## PHYSICAL THERAPY PLAN
### NON-OPERATIVE PATELLOFEMORAL PAIN

<table>
<thead>
<tr>
<th>Overuse/Overload</th>
<th>Movement Coordination Deficits</th>
<th>Muscle Performance Deficits</th>
<th>Mobility Impairments</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Eccentric step down reproduces anterior knee pain</td>
<td>• Dynamic valgus on lateral step down</td>
<td>• Hip muscle strength testing – abd, ER, ext</td>
<td>• Hypermobility – midfoot width &gt;11mm in NWB vs WB, Foot Posture Index score &gt;6</td>
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<tr>
<td></td>
<td>• Frontal plane valgus with single leg squat</td>
<td>• Knee strength testing – flex, ext</td>
<td>• Hypomobility – patellar tilt test, muscle length testing (HS, gastroc/soleus, quad, ITB), Hip IR/ER ROM, Closed chain DF &lt;34 degre</td>
</tr>
</tbody>
</table>

### Taping

- McConnell patellar taping. Used in short term in conjunction with exercise to assist with immediate pain reduction

### Movement retraining and motor control exercises

- Gait (running) retraining = cueing to adopt forefoot striking pattern, increase cadence and decrease hip adduction forces
- First 4 weeks focusing on posterolateral hip strengthening – sidelying hip abduction, clamshells, bridges
- Later stages add both NWB and WB “knee” strengthening – resisted knee extension, squat, step down, lunge, single leg squat
- May utilize BFR with exercise

### Hip and glute strengthening

- Utilization of prefabricated foot orthoses for those with greater than normal pronation to help decrease pain. Only use in short term (6 wks) in conjunction with exercise

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