

Joints (Shoulder, Elbow, Wrist, Hip, Knee, and Ankle) Examination

Name:

SSN:

Date of Exam:

C-number:

Place of Exam:

A. Review of Medical Records:

B. Medical History (Subjective Complaints):

Comment on:

1. Date, circumstances of onset, and course since onset.
2. Pain, weakness, stiffness, deformity, instability or giving way, "locking," lack of endurance, effusion, episodes of dislocation or subluxation, etc.
3. Signs of inflammation: swelling, heat, redness, tenderness, or drainage.
4. Treatment - type, include dose for medication, frequency, response, and side effects.
5. If there are periods of flare-up of joint disease:
 - a. State their severity, frequency, and duration.
 - b. Name the precipitating and alleviating factors.
 - c. State to what extent, if any, *per veteran*, they result in additional limitation of motion or functional impairment (e.g. pain, weakness, fatigue, speed, or incoordination) during the flare-up.
6. Describe whether crutches, brace, cane, corrective shoes, etc., are needed.
7. Describe details of any hospitalizations, surgery or injury.
8. For inflammatory arthritis, describe any constitutional symptoms and number and duration of incapacitating exacerbations per year.
9. Describe the effects of the condition on the veteran's usual occupation and daily activities.
10. Describe functional limitations on standing and walking.
11. Dominance of extremity and means used to identify dominant extremity.
12. If there is a prosthesis, provide date of prosthetic implant and describe any complaint of pain, weakness, or limitation of motion.
13. History of neoplasm:
 - a. Date of diagnosis, diagnosis.
 - b. Benign or malignant.

- c. Type and date(s) of treatment.
- d. Last date of treatment.

C. Physical Examination (Objective Findings):

Address each of the following as appropriate to the condition being examined and fully describe current findings: *A detailed assessment of each affected joint is required, including joints with prostheses.*

1. Using a goniometer, measure the *active* range of motion, of the unaffected joint (if normal) then the affected. Provide range of motion in degrees.
2. Describe presence of objective evidence of pain in the affected joint at rest and during active range of motion.
3. Describe objective evidence of edema, effusion, instability, tenderness, redness, heat, abnormal movement, guarding of movement, deformity, malalignment, drainage, weakness, etc.
4. For weight bearing joints (hip, knee, ankle), describe gait. Describe any callosities, breakdown, or unusual shoe wear pattern that would indicate abnormal weight bearing.
5. If ankylosis is present, describe the position of the bones of the joint in relationship to one another (in degrees of flexion, external rotation, etc.), and state whether the ankylosis is stable and pain free.
6. If indicated, measure the leg length from the anterior superior iliac spine to the medial malleolus.
7. For *inflammatory arthritis*, describe any constitutional signs and extra-articular manifestations (Follow appropriate worksheet for required examination findings). State whether disease is active and extent of overall impairment of health.
8. Describe range of motion with prosthesis in same detail as described above for nonprosthetic joints.

D. Loss of Joint Function with Use:

Impairment of joint function is determined by range of joint motion as reported in the physical examination and additional loss of range of motion after repetitive use caused by the following factors:

- Pain
- Fatigue
- Weakness
- Lack of endurance
- Incoordination

Have the veteran move the affected joint/joints through repetitive active range of motion, as tolerated (at least 3 repetitions). After repetitive motion, re-measure the range of motion of

the affected joint/joints. Do any of the above factors cause any additional loss of range of motion? If so, record the re-measured range of motion and the predominant factor causing the change in motion.

If repetitive active range of motion of a joint cannot be done, state so and give the reason.

E. Normal Range of Motion: All joint Range of Motion measurements must be made using a **goniometer**. Show each measured range of motion separately rather than as a continuum. For example, if the veteran lacks 10 degrees of full knee extension and has normal flexion, show the range of motion as extension to minus 10 degrees (or lacks 10 degrees of extension) and flexion 10 to 140 degrees.

1. **Hip range of motion:** (Movement of femur as it rotates in the acetabulum.)

a. Normal range of motion, using the anatomical position as zero degrees.

Flexion = 0 to 125 degrees (To gain a true picture of hip flexion, i.e., movement between the pelvis and femur in the hip joint, the opposite thigh should be extended to minimize motion between the pelvis and spine.)

Extension = 0 to 30 degrees.

Adduction = 0 to 25 degrees.

Abduction = 0 to 45 degrees.

External rotation = 0 to 60 degrees.

Internal rotation = 0 to 40 degrees.

2. **Knee range of motion:**

a. Normal range of motion, using the anatomical position as zero degrees.

Flexion = 0 to 140 degrees.

Extension - zero degrees = full extension. Show loss of extension by describing the degrees in which extension is not possible. (e.g., Show range of motion as extension to minus 10 degrees and flexion 10 to 140 degrees when full extension is limited by 10 degrees and full flexion is possible.)

b. Stability.

Medial and Lateral Collateral Ligaments:

Varus/valgus in neutral and in 30 degrees of flexion -

normal is no motion.

Anterior and Posterior Cruciate Ligaments:

Anterior/posterior in 30 degrees of flexion with foot stabilized - normal is less than 5 mm. of motion (1/4 inch - Lachman's test) or in 90 degrees of flexion with foot stabilized - normal is less than 5mm. of motion (1/4 inch - anterior and posterior drawer test).

Medial and Lateral Meniscus: Perform McMurray's test.

3. Ankle range of motion:

- a. Neutral position is with foot at 90 degrees to ankle. From that position, dorsiflexion is 0 to 20 degrees; plantar flexion is 0 to 45 degrees.
- b. Describe any varus or valgus angulation of the os calcis in relationship to the long axis of the tibia and fibula.

4. Shoulder, elbow, forearm, and wrist range of motion:

a. Normal range of motion is measured with zero degrees the anatomical position **except** for 2 situations:

- i. Supination and pronation of the forearm is measured with the arm against the body, the elbow flexed to 90 degrees, and the forearm in mid position (zero degrees) between supination and pronation
 - ii. Shoulder rotation is measured with the arm abducted to 90 degrees, the elbow flexed to 90 degrees, and the forearm reflecting the midpoint (zero degrees) between internal and external rotation of the shoulder.
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- b. **Shoulder forward flexion** = zero to 180 degrees.
 - c. **Shoulder abduction** = zero to 180 degrees.
 - d. **Shoulder external rotation** = zero to 90 degrees.
 - e. **Shoulder internal rotation** = zero to 90 degrees.
 - f. **Elbow flexion** = zero to 145 degrees.
 - g. **Forearm supination** = zero to 85 degrees.
 - h. **Forearm pronation** = zero to 80 degrees.
 - i. **Wrist dorsiflexion** (extension) = zero to 70 degrees.
 - j. **Wrist palmar flexion** = zero to 80 degrees.
 - k. **Wrist radial deviation** = zero to 20 degrees
 - l. **Wrist ulnar deviation** = zero to 45 degrees.

F. Diagnostic and Clinical Tests:

1. As indicated: X-rays, including special views or weight bearing films, MRI, arthrogram, diagnostic arthroscopy.

Note: The diagnosis of degenerative arthritis or post-traumatic arthritis of a joint requires X-ray confirmation. Once the diagnosis has been confirmed in a joint, further X-rays of that joint are not required.

2. Include results of all diagnostic and clinical tests in the examination report.

G. Diagnosis:

1. For subluxation or instability of the knee, indicate whether it is slight, moderate or severe.

Signature:

Date:

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