
Consistency of AMA Impairment Evaluation & Reporting:

Part II: Lower Extremities

A California Permanent Disability Rating starts with the evaluating physician's impairment rating in accordance with the medical evaluation protocols and rating procedures set forth in the 5th Edition of the AMA Guides.

Chapters 3 to 17 of the AMA Guides outline how imaging studies, signs and appropriate test results support the use of not only Diagnosis Related/Based Estimates (DRE) or (DBE) but of the distinct percentages for objective manifestations of impairment. Yes, the AMA Guides emphasize impairment ratings based on objective assessment. It also considers subjective symptoms within the diagnostic criteria in support of an impairment percentage. Chapter 18 specifically deals with those situations above and beyond the effects of pain on Activities of Daily Living (ADL).

A whole person impairment rating based on the body or organ rating system of the AMA Guides (Chapters 3 through 17) may be increased by up to 03% WPI if the burden of the worker's condition increases by pain-related impairment in excess of the pain component already incorporated in the WPI rating in Chapters 3 to 17. AMA 5th Ed., page 573 & 2005 PDRS, page 1-12.

Evaluating Physician must not fail to discuss how specific findings relate to and compare with the applicable rating criteria used to determine impairment - especially how impairment is determined with missing and/or limited data. AMA 5th Ed., Section 2.6b, page 22.

Imaging study findings and unsupported subjective complaints are worthless without a clinical correlation at the time of examination. Symptoms and complaints without integration to objective data (by the evaluating physician) should not serve as the sole criterion upon which decisions about impairment are made. General guidelines for the description and correlation of any imaging or diagnostic can be found on AMA 5th Ed., page 378.

A computer program calculating impairment is not a replacement for a reasoned medical opinion and the measurable factors & findings necessary to determine how the impairment rating was calculated. AMA 5th Ed., Section 2.6, pages 21 to 22.

Consistency is the key word when addressing impairment in a California P&S report. Consistency of imaging studies, to clinical findings on examination, to the medical/treatment histories, to subjective complaints, to the impairment rating criteria of the AMA Guides and to a reasoned medical opinion.

1. Lower Extremities evaluation criteria: AMA 5th Ed., Chapter 17, page 523.

1.1. The lower extremities are evaluated on the basis of anatomic changes, Diagnostic Based Estimates (DBE), and functional changes.

1.2. Complete and detailed examination of the lower extremities is necessary. Impairment is based on examiner's actual findings and requires assessment of the:

1.2.1. Skeletal framework

1.2.2. The joints and associated soft tissues, (to include ROM, Ankylosis, Amputation)

1.2.3. Vascular system, and nervous system

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- 1.3. **AMA 5th Ed., Table 17-1**, page 525, lists the 13 methods that can be used to assess impairment. **Anatomic changes are assessed in the physical examination and supported with clinical studies.** Specific fractures, joint replacements, bursitis, ligamentous instability, meniscectomies, etc. are rated under the DBE criteria. When functional implications have been clinically documented and the anatomic changes are difficult to categorize, then the impairment can be addressed under the functional impairment evaluating criteria.
- 1.4. **Avoiding Duplication of Impairment: AMA 5th Ed., Table 17-2, pages 526 & 527.** Provides evaluating physician with the guide of which evaluation methods can be combined and it helps physician avoid combining methods that rate the same condition. **If more than one method can be used to calculate impairment, the method that provides the higher rating is used.**

Table 17-2: Guide to Appropriate Combination of Evaluation Methods												
Open Boxes Indicate that Impairment Ratings Derived From These Methods Can Be Combined												
	Limb Length Discrepancy	Gait Derangement	Muscle Atrophy	Muscle Strength	ROM Ankylosis	Arthritis (DJD)	Amputation	Diagnosis Based Estimates (DBE)	Skin Loss	Peripheral Nerve Injury	Complex Regional Pain Syndrome (CRPS)	Vascular
Limb Length Discrepancy		X					X					
Gait Derangement	X		X	X	X	X	X	X	X	X	X	X
Muscle Atrophy		X		X	X	X	X	X		X	X	
Muscle Strength		X	X		X	X		X		X	0	
ROM Ankylosis		X	X	X		X		X			0	
Arthritis (DJD)		X	X	X	X							
Amputation	X	X	X	X								
Diagnosis Based Estimates (DBE)		X	X	X	X							
Skin Loss		X										
Peripheral Nerve Injury		X	X	X							X	
Complex Regional Pain Syndrome (CRPS)		X	X	0	0					X		X
Vascular												

X = Do Not Use These Methods Together for evaluating (calculating) a single impairment.
 0 = See Specific Instructions fro CRPS of the Lower Extremity.
 AMA 5th Ed., page 526

2. ROM assessment requires that both extremities be compared and individual joints be evaluated separately. Active Motion measurements take precedent.

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- 2.1. It is the physician's responsibility to (1) include a relevant description of body habitus and any general observations such as a limp, obvious discomfort while sitting/standing, etc., (2) evaluate all joints on an injured extremity (*if measurements or observations are normal physician should simply state "normal"*), (3) include the voluntary active arc of motion of the injured over the un-injured and appropriate circumferential measurements of the involved muscle groups (*evaluating physician should also record abnormal, excessive or limited range of motion, including ankylosis*).
- 2.2. If restriction of motion is present, evaluating physician must comment on the reason why: pain, muscle spasm, voluntary restriction, mechanical block, etc. Gentle passive range of motion may be performed in addition to active range of motion to determine whether the restriction is due to pain or mechanical block. The examination of injured workers with spinal or spino-radicular difficulties, should also include examination of the balance of the neuromusculoskeletal system, balance of physical examination [neurological exam], and special neurological/provocative test, as per L.C. 139.2
- 2.3. For individuals with active ROM measurements below or above average population values, physician must discuss the prior values and any subsequent loss. Physician's reasoning for the uses of estimated values for pre-injury capacity functional loss must be included.
- 2.4. If a contra lateral 'normal' joint has a less than average mobility, the impairment value(s) corresponding to the uninvolved joint can serve as a baseline and are subtracted from the calculated impairment for the 'injured' joint.

Table A-3: Recording ROM Measurements for the Lower Extremities				
Joint	Plane	ROM-0-ROM (★)	Clinical Examples	
			Text Description	SFTR Recording (°)
Hip	Sagittal	Extension -0- Flexion (30)-0-(100)	Left extends 30°, flexes 80° Right extends 10°, flexes 60°	Left S: 30-0-80 Right S: 10-0-60
Hip	Frontal	Abduction -0- Adduction (40)-0-(20)	Left abducts 30°, adducts 10° Right abducts 20°, adducts 10°	Left F: 30-0-10 Right F: 20-0- 10
Hip	Rotation	External -0- Internal Rotation Rotation (50)-0-(40)	Left external rotation 30°, Internal rotation 30° Right external rotation 20°, Internal rotation 15°	Left R: 30-0-30 Right R: 20-0-15
Knee	Sagittal	Extension -0- Flexion (0)-0-(150)	Left extends 0°, flexes 150° Right hyperextension 10°, flexes 120°	Left 5:0-0-1 50 Right 5:0-0-1 20
Ankle (Talocrural)	Sagittal	Extension -0- Flexion (20)-0-(40)	Left extends 10°, flexes 10° Right extends 20°, flexes 40°	Left S: 10-0-10 Right 5: 20-0-40
Ankle (Subtalar)	Frontal	<u>Eversion -0- Inversion</u> (20)-0-(30)	Left eversion 20°, inversion 30° Right eversion 10°, inversion 20°	Left F: 20-0-30 Right F: 10-0-20

★ Normal ranges are in parentheses.

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3. **Impairment of Peripheral Nerve Abnormalities** (non-musculoskeletal areas) is based on the anatomic distribution and severity of loss of functions resulting from (1) sensory deficits or pain and (2) motor deficits and loss of power. **It also includes measurement of knee and ankle reflexes.** They are rated when an objective verifiable diagnosis is present, supported by positive clinical findings and loss of function. Documentation requires Nerve Conduction/EMG studies with corresponding clinical corroboration by appropriate provocative testing. Physician must indicate that the underlying impairment is not due to spine pathology. (If due to spine, then rate under the Spine Chapter.)
 - 3.1.1. AMA 5th Ed., Section 17.2l, Peripheral Nerve Injuries.
 - 3.1.2. Table 17-37 - Impairment Due to Nerve Deficits, AMA 5th Ed., page 552.
4. **Peripheral Vascular Disorders** AMA 5th Ed., Table 17-38, page 554, are only considered when objective testing establishes the presence of obstructive physiology (claudication), including residual damage due to amputation. (AMA pg. 497).
5. **Arthritis, Skin Loss and Pain Syndromes.** Evaluating physician must be aware of the overlapping pathomechanics inherent among these conditions and closely follow the impairment evaluation criteria to avoid duplication of impairment.
 - 5.1. **Arthritis**, AMA 5th Ed., Section 17.2h, page 544. Specific diagnostic and evaluation criteria must be followed. **Use for individuals with documented findings (imaging studies) that are impaired by pain, weakness, or stiffness, with functional ROM of the joints.**
 - 5.2. **Skin Loss**, AMA 5th Ed., Section 17.2k, page 550. Other skin disorders could be evaluated using criteria in AMA Guides, Chapter 8.
 - 5.3. **Criteria for Rating Impairment Related to Chronic Pain**, AMA 5th Ed., Section 17.2m, page 553. **Causalgia, RSD, Complex Pain Syndromes' evaluation method is the same as that found on Chapter 13 AMA 5th Ed., Section 13.8, page 343.**
6. **(DBE) Diagnosis-Based-Estimates**, AMA 5th Ed., Section 17.2j, page 545. **Impairment determinations based more appropriately on diagnosis.** Addresses specific impairment ratings based on clinical condition and impact of impairment on ADL. Includes ratings for hip/knee replacements based on a scoring system. Fractures, ligament injuries, meniscectomies, foot deformities, hip/pelvis/femur/knee/ankle & foot conditions. Only on very specific situations (See Table 17-2) are DBE's combined with other methods of assessment.
 - 6.1. Table 17-33 – Impairment Estimates, AMA 5th Ed., page 546.
 - 6.2. Scoring System for Rating Hip and Knee Replacements, Tables 17-34 & 17-35, AMA 5th Ed., pages 548 & 549.

Luis Pérez-Cordero & Craig Andrew Lange
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