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Medical Editor
Disclaimers:

- No formal role as AMA staff representative
  - Medical Editor not employed by nor directly representing AMA
- Financial conflict of interest
  - contractual agreement as Medical Editor
Essential Elements of Physician Assessment & Reporting:

1) What is the clinical problem (diagnosis)?
2) What difficulties does the patient report (symptoms; functional loss)?
3) What are the examination findings?
4) What are the results of clinical studies?
History of the Guides
“If it ain’t broke, don’t fix it.”

Bert Lance, *Nation’s Business*, 1977
Frequent criticisms of the AMA Guides

- Inconsistent and ambiguous definitions & terminology of disablement (*Spine* ’83; ’88; ’93; *J Tenn Med Assoc* ’80; *Ann Int Med* ’86)
- Content & predictive validity questionable (*JAMA* ’82; *Arch PM&R* ’97; *JBJS* ’98; *JAMA* 2000)
- Reliability questionable (Am J Phys Med Rehabil ’92)
- Gender bias (Harvard Law Review ’90)
Shortcomings of AMA Guides 5th ed.
Spieler et al, JAMA 2000

- Confusing/antiquated terminology
- Inadequate evidence-base
- Ratings fail to reflect perceived or actual loss of function
- Lack of internal consistency
Axiom 1:

- The AMA Guides must adopt the terminology and conceptual framework of disablement as put forward by the International Classification of Functioning, Disability and Health (ICF).

(WHO, 2001)
New ICF model *(WHO, 2001)*

- **Health Condition, Disorder or Disease**
  - Body Functions and Structures
    - Normal Variation
    - Complete Impairment
  - Activity
    - No Activity Limitation
    - Complete Activity Limitation
  - Participation
    - No Participation Restriction
    - Complete Participation Restriction

- **Contextual Factors**
  - Environmental
  - Personal
Disability as a Continuum Within ICF

Health Condition, Disorder or Disease

Body Functions and Structures

Activity

No Activity Limitation

Complete Activity Limitation

Participation

No Participation Restriction

Complete Participation Restriction

Contextual Factors

Environmental

Personal
Impairment rating – a consensus-derived percentage estimate of loss of activity, which reflects severity of impairment for a given health condition, and the degree of associated limitations in terms of activities of daily living (ADLs)
Relevance of Impairment Ratings:

- Proxy estimates of
  - functional loss (ADLs)
  - work disability
  - nonwork disability
  - residual quality of life
Institute of Medicine Model:

FIGURE 4-1 The consequences of an injury or disease.
Axiom 2:

- The AMA *Guides* must continue to become more evidence-based.
Levels of Evidence

- **Level 1**: Systematic review or meta-analysis
- **Level 2**: One or more well designed RCTs
- **Level 3**: Non-randomized trials, cohort studies, etc.
- **Level 4**: Case report, clinical experience
Axiom 3:

- Wherever/whenever evidence-based criteria are lacking…
  - Simplicity and ease-of-application, in addition, must be given highest priority.
Historical Trends & Growth of AMA Guides

No. of pages vs AMA Guides Editions:
- Red line: Total no. pages
- Green line: Total no. pages - MSKTL
Axiom 4:

- Rating percentages derived according to the AMA *Guides* must be functionally-based, whenever possible.
  - patient functional history can be assessed according to basic ADLs
  - self-report functional assessment tools also available and applicable
## ICF codes and functional levels

<table>
<thead>
<tr>
<th>ICF CODE</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>* xxx.0</td>
<td>NO problem (none, absent, negligible, …)</td>
</tr>
<tr>
<td>* xxx.1</td>
<td>MILD problem (slight, low, …)</td>
</tr>
<tr>
<td>* xxx.2</td>
<td>MODERATE problem (medium, fair, …)</td>
</tr>
<tr>
<td>* xxx.3</td>
<td>SEVERE problem (high, extreme, …)</td>
</tr>
<tr>
<td>* xxx.4</td>
<td>COMPLETE problem (total, …)</td>
</tr>
</tbody>
</table>
Sample impairment functional classification

<table>
<thead>
<tr>
<th>Functional Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 No symptoms with strenuous activity (independent)</td>
</tr>
<tr>
<td>1 Symptoms with strenuous activity; no Symptoms with normal activity (independent)</td>
</tr>
<tr>
<td>2 Symptoms with normal activity (independent)</td>
</tr>
<tr>
<td>3 Symptoms with minimal activity (partially dependent)</td>
</tr>
<tr>
<td>4 Symptoms at rest (totally dependent)</td>
</tr>
</tbody>
</table>
Orthopedic Functional Assessment Tools

- QuickDASH
- Pain Disability Questionnaire (PDQ)
- AAOS Lower Limb Outcomes Questionnaire
Axiom 5:

- AMA Guides must stress conceptual and methodological congruency within and between organ system ratings.
Internal Consistency

- Uniform “impairment grid” methodology adopted to the fullest extent possible
- Attempt is made to normalize impairment ratings across organ systems to improve internal consistency
- Decisions, in such cases, remain consensus-based and await future validation studies
Features of AMA *Guides* 6th ed:

- ICF Model of Disablement (WHO 2001) replaces outdated ICIDH model (WHO 1980)
- *AMA Guides* is regularly updated with latest, evidence-based diagnostic information
- *AMA Guides* is increasingly diagnosis-based, hence physician-friendly and easy to learn and to use
Features of AMA Guides 6th ed: (2)

- AMA Guides is internally-consistent, hence easy to apply across multiple organ systems
- AMA Guides is functionally-based to help capture impact of impairment upon ADLs
- AMA Guides has high precision and resolution of impairment ratings
- AMA Guides is transparent and promotes greater inter-rater reliability and agreement
Questions