Comparison of the AMA Guides: 4th, 5th and 6th Editions

Division of Workers' Compensation
and
the Workers' Compensation
Research and Evaluation Group
2011

Texas Department of Insurance

Background and Issues

AMA Guides: Recent History

- Third edition published in 1988
  - Emphasis on range of motion
- Third Edition, second printing, February 1989
  - Effective Texas WC system 1991-2001
- Fourth Edition published in 1993
  - Diagnosis related estimate
  - Effective Texas WC system 2001

AMA Guides: Recent History (Continued)

- Fifth Edition published in 2000 - similar to 4th
- Sixth Edition published in 2007, corrections in 2009
  - Paradigm shift
  - Diagnosis-Based Impairments, with consideration of function, physical examination, and clinical studies
  - Increased consistency between chapters
- 2005 amendment to TLC §408.124 granted the Commissioner the authority to adopt editions subsequent to the fourth edition by rule.

Use of AMA Guides in Other States

- Third Edition - 1 state
- Fourth – 8 states (Including Texas)
- Fifth – 13 states
- Sixth – 14 states, Federal FECA and Longshore
- State specific – 8 states
- Not specified – 6 states

- Source - http://www.impairment.com/Use_of_AMA_Guides.htm

Data and Methodology

Project Goal

- Measure and evaluate the system impacts associated with adopting either the 5th or 6th Edition of the AMA Guides

Project Plan

- Review sample of existing Impairment Ratings with 4th, 5th, and 6th Editions of the AMA Guides
- Analyze results for consistency among reviewers and changes between editions
- Compare Texas results with AMA study
- Evaluate system impacts

Reviewers

- Three reviewers with expertise rating per AMA Guides 4th, 5th, and 6th editions
- Blinded to each other
- Special Instructions
  - Rate at MMI vs. injury model
  - APD “significant signs of radiculopathy”
  - “Show your work”

Claims Reviewed: 25 Clinical Vignettes

- Vignettes 1-19: to encompass meaningful clinical differences within the categories – non-surgical vs. surgical treatment, different types of surgery and other factors
- Cases in vignettes 1-19 derived from the 100 most frequent diagnosis codes used by Designated Doctors from 2002-2009 (78 percent of the total DD exams)
- These diagnoses were grouped into 12 clinical categories

Claims Reviewed: 25 Clinical Vignettes (Continued)

- Cases 20-25: based on a random sample of claims with Impairment Ratings 15% or greater
- Less than 5% of impairment ratings were 15% or greater in 2009
- The reviews analyzed were 25 each for two of the reviewers and 24 for the third.

Clinical Vignettes

- Low back pain, lumbar sprain/strain with non verifiable-radicular complaints and moderate residual symptoms/functional deficits
- Symptomatic lumbar HNP with correlating radiculopathy - treated without surgery
- Symptomatic lumbar HNP with correlating radiculopathy - treated with surgical hemi-laminotomy/discectomy without fusion
- 2 level lumbar fusion for segmental instability and HNP
- Neck pain, cervical sprain/strain with non-verifiable radicular complaints and residual symptoms/functional deficits
- Symptomatic cervical HNP with correlating radiculopathy - treated without surgery
- Symptomatic cervical HNP with correlating radiculopathy - surgical

Clinical Vignettes (Continued)

- 2 level anterior cervical discectomy fusion (ACDF) for HNP and segmental instability
- Carpal tunnel syndrome treated with release
- Lateral epicondylitis with moderate residual functional deficits
- Shoulder sprain/strain with moderate residual symptoms/functional deficits
- Full thickness rotator cuff tear – with surgical repair
- Shoulder impingement treated surgically with distal clavicular resection
- Knee sprain with moderate residual symptoms/functional deficits
- Medial meniscus tear with meniscectomy
- Anterior cruciate ligament (ACL) tear with surgical repair
- Ankle sprain with moderate residual symptoms/functional deficits

Clinical Vignettes (Continued)

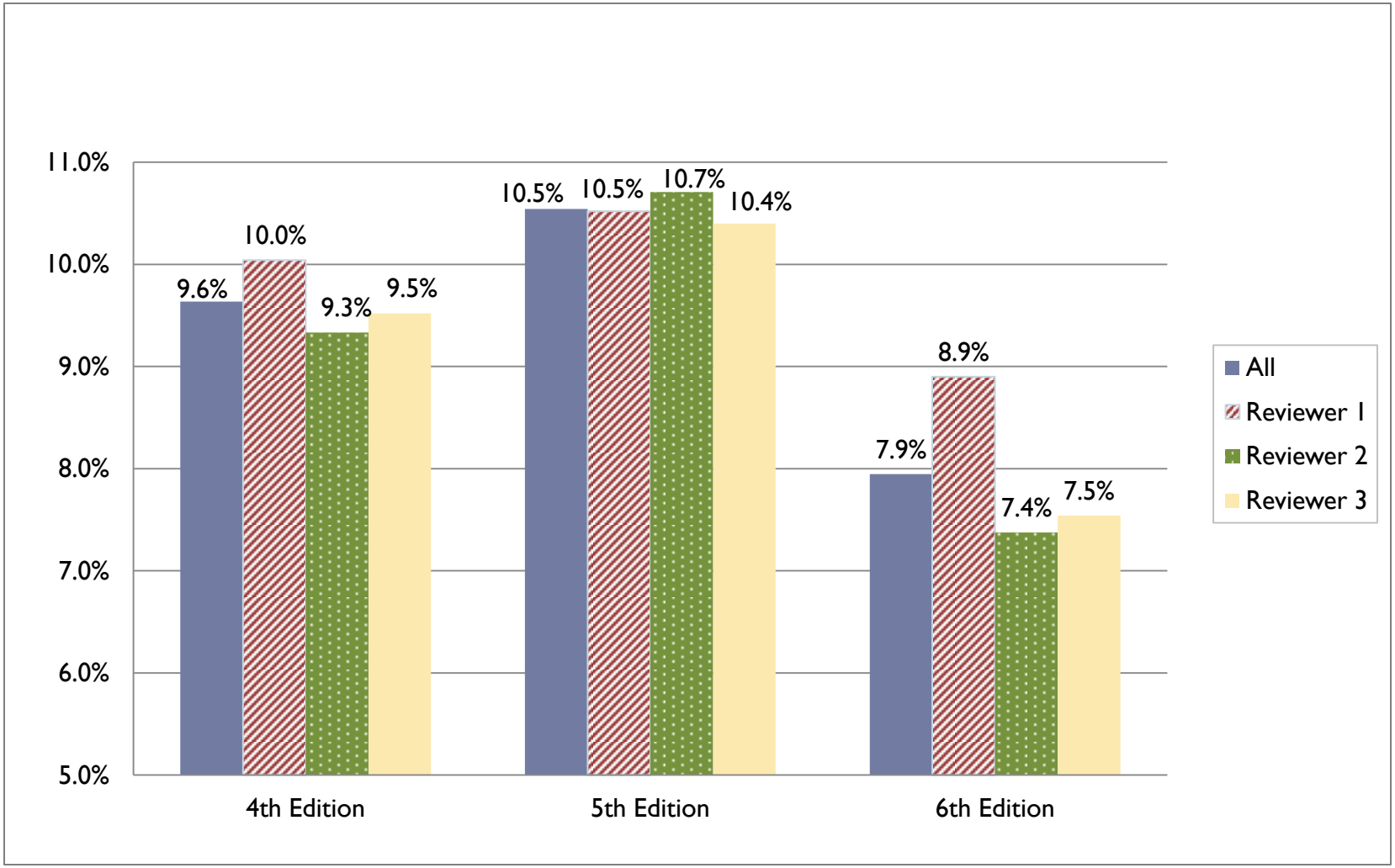
- Colles fracture (closed)
- Bimalleolar fracture – Open reduction internal fixation (ORIF)
- Wrist ankylosis
- Thoracic compression fracture
- Hip fracture resulting in avascular necrosis and subsequent total hip replacement
- Knee injury with total knee replacement
- Multiple body areas - low back pain, lumbar sprain/strain with non-verifiable radicular complaints and moderate residual symptoms/functional deficits; symptomatic cervical HNP with correlating radiculopathy - treated with surgical ACDF; partial thickness rotator cuff repair with surgical repair.
- Multiple body areas - symptomatic lumbar HNP with correlating radiculopathy - treated without surgery; symptomatic cervical HNP with correlating radiculopathy - treated without surgery; ankle sprain with moderate residual symptoms/functional deficits

Results

Key Results

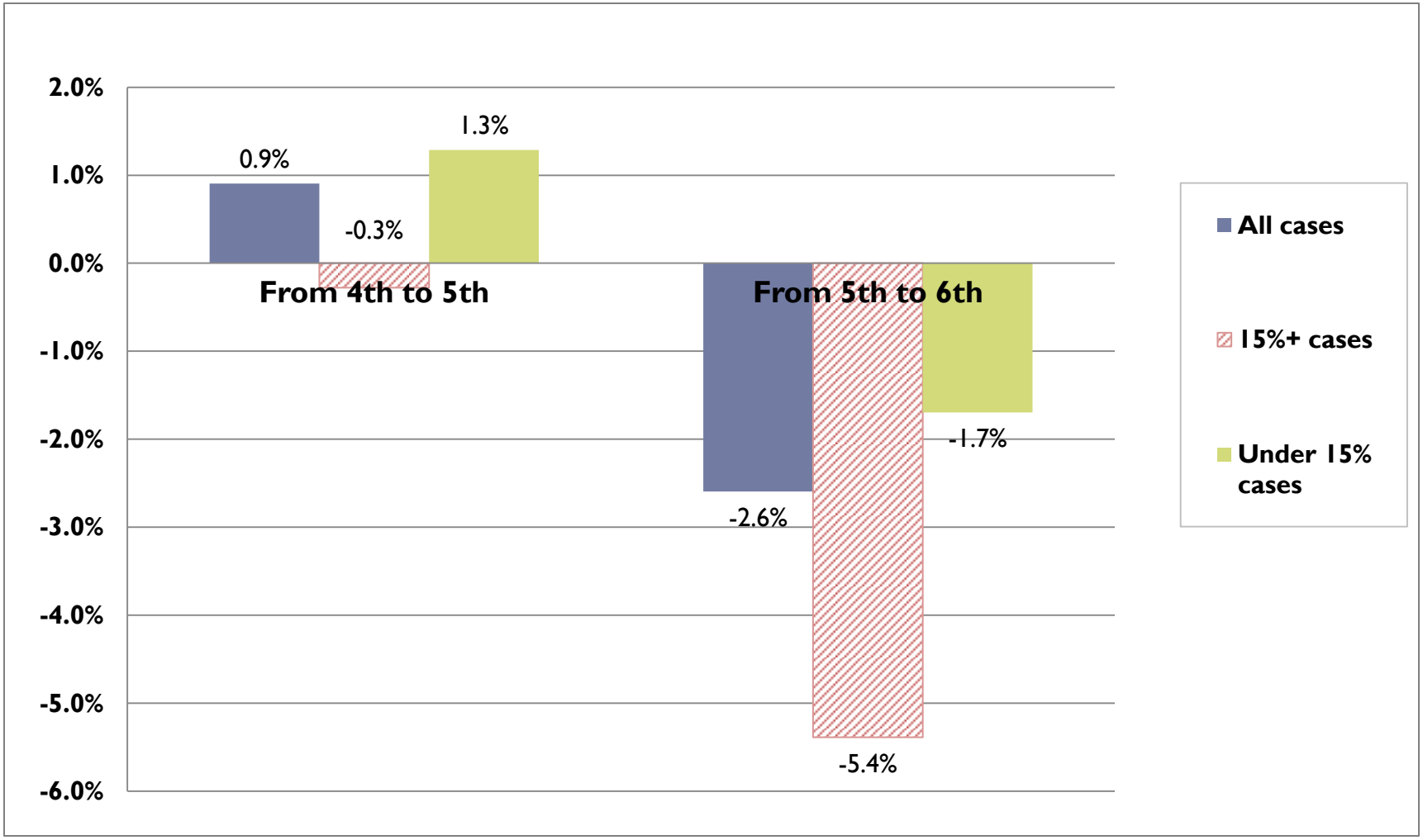
- The Average Impairment Rating increased .9% IR from the 4th to the 5th edition
- The Average Impairment Rating decreased 2.6 % IR from the 5th to the 6th edition
- The Average Impairment Rating for SIBs cases (IR 15% or greater) decreased .3 % IR from the 4th to the 5th edition and decreased a further 5.4 % IR from the 5th to the 6th edition
- The Average Impairment Rating for the other cases (IR less than 15%) increased by 1.3 from the 4th to the 5th edition but decreased by 1.7 from the 5th to the 6th edition
- Impairment Rating inconsistencies among the reviewers were exacerbated under the 6th Edition
- Key results consistent with AMA results from similar study

All Vignettes
Mean Impairment Ratings by Edition
Inter-Rater Comparison



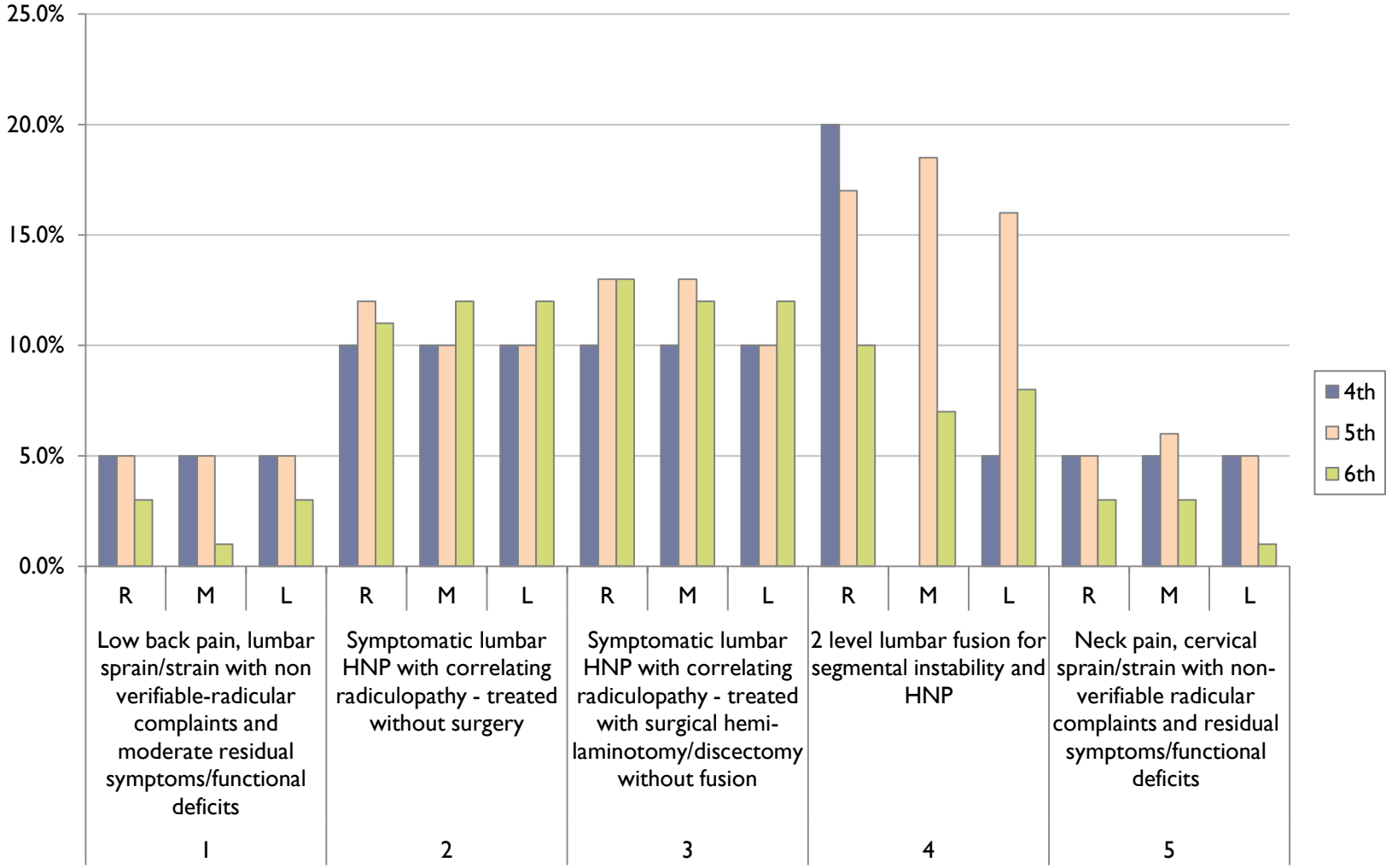
Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

All Vignettes
Changes in Average Impairment Ratings
by Edition



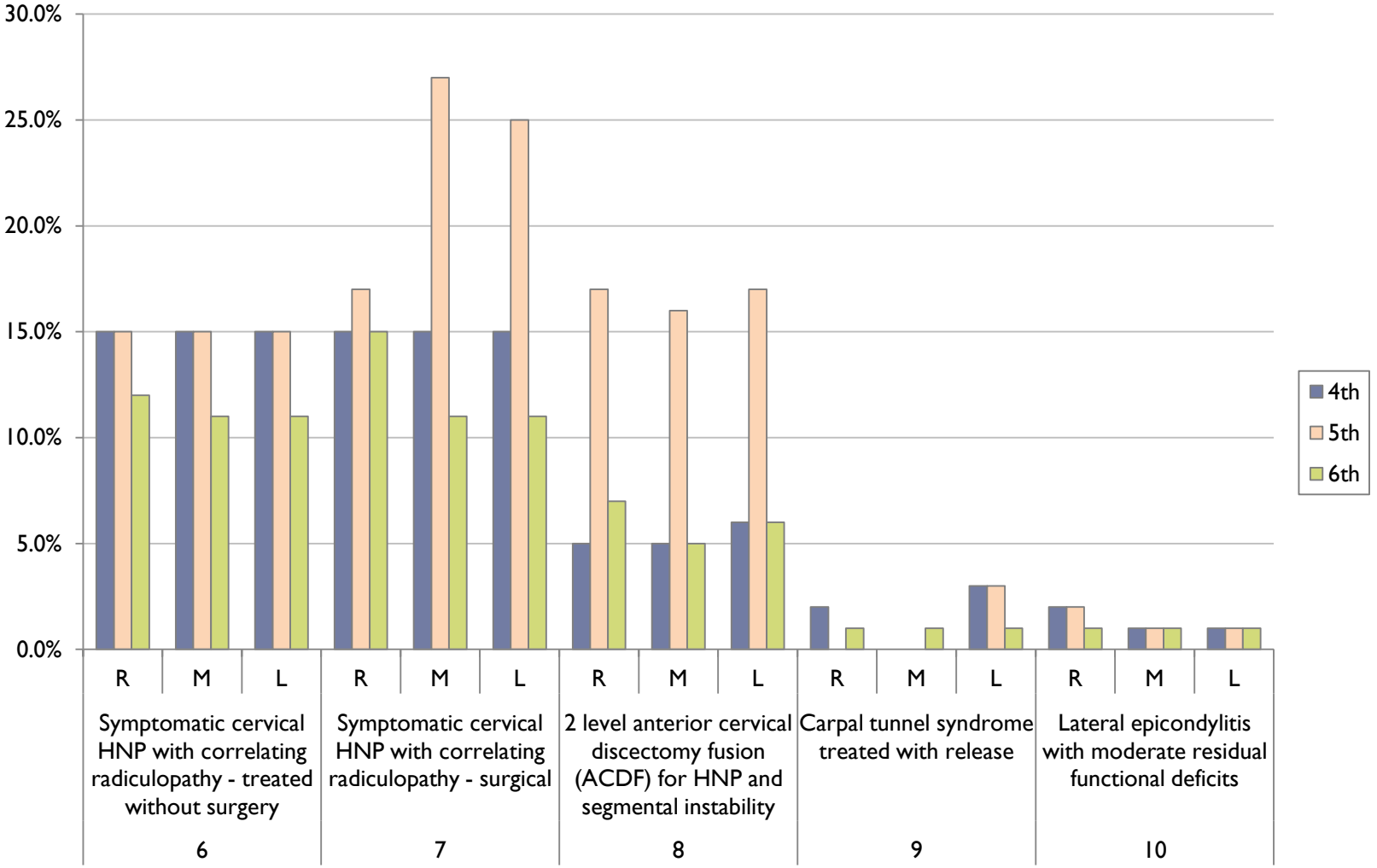
Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

Vignettes 1-5
Mean Impairment Ratings by Edition
Inter-Rater Comparison



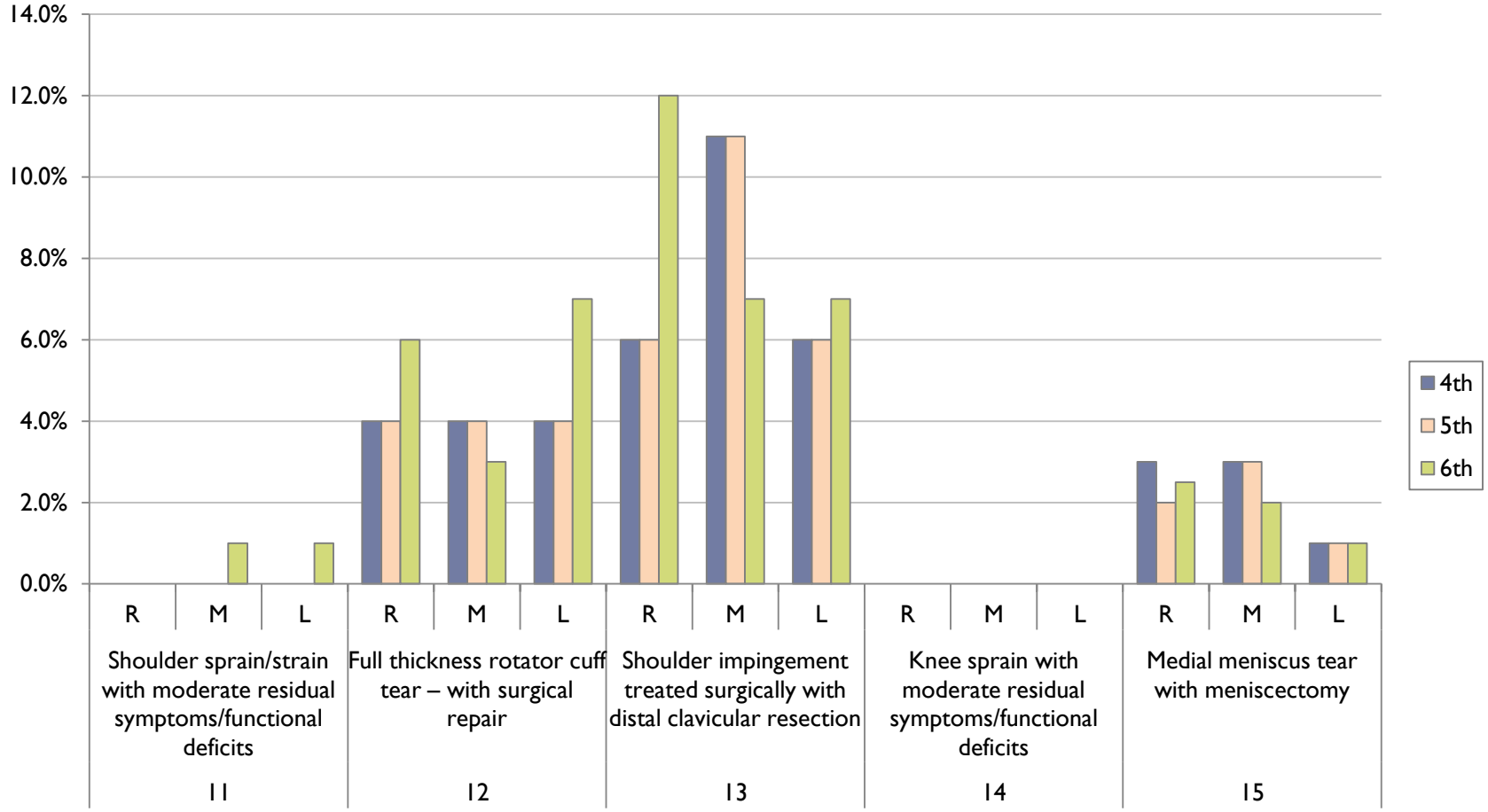
Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

Vignettes 6-10
Mean Impairment Ratings by Edition
Inter-Rater Comparison



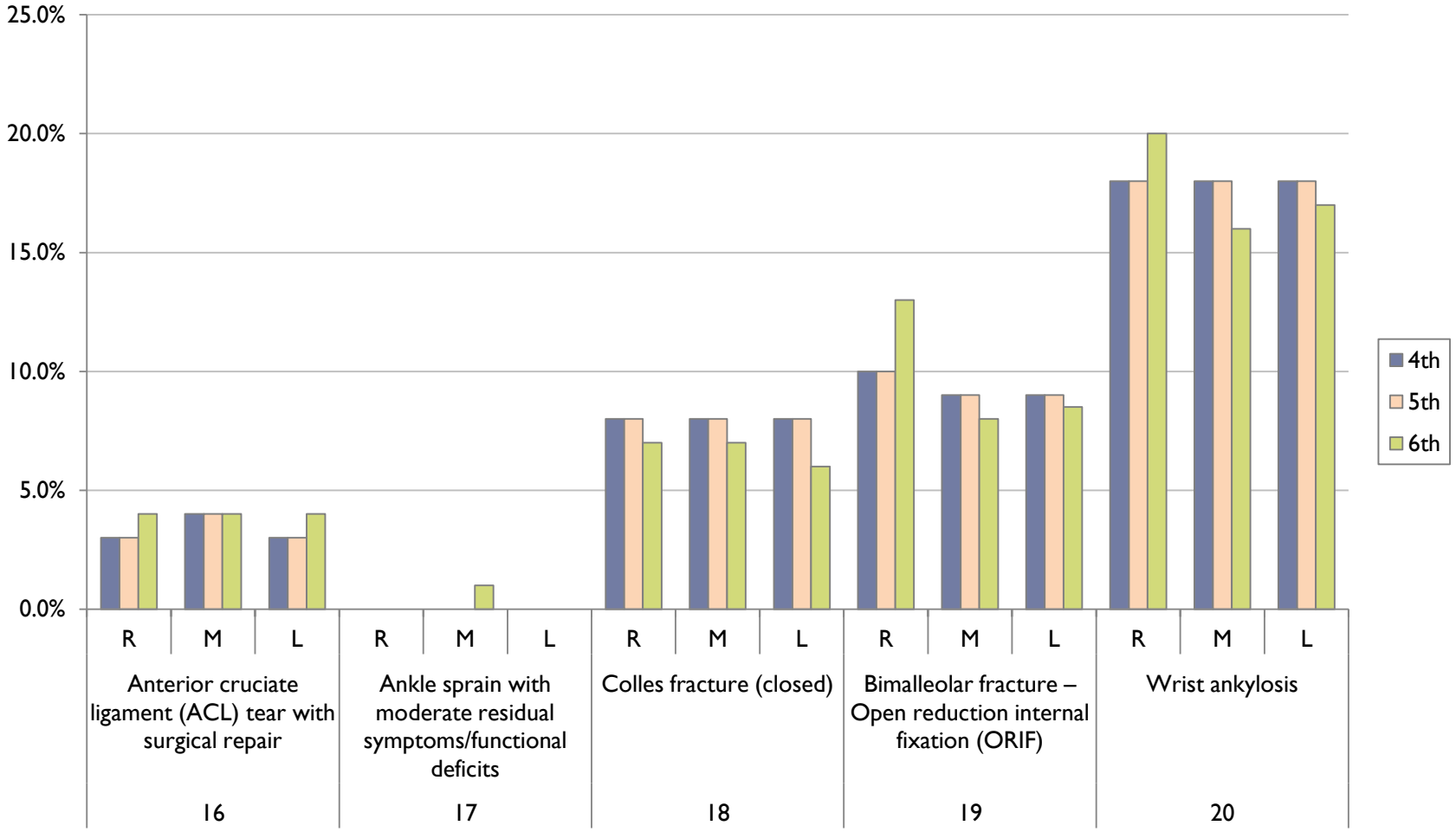
Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

Vignettes 11-15
Mean Impairment Ratings by Edition
Inter-Rater Comparison



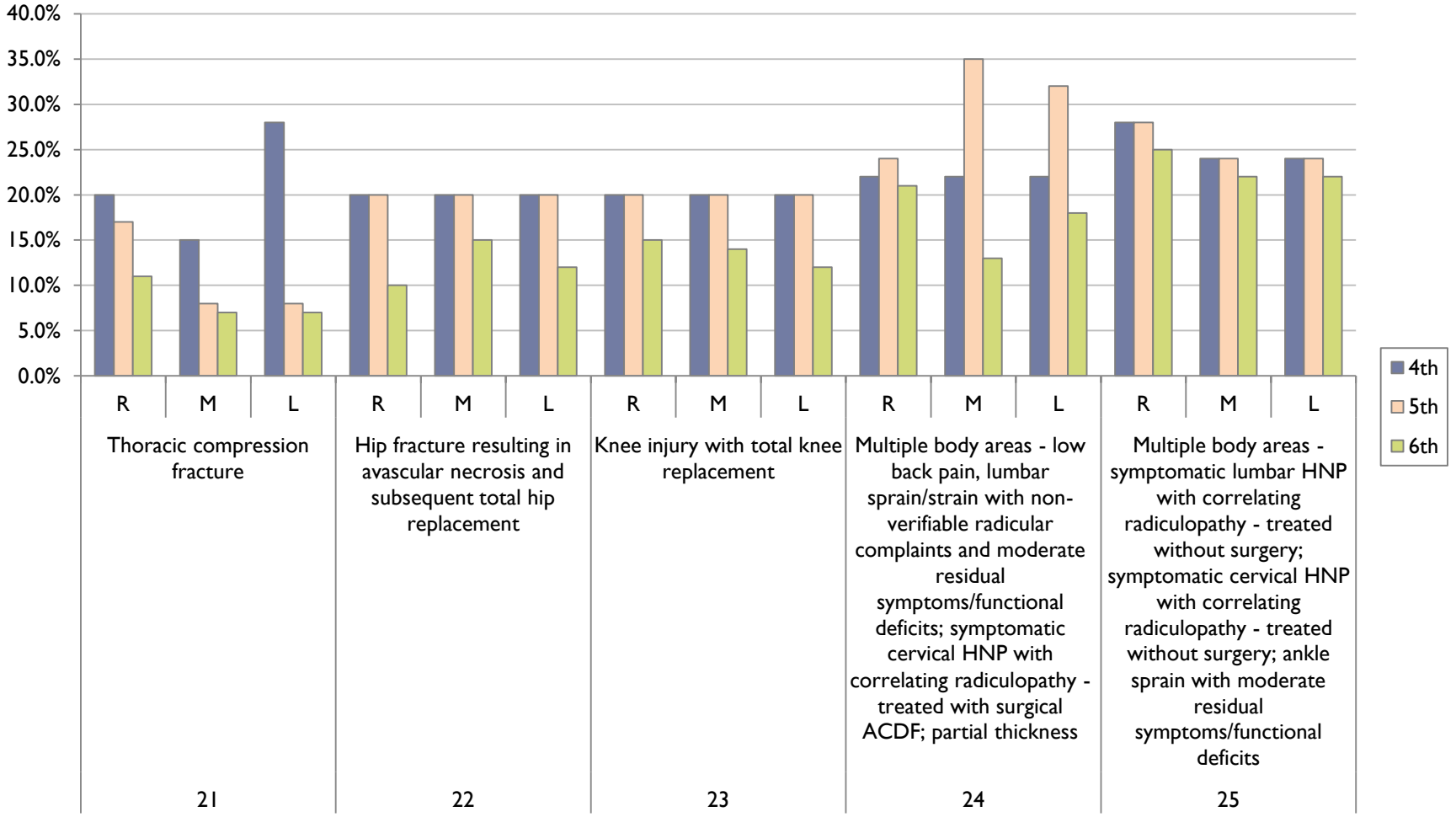
Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

Vignettes 16-20
Mean Impairment Ratings by Edition
Inter-Rater Comparison



Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

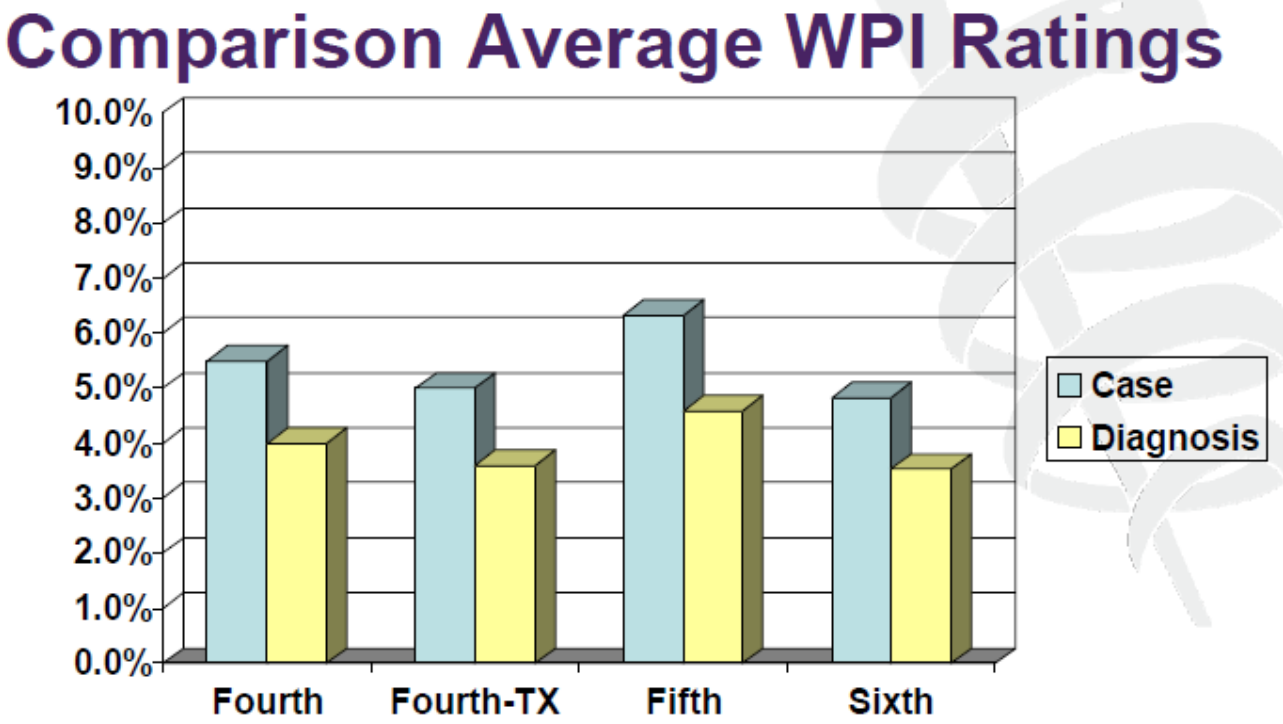
Vignettes 21-25
Mean Impairment Ratings by Edition
Inter-Rater Comparison



Source: Division of Workers' Compensation and the Workers' Compensation Research and Evaluation Group, 2011

American Medical Association

Comparative Analysis of AMA Guides Ratings by the Fourth, Fourth (Texas), Fifth and Sixth Editions



	Fourth	Fourth - TX	Fifth	Sixth
Case	5.5%	5.0%	6.3%	4.8%
Diagnosis	4.0%	3.6%	4.6%	3.5%

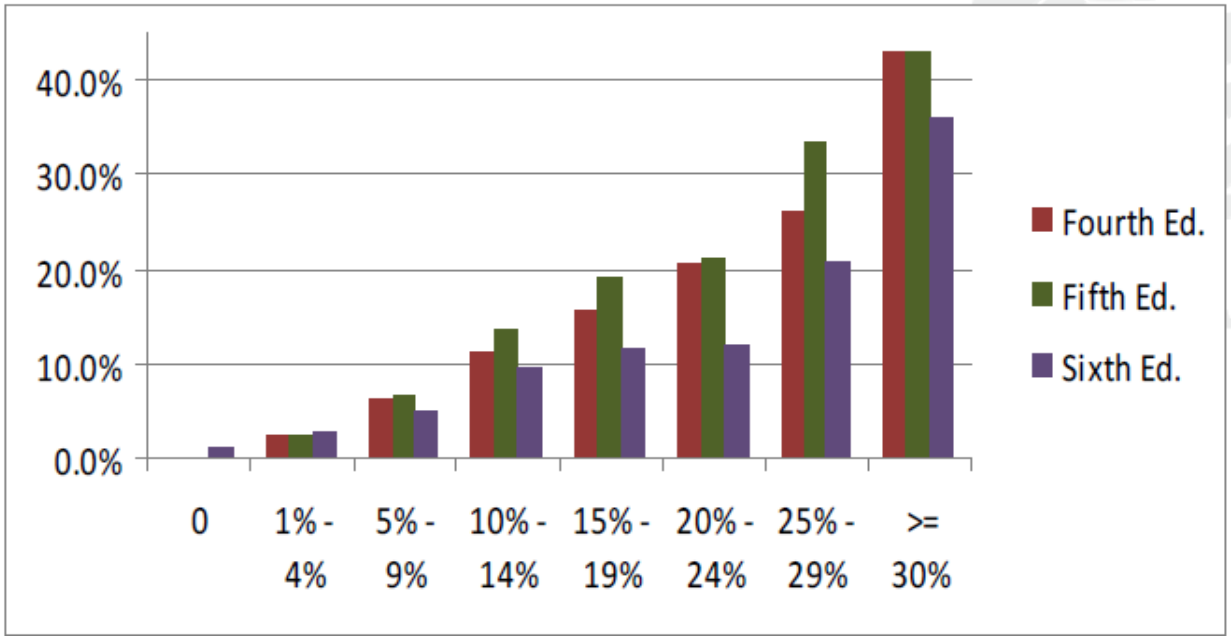
Source: American Medical Association, *Comparative Analysis of AMA Guides Ratings by the Fourth, Fourth (Texas), Fifth and Sixth Editions,* 2010

American Medical Association

Comparative Analysis of AMA Guides Ratings by the Fourth, Fourth (Texas), Fifth and Sixth Editions

Case WPI Ratings Based On Categorization by Fourth Ed. Texas

(note only 13 cases ≥ 15%WPI)



Source: American Medical Association, *Comparative Analysis of AMA Guides Ratings by the Fourth, Fourth (Texas), Fifth and Sixth Editions,* 2010