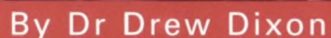
By Dr Drew Dixon

The 4th, 5th and 6th editions of the AMA Guides A comparison for PI lawyers

With the publication of the 6th edition of the AMA *Guides to the Evaluation of the Permanent Impairment* (AMA VI), there has been a paradigm shift from objective impairment assessment to one of functional disability when rating compensation cases following injury. >>

While the 4th and 5th editions of the AMA Guides (AMA 4 and 5) provided a reasonably standardised format for rating – for example, musculo-skeletal injuries – these ratings have been modified in some jurisdictions by *Guidelines to the Guides* (Guidelines). For example, WorkCover NSW (WCC NSW) is about to launch its 4th edition Guidelines to AMA 5, and the Motor Accidents Authority (MAA NSW) has issued a 2nd edition Guidelines to AMA 4. In particular, the MAA Guidelines have formulated new assessment criteria for psychological injury, which have been substantially adopted by AMA 6.

INTRODUCTION

In the more recent 6th edition of the AMA Guides, impairment assessment is based more on defining the medical impact of injury or illness on activities of daily living (ADLs): and this is a critical component in assessing workers' compensation, motor accidents and personal injury claims. The methodology adopted in the 6th edition has been standardised across the multiple organs systems based on the international classification of functioning disability and health (ICF) taxonomy. There are five impairment classes that rate claimants from no impairment to the most severe impairment. A diagnosis-based grid has been developed for each organ system, and each diagnosis within the five classes of impairment severity (nil, minimal, mild, moderate and severe), with functionally based histories (FH), physical findings (PF) and objective clinical studies, (CS) (investigations) being integrated to determine the grade within each particular impairment class.

Comprehensive training is required for each of the 4th, 5th and 6th editions, and this is provided on a regular basis by organisations such as the relevant statutory authorities, the American Academy of Disability Evaluating Physicians (AADEP) and the American Board of Independent Medical Examiners (ABIME). The evaluation of the AMA Guides is supported by case book studies edited by Christopher R Brigham, who has provided 1st, 2nd and 3rd editions of the *AMA Guides Casebook* for use by doctors performing evaluations.

The application of the Guides depends on the jurisdictions. For example, in NSW, the Workers' Compensation Commission (WCC) uses AMA 5, the MAA uses AMA 4 (both modified by their own Guidelines) and in the Northern Territory, AMA 6 applies and has been mooted for use in New Zealand.

SPINAL INJURY

In the musculo-skeletal system, one essential difference between AMA 4 and AMA 5 is the application of the impact on ADLs by spinal impairment, allowing 0 to 3 per cent for impact on domestic duties, yard work, recreation as well as on personal care in the 5th edition. These ADLs are rated 1, 2 and 3 per cent respectively and can be added to the impairment; for example, of the lumbar spine. Both AMA 4 and AMA 5 use diagnosis-related estimates (DRE), to assess impairment for the spinal conditions and, in the upper and lower limbs, Diagnosis Based Estimates (DBE). Neither Guide provides for the impact of ADLs on either the upper or lower extremity assessments.

Range of motion of spinal movement as a measureable impairment is disallowed in AMA 5 and AMA 6 and by the MAA Guidelines, but alteration of motion segment integrity (AOMSI) is allowed (for example, fusion of the cervical spine). Asymmetry of spinal motion (dysmetria) is an important differentiator in spinal injury, together with muscle spasm or guarding and radicular complaint, which may help to assist a claimant to achieve a higher DRE spinal impairment category.

SPINAL CORD INJURY

Spinal conditions can be combined with injuries to the spinal cord *per se* as found in Chapter 13, AMA 6 and Chapter 13, AMA 5. Spinal cord injury is incorporated in AMA 4 under the spinal impairment section, Chapter 3, where DRE tables have been included for each category of very severe spinal injuries (Category VI, VII, VIII) with quadriplegia and paraplegia and cauda equina syndrome, with or without bladder or bowel dysfunction. This is useful as it combines assessments for spinal injury as DRE ratings in the one chapter, which are separated in the other two more recent Guides.

EFFECTS OF TREATMENT

AMA 6 allows for the effect of treatment on whole person impairment (WPI) ratings – for example, improvement in neck function following cervical fusion – to allow for more reliable WPI ratings. Another area is the burden of treatment compliance (BOTC) where, but for medication, a chronic condition such as diabetes, asthma, hypertension, or peptic ulcer, the claimant would have had a higher WPI. In certain circumstances, the independent medical examiner (IME) can add a 2-3 per cent modifier to BOTC.[1]

PAIN

Although there are pain chapters in both AMA 4 and AMA 5, allowing 0 to 3 per cent for pain, this is disallowed under the NSW MAA and WCC jurisdictions.

In AMA 6, there is a pain chapter, again allowing for rating on painful conditions where pain is a significant stand-alone diagnosis, but is precluded from the Guides in spinal conditions which have already been included as part of the clinical history. In this respect, a pain and disability questionnaire (PDQ)[2] is used as part of the functional history and provides visual analogue scale guidelines (VAS), which the claimant can fill out as a guide to the impact on their functionality due to their spinal condition.

COMPLEX REGIONAL PAIN SYNDROME (CRPS)

CRPS is addressed well in AMA 5, but has strict requirements: 8 or more of 11 signs are needed to confirm such a diagnosis, whether it be CRPS I (without major nerve injury) or CRPS II, (with major nerve injury). These conditions were called causalgia and reflex sympathetic dystrophy (RSD) in AMA 4. Under AMA 6, the Guidelines >>

are modified to allow the diagnosis of CRPS where there is one major symptom and one major sign (vasomotor, sudomotor, trophic changes or radiological) allowing for grading within a particular grid class. This may be a fairer way of assessing CRPS, but it is noted that, generally, 70 per cent of claimants with this condition recover or substantially improve with time.

SCARRING AND DISFIGUREMENT

In most jurisdictions, the assessment for post-traumatic scarring has been statutorily addressed, as it is not covered sufficiently in the AMA Guides. The current system in Australia is generally the use of the Evaluation of Minor Skin Impairments (TEMSKI) Guides, which provide useful extensions to the skin chapter in the AMA 4 and AMA 5 Guides, allowing a rating of 0 to 7 per cent WPI. Generally, ratings of 0 to 4 per cent WPI can be done by most evaluating doctors and those between 5 and 9 per cent generally require assessment by plastic surgeons, but can also be provided by suitably qualified, accredited specialists. The rating system is interesting in that it rates the skin as a single organ; in cases of multiple scarring, these ratings are aggregated to perform a total WPI for scarring. There is a separate table for facial scarring in AMA 4, and in AMA 5, where it has been further modified in NSW with an alternative[3] of the WCC Guidelines, allowing for facial disfigurement from simple scars through to severe deformity or facial paralysis. The assessment for scarring is additional to the musculo-skeletal impairments.

THE DIGESTIVE SYSTEM

The digestive system generally requires rating by a gastroenterologist or a general surgeon, and in most jurisdictions allows for classification of upper and lower gastro-intestinal (GIT) dysfunction, classes 1 through to 4, depending on severity – for example, gastro-oesophageal reflux due to anti-inflammatories (upper GIT) and constipation due to analgesic medication (lower GIT dysfunction). This rating is added to the musculo-skeletal impairment. Allowance is made for impairment for claimants who have post-traumatic hernias (inguinal, umbilical) and whose impairment is ongoing despite operative repair. These impairments are usually assessed by a general surgeon. Typically, a palpable hernia in the 4th and 5th editions following a lifting strain at work is rated Class 1, 0-9 per cent, average 5 per cent WPI, but in the 6th edition this can be modified, based on the claimant's level of discomfort at the site of the palpable defect. This difference is important as there may be painful neuromas in the groin at the time of assessment or mesh allodynia (pain due to mesh implanted for the repair). These inguinal symptoms are rated under the WCC Guidelines (NSW), chapter 16. In Table 6-10 of AMA 6, grading is allowed within each class for herniation.

HEAD INJURY

Alteration in the level of consciousness and the impact of acute traumatic brain injury (ATBI) on mental status is rated in all three Guides. AMA 4 has been modified by the MAA in NSW to include, in its own MAA Guidelines, a clinical dementia rating (CDR) score from Table 5-1; and then this is further rated according to mental status, Class 1 through to 4, in Table 5.2 in its Guidelines. In AMA 5, Chapter 13 provides separate ratings for disturbances in a claimant's level of consciousness and awareness (Table 13-2); episodic neurological impairments – for example, epilepsy, arousal and sleep disorders such as reduced daytime alertness; mental status; cognition and higher integrative function (for example, memory, orientation, judgement and problem-solving); community affairs, impact on home and hobbies and personal care. Under WCC Guidelines, these ratings of impairment can be combined. There are similar CDR and mental status impairments as per the MAA Guidelines. The CDR ratings are found in Table 13-5 and the impairment to mental status in Table 13-6.

Generally, in the MAA and WCC jurisdictions in NSW, impairment for head injuries or mental status is not rated in addition to musculo-skeletal injury, but rather as an alternative rating following injury. If it is severe, and exceeds the threshold of 15 per cent WPI, it is permitted as a stand-alone diagnosis. Usually it requires evidence of intra-cerebral trauma (for example, subdural or intracranial haemorrhage), plus or minus skull fracture and a low Glasgow Coma Score (GCS), which is often found in ambulance notes, Emergency Accident Centre files, intensive care ward notation and in neurological wards. These conditions are generally assessed by neurosurgeons, neurologists and rehabilitation physicians with confirmatory neuro-psychological assessment.

In AMA 6, traumatic brain injury is evaluated using a significantly different approach, rating impairment due to alteration in mental status, cognition and highest integrative function (MSCHIF). This edition notes that if mild traumatic brain injury persists, post-concussive symptoms may have non-injury related factors complicating the clinical cause (MTBI). Most people recover from mild traumatic brain injury (MTBI). This is discussed in Section 13.3 and noted in Table 13-8 and 13-9 of AMA 6.

Cranial nerve injuries are mostly rated in Chapter 11 of AMA 6; ear, nose and throat and related structures in Chapter 12 the Visual System, and are best assessed by the appropriate ear nose and throat specialist with audiography and ENG (electronystograms) as well as ophthalmologists, orthoptic plotting of visual fields and optical visual acuity charting, and neurological review by neurologists and neurosurgeons.

HEADACHE

Headache following head injury in AMA 4 does not provide numeric impairment, although it is listed. In AMA 5, it is rated according to severity of pain, activity limitation, effect of pain on mood, as well as global pain behaviour and adjudged credibility of the claimant by the evaluator. Generally, however, a percentage rating is not allowed for headache in the NSW jurisdiction. In the AMA 6 rating, a painful headache has to have a reasonable medical basis, and be identified by the patient as a major problem, and can be

assessed under the PDQ score, but the evaluator must feel that the patient's presentation is reliable and credible in a permissible range of up to 3 per cent WPI. Impairment is often judged not to be permanent, and in the case of most headaches, no WPI rating is usually given.

DOMAINS OF DISABILITY

In summary, AMA 6 represents a shift from objective signs to subjective disability. Disability can be reflected in simple ADLs, such as toileting and dressing, or instrumental activities (complex tasks) of daily living (IDALs) – for example, meal preparation or other domains such as participation in sporting activities. The impact of injury on these domains of activities of daily living, be it personal care, domestic duties, yard work, or recreational pursuits is incorporated significantly in the 6th edition Guides as part of the functional history, and have been addressed under the ADLs for spinal injury in AMA 5.

As well as the PDQ score for evaluating impairment on ADLs on spinal injury, domains of personal function can include mobility – such as transfers or ambulation – as well as self-care, meal preparation and fiscal management. Functional assessments may include the use of walking aids (assistive devices) or personal assistants for mobilisation, and working aids such as Einstein computer programming to enhance clerical skills. The 6th edition Guides has the most impact in that it gives greater weight to this functional assessment than do previous editions. Also useful in functional history, is the Quick Dash test,[4] which is employed in the upper limb (meaning disability in arm, shoulder and hand) as well as a functional table adopted for the lower limb scoring found under the lower limb outcomes questionnaire (LLOQ),[5] as developed by the American Academy of Orthopaedic Surgeons.

BEHAVIOURAL DISORDERS

Injury behavioural disorders are based on Diagnosis and Statistical Manual and Mental Disorders, 4th edition DSM-4). Diagnosis and impairment rating in AMA 6 is limited to mood disorders (depression, bi-polar), anxiety states and psychotic disorders (including schizophrenia), but excludes somatoform disorders, dissociative disorders and dementia as well as substance abuse and psychiatric manifestations of traumatic brain injury. It is noted that the new edition (DSM-5) is now available which has modified certain areas; this may be incorporated in future editions of the Guides.

IMPAIRMENT EVALUATION AND THE LAW

Contemporary adjudication processes increasingly question the science behind doctors' assertions, and doctors are increasingly being faced with the challenge of litigants wanting multiple opinions. It is noted that the impairment evaluation is a form of expert testimony and if WPI is not provided, the courts may fill the void. In legal proceedings, the specialist's opinion can be undermined if unsubstantiated by established science, and this can lead to challenges.

The use of the AMA Guides requires doctors to use their skills, knowledge and therapeutic ability in making accurate diagnoses and to determine impairment, as well as determining whether treatment is reasonably necessary. Due diligence means that arbitrary and dogmatic opinions taken from well-qualified experts may not be held to be credible and the court need not accept testimony connected to existing data if it is cited only by that expert.

Those who provide IME reports and expert testimony should support their opinions with clinical evidence and provide a statement of reasons; that is, the rationale behind the WPI rating, plus or minus the need for reasonable treatment. To this can be added the need for reasonable costs for such treatment and whether such reasonable treatment and costs are causally related to the claimant's stated injuries.

In impairment evaluation, the clinical rater needs to peruse reports *prior* to seeing the claimant to review the documents, to clarify and reconcile any inconsistencies and focus on the portion of the relevant history, and to avoid 'inconsistent' efforts from the claimant. This will go a long way to ensuring that a satisfactory WPI rating is performed. It is worth noting that if a contra-lateral extremity is uninjured, it may serve as a normal baseline, which should be used and incorporated in the WPI rating calculation. In the US, the Daubert test regarding the admissibility of expert opinion is used. It includes:

1. peer review;
2. testability (known error rate);
3. general acceptance (the Frye test – 1923);[6] and

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4. the court need not accept testimony connected to the existing data, if it is presented only by that expert.[7]

CAUSATION

Under WCC (NSW), causation is usually decided by the arbitrator or has been accepted by the insurer. In MAA (NSW), the medical assessment specialist (MAS assessor) is asked to decide which of the current complaints are causally related to the subject motor vehicle accident, which are pre-existing and which injuries are due to other or subsequent events (for example, a previously symptomatic neck condition with treatment immediately prior to a motor vehicle accident may be rated DRE Category II for the neck or lumbar spine and then be deducted from a DRE II (or more) assessment arising from the subject motor vehicle -accident that has occurred subsequently). Pre-existing conditions under WCC (NSW) are assessed under s323 of the 1998 Act, and under statutory provision s323(2), a one-tenth deduction can be made where the extent of the pre-existing condition is too difficult or too costly to estimate.

EMPLOYABILITY

It is noted that impairment rating does not necessarily correlate with a claimant's employability, fitness to return to work, fitness to perform pre-injury duties or fitness to perform selected or modified work, but represents an evaluation for determining compensation for the injuries, including pain and suffering, as well as economic loss and other entitlements for other non-pecuniary losses (for example, disfigurement).

The process of return to work may be hampered by ongoing claims, and the legal process should not thwart the chance that a claimant has to return to a remunerative occupation. Assessments that appear too narrow to claimants or their legal advisers may impact negatively on morale, leading to reluctance to re-enter the work place and, as a consequence, hinder ongoing rehabilitation. Vocational guidance should be instigated before the assessment process is completed so that the wait for permanent impairment ratings does not delay or deter claimants from returning to work.

APPORTIONMENT

The final WPI ratings have to be modified by the existence of pre-existing conditions or injuries and be apportioned when there is more than one injury and be varied if there is a subsequent, similar injury before permanent impairment ratings are made. Arbitrators need to be conversant with such changes before final decisions are made.

APPEALS

Under both MAA (NSW) and WCC (NSW), appeals may be allowed if there is evidence of procedural error or unfairness, or substantial grounds for appeal, such as omission of known facts or relevant evidence (and in some cases where fresh, previously undisclosed evidence becomes available – for example, video surveillance).

Appeal panels usually comprise two approved medical specialists (AMS) and an arbitrator from WCC (NSW) or three MAS assessors (medical approved specialists) in MAA appeals. Such safeguards provide for alternative dispute resolution (ADR) in a bid to ensure procedural fairness and allow for the final WPI so that claims can be settled.

THRESHOLDS

Under the MAA Guidelines, claimants must have greater than 10 per cent WPI to meet the threshold for pain and suffering and under the NSW legislation the WCC threshold is now more than 10 per cent for musculo-skeletal injury and 15 per cent for psychological impairment. For pain and suffering, the AMA Guides remain important and are critical to tribunals or courts in final arbitrated or judicial decisions.

CONCLUSION

In summary, AMA 4 and 5 were an attempt to provide objective ratings on objective basis, but in the more recent AMA 6, more weight is given to disability which has an impact on functionality and on the claimant's ADLs, as well as allowing for improvement in ratings following treatment. It represents an attempt to achieve more internal consistency in performing WPI evaluations and provides a consistent format to be followed throughout.

It appears that while AMA 6 has not found favour with many of the Australian jurisdictions, further modification in a future 7th edition of the AMA Guides may well address issues of apportionment between injuries and pre-existing conditions, scarring and disfigurement and further define (for rating purposes) conditions such as complex regional pain syndrome, to allow for more inter-rater reliability. ■

Notes: 1 Appendix B, AMA 6, p607. **2** AMA 6, Figure 17a, p600. **3** WorkCover Guidelines, Table 6.1, p38. **4** Table 15-39, AMA 6. **5** Table 16-0, Appendix 16-A, AMA 6, p555. **6** *Frye v United States*, 293 F. 1013 9d.c. Cir. 1923). **7** *Daubert v Merrell Dow Pharmaceutical*, 509 US 579, 113 S Ct 2786, 125L. Ed. 469 (US June 28, 1993).

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