk and placing stress on both knee joints  
*Both Feet flatten at arch and both ankles roll. Under Active:* Gluts, Hip ADDuctors (inner thigh muscles) and inner calves; *Over Active:* Developed hamstrings, Gastrocnemius (Calf muscles)  
*Asymmetrical Shift to the Left Under Active:* Left glute, Right inner thigh, R internal Oblique; *Over Active:* L inner thigh, L hamstrings, and L internal and external oblique. Consistent with R knee moving inward and calcification of L Knee

Standing on <b>RIGHT Leg</b> L Knee Elevated			Standing on <b>LEFT Leg</b> R Knee Elevated		
		YES			YES
Foot	Foot Flattens		Foot	Foot Flattens	
Knee	Moves Inward	X	Knee	Moves Inward	X
	Moves Outward			Moves Outward	
L-P-H-C	Lateral Hip Shift	<b>Right</b>	L-P-H-C	Lateral Hip Shift	<b>Left</b>

**Notes:**  
 L Hip Drop, R Inward Trunk Rotation | R Hip Drop, L Inward Trunk Rotation, L Shoulder Drop

# Overhead Squat (OHS)



## Sample Corrective Exercise Program

View	Checkpoint	Compensation	Probable Overactive Muscles	Probable Underactive Muscles	Example Flexibility Exercise (SMR & Static)	Example Strengthening Exercise
Anterior	Foot	Foot Turns Out	Soleus Lat. Gastrocnemius Bicep Femoris (short head) Tensor Fascia Lata	Med. Gastrocnemius Med. Hamstring Gluteus Medius/ Maximus Gracilis Popliteus	Calf Stretch Hamstring Stretch Standing TFL Stretch	Single-leg Balance Reach
	Knee	Moves Inward	Adductor Complex Bicep Femoris (short head) Tensor Fascia Lata Vastus Lateralis Lat. Gastrocnemius	Gluteus Medius/ Maximus Vastus Medialis Oblique (VMO) Med. Hamstring Med. Gastrocnemius	Adductor Stretch Hamstring Stretch TFL Stretch Calf Stretch	Lateral Tube Walking Ball Squat w/Abduction Ball Bridge w/Abduction
		Moves Outward	Piriformis, Biceps Femoris Tensor Fascia Lata Gluteus Minimus/ Medius	Adductor Complex Med. Hamstring Gluteus Maximus	Piriformis Stretch, Hamstring Stretch TFL Stretch	Ball Squat w/ Adduction Ball Bridge w/ Adduction
Lateral	L-P-H-C	Excessive Forward Lean	Soleus Gastrocnemius Hip Flexor Complex Abdominal Complex (rectus abdominus, external oblique)	Anterior Tibialis Gluteus Maximus Erector Spinae	Calf Stretch Hip Flexor Stretch Ball Abdominal Stretch	Ball Squat
		Low Back Arches	Hip Flexor Complex Erector Spinae Latissimus Dorsi	Gluteus Maximus Hamstrings Intrinsic Core Stabilizers (transverse abdominis, multifidus, internal oblique, transversospinalis, pelvic floor muscles)	Hip Flexor Stretch Latissimus Dorsi Stretch Erector Spinae Stretch	Ball Squat Floor Bridge Ball Bridge
		Low Back Rounds	Hamstrings Adductor Magnus Rectus Abdominus External Obliques	Gluteus Maximus Erector Spinae Intrinsic Core Stabilizers (transverse abdominis, multifidus, internal oblique, pelvic floor muscles, transversospinalis)	Hamstring Stretch Adductor Magnus Stretch Ball Abdominal Stretch	Floor Cobra Ball Cobra Ball Back Extension
	Upper Body	Arms Fall Forward	Latissimus Dorsi Pectoralis Major/ Minor Teres Major Coracobrachialis	Mid/Lower Trapezius Rhomboids Rotator Cuff Posterior Deltoid	Latissimus Dorsi Stretch Pec Stretch SMR Thoracic Spine	Floor Cobra Ball Cobra Squat to Row
		Forward Head (pushing/pulling assessment)	Levator Scapula Sternocleidomastoid Scalenes	Deep Cervical Flexors	Levator Scapula Stretch Sternocleidomastoid Stretch Scalene Stretch	Tuck chin, keeping head in neutral position during all exercises
		Shoulder Elevation (pushing/pulling assessment)	Upper Trapezius Sternocleidomastoid Levator Scapulae	Mid/lower Trapezius Rhomboids Rotator Cuff	Upper Trapezius Stretch Sternocleidomastoid Stretch Levator Scapulae Stretch	Floor Cobra Ball Cobra
		<b>Left</b>				



# Overhead Squat (OHS)

## Sample Corrective Exercise Program

View	Checkpoint	Compensation	Probable Overactive Muscles	Probable Underactive Muscles	Example Flexibility Exercise (SMR & Static)	Example Strengthening Exercise
Posterior	Foot	Foot Flattens	Peroneals Lat. Gastrocnemius Bicep Femoris (short head) Tensor Fascia Lata	Anterior Tibialis Posterior Tibialis Med. Gastrocnemius Gluteus Medius	Peroneal Stretch Calf Stretch Hamstring Stretch Standing TFL Stretch	Single-Leg Balance Reach Single-leg Medial Calf Raise
		Heel Rises	Soleus	Anterior Tibialis	Soleus Stretch	Single-leg Balance Reach Single-leg Squat
	L-P-H-C	Asymmetrical Weight Shift  <b>Left</b>	Adductor Complex TFL (same side) Piriformis Bicep Femoris Gluteus Medius (opposite side)	Gluteus Medius, (same side) Adductor Complex (opposite side)	Adductor Stretch TFL Stretch (same side) & Piriformis Stretch Hamstring Stretch (opposite side)	Gluteus Medius (same side) Adductor Complex (opposite side)

# Single Leg Squat (SHS)



## Sample Corrective Exercise Program

View	Checkpoint	Compensation	Probable Overactive Muscles	Probable Underactive Muscles
Anterior	Feet	Flatten	Soleus Lat. Gastrocnemius Bicep Femoris Tensor Fascia Lata (TFL)	Med. Gastrocnemius Med. Hamstring Gluteus Medius/Maximus Gracilis/ Sartorius Popliteus
	Knee  Both R & L	Move Inward	Adductor Complex Bicep Femoris (short head) TFL Lat. Gastrocnemius	Med. Hamstring Med. Gastrocnemius Gluteus Medius/Maximus VMO
		Move Outward	Piriformis Bicep Femoris TFL/ Gluteus Minimus Gluteus Medius	Adductor Complex Med. Hamstring Gluteus Maximus
	LPHC	Hip Hike	Quadratus Lumborum (opposite side) TFL/ Gluteus Minimus (same side)	Adductor Complex (same side) Gluteus Medius (same side)
		Hip Drop <small>R Hip drop on Standing L Leg</small> <small>L Hip drop on Standing R Leg</small>	Adductor Complex (same side)	Gluteus Medius (same side) Quadratus Lumborum (opposite side)
	Upper Body	Inward Trunk Rotation  Both	Internal Oblique (same side) External Oblique (opposite side) TFL (same side) Adductor complex (same side)	Internal Oblique (opposite side) External Oblique (same side) Gluteus Medius/Maximus
		Outward Trunk Rotation	Internal Oblique (opposite side) External Oblique (same side) Piriformis (same side)	Internal Oblique (same side) External Oblique (opposite side) Adductor Complex (same side) Gluteus Medius/Maximus

**Table 6.** Kinetic Chain Compensations for the Anterior View of the SLS.

# Assessment Findings



## Sample Corrective Exercise Program

**Findings:** Pain in Left knee consistent postural imbalance observed using OHS, SLS, ROM tests. Calcification in Left Knee consistent with findings but not remarkable at this time. Winged L Scapula and Depressed R shoulder consistent with previous injury. SMF on foam roller suggested for overactive L shoulder muscles

Client in manageable pain consistent with Patellar Femoral Tendonitis. No other pain, bone compression, or abnormalities detected.

Overall: Overactive Quadriceps (mainly TFL and VMO), Hamstrings, Lat. Gastrocnemius (outer calves) and back muscles (Erector Spinae, multifidi) are contributing to underactive Glutes, ADDuctors (inner thigh muscles), and inner calves

R Knee moves inward: Glutes, outer thigh muscles, and inner calves cannot prevent the knees from buckling inward. *Over Active:* Hamstrings, quads, and outer calves take over. This contributes to knee pain.

**OBJECTIVE:** Strengthen Glutes and inner calves to pull shins back into alignment and prevent collapse of knees.

Excessive forward lean: Back Muscles, quadriceps, hamstrings, and calf muscles overpower the weaker and underactive Glutes and inner thigh muscles which cannot stop the trunk from falling forward and places stress on both knee joints. **OBJECTIVE:** Knee joints protrude too far forward in squat and should be re-aligned directly atop the ankle joints. Strengthen the glutes to pull the trunk backward into alignment and prevent hyper flexion of knees. Lengthen the hamstrings and calves. SLS revealed this as well.

Rounded back: Discrepancy between strong Erector Spinae and Multifidi of back muscles and weak Glutes prevent the trunk from decelerating and creates a rounding forward. This places stress on both knee joints and low back. **OBJECTIVE:** Strengthen Glutes and core muscles to prevent rounding forward.

Both Feet flatten at arch and both ankles roll inward. Under Active Glutes, inner thigh muscles and inner calves cannot keep the Over Active outer calves and tight hamstrings from pushing the ankles in and flattening the arches **OBJECTIVE:** Make a strong connection with the feet and balance strengthening the ankles and hips.

Asymmetrical Shift to the Left Under Active Left glut, right inner thigh, R internal Oblique are over powered by L inner thigh, L hamstrings, L internal and external oblique. Consistent with R knee moving inward and calcification of L Knee. SLS also revealed problems with strength in standing leg, balance, and keeping the shin parallel to the floor and knee bent in SLS. **OBJECTIVE:** Build strength in inner thighs, glutes, internal and external Obliques, and lengthen hamstrings and back muscles.

Total Length of Program: 16 -20 minutes

Recommended Frequency: 2x daily

Recommended Duration: 6 weeks



# Appendix II — Corrective Exercise Program Template



## Sample Corrective Exercise Program

### Corrective Exercise Program Template

#### INHIBIT (FOAM ROLLER) 4-5 minutes total

Exercise	Sets	Duration	Photo
Quad foam roller	1	60- 90sec	
TFL foam roller	1	60- 90sec	
Shoulder	1	60- 90sec	
Calves	1	60- 90sec	

#### LENGTHENING (STATIC STRETCH)

Exercise	Sets	Directions	Photo
Hamstrings, Calves	3 sets each leg  = 2 min	<ul style="list-style-type: none"> <li>• Bring one Knee to chest</li> <li>• Extended leg stays active and foot flexed</li> <li>• Strap around foot of bent knee or hands behind thigh</li> <li>• Extend bent knee to straight as far as you can</li> <li>• Hold for 5 seconds,</li> <li>• Switch</li> </ul>	
Standing Quad Stretch	1 set each leg  = 1 min	<ul style="list-style-type: none"> <li>• Hold wall for support</li> <li>• Hold stretch for 30-60 seconds</li> </ul>	



# Appendix II — Corrective Exercise Program Template

## Sample Corrective Exercise Program

### Corrective Exercise Program Template

**MUSCLE ACTIVATION:** FOCUS ON STRENGTHENING GLUTEAL MUSCLES, INNER THIGHS, INNER CALVES, AND LENGTHENING HAMSTRINGS, QUADS, BACK

Exercise	Sets	Duration	Photo
<p><b>Standing Knee to Chest</b> - use wall for balance</p> <ol style="list-style-type: none"> <li>1. Choose 1 leg, and bring knee into chest</li> <li>2. Press Big toe and pinky toe of standing leg into floor</li> <li>3. Create suction at arch to strengthen ankles and aid in balance</li> <li>4. Activate quads by toning them to pull up on tendon attached to knee cap; knee cap should be hard to move</li> <li>5. Lengthen from the hip of the standing leg and activate glutes</li> <li>6. Bent leg, flex foot at ankle, level hips NO HIKING</li> <li>7. Keep knee towards midline; avoiding knee drifting L or R to activate inner thigh</li> </ol>	<p>5 sets each leg  = 2 min total</p>	<p>5 sec hold</p>	
<p><b>Glute Kickback</b> - Face wall for balance</p> <ol style="list-style-type: none"> <li>1. Take bent knee directly from chest to "kick back"</li> <li>2. Activate glut and freeze in "kick back"</li> <li>3. Bend knee and have shin parallel to the floor with hips level</li> <li>4. Avoid curving lower spine</li> <li>5. Try to keep standing leg active and straight at knee following #2-5 of above exercise</li> <li>6. Activate standing leg's glute to tilt pelvis forward and lock in</li> <li>7. Hold and activate lower abs to tilt pelvis forward</li> </ol>	<p>5 sets each leg  = 1 min total</p>	<p>10 sec hold</p>	
<p><b>Plank, Low Lunge, High Lunge, back to Plank</b> - Lengthens Hamstrings, Quads, and outer thighs, tones glutes, inner thighs, core, shoulder complex</p>	<p>5 sets each leg = 4 min total</p>	<p>5 sec hold each exercise</p>	<p>1</p>
<p><b>Low Lunge</b> - use blocks or books for support if needed</p> <ol style="list-style-type: none"> <li>1. Fire up glutes of both legs to stabilize pelvis</li> <li>2. Keep bent knee towards midline</li> <li>3. Activate lower abdominals to control pelvis from tilting forward in "crunch" motion</li> <li>4. Elongate back muscles</li> <li>5. Align bent knee directly over ankle</li> <li>6. Shoulder blades squeezing towards each other</li> </ol>		<p>5 sec hold each exercise</p>	<p>2</p>
<p><b>High Lunge:</b></p> <ol style="list-style-type: none"> <li>1. Fire up glutes first before coming off the knee into high lunge</li> <li>2. Press Big toe and pinky toe of back ball of foot into floor</li> <li>3. Activate quads of back leg by toning them to pull up on tendon attached to knee cap; knee cap should be hard to move</li> <li>4. Squeeze front bent knee towards midline more</li> <li>5. Align front bent knee directly over front ankle</li> <li>6. Activate lower abdominals to control pelvis from tilting forward in "crunch" motion</li> <li>7. Shoulder blades squeezing towards each other to prevent rounding</li> </ol>		<p>5 sec hold each exercise</p>	<p>3</p>



# Appendix II — Corrective Exercise Program Template

## Sample Corrective Exercise Program

### Corrective Exercise Program Template

#### FUNCTIONAL MOVEMENT(INTEGRATION) Standing Sequence

Exercise		Photo	
<p><b>Standing knee to chest to direct full extension kick back</b> Hold wall for support</p> <ol style="list-style-type: none"><li>1. Pause in standing knee to chest - follow cues from previous directions</li><li>2. Take bent knee directly to extended leg back</li><li>3. Keep pelvis level - bending knees to accommodate hamstrings</li><li>4. Press Big toe and pinky toe of standing leg into floor</li><li>5. Create suction at arch to strengthen ankles and aid in balance</li><li>6. Flex extended foot at ankle</li><li>7. Activate quads of both legs by toning them to pull up on tendon attached to knee cap; knee cap should be hard to move</li><li>8. Activate standing leg's glute to tilt pelvis forward and lock in</li><li>9. Hold and activate lower abs to tilt pelvis forward</li></ol>	<p>5 sets each leg</p> <p>hold 5 secs each</p> <p>= 2 min total</p>		
<p><b>Overhead "Bar Stool" Squat</b> Feet hips width distance apart</p> <ol style="list-style-type: none"><li>1. Hold and activate lower abs in "crunch" to tilt pelvis forward</li><li>2. Rock weight back into heels</li><li>3. Sink down into "barstool" not deep chair</li><li>4. Press Big toes and pinky toes into floor</li><li>5. Arms up or out into a cactus</li><li>6. Make sure you can see your toes to prevent knees from over flexing</li><li>7. Active Belly the whole time</li></ol>	<p>5 sets</p> <p>hold for 10 sec</p> <p>= 1 min total</p>		





- Follow program for 6 weeks, then reassess with OHS in the mirror
  - Make any notes, problems, progress, questions, etc.
  - Contact me with any questions
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Date	Notes
	<b>Sample Corrective Exercise Program</b>