

Passive Range of Motion (PROM)

Definition

Passive Range of Motion (PROM) is the movement of a joint by an **external force** (therapist, caregiver, or device) **without active muscle contraction** from the patient. The therapist moves the joint carefully through its available range while the patient remains relaxed.

Applications of PROM

PROM is widely used in **clinical rehabilitation**.

1. **Prevention of Joint Stiffness & Contractures**
 - Keeps joint structures mobile.
 - Prevents adaptive shortening of muscles and periarticular tissues.
2. **Maintaining Joint Integrity & Nutrition**
 - Promotes synovial fluid circulation.
 - Nourishes articular cartilage, preventing degeneration.
3. **Circulation & Edema Control**
 - Aids venous return and lymphatic drainage in immobile patients.
4. **Pain Reduction**
 - Gentle, rhythmic PROM may reduce pain by stimulating mechanoreceptors and inhibiting nociceptors.
5. **Maintaining Muscle Elasticity**
 - Although it does not increase strength, PROM prevents muscle shortening and maintains elasticity.
6. **Post-Surgical or Acute Injury Conditions**
 - Used when **active movement is restricted** due to surgical precautions (e.g., rotator cuff repair, tendon graft, fracture fixation).
7. **Neurological Conditions**
 - In patients with paralysis, spasticity, or coma (e.g., stroke, SCI, TBI) to maintain mobility.
8. **Assessment Purposes**
 - Helps assess joint integrity, end-feel, pain, and available ROM.
9. **Preparation for Active Exercises**
 - PROM is often the **first step in rehabilitation**, gradually progressing to active-assisted (AAROM) and then active ROM (AROM).

Principles of PROM

1. **Patient Positioning**
 - Comfortable, well-supported position.
 - Adequate exposure of the joint.
2. **Therapist Handling**
 - One hand supports the proximal segment, the other moves the distal segment.
 - Provide firm but gentle support.
3. **Range & Speed**
 - Move the joint **within available, pain-free ROM**.

- Smooth, slow, and controlled movements—avoid jerks.
- 4. **Respect Pain & Precautions**
 - Do not force beyond resistance or cause pain.
 - Consider surgical restrictions, fractures, wounds, IV lines, etc.
- 5. **Frequency & Repetitions**
 - Usually **5–10 repetitions per joint**, 2–3 times/day (depending on patient condition).
- 6. **Sequence**
 - Follow a logical order (head → trunk → upper limbs → lower limbs).
 - Move each joint through all planes.
- 7. **Stabilization**
 - Stabilize the proximal joint to prevent compensatory movements.
- 8. **Observation During PROM**
 - Watch for signs of pain, resistance, abnormal muscle tone, or spasm.
- 9. **Communication**
 - Explain the procedure to the patient even if unconscious (to reduce anxiety and build trust).
- 10. **Progression**
 - As patient improves, shift from PROM → AAROM → AROM → resisted exercises.