

Resolution Grid – MSK 15.01 and 15.13

Commenter	Comment Received	Resolution (from authors/panel) - TBD
American Academy of Academic Physiatry	<p>The impact of a given percentage of loss of range of motion can vary significantly between individuals. It is crucial to recognize that the ROM specific severity of impairment is not solely determined by the numerical percentage but is highly influenced by the nature of the joint involved and the individual's specific needs and activities. It is imperative to adopt a nuanced approach when assessing the impact of range of motion loss. Consideration should be given not only to the numerical representation of impairment but also to the practical implications it holds for the individual, especially in the context of their professional and daily activities. A 60% of normal range of motion in a hand joint might be perceived as mild for someone who primarily engages in gross motor movements. However, the same degree of loss can be deemed severe for another individual whose profession requires intricate fine motor movements.</p>	
	<p>15.25: There is a concern on how the whole person impairment for someone with a shoulder disarticulation is only 5% more than amputation of all of the fingers. The former is far more disabling.</p>	
	<p>16.25: There is concern regarding what seems to be underestimating the difference between below knee and above knee amputation. Life gets way harder when you need to add a knee joint but there is not much gradation provided.</p>	
	<p>The discussions of active vs passive ROM are a bit tricky. Ultimately active is probably more important but passive is far easier to measure with a goniometer or similar. Both can be relevant in different situations. Having an ankle that is fused may be more disabling in some ways than one with limited motion due to weakness (you can brace a non fused ankle and still have motion when desired). Is weakness from neurologic loss that affects joint motion measured the same as contracture or are they different in some way?</p>	
	<p>It is important to note that guarding of a joint should be “palpable” is not always true or practical. It is hard to move a joint and palpate for subtle contraction of related muscles, also very hard to palpate the infrapinatus or psoas for example or in larger limbs</p>	

	16.04- hip “bursitis” is really an inaccurate term for most with lateral hip pain- should be “greater trochanteric pain syndrome” as most are tendon related pathology rather than bursa probably. This also is different entity than “impingement” which is another broad term for various other intra-articular and extra-articular conditions.	
	Tendon rupture should be distinct from tendonitis. Rupture of the Glut med/ min tendon is a highly disabling injury- more than 3% of the whole person. Iliopsoas and hamstring tendon ruptures can also be quite problematic compared to tendonitis.	
	Femoral neck, shaft and related fractures seem undervalued when compared to s/p arthrodesis/ osteotomy and similar numbers. The latter are far higher. Femur fractures are often highly traumatic injuries and often never right after surgery.	
	16.24: We concur that measuring ankle DF and PF should be measured with the knee in flexion. However, in addition to this, we also think it is imperative to assess these measurements with knee in extension to assess for gastrocnemius or soleus contractures. This dual assessment is crucial, particularly in dynamic activities and functional contexts and should be reported separately.	
	Re: 16.24g Ankle Dorsiflexion (extension) and Plantar Flexion We concur that measuring ankle DF and PF should be measured with the knee in flexion. However, in addition to this, we also think it is imperative to assess these measurements with knee in extension to assess for gastrocnemius or soleus contractures. This dual assessment is crucial, particularly in dynamic activities and functional contexts.	
American Chiropractic Assn	The American Chiropractic Association (ACA), in conjunction with the ACA Council on Forensic Sciences, reviewed the proposed changes and is without disagreement with the presented changes. Overall, the proposed changes or edits promote consistency across the AMA Guides, they seem reasonable, and they are consistent with the current evidence.	
Steven Mandel, MD	When using the word “ suboptimal “ – what is the consideration when someone is in severe pain ?	
	Amputations – is there any consideration for impairment when prosthetic/ assistive devices are used to reduce disability?	

	Range of motion – how do you rate the “injury “ impairment from a “ congenital “ condition ?	
	Are the vascular impairments for sympathetic dysfunction the same for the Upper and lower extremities? My recollection was that they were not the same in a previous edition ?	
Kathryn Mueller, MD	It would be best if systematic reviews which include final patient function and reported satisfaction were included. This would support any changes in the % numbers from the current 6 th .	
	I would prefer a much greater emphasis on kpatientn reported overall function but this was addressed in the previous review.	
	I am not sure, however any changes in the % ratings from the 6 th need to be fully explained and delineated for jurisdictions to evaluate.	
Dong-Sik Park, MD	<p>I'd like to discuss the ratings of dominant and non-dominant upper extremities. I support the concept that maximal dominant UE impairment rating is 60% WPI and non-dominant is 50%. But in the Chapter 15 (The Upper Extremities), dominant or non-dominant ratings are same. That is an internal inconsistency. What if cervical disc herniates to left or right?</p> <p>I am an electromyographer and like to comment on the perepheral nerve impairments, especially on entrapment/compression neuropathy impairment. Let's assume the extreme case. If median nerve is severely compressed at or around the elbow leading to complete paralysis & complete ulnar nerve paralysis due to compression at the wrist plus complete radial nerve paralysis, resulting in total paralysis of the involved hand. Can't extent wrist and fingers, can't flex wrist and fingers and cannot move all the hand intrinsic muscles Impairment rating according to Table 15-23, GM of median nerve is 3 and UE impairment is 9. GM of ulnar nerve is 3 and UE impairment is 9. GM of radial is 3 and UE impairment is 9. In this 3 focal neuropathies, 9% UEI is combined with 5% UEI(50% of 9%) without rating radial nerve, results in 14% UEI. But hand function is 90% of the UE. What a big difference. The patient loses a function of the hand completely but rating is too low. In Chapter 16 (The Lower Extremities), there is no Entrapment/Compression Neuropathy table, even though there are entrapment neuropathies like Piriformis syndrome, Meralgia Paresthetica, femoral neuropathy</p>	

around inguinal ligament, peroneal neuropathy at fibular head, saphenous neuropathy at the knee, tarsal tunnel syndrome. Every entrapment/compression neuropathy has its own sensory and motor symptoms and signs. Some have only sensory symptoms, as in Meralgia Paresthetica, saphenous neuropathy. Some have only motor symptoms as in anterior interosseus neuropathy, posterior interosseus neuropathy. In my opinion, there is no need to rate the entrapment/compression neuropathies simultaneously. It's better to use the peripheral neuropathy sections separately and then combine them.

There are 3 essential muscles for standing and walking.

Those are gluteus maximus (hip extensor), knee extensors (mainly quadriceps, gastrocnemius assists), and gastrocnemius (push-off the body forward, pull the femur backwards acting as a knee extensor), so their ratings should be high. But in Table 16-12 Peripheral N impairment-LE impairments, Superior Gluteal Nerve ratings is much higher than Inferior Gluteal N. Superior Gluteal N innervates Gluteus Medius. During the stance phase, or when standing on one leg, the weakened abductor muscles allow the pelvis to tilt down on the opposite side. To compensate, the trunk lurches to the weakened side to attempt to maintain a level pelvis throughout the gait cycle. Inferior Gluteal N innervates Gluteus Maximus (GM) and the muscle is the largest and strongest muscle in the human body. Functions of the GM muscle are extension and external rotation of the thigh at the hip joint, it is a chief antigravity muscle that helps keep the trunk of the body in an erect posture. The GM acts as a stabilizer during trunk rotation and stabilizes the pelvis during single leg stance. If the muscles are weak or ineffective, the stabilizing effect of these muscles during gait is lost. It prevents adduction and internal rotation of the femur and prevents the trunk to forward lean during movement. Bilateral marked weakness makes walking extremely difficult and necessitates the aids of crutches. Therefore, rating of Inferior Gluteal N should be much higher than Superior Gluteal N.

Gastrocnemius innervated by tibial nerve push-off the body forward and extend the knee when ankle is fixed, Weakness of the muscle leads to crouching position (flexed knee while stands on the involved side) and difficulty in pushing off, leading to crouching gait if severe or bilateral. Crouching gait increases the up and down movement of center of gravity and then higher energy consumption. So, rating of the

	<p>tibial nerve may be higher than peroneal nerve.</p> <p>In addition, Superficial Peroneal Nerve is a mixed nerve, innervates Peroneus Longus (ankle evertor). Thus motor rating of the nerve should be given.</p>	
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