



Updates on

AMA Guides to Evaluation of Permanent

NSRP Workers' Compensation Committee Meeting
San Diego, CA - November 18, 2009


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Disclosures

- Christopher Brigham, MD
 - Chairman of Impairment Resources, LLC (organization provides consulting services, rating reviews and training)
 - Senior Contributing Editor, Sixth Edition (not financially compensated)
 - Editor, *Guides Newsletter* and *Guides Casebook*
- This presentation is neither endorsed nor sponsored by the American Medical Association; opinion and the content of the training presentations present the views of the presenter and not necessarily those of the AMA, particularly on matters of medical policy.




Issues to Discuss

- *AMA Guides* evolution
- Sixth Edition fundamentals and five axioms
- Case example (to illustrate process)
- Perceptions and reality
- Future
- Discussion
- What Editions of the *AMA Guides* do you use?
- What impairment assessment challenges are you facing?
- What questions do you need answered?

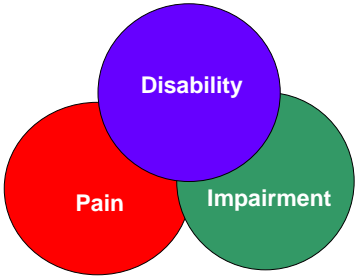


Impairment – In Perspective


- Impairment, a “loss”, reflects failure to prevent an injury or illness and/or to restore function.
- Goal is an accurate, unbiased assessment of impairment via efficient means – assuring valid and reliable definition.
- The Sixth Edition reflects the current standard; responding to opportunities for improvement from prior Editions.
- OWCP (FECA) required use of Sixth Edition as of May 1, 2009.
- Reaction to the Sixth Edition exemplifies challenges core to Longshore and Harbor Workers Act and to workers compensation.





Pain, Impairment and Disability



Impairment ≠ Work Restrictions

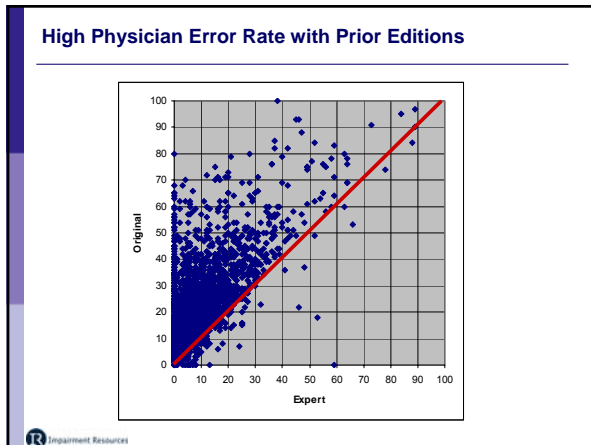
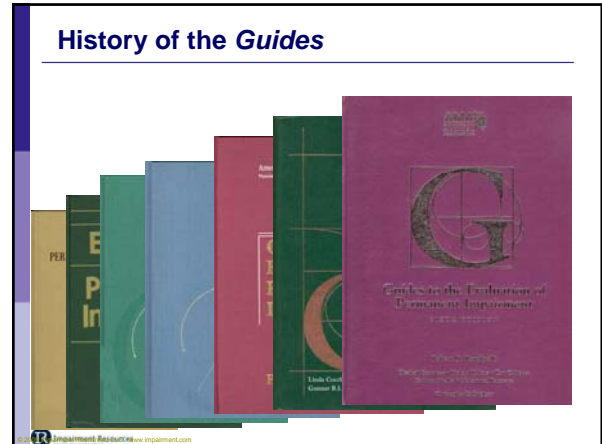


Impairment is Not Synonymous With Disability

Contrasts: Needlessly disabled and exceptionally abled

Negative (Pessimistic) Positive (Optimistic)	Others Responsible - Victim Self Responsible / Locus of Control	
Focus on Weakness Focus on Strength	Dependent Independent	Angry Gracious
Encounter Problems and Barriers See Challenges and Opportunities	Depressed Joyful	Fearful Courageous
Energy Draining Empowering	Work a Burden Work a Purpose	



Significance of Errors in Longshore

Based on review of 310 Longshore Cases (consecutive)

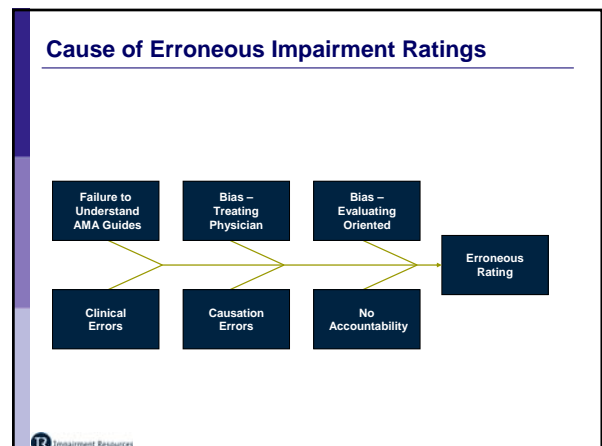
Body Part	Error Rate	Original Rating	Revised Rating	Difference
Upper Extremity	65%	15.8	6.8	9.0
Lower Extremity	53%	21.2	11.8	9.4
Whole Person	75%	16.7	8.7	8.0

Return on Investment Potential for Identifying and Managing

Regional Impairments: 40:1
Whole Person Impairments: 30:1


Physician Selection by Body Part

Digit	Doctor	# of Cases	Avg Original	Avg Revised	Avg Difference	Avg Quality	% Cases
A		16	23	19	-4	3.3	20%
C		1	55	55	0	4.0	1%
O		3	5	2	-2	3.7	4%
P		2	14	14	0	4.7	4%
E		3	14	14	0	4.7	1%
D		1	47	47	0	4.0	1%
B		2	11	11	0	4.0	3%
I	sthy	2	11	8	-3	4.0	3%
L		1	20	20	0	5.0	1%
N	ha	2	10	10	0	3.5	3%
N		2	29	29	0	3.6	3%
N		2	78	69	-7	4.0	3%
S		1	18	18	0	4.0	1%
S		2	18	18	0	5.0	3%
S		1	5	5	0	4.0	1%
S		1	15	15	0	3.5	1%
S		1	17	21	4	3.0	1%
V		1	37	49	12	4.3	1%
Z		1	4	4	0	3.0	1%
Digit Total		80	19	18	-1	3.7	100%
Hand	Doctor	# of Cases	Avg Original	Avg Revised	Avg Difference	Avg Quality	% Cases



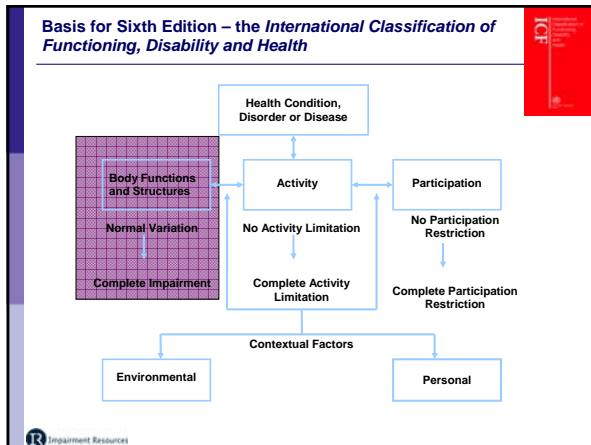
Sixth Edition Responded to Prior Concerns

- Prior editions
 - Did not provide a comprehensive, valid, reliable, unbiased, and evidence-based rating system
 - There were inconsistencies with some approaches
 - Incorporated principles not consistent with clinical care (such as the premise that treatment – including surgery – should improve function)
 - Resulted in poor interrater reliability
- Medical care changes with time, as do the *Guides*



Sixth Edition Five Axioms

1. Adopt methodology of International Classification of Functioning, Disability and Health (ICF)
2. Become more diagnosis-based
3. Simplicity and ease
4. Conceptual and methodological congruity
5. Provide rating percentages that consider clinical and functional history, examination and clinical studies



Impairment Rating Considerations

1. What is the problem?
2. What difficulties are reported?
3. What are the exam findings?
4. What are the results of the clinical studies?

Diagnosis-Based Impairment Classes

- Class 0: No objective problem
- Class 1: Mild problem
- Class 2: Moderate problem
- Class 3: Severe problem
- Class 4: Very severe problem


Vast majority of impairment ratings are based on diagnosis-based impairments, with adjustments (as applicable) for function, physical examination and clinical studies)

Diagnoses and Adjustments Must Be Valid / Reliable

The newsletter cover features the title 'The Guides Newsletter' and the subtitle 'Expert advice, practical information, and current trends on impairment evaluation'. The main article is 'Examinee-Reported History Is Not a Credible Basis for Clinical or Administrative Decision Making' by Robert J. Barth, PhD. The cover also lists other content: 'In this Issue: Examinee Reported History, Lower Extremity Workbook, Excerpts, Q and A', 'Book Review: Guide to the Evaluation of Disease and Injury Classification', 'Calendar of Events', 'In upcoming issues: Complex Regional Pain Syndrome Update, Rating by Analogy: Abusing the Guides Fifth Edition's Reflections, Comparison of Two Jurisdictions: California vs Hawaii, Observations on the Sixth Edition'.

Example: Upper Extremities

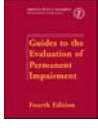
- History:** s/p wrist fusion for osteoarthritis
- Current Symptoms:** difficulties with many ADLS, however self-care unassisted
- Functional Assessment:** QuickDASH 45
- Physical Exam:** Fused in neutral position, mild tenderness
- Clinical Studies:** X-rays reveal solid fusion, prior X-rays revealed severe post-traumatic osteoarthritis




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Fourth and Fifth Editions

Fourth Edition
 3.1h Wrist
 Figure 26 = 21% UEI
 Figure 29 = 9% UEI
 Total = 30% UEI



Fifth Edition
 16.4g Wrist Motion Impairment
 Figure 16-26 = 21% UEI
 Figure 16-31 = 9% UEI
 Total = 30% UEI



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Table 15-3 Wrist Regional Grid (6th ed, 396)

Diagnostic Criteria	Class 0	Class 1	Class 2	Class 3	Class 4
RANGES	0%	1% - 13%	14% - 25%	26% - 49%	50% - 100%
GRADE		A B C D E	A B C D E	A B C D E	A B C D E
Ligament / Bone / Joint / Wrist Arthrodesis (Fusion)				26 29 30 32 34 Wrist arthrodesis in functional position (10° extension to 10° flexion, radial 5° to ulnar 10°)	If non-optimal positioning assess per Section 15.7, Range of Motion Assessment

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Sixth Edition Adjustments

- Functional Assessment**
 - Symptoms with normal activity and QuickDASH 45
 - Grade Modifier 2
- Physical Exam**
 - n/a – Used in placement process
- Clinical Studies**
 - Confirms diagnosis, prior findings of “severe post traumatic arthritis” (consistent with diagnosis, i.e. “severe”)
 - However, would consider n/a since also identifies the class placement

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Table 15-7 Functional History Adjustment: Upper Extremities (6th ed, 406)

Functional History Factor	Grade Modifier 0	Grade Modifier 1	Grade Modifier 2	Grade Modifier 3	Grade Modifier 4
	Asymptomatic	Pain / symptoms with strenuous / vigorous activity	Pain / symptoms with normal activity	Pain / symptoms with less than normal activity	Pain / symptoms at rest
		AND Able to perform self-care activities independently	AND Able to perform self-care activities with modification but unassisted	AND Requires assistance to perform self-care activities	AND Unable to perform self-care activities
QuickDASH Score	0-20	21-40	41-60	61-80	81-100

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Sixth Edition Diagnosis and Adjustments

Diagnosis-Based Impairment

Diagnosis	Grid	Class 0	Class 1	Class 2	Class 3	Class 4
	Table 15-3	No problem	Mild problem	Moderate problem	Severe problem	Very severe problem

Adjustment Factors – Grade Modifiers

Non-Key Factor	Grid	Grade Modifier 0	Grade Modifier 1	Grade Modifier 2	Grade Modifier 3	Grade Modifier 4
Functional History	Table 15-7	No problem	Mild problem	Moderate problem	Severe problem	Very severe problem
Physical Exam	Table 15-8	No problem	Mild problem	Severe problem	Very severe problem	Very severe problem
Clinical Studies	Table 15-9	No problem	Mild problem	Moderate problem	Severe problem	Very severe problem

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Sixth Edition Adjustments

CDX	GMFH	GMPE	CMCS
3	2	n/a	n/a

Net Adjustment Calculations

(GMFH-CDX) 2 - 3 = -1
 (GMPE-CDX) n/a - 3 = n/a
 (GMCS-CDX) n/a - 3 = n/a
 Net Adjustment = -1

Result is class 3 with adjustment of -1 from the default value C which equals grade B.

Table 15-3 Wrist Regional Grid (6th ed, 396)

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RANGES	0%	1% - 13%	14% - 25%	26% - 49%	50% - 100%
GRADE		A B C D E	A B C D E	B C D E	A B C D E
Ligament / Bone / Joint / Wrist Arthrodesis (Fusion)				2L 2B 30 32 34 Wrist arthrodesis in functional position (10° extension to 10° flexion, radial 5° to ulnar 12°)	If non-optimal positioning assess per Section 15.7, Range of Motion Assessment

Concern / Perception	Reality
<ul style="list-style-type: none"> Concerns or myths – often resulting from lack of knowledge and sometimes from bias. 	<ul style="list-style-type: none"> The truth about the Sixth Edition.

Concern / Perception	Reality
<ul style="list-style-type: none"> Sixth Edition is controversial 	<ul style="list-style-type: none"> Basis for controversy appears to be driven by lack of knowledge and self-serving behavior of specific stakeholders: <ul style="list-style-type: none"> Stakeholders reluctant to change from a system they are familiar with, and Stakeholders who fear the values may be less and may favor approaches that are more ambiguous (resulting in more controversy and litigation).

Concern / Perception	Reality
<ul style="list-style-type: none"> There was a more rapid reaction to the Sixth Edition, than there was to prior Editions. 	<ul style="list-style-type: none"> The internet is much more widely used for rapid dissemination of news and discussion now, compared to when the Fifth Edition was released (2000) and the Fourth Edition was released (1993).

Concern / Perception	Reality
<ul style="list-style-type: none"> Stakeholders do not like the Sixth Edition 	<ul style="list-style-type: none"> Most stakeholders have not yet had an opportunity to learn the Sixth Edition, and therefore are biased opinions of certain stakeholders. Majority of physicians surveyed prefer the Sixth Edition (66% and informal polls in training 100%), and all plaintiff attorneys surveyed do not. (Mixed response by others.)

Concern / Perception	Reality
<ul style="list-style-type: none"> The impairment values will be different. (Specific concerns by plaintiff attorneys and plaintiff-biased physicians that rating values are less.) 	<ul style="list-style-type: none"> Impact not fully identified - comprehensive study of impact of the Sixth Edition is in process. Need to consider whether comparing to prior observed ratings or corrected ratings. Impairment ratings follow precedent unless reason for change (different outcomes, erroneous approaches). Common conditions not previously ratable may be ratable in certain situations (i.e. soft tissue, typically 1% - 3%). Surgery itself typically does not increase impairment, rather focus is on outcome.

Extremity Rating – Typical Case Examples (WPI)

	Fourth	Fifth	Sixth
Digit Amputation – Index at DIP joint	5%	5%	5% - 6%
Wrist Fracture – residual symptoms and objective findings and/or functional loss with normal motion	0%	0%	1% - 3%
Wrist Fracture – lack of 20 degrees flexion and of 20 degrees extension	4%	4%	4%
Lateral Epicondylitis – residual symptoms without consistent objective findings	0%	0%	0% - 1%
Impingement Syndrome – residual loss, functional with normal motion	0%	0%	1% - 3%
Carpal Tunnel Syndrome - confirmed, s/p release, symptoms and no objective findings	0%	0% - 3%	1% - 2%
Partial Medial Meniscectomy - symptoms, normal exam)	1%	1%	1% - 2%
Knee Arthritis – moderate, 2 mm cartilage interval	8%	8%	6% - 10%
s/p Total Knee Replacement – fair result	20%	20%	12% - 17%
Average	4%	4%	4%

Concern / Perception	Reality
<ul style="list-style-type: none"> The error rate will be higher. 	<ul style="list-style-type: none"> Observations to date do not support this conclusion. Following errors common with the Fourth and Fifth Editions will not occur with the Sixth: <ul style="list-style-type: none"> Rating for strength loss (grip or clinical) Rating for subjective complaints in addition to the musculoskeletal rating (i.e. pain, sex and sleep) Confusion with spine whether to rate on the basis of Diagnosis Related Estimate or Range of Motion

Impairment Rating Value Conclusions

- Fifth Edition reflected in aberrant ratings for surgical spine impairments – despite goal of treatment being increased function (and decreased impairment) the procedure itself resulted in high and unsubstantiated ratings.
- Values will be similar to prior Editions, with exception of:
 - Surgical Spine Cases (when compared to Fifth Edition, will be similar to Fourth; note this was significant driver in controversy, however n/a in Longshore)
 - Joint Replacements (better functional results)
 - Soft Tissue Injuries without ratable criteria (in certain situations my result in mild rating)
- Magnitude of errors will be less
- Observation: There has been significant reaction to the Sixth Edition (values more similar to those present in the Fourth Edition), yet there was no observed reaction with the changes going from the Fourth Edition to the Fifth Edition (with marked increased in surgical spine impairment values).

Concern / Perception	Reality
<ul style="list-style-type: none"> The impairment rating values in the Sixth Edition are not evidence based. 	<ul style="list-style-type: none"> Impairment rating values have never been evidence based, rather they reflect the consensus of experienced physicians using a modified Delphi panel approach to achieve consensus. Diagnoses, the primary basis for defining impairment, should be evidence-based.

Concern / Perception	Reality
<ul style="list-style-type: none"> Evaluation process is more complex and time-consuming 	<ul style="list-style-type: none"> The approaches used are consistent among most chapters; therefore, once learn approach easily applied to other chapters. Reports by actual users is once have become familiar with approach (usually 10 cases), it is simpler.

Concern / Perception	Reality
<ul style="list-style-type: none"> There will be more disagreement over the final impairment rating. 	<ul style="list-style-type: none"> Majority of ratings per earlier Editions were incorrectly performed. Probable there will be agreement in the vast majority of the cases to class assignment and differences will be to the adjustments which have smaller impact on final rating.

Concern / Perception	Reality
<ul style="list-style-type: none"> Extensive training is required. 	<ul style="list-style-type: none"> As with any new concepts (including medicine and law), ongoing learning is required. Working knowledge of the <i>Guides</i> can be grasped more quickly with the Sixth Edition than earlier Editions – typically in less than a day of training.

Concern / Perception	Reality
<ul style="list-style-type: none"> Sixth Edition is difficult to use due to need to reference Corrections and Clarifications 	<ul style="list-style-type: none"> Sixth Edition is now in Second Printing with all Corrections and Clarifications incorporated. Electronic version available.

Concern / Perception	Reality
<ul style="list-style-type: none"> It is perfectly acceptable to use earlier Editions to assess impairment 	<ul style="list-style-type: none"> Is it acceptable to diagnose and treat a patient by an outdated textbook, particularly when it has now been shown that prior approaches were incorrect?

Future
<ul style="list-style-type: none"> Refinement of approaches piloted in the Sixth Edition Transition to Internet-based resource updated as science evolves Use of best practice approaches and guidelines based on science (rather than faulty belief systems) Recognition and management of root causes for erroneous ratings – and ultimately needless impairment and disability (with associated human and financial costs) Recognition and promotion of human potential rather than focus on deficits and hopefully transformation of the workers compensation and disability field with focus on empowerment and not disablement.

<h2>Discussion</h2> <p>If questions, please email Chris Brigham, MD cbrigham@impairment.com</p> <p>Thanks</p>
