Upper Extremity Strength Impairment
To Rate or Not to Rate

What the AMA Guides Say

• In a rare case, if the examiner believes the individual’s loss of strength represents an impairing factor that has not been considered adequately by other methods in the Guides, loss of strength may be rated separately.
Principles

• Rare Case – not typical to use strength

• Examiner – physician

• Strength may be used if impairment not adequately considered by other methods

What the AMA Guides Say

• Decreased strength cannot be rated in the presence of decreased motion, painful conditions, deformities or absence of parts that prevent maximum application of force in the region being evaluated
Principle

- Strength cannot be used if prevented by decreased motion, pain or amputation

What the AMA Guides Say

- If the examiner judges that loss of strength should be rated in an extremity that presents other impairments, the impairment due to loss of strength could be combined with other impairments, only if based on unrelated etiologic or pathomechanical causes.
Principle

- Strength impairment can be combined with other impairments only if due to unrelated cause
- Etiologic – medical cause
- Pathomechanic – refers to body’s function and structure

Physician’s Approach

1) Determine if there is strength impairment
2) Determine the cause of the strength impairment
3) Determine if strength impairment already considered adequately by other impairments
4) Combine with other impairments only if due to unrelated causes
Physician’s Approach

5) Based on steps 1-4, provide AMA Guides standard rating

6) If rating not accurate, consider alternative rating per Almaraz/Guzman

Physician’s Approach

1) Is there strength impairment?

Shoulder and Elbow

- Table 16-35 manual Muscle testing

Forearm, Wrist and Hand

- Table 16-34 Grip
Muscle Strength Impairment

Manual Muscle Testing

- Doctor tests each unit of shoulder motion
- Doctor assigns grade and strength deficit per Table 16-11

- Impairment values are assigned for each unit of motion
- Values are determined by multiplying maximum by shoulder ROM unit by strength deficit.
- Values for each unit of motion are added (AMA Guides page 510)
Grip Strength Measurement

- Jamar dynamometer
- Test repeated three times with each hand
- Mean average of three measurements

Calculating Grip Loss

- Normal Strength - Limited Strength
  Normal Strength

- Opposite uninjured side is considered normal

- Tables 16-31 and 16-32 estimated group normals for bilateral injuries
Physician’s Approach

2) What is the cause of the strength loss?

Not ratable if caused by

- Decreased motion
- Pain
- Deformities
- Amputation

Physician’s Approach

Is there an objective basis for strength impairment?

AMA Guides Examples

- Severe muscle tear
- Rotator cuff tear
Physician’s Approach

3) Has the loss of strength not been considered adequately by other factors?

Rare Cases

• Not Typical
• Exceptional Case

When Can Strength be Combined?

4) Is there a different cause for strength impairment?

Ratable only if based on unrelated causes

• Etiologic
• Pathomechanical

If not, impairments based on objective findings are rated
Strength Example #1

• Injured with torn rotator cuff

• Significant decrease in shoulder motions

• Some decreased strength

1) Is there strength impairment per Table 16-35? Yes

2) What is the objective basis for strength impairment? Rotator cuff tear

3) Is the strength deficit caused by decreased motion, pain, deformities or amputation? No
Strength Example #1

4) Has the strength impairment been accounted for by other impairments? **No**

5) Is this an exceptional case to use strength impairment? **Yes**

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Strength Example #1

6) Are there other impairments, if so what are they? **Yes, decreased motion**

7) If so, what is the medical cause(s) of the strength and other impairment?

Both the strength and ROM impairments are due to the rotator cuff tear
Strength Example #1

- Both strength and ROM impairments are rated using the six units of shoulder motion – same mechanics

- Impairment based on objective anatomic findings is rated

Decreased ROM is rated per AMA Guides

DEU Approach

- Will rate strength per physician with a few exceptions

- Will combine impairments per PDRS

- Will annotate rating to guide parties regarding possible rating issues
Strength Example #2

- 34 Year old carpenter
- Torn biceps
- ROM impairment 8 UE = 5 WP
- Strength grade 4 flexion/ext 10 UE = 6 WP
- Doctor uses both ROM and strength = 11 WP

DEU will combine at UE index

Strength = 10 UE
ROM = 8 UE
10 C 8 = 17 UE = 10 WP
Strength Example #2

DEU will annotate rating

• Strength and ROM methods may be combined only if due to separate etiologic or pathomechanic causes.

• Parties may wish to inquire the cause of ROM and strength impairments

Parties Responsibility

• Review medical report - make sure strength issues addressed

• Follow up on rater annotations
Strength Example #2

Defense may query

• Cause of the strength?

• Is strength prevented by pain or ROM?

Strength Example #2

Applicant may query

• Does ROM rating alone adequately represent impairment

• Application of Almaraz/Guzman?
DEU Approach

Grip will not be used to rate peripheral nerve injuries

• Per AMA Guides page 494

• AMA Guides has a method per Section 16.5

Strength example #3

• 26 year old secretary with carpal tunnel syndrome

• Grip loss 40%

• Physician rates grip loss at 20 UE
Strength Example #3

DEU will not rate grip impairment

DEU will annotate

• Grip cannot be used to rate peripheral nerve injuries. Doctor may use AMA Guides Tables 16-10, 16-11 and 16-15 to evaluate impairment.

DEU Approach

Strength is not used to rate complex regional pain syndrome

• Per AMA Guides page 496

• There are methods in both Chapters 13 and 16 that do not use strength impairment
DEU Approach

Table 16-34 Grip

- Limited to injuries related to forearm, wrist and hand – AMA Guides page 508

Table 16-35 Manual Muscle Testing

- Limited to injuries related to shoulder and elbow – AMA Guides page 508

Almaraz/Guzman Considerations

- AMA Guides rating is prima facie evidence

- AMA Guides rating is rebuttable

- Doctor may still rate strength under Almaraz/Guzman
Bakersfield Road Rage