

**Patient Name:** Margaret Wilson

**Patient DOB:** 1948-09-22

**Practitioner Name:** John Doe

**Date:** 2025-03-26



## Summary

This 12-week treatment plan for osteoarthritis of the knee is structured into three phases focusing on pain management, muscle strengthening, and functional improvement. Each phase incorporates a mix of modalities, exercises, and manual therapy tailored to the patient's progress and individual needs. Achieving incremental goals throughout this rehabilitation ensures a safe return to desired activities, such as walking with grandchildren.

## Phase 1 (Pain Management - 4 weeks)

### Goals:

- Reduce pain levels
- Improve knee flexion and extension range of motion

### Summary

During this phase, we will focus on pain reduction using modalities and initial motion exercises. Manual therapy will be employed to enhance tissue flexibility and joint mobilization.

### Milestones

- Pain reduction to at least 3/10 on VAS
- Range of motion improvement: Flexion to 80%, Extension to 85%

## Treatment

### Modalities:

- TENS (Transcutaneous Electrical Nerve Stimulation) machine: 20 minutes per session, 3 times per week
- Red light therapy: 15 minutes, 3 times per week

### Exercises:

- Gentle knee flexion and extension exercises, 10 repetitions, twice daily
- Quadriceps setting: 10 repetitions, 3 times daily

### Manual Therapy:

- Soft tissue mobilization: 10 minutes per session, 2 times per week
- Patellar mobilization: 5 minutes, 3 times per week

## Phase 2 (Strengthening and Stability - 4 weeks)

<b>Goals:</b> <ul style="list-style-type: none"><li>• Increase muscle strength and stability around the knee joint</li></ul>	<b>Summary</b> <p>The focus in this phase will shift to strengthening exercises using resistance bands. This will help patients achieve better control and stability during movement.</p>	<b>Milestones</b> <ul style="list-style-type: none"><li>• Achieve muscle strength of 4/5 for flexion and extension</li><li>• Improved muscular control in daily activities</li></ul>
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<b>Treatment</b>
<b>Exercises:</b> <ul style="list-style-type: none"><li>• Resistance band knee flexion/extension: 15 repetitions, 3 sets per day</li><li>• Standing leg curls with band: 10 repetitions each leg, 3 times per week</li><li>• Step-ups on low step: 10 repetitions, 2 times per week</li></ul> <b>Manual Therapy:</b> <ul style="list-style-type: none"><li>• Continued patellar mobilization: 5 minutes, twice weekly</li><li>• Joint mobilizations: Grade II-III oscillations, 5 minutes weekly</li></ul>

## Phase 3 (Functional Improvement - 4 weeks)

<b>Goals:</b> <ul style="list-style-type: none"><li>• Restore functional capacity for walking and daily activities</li><li>• Facilitate safe walking with grandchildren</li></ul>	<b>Summary</b> <p>Functional activities will be incorporated to simulate real-world tasks, focusing on endurance and task-specific training.</p>	<b>Milestones</b> <ul style="list-style-type: none"><li>• Walk independently on level ground for 20 minutes without pain</li><li>• Safely navigate stairs at a controlled pace</li></ul>
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<b>Treatment</b>
<b>Exercises:</b> <ul style="list-style-type: none"><li>• Walking program: Start with 5-minute walks, incrementally increase by 5 minutes weekly</li><li>• Balance exercises: Single-leg stands, 10 seconds, 5 times per leg, daily</li><li>• Mini-squats: 10 repetitions, 3 times per week</li></ul> <b>Functional Training:</b> <ul style="list-style-type: none"><li>• Practice stair navigation with railing support, 5 minutes, twice weekly</li><li>• Walking with a simulated grandchild (e.g., weight in backpack): 5 minutes, once per week</li></ul>

## References

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1. <https://www.sciencedirect.com/>
2. <https://pmc.ncbi.nlm.nih.gov/>
3. <https://journals.bmj.com/>
4. <https://www.biomedcentral.com/>