Physical Therapy Treatment Plan

Patient Name: Emily Parker Date of Birth: 03/07/1995 Start of Care: 02/12/2025

Payer: Aetna

Hospitalization: None

Diagnosis

The patient has the following diagnoses: Med – bilateral patellofemoral disorder (M22.2) with an onset date of 02/01/2025, Tx – osteoarthritis of the knee (M17.0) with an onset date of 02/01/2025, Tx – pain in the right knee (M25.561) with an onset date of 02/01/2025, Tx – pain in the left knee (M25.562) with an onset date of 02/01/2025, and Tx – other abnormalities of gait and mobility (R26.89) with an onset date of 02/01/2025.

Treatment Approaches

- PT Evaluation
- Therapeutic Exercises
- Neuromuscular Reeducation
- Manual Therapy (Soft tissue mobilization, Patellar mobilization)
- Gait Training Therapy
- Therapeutic Activities
- Taping Techniques (Kinesiology tape)

Frequency, Duration, Intensity, Certified Period

• Frequency: 2-3 sessions per week

• **Duration:** 6 weeks

• Intensity: Moderate intensity with gradual progression

• Certified Period: 02/12/2025 - 03/26/2025

Plan of Treatment

Short Term Goals

- 1. Emily will demonstrate improved quadriceps strength to 4/5 to reduce knee pain during functional activities. (Target: 02/26/2025)
- 2. Emily will increase knee flexion and extension range of motion to within normal limits with no pain during active movement. (Target: 02/26/2025)
- 3. Emily will perform single-leg squats with proper alignment and minimal discomfort, focusing on proper mechanics. (Target: 02/26/2025)
- 4. Emily will increase tolerance to running on level surfaces for 10 minutes with minimal discomfort. (Target: 02/26/2025)

Long Term Goals

- 1. Emily will demonstrate full strength in quadriceps and hip abductors, achieving 5/5 strength in both legs, to reduce patellofemoral pain during all activities. (Target: 03/26/2025)
- 2. Emily will report a decrease in knee pain from 6/10 to 2/10 on the Visual Analog Scale (VAS) during running, including downhill running. (Target: 03/26/2025)
- 3. Emily will run for 30 minutes without pain or discomfort in the knees, including downhill running. (Target: 03/26/2025)
- 4. Emily will demonstrate proper running mechanics, including knee tracking and hip control, to prevent further injury. (Target: 03/26/2025)

Patient Goals

• "I want to run without my knee hurting, especially when I go downhill. I also want to be able to sit for longer periods without discomfort."

Potential for Achieving Goals

• Emily demonstrates good rehab potential as evidenced by a high prior level of function, motivation to participate, insight regarding functional deficits, and the ability to follow multi-step instructions.

Participation

• Emily is motivated to return to running and recreational activities and is committed to following through with her home exercise program to reduce knee pain.

Initial Assessment / Current Level of Function & Underlying Impairments

Factors Supporting Medical Necessity

- **Referral:** Referred by Orthopedic Specialist following diagnosis of Patellofemoral Pain Syndrome.
- **Medical History:** No significant past medical history related to the knee, other than running-related stress.
- **Complexities:** Bilateral patellofemoral pain, difficulty with running and prolonged sitting.
- **Prior Treatment:** Rest, ice, NSAIDs, and over-the-counter knee braces with minimal improvement.
- Prior Living Situation: Active lifestyle, engaged in regular running for fitness.
- **Discharge Plan:** Return to full running activity without pain or dysfunction.
- **Prior Level of Function (PLOF):** Independent with all activities, running 5-10 miles 3-4 times a week.

Background Assessment

• **Precautions:** Avoid running downhill and excessive knee bending for the first few weeks to avoid exacerbation of symptoms.

Joint ROM / Goniometric Measurements

- Right Knee:
 - o Flexion: 0-130° (Normal)
 - o Extension: 0-10° (Mild limitation due to pain)
- Left Knee:
 - o Flexion: 0-135° (Normal)
 - o Extension: 0-5° (Mild limitation due to pain)

Strength / Manual Muscle Testing

- Right Knee:
 - o Quadriceps: 4/5 (Weakness noted)
 - o Hamstrings: 4+/5 (Normal)
 - o Hip Abductors: 4+/5
- Left Knee:
 - o Quadriceps: 3+/5 (Weakness noted)
 - o Hamstrings: 4/5 (Normal)
 - o Hip Abductors: 4+/5
- LE Strength: Weakness noted in both quadriceps, particularly on the left side.

Balance

- **Sitting Balance:** Good.
- Standing Balance: Normal, able to balance on both legs without issues.
- Balance Loss: None.
- **Reactions & Strategies:** Normal protective reactions when standing.

Additional Abilities / Underlying Impairments

- Cardiopulmonary Function: Normal.
- **Tone and Posture:** Postural imbalances noted in the lower body, with slight valgus knee positioning during standing.
- Pain and Edema: Pain reported as 6/10 during downhill running and prolonged sitting.
- Coordination: Normal, no deficits.
- Sensory Test Findings: WNL.
- Cognition: Intact.

Visual Assessment

- History and Analysis: No visual impairments affecting gait or posture.
- Testing: WNL.

Functional Assessment

- Bed Mobility: Independent.
- Transfers: Independent.
- Gait: Antalgic gait when running downhill.
- Gait Analysis: Mild knee valgus during running, particularly on the left side.
- Other Areas: Difficulty sitting for extended periods and running downhill.

Objective Tests / Measures & Additional Analysis

- Assessments:
 - o **Patellar Tracking Test:** Positive (suggestive of abnormal patellar tracking contributing to pain).
 - Visual Analog Scale (Pain): 6/10 during running.
- Other: Home Exercise Program (HEP) for strengthening quadriceps, hip abductors, and improving knee tracking.
- Additional Analysis:
 - o **Gait Analysis:** Increased knee valgus noted during dynamic movements, particularly downhill running.

Clinical Impressions

Emily presents with Patellofemoral Pain Syndrome, likely exacerbated by improper running mechanics, especially during downhill running, and weakness in the quadriceps and hip abductors. She demonstrates a good rehab potential with physical therapy, including exercises aimed at improving quadriceps strength, hip stability, and correcting patellar tracking. With proper management and progression, she should be able to return to her prior level of function, including running, without pain.

Test/Measures and Outcomes

- Patellofemoral Pain Scale (PFPS): Target to reduce to < 10% by the end of treatment.
- Visual Analog Scale (Pain): Target to decrease from 6/10 to 2/10.
- Single-Leg Squat Test: Target to improve to proper alignment with minimal discomfort.