



Workers Compensation and Injury Management Act 2023

WorkCover WA Guidelines for the Evaluation of Permanent Impairment

Changes from 1st to 2nd Edition Effective 1 July 2026

30 April 2026

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Guidelines reference	2 nd Edition with Change	Reasons
<p>1. Introduction Section 1.17 pain</p>	<p>AMA5 chapter on pain (Chapter 18 AMA5) and section 13.8 'Criteria for rating impairments related to chronic pain are excluded entirely at the present time. Conditions associated with chronic pain should be assessed on the basis of the underlying diagnosed condition, and not on the basis of the chronic pain. Where pain is commonly associated with a condition, an allowance is made in the degree of impairment assigned in the WorkCover WA Guidelines. Complex regional pain syndrome is to be assessed in accordance with Chapter 17 of the WorkCover WA Guidelines.</p>	<p>Clarifies that in addition to chapter 18 section 13.8 is also excluded in relation to the assessment of chronic pain.</p>
<p>1. Introduction Section 1.42 – adjustment for the effects of treatment</p>	<p>Where the effective long-term treatment of an illness or injury results in apparent substantial or total elimination of the claimant's permanent impairment, or an apparent reduction of greater than 50% of the original impairment, but the claimant is likely to revert to the original degree of impairment if treatment is withdrawn, the APIA may increase the percentage of whole person impairment by 1, 2 or 3% WPI. This percentage should be combined with any other impairment percentage, using the Combined Values Chart. This paragraph does not apply to the use of analgesics or anti-inflammatory medication for pain relief.</p> <p>'Original degree of impairment' means the degree of impairment which was or would have been assessed in the absence of the long-term treatment.</p>	<p>In the 1st ed the words "substantial or total elimination of the claimant's permanent impairment" contemplate circumstances where a worker is assessed at 0% WPI because the long-term effect of the treatment has totally eliminated the worker's permanent impairment. This view contemplates that a worker would have had a degree of impairment but for the effects of the treatment.</p> <p>The word 'substantial' is imprecise. Safe Work Australia's medical experts recommended that a precise figure be introduced. While 50% is an arbitrary figure, it has the benefit of giving a precise instruction to the assessor whilst also being a change which is beneficial to the injured worker in most instances (The current wording - 'substantial elimination' – implies a figure of greater than 50% in most cases.)</p>
<p>1. Introduction Special assessment</p>	<p>1.63 It is a general principle that an assessment of permanent impairment only be done when a worker's condition has stabilised (i.e., has reached MMI), unless the injury is a dust disease.</p>	<p>In the 1st ed a special assessment of a worker that had not reached MMI could be done at the 18-month mark if the worker was seeking common law damages. A special assessment could not be done if a worker was seeking permanent impairment compensation.</p>

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Sections 1.63-1.67	<p>1.64 However, the Act states the WorkCover WA Guidelines may provide for circumstances in which an assessment of a worker's degree of permanent impairment can be made even though the worker's condition has not stabilised (i.e., has not reached MMI).</p> <p>1.65 An assessment of the worker's degree of permanent impairment can be done, notwithstanding the worker's condition has not stabilised or reached MMI (a 'special assessment') if the following criteria are satisfied:</p> <p>(a) A period of at least 18 months has elapsed after the day on which the worker's injury occurred.</p> <p>(b) The special assessment is based on the clinical assessment of the worker as they present on the day of the special assessment and must not consider any prospective change in the degree of permanent impairment that may result from future treatment, anticipated further recovery or deterioration of the condition.</p> <p>1.66 A special assessment allows for an assessment to be done even if the condition has not stabilised and overrides anything in AMA5 or the WorkCover WA Guidelines that requires the condition to be stable or to have reached MMI.</p> <p>1.67 The APIA requested to make a special assessment may be the APIA who notified the parties the condition has not stabilised. A special assessment is not required for a dust disease (see below).</p> <p>1.64 However, in limited circumstances a special assessment can be done for workers requesting an assessment of impairment in order to make an election to pursue common law damages (section 421 of the Act), or for workers seeking an increase in medical and health expenses beyond the standard limit under section 78 of the Act.</p>	<p>The special assessment criteria has changed to authorise a special assessment for all purposes, including permanent impairment compensation, common law and the special increase to the medical and health expenses limit.</p> <p>The 18-month period is taken from the injury date not the claim date as it was in the 1st edition.</p> <p>This will enable a worker to receive permanent impairment compensation and settle their claim even if the worker's condition has not stabilised at that time.</p> <p>The special assessment criteria has been modified to clarify the special assessment is to be based on the clinical assessment of the worker as they present on the day of the special assessment and must not consider any prospective change in the degree of permanent impairment that may result from future treatment, anticipated further recovery or deterioration of the worker's condition.</p> <p>This point of clarification to accommodate special assessments is essential as it is a fundamental principle that the clinical assessment of a worker is only to be undertaken as they present on the day of assessment taking account of the claimant's relevant medical history and all available relevant medical information.</p> <p>APIA cannot reliably assess, and should not be requested to consider, future events or circumstances that may and may not happen that could increase or decrease the worker's level of impairment. A special assessment, like a normal assessment, should not be forward looking but should assess the worker's degree or permanent impairment based on their current condition, irrespective of the purposes of the assessment.</p> <p>The reference in the 1st ed to a special assessment request being in the approved form has been deleted, as the standard request form will cover special assessments.</p> <p>Note. Changes will be made to APIA forms 1, 2 & 3 to accommodate changes to the special assessment criteria.</p>

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	<p>1.65—A special assessment allows for an assessment to be done even if the condition has not stabilised and overrides anything in AMA5 or the WorkCover WA Guidelines that requires the condition to be stable or to have reached MMI. These limited circumstances are outlined below.</p> <p>1.66—An assessment of the worker's degree of permanent impairment can be done, notwithstanding the worker's condition has not stabilised (a 'special assessment') if the following conditions are met:</p> <p>(a) If, after the expiry of the period of 18 months after the day on which a claim for compensation is made by a worker, an APIA notifies the worker, employer and insurer that the worker's condition has not stabilised to the extent required for an assessment of the worker's degree of permanent impairment to be made.</p> <p>(b) A request is made for a special assessment in the approved form.</p> <p>(c) The purpose of the special assessment is for an assessment of the degree of impairment in order to make an election to pursue common law damages (section 421), or for an increase in medical and health expenses beyond the standard limit under section 78 of the Act</p>	
<p>2. Upper extremity Section 2.22 epicondylitis</p>	<p>Epicondylitis of the elbow (common extensor/flexor origin tendinopathy)</p>	<p>Epicondylitis is generally considered an outdated term. It is now termed 'common extensor/flexor origin tendinopathy.'</p>
<p>3. Lower extremity Sections 3.23 & 3.24 – ankylosis</p>	<p>3.23. Ankylosis is to be regarded as the equivalent to arthrodesis in impairment terms only. For the assessment of impairment, when a joint is ankylosed (AMA5 Section 17.2g, pp 538-543), the calculation to be applied is to select the impairment if the joint is ankylosed in optimum position (see Table 3.1 below), and then if not ankylosed in the optimum position by adding (not combining) the values of percentage of WPI using tables 3.1 (a), (b), and (c)</p>	<p>1st ed Table 3.1(a) Impairment for ankylosis in variation from the optimum position has been deleted.</p> <p>Replace with 3 tables.</p> <p>The table for ankylosis of the hip is 3.1(a), for the knee 3.1(b), and for the ankle 3.1(c).</p>

Guidelines reference	2 nd Edition with Change	Reasons
	<p>below. These tables summarise the Tables in AMA5 at pp 538 – 541 inclusive 17-15 to 17-30 (pp 538-543 AMA5).</p> <p>3.24. Ankylosis of the ankle in the neutral/optimal position equates with 15 (37) [53] % impairment as per Table 3.1. Table 3.1(a) is provided below as guidance to evaluate additional impairment owing to variation from the neutral position. The additional amounts at the top of each column are added to the figure for impairment in the neutral position. In keeping with AMA5, p 541, the maximum impairment for ankylosis of the ankle remains at 25 (62) [88] % impairment. The maximum impairment for ankylosis of the hip or knee is 100% lower extremity impairment.</p> <p>Table 3.1(a): Impairment of Ankylosis of the Hip in variation from the optimum position (see appendix 1).</p> <p>Table 3.1(b): Impairment for Ankylosis of the Knee in variation of the optimum position (see appendix 1).</p> <p>Table 3.1(c) Impairment for ankylosis of the ankle in variation from the optimum position (see appendix 1).</p>	<p>As no compilation tables existed for ankylosis of the hip and knee in the 1st ed, SWA's PI template guide added two further compilation tables for both the hip and knee ankylosis (fusion).</p> <p>The tables for ankylosis of the hip are a compilation of five Tables in AMA 5 (Table 17-15 to 17-19), and for the knee a compilation of four Tables (17-20 to 17-23).</p> <p>These combined Tables make for far easier reference, replacing four or five Tables.</p>
<p>3. Lower extremity Sections 3.30/ 3.31</p>	<p>Delete paragraphs under section 3.30 (see appendix 1).</p> <p>Delete paragraphs under section 3.31 other than the first two (see appendix 1).</p>	<p>The most appropriate techniques for assessing the joint space at the various joints of the lower limb are complex and will change and evolve over time. It is not considered necessary to give prescriptive descriptions of these techniques as the 1st ed did, particularly considering that assessors are discouraged from ordering their own studies purely for impairment assessment purposes.</p> <p>A number of paragraphs are deleted from the 1st ed.</p> <p>This change means that in the rare referrals for assessment of arthritis in a joint of the lower limb, the assessor will need to rely on the information provided in the referral rather than order additional radiological studies.</p>

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<p>3. Lower extremity Section 3.37</p>	<p>Under Table 3.2 Impairment for tibial plateau fractures insert: Tibial shaft fracture, mal-alignment of: In those situations where there is more than one plane of mal-alignment, assess the impairment for each and select the highest. Note this process should also apply in a situation where there is more than one plane of mal-alignment in the femoral shaft. Patello-femoral joint replacement: Assess the knee impairment in the usual way and combine with 9% WPI (22% lower extremity impairment) for isolated patello-femoral joint replacement.</p>	<p>In the 1st ed it was unclear whether an assessor can apply Table 17-33 for malalignment of the tibial shaft twice, and if so, should the two LEI's be combined or added? The scenario queried where a worker had a fracture of both legs, at the junction of the distal tibial metaphysis with the tibial diaphysis. SWA's template added an extra bullet point under the Table at 3.37 and above the entry for 'Patello-femoral joint replacement:' (which keeps it in the correct sequence according to Table 17-33): Tibial shaft fracture, mal-alignment of: In those situations where there is more than one plane of mal-alignment, assess the impairment for each and select the highest. Note that this process should also apply in a situation where there is more than one plane of mal-alignment in the femoral shaft.</p>
<p>3. Lower extremity Section 3.38</p>	<p>3.38. Table - Number of Points c. Range of motion c. Activities/ Function.</p>	<p>Table 3.3 Rating Ankle Replacement: 'b' and 'c' both say 'Range of motion'. Alter heading of Table 3.3(c) to 'Activities/Function'.</p>
<p>3. Lower extremity Section 3.42/ Table 17-35</p>	<p>3.42 Table 17-35 Rating Knee Replacement Results b. range of motion b. range of flexion SUBTOTAL of (a), (b) and (c)</p>	<p>Clarified the subtotal is for (a), (b) and (c) - the total of all the points Table 17-35 (b) heading has been amended to read 'Range of Flexion'. In the 1st ed the way the table is currently worded a patient may have a 'double deduction' applied if they have a flexion contracture as a result of their injury. In item b., the word 'motion' is changed to 'flexion' to avoid confusion (e.g. example a person has 90° of flexion, but also has a 10° flexion contracture, the range of motion is actually only 80°. However, as noted in item d, a deduction of flexion contracture is made, so this would be a double deduction. Therefore using the word 'flexion' in b. avoids this problem.</p>
<p>3. Lower extremity Section 3.44</p>	<p>3.44. When assessing the impairment due to peripheral nerve injury (pp 550-552 AMA5) the APIA should read the text in this section. Note that the separate impairments for the motor, sensory</p>	<p>Sentences added to section 3.44.</p>

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	<p>and dysaesthetic components of nerve dysfunction in Table 17-37 (p 552 AMA5) are to be combined.</p> <p>Note also that if a lower extremity impairment results solely from the peripheral nerve injury, the loss of range of movement of any affected joint is not included in the impairment. However, if loss of range of movement of a joint is due to an unrelated pathology affecting that joint, (eg ankylosis/arthrodesis) that is assessable as an impairment separate from the peripheral nerve injury.</p>	<p>In the 1st ed it was not clear when assessing lower extremity whether assessor can combine loss of range of movement of a joint with a peripheral nerve injury.</p> <p>E.g. if one has a common peroneal nerve injury with complete loss of motor power; this would result in a drop foot. One would then assess impairment by combining the motor and sensory loss for the common peroneal nerve. One would certainly not include any additional impairment for the loss of range of movement as a result of the foot drop.</p> <p>However, if the loss of range of movement is not due to the nerve injury, but for example due to a fractured calcaneus with loss of inversion of the ankle (please note that inversion is not supplied by the common peroneal nerve), then the loss of range of motion of inversion of the ankle can be combined with the peripheral nerve injury.</p>
<p>3. Lower extremity Section 3.45</p>	<p>3.45 Note that the (posterior) tibial nerve is not included in Table 17-37, but its contribution can be calculated by subtracting ratings of common peroneal nerves from sciatic nerve ratings.</p> <p>3.45 Note that there is an error in Table 17-37. The maximum motor loss for the common peroneal nerve is 15%WPI (38%LEI). Note also that the (posterior) tibial nerve is not included in table 17-37. The maximum ratings for this nerve are the same as for the common peroneal nerve, namely Motor: 15 (38), Sensory Loss 2 (5), Dysesthesia 2 (5) in WPI (LEI) units.</p>	<p>The 1st ed correctly noted that impairment of the (posterior) tibial nerve is calculated by subtracting ratings of the common peroneal nerve from the sciatic nerve in AMA5 Table 17.37. The 2nd ed highlights an error in Table 17.37, where maximum motor loss for the common peroneal nerve is assigned an incorrect LEI value of 42%.</p> <p>The 2nd ed corrects the motor value of 15 (42) to 15 (38) for the common peroneal nerve, and adds a note about the error in Table 17-37.</p>
<p>4. The spine Section 4.12</p>	<p>4.12 The optimal preferred method to measure the percentage compression of a vertebral body is a well centred plain x-ray. CT or MRI images should not be ordered solely for the purpose of PI assessment. APIA should state the method they have used. The loss of vertebral height should be measured at the most compressed part and must be documented in the impairment assessment report. The estimated normal height of the</p>	<p>Section 4.12 of the 1st ed stated 'the optimal method to measure the percentage compression of a vertebral body is a well-centred plain x-ray'.</p> <p>The preferred method to measure the percentage compression of a vertebral body is a well centred plain x-ray. CT or MRI images should</p>

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	<p>compressed vertebra should be determined where possible by averaging the heights of the two adjacent (unaffected and normal) vertebrae.</p>	<p>not be ordered for the sole purpose of permanent impairment assessment.</p> <p>Section. 4.12 has been modified to say: 'The preferred method to measure the percentage compression of a vertebral body is a well centred plain x-ray. CT or MRI images should not be ordered solely for the purpose of PI assessment.</p>
<p>4. The spine Sections 4.33/ 4.37</p>	<p>4.33 Vertebral body fractures and/or dislocations at more than one vertebral level are to be assessed as follows:</p> <p>4.33 Vertebral body fractures and/or dislocations (multiple fractures) in the same spinal region are to be assessed as follows:</p> <p>4.37 Other than for vertebral body fractures (see 4.33 above) within a spinal region separate spinal impairments are not combined. The highest value impairment within the region is chosen. Impairments in different spinal regions are combined using the combined values chart (AMA5, pp 604-606).</p>	<p>In the 1st ed it was not clear specifically how to calculate fractures at multiple levels.</p> <p>Section 4.33 has been modified to say: "Vertebral body fractures and/or dislocations (multiple fractures), in the same spinal region, are to be assessed as follows: ..."</p> <p>Section 4.37 has been modified and commences: "4.37 Other than for vertebral body fractures (see 4.33 above), within...."</p>
<p>4. The spine Section 4.51</p>	<p>4.51 Impairment due to pelvic fractures should be evaluated with reference to the following table which replaces both table 15-19 in AMA5 and the reference to the pelvis in Table 17-33.</p>	<p>The template national guideline replaced Table 15-19 in AMA5 (Disorders of the Pelvis) with Table 4.3 (Pelvic Fractures) in the Guidelines.</p> <p>Section 4.51 has been amended to clarify this replaces both table 15-19 in AMA5 and the reference to the pelvis in Table 17-33.</p>
<p>4. The spine Table 4.3: Pelvic fractures</p>	<p>In Table 4.3 delete '8' in the row corresponding to:</p> <p>6. Fractures of the Fractures of the coccyx -8</p> <p>7. Fractures of the acetabulum: Evaluate based on restricted range of hip motion -8</p>	<p>There was an error in the 1st ed Table 4.3 Pelvic Fractures. Items 6 and 7 have 8% WPI corresponding to the heading of each item. The reference to 8% should be deleted.</p>
<p>5. Nervous system Section 5.23, Table 15.1</p>	<p>1% column</p> <p>Sensory loss alteration only in an anatomic distribution</p>	<p>Changed wording from 'sensory loss' to 'sensory alteration' in the 1% column.</p> <p>In the 1st ed the 1% column refers to 'sensory loss' whilst all other columns refer to 'sensory alteration'. Sensory alteration can include paraesthesia, dysaesthesia etc, in addition to sensory loss. This should be consistent across all columns</p>

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<p>10. The visual system New Section 10.8</p>	<p>10.8 In Table 3, page 212 of AMA4, the lower number for monocular aphakia or monocular pseudophakia should not be used if a modern intraocular lens implant is present.</p>	<p>Added a new section 10.8 to the Vision Chapter 10.</p> <p>The issues relates to AMA4, chapter 8, P 212 – Visual assessment of cataracts.</p> <p>Cataracts are assessed under monocular aphakia or monocular psuedophakia in Table 3 – Loss (in %) of Central Vision in a Single Eye.</p> <p>The top line is for where there is no lens removal involved and the bottom is for where the lens has been removed or replaced. The least a person is going to get is 50% of the visual system, where the lens has been replaced.</p> <p>Ophthalmology assessor advice to Safe Work Australia is that with current surgery and modern replacement lenses, these may not apply and 50%VI is no longer an appropriate rating.</p>
<p>11. Psychiatric and psychological disorders Section 11.4</p>	<p>The impairment rating must be based upon a psychiatric diagnosis (according to a recognised diagnostic system) and the report must specify the diagnostic criteria upon which the diagnosis is based. Impairments arising from any of the somatic symptom disorders (DSM-5) somatoform disorders (DSM-IV TR, pp 485-511) are excluded from this chapter.</p>	<p>Corrected reference from DSM IV TR to DSM-5.</p> <p>Providing an assessment for permanent impairment for 'somatoform disorders' is not appropriate in a compensation setting as they refer to complaints of physical symptoms for which there is no explained medical reason.</p>
<p>11. Psychiatric and psychological disorders Section 11.12</p>	<p>11.12 To measure the impairment caused by a work-related injury or incident, the psychiatrist must measure the proportion of WPI due to a pre-existing symptomatic condition. Pre-existing impairment is calculated using the same method for calculating current impairment level. The assessing psychiatrist uses all available information to rate the injured worker's pre-injury level of functioning in each of the areas of function. The percentage impairment is calculated using the aggregate score and median class score using the conversion table below.</p>	<p>Clarify that a pre-existing impairment needs to be assessed only if it was symptomatic, as there is otherwise no deduction for this.</p>

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14. The skin Section 14.6	A scar may be present and rated as 0% WPI. Note that uncomplicated scars for standard surgical procedures do not, of themselves, rate an impairment.	In the 1 st ed there was lack of clarity regarding “Standard surgical procedure” and “uncomplicated scar” terminology. The note is deleted as it is considered unnecessary.
14. The skin Sections 14.7, 14.9, Table 14.1	Change the abbreviation from TEMSKI to TAMSKI in 5 places.	TEMSKI is now TAMSKI
16. Digestive system Section 16.9	At 16.9 include new dot point after the following: <ul style="list-style-type: none"> Assessment of colorectal disease and anal disorders requires the report of a treating doctor or family doctor which includes a proper physical examination with rectal examination if appropriate and/or a full endoscopy report. A rectal examination by the medical assessor should be performed only where information required for impairment assessment is not otherwise available. The reasons for the need for the examination should be carefully explained to the claimant. 	In SWA consideration of the template guides there was conflicting opinion about whether an assessor should conduct a rectal examination. Some assessors were adamant they always did one for this type of diagnosis while others said they avoided it in a medicolegal context. The change clarifies the position.
17. Chronic pain Section 17.6, CRPS type 1	17.6. In CRPS type 1, neither the initiating causative factor nor the symptoms involve a specific peripheral nerve structure or territory. For CRPS1 to be present for the purposes of assessment:.....	An issue of clarification rather than correction. Clarify that CRPS 1 does not involve a specific peripheral nerve, unlike CRPS 2. This is specified in AMA5 section 16.5e. The distinction is important to point out given the different impairment assessment methodologies.
17. Chronic pain Section 17.8, CRPS type 2	17.8Rate the extremity impairment resulting from sensory deficits and pain of the injured nerves.	Changed ‘nerves’ to ‘nerve’, i.e. singular. Para 3 states ‘sensory deficits and pain of the injured nerves’ but in CRPS 2 the impairment applies to one nerve only.
Appendix 2: Assessment of PI (s.101) Conversion factor table – item 41	<u>Conversion factor</u> Item 41- 100 x WPI/ 15 20	Changed ‘15’ to ‘20’ in the conversion factor for item 41. Maximum WPI value for the pelvis is 20%. The conversion factor was not amended to take into account the increase from 15%. The conversion factor for the pelvis 100 x WPI / 15. This results in the potential (albeit not aware of it ever occurring) PI of 100 x 20 / 15 = 133.33% impairment.

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<p>Appendix 2:</p> <p>Worked examples/ case studies</p>	<p>All worked examples/ case studies (pp 102-108) of WorkCover WA Guidelines to be deleted.</p>	<p>The worked examples/ case studies in Appendix 2 of the 1st ed have been deleted.</p> <p>Contemporary case studies and current issues will be integrated as part of broader APIA education, peer review, training and alternative information supports.</p>

Appendix 1 - Ankylosis & Arthritis

Ankylosis paragraph 3.24

Table 3.1(a) Impairment for ankylosis in variation from the optimum position in the 1st ed is deleted and replaced with 3 tables.

The table for ankylosis of the hip is 3.1(a), for the knee 3.1(b), and for the ankle 3.1(c). The following tables are inserted underneath paragraph 3.24:

Table 3.1(a): Impairment of Ankylosis of the Hip in variation from the optimum position:

Whole person (lower extremity) impairment

Position:	5(12)	10(25)	15(37)	20(50)
Flexion(°)	20-40	10-19	0-9	
Flexion(°)	40-49	50-59	60-69	70+
Internal rotation(°)	5-9	10-19	20-29	30+
External rotation(°)	10-19	20-29	30-39	40+
Abduction (°)	-	5-14	15-24	25+
Abduction (°)	-	5-9	10-14	15+

Note: Ankylosis in flexion between 25-39° give 0(0)% impairment.
(Table 17-15 to 17-19)

Table 3.1(b): Impairment for Ankylosis of the Knee in variation of the optimum position:

Whole person (lower extremity) impairment

Position:	5(12)	10(25)	13(33)
Varus (°)	0-9	10-19	20+
Valgus (°)	10-19	20-29	30+
Flexion (°)	20-29	30-39	40+
Internal or external malrotation (°)	10-19	20-29	30+

(Tables 17-20 to 17-23)

Table 3.1(c) Impairment for ankylosis of the ankle in variation from the optimum position

Position	Whole person (lower extremity) [foot] impairment (%)			
	2 (5) [7]	4 (10) [14]	7 (17) [24]	10 (25) [35]
1. Dorsiflexion	5 - 9 °	10 - 19 °	20 - 29 °	30 °+

2. Plantar flexion	-	10 - 19 °	20 - 29 °	30 °+
3. Varus	5 - 9 °	10 - 19 °	20 - 29 °	30 °+
4. Valgus	-	10 - 19 °	20 - 29 °	30 °+
5. Internal rotation	0 - 9 °	10 - 19 °	20 - 29 °	30 °+
6. External rotation	15 - 19 °	20 - 29 °	30 - 39 °	40 °+

Arthritis – paragraph 3.30

The following paragraphs in red strikethrough under paragraph 3.30 are deleted and not in the 2nd ed:

3.30 The accurate radiographic assessment of joints always requires at least two views. In some cases, further supplementary views will optimise the detection of joint space narrowing or the secondary signs of osteoarthritis.

~~Sacro-iliac joints: Being a complex joint, modest alterations are not detected on radiographs, and cross-sectional imaging may be required. Radiographic manifestations accompany pathological alterations. The joint space measures between 2mm and 5mm. Osteophyte formation is a prominent characteristic of osteoarthritis of the sacro-iliac joint.~~

~~Hip: An anteroposterior view of the pelvis and a lateral view of the affected hip are ideal. If the affected hip joint space is narrower than the asymptomatic side, cartilage loss is regarded as being present. If the anteroposterior view of pelvis has been obtained with the patient supine, it is important to compare the medial joint space of each hip as well as superior joint space, as this may be the only site of apparent change. If both sides are symmetrical, then other features, such as osteophytes, subarticular cyst formation, and calcar thickening should be taken into account to make a diagnosis of osteoarthritis.~~

~~Knee – Tibio-femoral joint: The best view for assessment of cartilage loss in the knee is usually the erect intercondylar projection, as this profiles and stresses the major weight bearing area of the joint which lies posterior to the centre of the long axis. The ideal x-ray is a posteroanterior view with the patient standing, knees slightly flexed, and the x-ray beam angled parallel to the tibial plateau (Rosenberg view). Both knees can readily be assessed with the one exposure. In the knee it should be recognised that joint space narrowing does not necessarily equate with articular cartilage loss, as deficiency or displacement of the menisci can also have this effect. Secondary features, such as subchondral bone change and past surgical history, must also be taken into account.~~

~~Knee – Patello-femoral joint: Should be assessed in the 'skyline' view, again preferably with the other side for comparison. The x-ray should be taken with 30 degrees of knee flexion to ensure that the patella is load-bearing and has engaged the articular surface femoral groove.~~

Arthritis – paragraph 3.31

The following paragraphs in red strikethrough under paragraph 3.31 are deleted and not in the 2nd ed:

3.31 Footnote to Table 17-31 (p 544 AMA5) regarding patello-femoral pain and crepitation:

This item is only to be used if there is a history of direct injury to the front of the knee, or in cases of patellar translocation/dislocation without there being direct anterior trauma. This item cannot be used as an additional impairment when assessing arthritis of the knee joint itself, of which it forms a component. If patello-femoral crepitus occurs in isolation (i.e., no other signs of arthritis) following either of the above, then it can be combined with other diagnosis based estimates (Table 17-33, AMA5, p 546). Signs of crepitus need to be present at least one year post injury.

Note: Osteoarthritis of the patello-femoral joint cannot be used as an additional impairment when assessing arthritis of the knee joint itself, of which it forms a component.

~~Ankle: The ankle should be assessed in the mortice view (preferably weight-bearing), with comparison views of the other side, although this is not as necessary as with the hip and knee.~~

~~Subtalar: This joint is better assessed by CT (in the coronal plane) than by plain radiography. The complex nature of the joint does not lend itself to accurate and easy plain x-ray assessment of osteoarthritis.~~

~~Talonavicular and calcaneocuboid: Anteroposterior and lateral views are necessary. Osteophytes may assist in making the diagnosis.~~

~~Intercuneiform and other intertarsal joints: Joint space narrowing may be difficult to assess on plain radiography. CT (in the axial plane) may be required. Associated osteophytes and subarticular cysts are useful adjuncts to making the diagnosis of osteoarthritis in these small joints.~~

~~Great toe metatarsophalangeal: Anteroposterior and lateral views are required. Comparison with the other side may be necessary. Secondary signs may be useful.~~

~~Interphalangeal: It is difficult to assess small joints without taking secondary signs into account. The plantardorsal view may be required to get through the joints, in a foot with flexed toes.~~