Musculoskeletal – Spine

Trainee Handout

**Table of Contents**

[Objectives 2](#_Toc464030787)

[References 3](#_Toc464030788)

[Topic 1: Musculoskeletal Terminology 4](#_Toc464030789)

[Topic 2: General Rating Considerations Applicable to All Back Disabilities (Old Rating Schedule) 7](#_Toc464030790)

[Topic 3: (Old) 38 C.F.R. §4.71a, Diagnostic Codes for Back Disabilities 11](#_Toc464030791)

[Attachment A: Scenario 1 12](#_Toc464030792)

[Attachment B: Scenario 2 13](#_Toc464030793)

[Practical Exercise 14](#_Toc464030794)

Objectives

# To provide the trainee with additional resources for rating the musculoskeletal system as it pertains to the old rating criteria this way they have knowledge on how to evaluate claims prior to 2002References

4.71a Schedule of Rating Musculoskeletal (old rating criteria provided in document)

4.59 Painful Motion

3.327 Reexaminations

Medical EPSS

DeLuca v. Brown 19995

Love v. West, 1999 U.S. App. Vet. Claims LEXIS 1341 (non-precedential).

MacMillan v. Brown

VAOPGCPREC 36-97, 63 Fed. Reg. 31262 (1998)

Topic 1: Musculoskeletal Terminology

ATROPHY - decrease in size or wasting away of a body part or tissue

ANKYLOSIS - stiffness or fixation of a joint by disease or surgery

CONTIGUOUS - being in actual contact : touching along a boundary or at a point

DEBRIDEMENT - the surgical removal of lacerated, devitalized, or contaminated tissue

DISTAL - situated away from the point of attachment or origin or a central point

PROXIMAL - situated next to or near the point of attachment or origin or a central point

**FOOT AND ANKLE**

DORSIFLEXION - flexion of the foot in an upward direction

METATARSALS - Concerning the metatarsal arch of the foot or any of the individual structural units of osseous tissue in the area between the phalanges and tarsals. There are five metatarsal bones of each foot.

PLANTAR FASCIITIS - inflammation involving the plantar fascia especially in the area of its attachment to the calcaneus and causing pain under the heel in walking and running

PLANTAR FLEXION - movement of the foot that flexes the foot or toes downward toward the sole

PRONATION - rotation of the medial bones in the midtarsal region of the foot inward and downward so that in walking the foot tends to come down on its inner margin

**HIP AND KNEE**

EFFUSION - the escape of a fluid from anatomical vessels by rupture or exudation

EXUDATION - Pathological oozing of fluids, usually the result of inflammation.

SUBLUXATION - partial dislocation (as of one of the bones in a joint)

ABDUCTION - to draw away (as a limb) from a position near or parallel to the median axis of the body

ADDUCTION – to draw toward the main plane of the body or one of its parts

**SHOULDER, ELBOW, WRIST, AND HAND**

DISARTICULATION - separation or amputation of a body part at a joint

IMPINGEMENT – A condition that affects the group of muscles and tendons that secures the arm to the shoulder joint and allows the arm to rotate (rotator cuff), and causes shoulder pain.

FLAIL JOINT - exhibiting abnormal mobility and loss of response to normal controls

METACARPALS – Pertaining to the five individual structural units of osseous tissue in the palm of the hand (metacarpus), consisting of a specialized form of dense connective tissue.

PHALANGES - any of the digital bones of the hand or foot distal to the metacarpus or metatarsus of a vertebrate that in humans are three to each finger and toe with the exception of the thumb and big toe which have only two each

PRONATION - rotation of an anatomical part towards the midline: as rotation of the hand and forearm so that the palm faces backwards or downwards

SUPINATION - rotation of the forearm and hand so that the palm faces forward or upward and the radius lies parallel to the ulna ; also : a corresponding movement of the foot and leg

VARUS - of, relating to, or being a deformity of a bodily part characterized by bending or turning inward toward the midline of the body to an abnormal degree

VALGUS - turned outward ; especially : of, relating to, or being a deformity in which an anatomical part is turned outward away from the midline of the body to an abnormal degree

Topic 2: General Rating Considerations Applicable to All Back Disabilities (Old Rating Schedule)

DC5285-5295 Old Spine Regs

Diagnostic Code 5285 (in effect prior to September 26, 2003) provided ratings for residuals of fracture of vertebra. Diagnostic Code 5285 provided that, in cases where residuals of vertebral fracture did not involve the spinal cord or require a neck brace, such residual disability was to be rated in accordance with definite limited motion or muscle spasm, adding 10 percent for demonstrable deformity of vertebral body. When the residuals of vertebral fracture were without cord involvement, but with abnormal mobility requiring neck brace (jury mast), the disability rating was 60 percent. When the residuals of vertebral fracture included cord involvement, being bedridden, or required long leg braces, the disability rating was 100 percent. When a 100 percent rating was assigned, the VA adjudicator was to consider special monthly compensation. With lesser involvements (than cord involvement, being bedridden, or requiring long leg braces) residuals of vertebral fracture were to be rated for limited motion or nerve paralysis. A Note to Diagnostic Code 5285 provided that, both under ankylosis and limited motion, ratings should not be assigned for more than one segment by reason of involvement of only the first or last vertebrae of an adjacent segment. 38 C.F.R. § 4.71a.

Diagnostic Code 5286 (in effect prior to September 26, 2003) provided ratings for complete bony fixation (ankylosis) of the spine. Ankylosis of the spine in a favorable angle was to be rated 60 percent disabling. Ankylosis of the spine in an unfavorable angle, with marked deformity and involvement of major joints (Marie-Strumpell type) or without other joint involvement (Bechterew type), was to be rated 100 percent disabling. 38 C.F.R. § 4.71a.

Diagnostic Code 5287 (in effect prior to September 26, 2003) provided ratings for ankylosis of the cervical spine. Favorable ankylosis of the cervical spine was to be rated 30 percent disabling. Unfavorable ankylosis of the cervical spine was to be rated 40 percent disabling. 38 C.F.R. § 4.71a.

Diagnostic Code 5288 (in effect prior to September 26, 2003) provided ratings for ankylosis of the dorsal spine. Favorable ankylosis of the dorsal spine was to be rated 20 percent disabling. Unfavorable ankylosis of the dorsal spine was to be rated 30 percent disabling. 38 C.F.R. § 4.71a.

Diagnostic Code 5289 (in effect prior to September 26, 2003) provided ratings for ankylosis of the lumbar spine. Favorable ankylosis of the lumbar spine was to be rated 40 percent disabling. Unfavorable ankylosis of the lumbar spine was to be rated 50 percent disabling. 38 C.F.R. § 4.71a.

Diagnostic Code 5290 (in effect prior to September 26, 2003) provided ratings based on limitation of motion of the cervical spine. Slight limitation of motion of the cervical spine was to be rated 10 percent disabling; moderate limitation of motion of the cervical spine was to be rated 20 percent disabling; and severe limitation of motion of the cervical spine was to be rated 30 percent disabling.

38 C.F.R. § 4.71a.

Diagnostic Code 5291 (in effect prior to September 26, 2003) provided ratings based on limitation of motion of the dorsal spine. Slight limitation of motion of the dorsal spine was to be rated noncompensably (0 percent) disabling; moderate limitation of motion of the dorsal spine was to be rated 10 percent disabling; and severe limitation of motion of the dorsal spine was to be rated 10 percent disabling. 38 C.F.R. § 4.71a.

Diagnostic Code 5292 (in effect prior to September 26, 2003) provided ratings based on limitation of motion of the lumbar spine. Slight limitation of motion of the lumbar spine was to be rated 10 percent disabling; moderate limitation of motion of the lumbar spine was to be rated 20 percent disabling; and severe limitation of motion of the lumbar spine was to be rated 40 percent disabling.

38 C.F.R. § 4.71a. VAOPGCPREC 36-97, 63 Fed. Reg. 31262 (1998).

Diagnostic Code 5293 (in effect prior to September 23, 2002) provided ratings based on intervertebral disc syndrome. Postoperative intervertebral disc syndrome that was cured was to be rated noncompensably (0 percent) disabling. Mild intervertebral disc syndrome was to be rated 10 percent disabling. Moderate intervertebral disc syndrome with recurring attacks was to be rated 20 percent disabling. Severe intervertebral disc syndrome with recurring attacks with intermittent relief was to be rated 40 percent disabling. Pronounced intervertebral disc syndrome with persistent symptoms compatible with sciatic neuropathy with characteristic pain and demonstrable muscle spasm, absent ankle jerk, or other neurological findings appropriate to site of diseased disc, little intermittent relief, was to be rated 60 percent disabling. 38 C.F.R. § 4.71a. VAOPGCPREC 36-97, 63 Fed. Reg. 31262 (1998).

Diagnostic Code 5293 (in effect from September 23, 2002 through September 25, 2003) provided that intervertebral disc syndrome (preoperatively or postoperatively) was to be rated either on the total duration of incapacitating episodes over the past 12 months or by combining under 38 C.F.R. § 4.25 separate ratings of its chronic orthopedic and neurologic manifestations along with ratings for all other disabilities, whichever method results in the higher rating. Diagnostic Code 5293 (in effect from September 23, 2002 through September 25, 2003) provided a 10 percent rating for intervertebral disc syndrome with incapacitating episodes having a total duration of at least one week but less than two weeks during the past 12 months; a 20 percent rating for intervertebral disc syndrome with incapacitating episodes having a total duration of at least two weeks but less than four weeks during the past 12 months; a 40 percent rating for intervertebral disc syndrome with incapacitating episodes having a total duration of at least four weeks but less than six weeks during the past 12 months; and a 60 percent rating for intervertebral disc syndrome with incapacitating episodes having a total duration of at least six weeks during the past 12 months. 38 C.F.R. § 4.71a.

Notes following Diagnostic Code 5293 (in effect from September 23, 2002 through September 25, 2003) provided guidance in rating intervertebral disc syndrome. Note (1) provided that, for purposes of ratings under Diagnostic Code 5293, an incapacitating episode is a period of acute signs and symptoms due to intervertebral disc syndrome that requires bed rest prescribed by a physician and treatment by a physician. "Chronic orthopedic and neurologic manifestations" means orthopedic and neurologic signs and symptoms resulting from intervertebral disc syndrome that are present constantly, or nearly so. Note (2) provide that, when evaluating on the basis of chronic manifestations, evaluate orthopedic disabilities using evaluation criteria for the most appropriate orthopedic diagnostic code or codes. Evaluate neurologic disabilities separately using evaluation criteria for the most appropriate neurologic diagnostic code or codes. Note (3) provide that, if intervertebral disc syndrome is present in more than one spinal segment, provided that the effects in each spinal segment are clearly distinct, rate each segment on the basis of chronic orthopedic and neurologic manifestations or incapacitating episodes, whichever method results in a higher rating for that segment. 38 C.F.R. § 4.71a. MacMillan v. Brown.

Diagnostic Code 5294 (in effect prior to September 26, 2003) provided ratings for sacro-iliac injury and weakness were to be rated under the Diagnostic Code 5295 criteria. 38 C.F.R. § 4.71a.

Diagnostic Code 5295 (in effect prior to September 26, 2003) provided ratings for lumbosacral strain. Lumbosacral strain with slight subjective symptoms only was rated noncompensably (0 percent) disabling. Lumbosacral strain with characteristic pain on motion was rated as 10 percent disabling. Lumbosacral strain with muscle spasm on extreme forward bending, unilateral loss of lateral spine motion in the standing position, was rated 20 percent disabling. Severe lumbosacral strain with listing of whole spine to the opposite side, positive Goldthwaite's sign, marked limitation of forward bending in the standing position, loss of lateral motion with osteo-arthritic changes, or narrowing or irregularity of joint space, or some of the above with abnormal mobility on forced motion, was rated 40 percent disabling. 38 C.F.R. § 4.71a. Love v. West, 1999 U.S. App. Vet. Claims LEXIS 1341 (non-precedential).

**A.** **Pain.** Without a diagnosed or identifiable underlying malady or condition, pain does not in and of itself constitute a disability for which service connection may be granted. *Sanchez-Benitez v. West*, 13 Vet. App. 282 (1999). However, in an increased rating claim, unless the underlying disability for which service connection was granted has been cured, there will generally be a medical basis for complaints of pain.

**B.** **Levels of the Back.** Separate evaluations apply for each level of the back (cervical, thoracic, lumbar) affected by a service-connected disability. Assignment of separate evaluations for each affected level of the back, when more than one level is affected by the service-connected disability, does not constitute pyramiding.

**C.** **Arthritis and Intervertebral Disk Disease.** Arthritis, or degenerative joint disease of the spine, is not the same disease or disability as intervertebral disk disease (IVDD). Although arthritis is listed among the chronic diseases in 38 U.S.C.A. § 1101 which may be presumed service-connected, IVDD is not among the listed diseases, and is not equivalent to arthritis so as to be subject to presumptive service connection under 38 U.S.C.A. § 1101 or 38 C.F.R. § 3.309. *Lehman v. West*, 1998 U.S. Vet. App. LEXIS 727 (May 1998) (non-precedential).

**D. Rating Schedule Changes**.

When a provision of the rating schedule is changed during the pendency of an appeal for an increased rating, VA must determine if the revised regulation is more favorable to the veteran, either on its face or under the facts of the particular case. If the revised regulation is more favorable, it must be applied to that portion of the appeal after the effective date of the revised regulation, and the prior, less favorable regulation must be applied to the portion of the pendency of the appeal prior to the date of the revision. All evidence of record must be considered in making each of these determinations. The Board should state the findings, conclusion, and reasons or bases as to the determination of which version of a regulation is more favorable. VAOPGCPREC 4-00 (April 2000).

**E. Overlapping Symptomatology.** Where two disabilities affect the same anatomic area and have overlapping symptomatology, all disability must be evaluated as service-connected unless the symptoms have been medically separated out. *Mittleider v. West*, 11 Vet. App. 818 (1998).

Topic 3: (Old) 38 C.F.R. §4.71a, Diagnostic Codes for Back Disabilities

Rating Rating

**5285** Vertebra, fracture of, residuals: **5291** Spine, limitation of motion of, dorsal:

With cord involvement, bedridden, or Severe 10

requiring long leg braces, 100 Moderate 10

Consider special monthly compensation; Slight 0

with lesser involvements rate for limited **5292** Spine, limitation of motion of, lumbar

motion, nerve paralysis. Severe 40

Without cord involvement; abnormal 60 Moderate 20

mobility requiring neck brace (jury mast) Slight 10

In other cases rate in accordance with

definite limited motion or muscle spasm, **5293** Intervertebral disc syndrome:

adding 10 percent for demonstrable Pronounced; with persistent symptoms

deformity of vertebral body. compatible with sciatic neuropathy with

characteristic pain and demonstrable muscle

NOTE: Both under ankylosis and limited spasm, absent ankle jerk, or other neuro-

motion, ratings should not be assigned for logical findings appropriate to site of

more than one segment by reason of in- diseased disc, little intermittent relief 60

involvement of only the 1st or last ver- Severe; recurring attacks, with inter

tebrae of an adjacent segment mittent relief 40

Moderate; recurring attacks 20

**5286** Spine, complete bony fixation (ankylosis) Mild 10

Unfavorable angle, with marked deformity Postoperative, cured 0

(Marie-Strumpell type) or without other

joint involvement (Bechterew type) 100 **5294** Sacro-iliac injury and weakness:

Favorable angle 60   
 **5295** Lumbosacral strain

**5287** Spine, ankylosis of, cervical: Severe; with listing of whole spine to oppo-  
 Unfavorable 40 site side, positive Goldthwaite's sign,

Favorable 30 marked limitation of forward bending in  
 standing position, loss of lateral motion

**5288** Spine, ankylosis of, dorsal with osteo-arthritic changes, or nar-

Unfavorable 30 rowing or irregularity of joint space, or  
 Favorable 20 some of above with abnormal mobility

**5289** Spine, ankylosis of, lumbar: on forced motion 40

Unfavorable 50 With muscle spasm on extreme forward

Favorable 40 bending, loss of lateral spine motion,   
 unilateral, in standing position 20  
**5290** Spine, limitation of motion of, cervical With characteristic pain on motion 10

Severe 30 With slight subjective symptoms only 0

Moderate 20

Slight 10

Attachment A: Scenario 1

**Instruction**: Read each scenario and provide what diagnositic code and evaluation should be given for each question. Note: Remember you may have to look at the old and new rating schedule for the spine.

1. The veteran is s/c for lumbar disc disease evaluated as 10 percent disabling from 01/02/01. The veteran files a claim for increase on 03/07/07. The following examination results are received. What is the appropriate action?

AROM DELUCA

FF 65 55

EXT 25 25

LLF 25 25

RLF 25 25

RLR 25 25

LLR 25 25

There was pain on motion. The neurological exam is normal. The veteran has no muscle spasms or other spinal abnormalities. The veteran reports having one incapacitating episode in the past 12 months. Outpatient treatment records confirm this and that it required bed rest for one week which was prescribed by the treating physician. The veteran is diagnosed with disc disease of the lumbar spine.

Attachment B: Scenario 2

2. You are granting s/c for lumbosacral strain effective 03/05/07. The following examination results are received. What is the appropriate action?

AROM DELUCA

FF 90 NC

EXT 30 NC

LLF 30 NC

RLF 30 NC

RLR 30 NC

LLR 30 NC

There was no pain on motion. The neurological exam is normal. The veteran had slight muscle spasms which did not result in any gait problems. The spinal contour was normal. There were no joint abnormalities. The veteran was diagnosed with chronic lumbosacral strain.

Practical Exercise

Directions: Read the scenario and choose the correct answer.

The veteran was granted 40% for IVDS effective 6/9/1997. He is now coming in for an increase on 12/30/2015, claiming right leg radicular pain secondary to the IVDS has gotten worse. The neurological examination on 1/15/2016 reports the following results on the examination: Moderate sciatic pain, diagnosis right leg radiculopathy secondary to IVDS with lower back strain. The examiner also provided the following range of motion testing:

FF 55 Delcula Mitchell

EXT 30 NC NC

LLF 30

RLF 30

RLR 30

LLR 30

Which is the correct answer?

1. Confirm and continue the 40% IVDS
2. Separate the IVDS with lower back pain at 20% and grant 20% for right leg radiculopathy
3. Continue the 40% for IVDS with lower back pain and grant 20% for right leg radiculopathy
4. None of the above