Please review the following recommendations when assigning impairment ratings:

**General Principles**

**Impairment Ratings Based on Objective Pathology:** Impairment ratings should only be given when a specific diagnosis and objective pathology can be identified. (Reference: C.R.S. §8-42-107(8)(c)) In cases with multiple symptoms, the clinician must determine whether separate diagnoses can be established which warrant an impairment rating or the impairment rating provided for a specific diagnosis incorporates the accompanying symptoms of the patient. This is particularly problematic in shoulder cases with accompanying neck pain. The clinician must determine whether an additional objective work-related Table 53 cervical pathology qualifies for a rating or the symptoms the patient has are those expected from the shoulder pathology of that patient and do not qualify for an additional rating.

**Impairment Rating for Workers Who Have Undergone an Invasive Treatment Procedure:** The rating physician should keep in mind the AMA Guides, 3rd Edition (rev.) definition for impairment. “The loss of, loss of use of, or derangement of any body part, system, or function.” Given this definition, one may reasonably assume any patient who has undergone an invasive procedure which has permanently changed any body part has suffered a derangement under the definition of impairment according to the AMA Guides, 3rd Edition (rev.). Therefore it is incumbent on the rating physician to perform the necessary testing as appropriate in the Guides for the condition which was treated by the invasive procedure. This should not be interpreted to say that all persons with invasive procedures necessarily qualify for an impairment rating. The impairment rating on many individuals who have had invasive procedures may be zero percent. Thus in cases with surgical procedures, an individual qualifies under the initial definition of impairment due to the derangement of a body part or system. If the rating physician provides a zero percent rating, this must be justified using the appropriate portions of the AMA Guides, 3rd Edition (rev.). Examples in which the rating procedure is necessary include arthroscopic debridement of the shoulder, anterior cruciate ligament surgery of the knee, facet rhizotomy procedures, and surgery to repair carpal bone instability. (Also see section on spine procedures, below.)

**Range of Motion measurements:** Only active range of motion measurements should be used to determine impairment. Thus the examiner should not assist the patient when obtaining spinal or extremity range of motion. For extremities, passive range of motion may be measured to assess the validity of active range of motion measurements. See more detailed discussion in Spinal and Extremity Rating section.

**Impairment Rating “rounding”:** Although the AMA Guides allows rounding of an impairment rating to the nearest whole number ending in 0 or 5, the Division recommends rounding up or down to the nearest whole number when presenting the final rating. A number ending in .50 should be rounded up.

**Worksheets:** Make sure to attach all related worksheets to the narrative report and include this information to all legally concerned parties. Remember that the Division requires the Lower Extremity and Mental Impairment forms created by the Division as well as the spinal and upper extremity forms found in the AMA Guides. If you need to send an addendum or a response to an incomplete notice, make sure you copy all parties. Note that you do not have to provide worksheets if you are not giving a rating for the injury(s) in question.
**Apportionment**

**Apportionment of Prior Conditions:** Asymptomatic conditions cannot be evaluated for prior impairment. Only previously symptomatic conditions should be considered for apportionment. *(Reference: Askew v. Industrial Claim Appeals Office, 927 P.2d 1333 (Colo. 1996); Rule 12).* To apportion you must create a rating of the workers’ impairment immediately prior to the current injury or disease using the *AMA Guides, 3rd Edition* (rev.). Subtract this rating from the current total rating at the appropriate levels. **Note:**

- The ‘current total rating’ should represent the person’s current impairment including the prior injury.
- You may not apportion by only estimating the percentage attributable to the prior injury or disease; for example, “50% of this impairment was pre-existing.”
- You must have medical documentation for the information that substantiates the previous rating.
- **For Workers’ Comp injuries occurring on or after July 1, 2008:**
  - For prior non-work-related injuries: To apportion prior injuries that are non-work-related, they must have been identified, treated, and independently disabling at the time of the current work-related injury. If the prior non-work-related injury was not independently disabling at the time of the current injury, you may not apportion.
  - For prior work-related injuries: The law regarding apportioning prior work-related injuries has changed. However, you should perform the impairment rating in the same manner as you have and let the insurer determine whether apportionment is allowed. It is critical that you provide complete information, particularly the total impairment—both apportioned and unapportioned.

**AGE:** Because age is considered in the calculation of benefits which the injured worker will receive, there is no additional apportionment for age when awarding impairment ratings *(Reference: C.R.S. §8-42-107).*

**Spinal and Extremity Rating**

**Table 53 and Application of Spinal Range of Motion:** In order to be assigned a spinal rating, the patient must have objective pathology and impairment that qualifies for a numerical impairment rating of greater than zero under Table 53. Spinal range of motion impairment must be completed and applied to the impairment rating only when a corresponding Table 53 diagnosis has been established. *(References: Spine section of the AMA Guides, 3rd Edition (revised); Level II Accreditation Curriculum, Spinal Impairment).* In unusual cases with established severe shoulder pathology accompanied by treatment of the cervical musculature, an isolated cervical range of motion impairment may be allowed if well-justified by the clinician. Otherwise there are no exceptions to the requirement for a corresponding Table 53 rating.

**Impairment Ratings for Invasive Procedures (spine)**

- Spinal Surgical Procedures using Table 53

  The following procedures are considered surgical and should be rated under Table 53 using II (D) or II (E):

  a. IDEA (intradiscal electrothermal annuloplasty)
  b. Coblation of the nucleus pulposus
  c. Microdiscectomy
  d. Permanent spinal stimulator placement requiring laminotomy
  e. Vertebroplasty or kyphoplasty
  f. Artificial disk placement

- Procedures for removal of spinal hardware would be rated under Table 53 II (G) 1 or 2 for subsequent surgical procedures.
The following are not rated as surgical procedures using Table 53: Diagnostic or therapeutic spinal injections; intrathecal drug pumps; removal of spinal stimulator-- not requiring laminotomy.

**Rhizotomy:** Rhizotomy is also currently known as a Radiofrequency Medial Branch Neurotomy or RF Neurotomy. It is not considered a surgical procedure under Table 53. Rhizotomies should be rated using II(C). A rhizotomy causes only minimal anatomic disruption and may not be permanent. In order to perform a rhizotomy the condition must meet the diagnostic criteria required in the Low Back Pain Medical Treatment Guideline (see section D). The degree of pathology required to perform a rhizotomy is deemed equivalent to moderate to severe degenerative changes at the facet joint.

Most commonly two or more spinal levels are performed with rhizotomy procedures to assure coverage of the appropriate nerves. To rate rhizotomies the total number of levels at which a rhizotomy is performed should be divided by 2. A two-level rhizotomy receives a rating of II(C) because II(C) accounts for the initial two levels. Three or four-level rhizotomies receive a II(C) plus (II)F 1% -- for the additional levels. Five or six-level rhizotomies receive II(C) plus II(F) 2% -- for the additional levels.

For example, the Table 53 rating for rhizotomies at 4 lumbar levels would be 8% (II-C of 7% for the first two levels plus II-F of 1% for the additional two levels). Similarly, the Table 53 rating for 6 cervical levels would be 8% (II-C of 6% for the first two levels plus II-F of 2% for the additional four levels). Bilateral rhizotomies at the same spinal level do not receive any additional rating.

**Rating for SI joint dysfunction:** Patients who continue to have SI joint symptoms, and thus qualify under the “six months of medically documented pain and rigidity with or without muscle spasm,” Table 53 terminology, should be rated as Table 53 II(B) in most circumstances. The appropriate spinal range of motion impairment must be combined with this.

**Vertebral fractures:** An operatively treated vertebral fracture should be rated under section IV(A) or (B) of Table 53. When more than one level has been fused additional levels are added at 1% each using IV(C). If there are additional vertebral fractures which are not operatively treated, these should be rated under section I and the ratings from I and IV should be combined for a total Table 53 rating. (If multiple unoperated fractures are present and rated under section I, these are combined as directed on Table 53.)

**Using Table 53 to differentiate between II (B), (C) and (F) regarding x-ray findings:** Physicians should be aware that in the asymptomatic population, disk bulges, annular tears or high intensity zone areas, and disk height loss are commonly reported in the lumbar spine from 40 – 60% of the time depending on the condition and study. In the cervical spine the prevalence of disc degeneration or loss of signal intensity on MRI is greater than 50% in the 50 years and older asymptomatic population. Cervical disc bulging and posterior disc protrusion, while not rare, is more commonly symptomatic than in the lumbar spine due to the smaller cervical spinal canal. Mild reduction in the cross-sectional spinal cord may be seen without myelopathy in patients older than 40. Therefore the existence of these anatomic findings cannot be considered pathological unless there are clear physiologic ties and correlation with clinical findings in an individual patient. The mere presence of these changes is not a sufficient justification to attribute correlation to a non-specific spinal complaint. The physician should not rate findings by diagnostic imaging which have not been clearly defined as contributing significantly to the patient’s condition. This applies to the use of II(C) as well as the use of II (F).

Asymptomatic moderate to severe lumbar facet degeneration has also been reported in 30% or more of the population 55 or older but is uncommon in the younger population. Clear disk extrusion and nerve impingement are much less frequent in asymptomatic individuals. Symptomatic disk extrusion/herniation is clearly rated under II(C). Due to these discrepancies between x-ray findings and pathological conditions, it is incumbent on physicians to carefully examine and apply other diagnostic tests as appropriate to identify the true pain generators in a patient and plan their treatment and impairment rating accordingly.
**Table 54:** Although Tables 53 and 54 are mutually exclusive and cannot be used in the same rating (**Reference:** Level II Accreditation Curriculum, Spine/Lower Extremity, Diagnosis-Related Factors and pg. 81 AMA Guides), remember that in some cases with ankylosis as a pre-existing condition Table 54 can be used for apportionment. In such cases, **Table 53** can be used for the current rating and **Table 54** can be used for the previous rating.

**Straight-Leg Raise Check (SLR) for Invalidation of Lumbar Flexion:** The SLR check applies to lumbar flexion only. Of the SLR measurements for each leg, the evaluator records the MAXIMUM SLR for each leg. Then the ‘tightest’ or the ‘lowest’ of these two maximum measurements for the right and left leg is used to compare to the sum of sacral flexion and extension (**Reference:** Level II Accreditation Curriculum, Range of Motion Testing for the Spine).

**Invalidation of Spinal Range of Motion (cervical, thoracic, lumbar):** To invalidate spinal range of motion impairment, claimants must have two visits. Two sets of three measurements must be taken on each visit (12 measurements total). When a physician performing a Division IME finds range of motion measurements invalid, such physician may fulfill this requirement by accepting invalidated measurements from other reports in lieu of bringing the claimant back for a second set of measurements. The physician must, however, report his/her own initial sets of measurements. (**Reference:** Level II Accreditation Curriculum, Range of Motion Testing for the Spine).

**Lumbar Flexion Impairment:** When using Table 60, you must first reference the sacral flexion angle (1st column), then the true lumbar flexion angle to calculate the impairment percentage for true lumbar flexion. (**Reference:** Table 60, pg. 98, AMA Guides, 3rd Edition (rev)).

**Angle of Minimum Kyphosis, Thoracic Flexion Worksheet:** Angle of minimum kyphosis must be recorded in addition to the other measurements. This is because it is the GREATER of the two impairments (between thoracic flexion and angle of minimum kyphosis) which is used in the rating (**Reference:** Section 3.3d, pg. 91, AMA Guides, 3rd Edition (rev)).

**Only Unassisted, Active Range of Motion Measurements Can Be Used in Impairment Rating:** The **AMA Guides to the Evaluation of Permanent Impairment**, 3rd revised edition, discusses the measurement of active and passive ranges of motion, however only active, patient-initiated, range of motion should be used to determine impairment. (**AMA Guides 3rd edition (rev.)** pp. 18, 55, 81) Any form of “assisted range of motion” is not part of the impairment rating process. Physicians’ physical examination records should identify the measurements which reflect active, unassisted range of motion. If there is a significant, non-physiologic difference between the active and passive ranges of motion, physicians should have the patient stretch and repeat the measurements. When the physician believes the active range of motion obtained is non-physiologic, the physician is encouraged to inform the patient of their impression and the fact that it may affect the patient’s rating, before obtaining another trial of measurements. If repeat measurements continue to appear significantly non-physiologic, the physician may use measurements obtained by other providers when there is reason to believe the measurements were performed according to the **AMA Guides** standards.

**Rating Extremities Using the Contralateral Joint:** In some cases the contralateral joint is a better representation of the patient’s pre-injury state than the **AMA Guides** population norms. The 3rd Revised Edition has little commentary on this procedure, however the 5th Edition and the Division consider it reasonable to compare both extremities when there are specific conditions which would make the opposite, non-injured extremity serve as a better individual baseline. (This procedure is not an apportionment procedure as it does not reflect a prior pathologic condition with impairment; therefore avoid using the term “apportionment” when referring to this process.) Therefore, when deemed appropriate, the physician may subtract the contralateral joint ROM impairment from the injured joint’s ROM impairment. (An example would be a patient with limited knee flexion due to obesity.) However, this subtraction should not be done if the contralateral joint has a known previous injury because that joint may not reflect the ‘normal’ ROM for that individual. **Make sure that you explain your methodology and your rationale in your report.**
**Shoulder Surgery:** Resection arthroplasty referred to in the *AMA Guides 3rd Edition (rev.)* is to be used only for partial resection of the humeral head, a procedure rarely performed currently. Neither resection nor implant arthroplasty values should be used for a distal clavicular resection. If providing a rating for a distal clavicular resection, the upper extremity value is 10%. The *AMA Guides 4th* and *5th* Editions continue to suggest that subacromial arthroplasty should be rated using ROM, and when appropriate, ‘joint crepitation with motion’ from the “Other Disorders” section. In general, when any additional rating for subacromial arthroplasty is deemed appropriate in a case with or without crepitus because “…other factors have not adequately rated the extent of the impairment,” it should not exceed 10%. (*AMA Guides 3rd Ed. Rev.* p. 48).

**Partial Shoulder Joint Replacement:** The *AMA Guides 3rd Edition (rev.)* allows a 30% rating for a total implant arthroplasty of the shoulder. Total arthroplasty is defined as an implant arthroplasty of the humeral head accompanied by resurfacing of the glenoid with any substance including metal, polyethrane or soft tissue graft. If a hemi-arthroplasty is done, the rating will generally be 20%. Hemi-arthroplasty includes resurfacing of the humeral head via a resurfacing cap or stemmed humeral replacement. The 20% rating should be combined with range of motion impairment and any peripheral nerve impairment ratings. Crepitus and synovial changes should not be rated as their ratings would be duplicative and the surgical procedure has presumably eliminated those anatomic derangements.

**Partial Knee Joint Replacements:** The *AMA Guides 3rd Edition (rev.)* allows a 20% rating for an optimally placed full knee arthroplasty. If a partial knee joint replacement is done, the rating will generally be for a hemi-arthroplasty or 10% for the knee replacement. The physician should also take into account any additional pathology present in that knee ratable under Table 40 and combine that with the 10%. Degenerative changes for which the arthroplasty was performed should not be rated since the surgical procedure has presumably eliminated those anatomic derangements. Range of motion is always recorded and combined with Table 40 ratings.

**Peripheral Nerve Injuries Resulting from Cumulative Trauma:** All peripheral nerve injuries should be rated under the peripheral nerve tables in the *AMA Guides 3rd Edition (rev.):* for upper extremity – Table 14 (p. 46), and for lower extremity – Table 51 (p. 77). The peripheral nerve values are then multiplied by percentages in Table 10 (grading scheme sensory function–p. 42), or Table 11 (grading scheme for motor function-p. 42). For further information, you may also consult ‘Helpful Hints for Grading Neurological Deficits’ (Level II Accreditation Curriculum). Range of motion or the CTD rating system should only be used if there is a separate and distinct non-neurologic cumulative trauma diagnosis (such as DeQuervain’s).

**Musculoskeletal Cumulative Trauma Disorders:** Remember that the terms ‘cumulative trauma disorder,’ ‘repetitive motion syndrome,’ ‘repetitive strain injury,’ and other similar nomenclatures are umbrella terms that are not acceptable diagnoses. (*Cumulative Trauma Conditions (CTC) Treatment Guidelines, Definitions and Mechanisms of Injury.*) Specific diagnoses must be provided prior to the assignment of an impairment rating. Descriptions of painful conditions without clear physiologic findings may not be rated using this method. Examples include pain in the elbow or other upper extremity joint and myofascial pain. Limit the impairment determination to areas of primary pathology, with anatomic or physiologic correlation based on objective findings. Do not rate areas of reactive muscle spasm and radiating or referred pain. Once the stage is determined from the *Cumulative Trauma Staging Matrix* in the CTC Treatment Guidelines (Section D.4.) the chosen grade percentage is multiplied times the upper extremity total impairment rating for the appropriate joint found in Table 17 on page 48 (*AMA Guides, 3rd Edition (rev.)*).

**“Grover Meds” and Impairment:** If continuing treatment or medications are ordered in a case post-MMI (“Grover Meds”), and that treatment was not being given prior to the onset of the work-related injury or condition, there may be a reasonable assumption that there has been a permanent change in a body part under the definition of impairment in the *AMA Guides, 3rd Edition (rev.)*. Therefore, it is incumbent on the physician to perform a full assessment for impairment at the time MMI is determined. This should not be interpreted to say that all persons receiving Grover Meds necessarily qualify for an impairment rating. If the rating physician provides an assessment of zero or no impairment, yet orders post-MMI treatment, this should be reconciled and justified in the physician’s closing report.
Other Impairment

Disfigurement: Physicians may, if they deem appropriate, give a rating for scars using the *AMA Guides 3rd Edition (rev.)*, even though there is an option for the claimant to go to an ALJ to request additional award. *(Reference: Level II Accreditation Curriculum, Dermatology, section on Disfigurement; Colorado Revised Statutes (C.R.S. §8-42-108)).

Complex Regional Pain Syndrome (CRPS)-formerly known as Reflex Sympathetic Dystrophy: The Division recommends using the spinal cord table *(Table 1, pg. 109, AMA Guides)* for determining impairment, however the peripheral nerve tables may be used if the evaluator deems them more appropriate *(Table 14, pg. 46; Table 51, pg. 77, Table 10 pg. 42, AMA Guides).* In unusual cases where severe vascular symptoms cause additional impairment of ADL’s the physician may choose to combine additional impairment for the vascular tables with the neurological impairment. *(Table 52, pg. 79 and Table 16, pg. 47, AMA Guides).* Range of motion should not be used, as this would be accounted for in the neurologic portion of the rating.

Tinnitus: The *AMA Guides, 3rd Edition (rev.)* suggests that 3-5% impairment may be added to the hearing impairment for tinnitus. *(Nervous System chapter, p. 110.)* Later editions of the *AMA Guides* have clarified that impairment for tinnitus is added to the total binaural hearing impairment rating before it is converted to whole person. Tinnitus impairment can only be provided when a hearing loss and impairment is documented. If adding impairment for tinnitus to monaural hearing impairment, the 3-5% would be added to the monaural hearing impairment percentage. You always eventually convert to whole person.

Headaches: Headaches which qualify for a separate work-related impairment rating should be rated using the Episodic Neurological Disorders section in Table 1 *(Chapter 4, p. 109)*. It is important to remember that if the individual has a closed head injury the highest applicable rating from this table is the only rating used. If the headache rating is to be combined with another body part, the rater must be very careful not to rate the activities of daily living deficits in both impairment areas.

Rating Abdominal Hernias: There are three classes of hernia impairment *(AMA Guides, 3rd Edition (rev.), p. 196).* Remember that to qualify for a rating in any class at the time of MMI there must, at minimum, be a “palpable defect in the supporting structures of the abdominal wall.”

Additional Notes for Physicians on the IME Panel:

IME Application: When completing the narrative and worksheets for the IME, make sure you address all of the issues and/or all of the body parts listed on the IME application. Some of them are very specific.

DIME Physicians Must Perform Complete Assessments and Exams, including All Applicable Measurements: As a Division Independent Medical Examiner you are required to perform your own examination of the claimant and ensure that all required measurements are performed and documented on the appropriate worksheets. If you utilize another medical professional (such as a physical therapist) to perform range of motion measurements or other specialized tests and assessments (such as an audiogram), you are responsible for ensuring that the medical professional performs the assessments in accordance with the *AMA Guides* and other professional standards. After completing the evaluation, in rare instances you may decide that another physician’s impairment rating better reflects the condition being evaluated. Examples include instances where you find another physician’s range of motion more physiologically credible than the measurements you have obtained or when another physician has more training in a particular area than you do, such as a psychiatrist. If you then decide to adopt another physician's rating, you should discuss in your report your own findings and clearly justify the reasons for using another physician’s rating. If you do not provide such a discussion your report will be returned as incomplete.
Performing Ratings: Just because you are asked to address a body part or condition that is listed on an IME application does not mean you have to rate that condition if you do not feel it is work-related or qualifies for permanent impairment. You should, however, acknowledge it in some fashion to ensure that all listed issues are addressed. Remember that you do not have to provide worksheets if you are not giving a rating for the injury(s) in question.

MMI Status: Be specific about MMI status and date of MMI. If you agree with an authorized treating physician regarding MMI status and date, state the name of that doctor as well as the MMI date. If you decide to provide a different date of MMI, please provide a discussion of your reasoning.

Impairment when “Not at MMI”: Remember that an IME is a legal/medical proceeding and you are being asked to provide specific information. If the party requesting the IME has asked that impairment be addressed, and if you find the patient not at MMI for that work-related injury, you should nevertheless provide a rating for that injury. This information can be used by the parties for negotiations, settlement, or to help assess further treatment needs.

Recommendations for Additional Treatment: Division Independent Medical Examiners frequently recommend further treatment. To avoid ambiguity and controversy, we recommend that independent medical examiners consider the following legal opinion issued by the Industrial Claim Appeals Office, Gebert v. Nordstrom, Inc., W.C. No. 4-428-645 (ICAO, June 20, 2003), “A recommendation for therapies which present a reasonable prospect for improving physical function may be viewed as evidence that the claimant’s condition is not stable, and the resulting impairment is not measurable. Therefore such treatment recommendations are inconsistent with MMI…. Of course it is also true that treatment which is provided merely to maintain the claimant’s condition by preventing deterioration, or to relieve continuing symptoms, is not inconsistent with MMI and may be awarded thereafter.”

The Division Independent Medical Examiner must clearly indicate whether the treatment recommendations in the IME report are intended as maintenance treatment or if the treatment could affect the MMI date given the above statement. If the examiner indicates that the treatment recommended would affect the MMI date, the examiner should also indicate whether the patient would be at maximum medical improvement as of a specific date in the event the patient refused to undertake the treatment suggested by the examiner. That “specific date” may or may not be the date of your exam. Remember that the statute defines MMI as: “A point in time when any medically determinable physical or mental impairment . . . has become stable and when no further treatment is reasonably expected to improve the condition. The requirement for future medical maintenance which will not significantly improve the condition or the possibility of improvement or deterioration resulting from the passage of time shall not affect a finding of [MMI].”

Diagnostic Tests and MMI. There are times when a patient is placed at MMI but the examiner will nevertheless order a diagnostic test. If there is a reasonable possibility that the results of a diagnostic test (such as an MRI or EMG) will change the patient’s MMI status, then in most instances the patient will not be at MMI.