Steven Feinberg, MD
Kale Wedemeyer, MD
Maureen Miner, MD
Nicole Chitnis, MD
Heather King, PhD
Rachel Feinberg, PT, DPT

FEINBERG MEDICAL GROUP

825 El Camino Real
Palo Alto, CA 94301
TEL 650-223-6400
FAX 650-223-6408

FMG@FeinbergMedicalGroup.com

www.FeinbergMedicalGroup.com

Almaraz-Guzman II WCAB Decision

Providing a WPI that is the Most Accurate Reflection of the Impairment

On September 3, 2009, the WCAB provided Almaraz-Guzman II. This article will discuss how the AME/QME/Treating physician might respond when queried about Almaraz-Guzman II.

Caveat: This article presents a discussion about Almaraz-Guzman II but also provides a collection of possible responses for the physician to provide the most accurate WPI. These possible methods are not meant to be used to achieve a desired result but rather the provision of a non-traditional alternative Almaraz-Guzman II WPI which must be based on substantial evidence to support rebutting a "strict/traditional" AMA *Guides* WPI.

Summary of Almaraz-Guzman II

The physician is charged with providing a whole person impairment (WPI) rating utilizing any chapter, table, or method in the AMA *Guides* 5th Edition that most accurately reflects the injured employee's impairment. The opinion must be substantial evidence.

WCAB Conclusions

- A permanent disability rating established by the Schedule is rebuttable;
- The burden of rebutting a scheduled permanent disability rating rests with the party disputing it;
- One method of rebutting a scheduled permanent disability rating is to successfully challenge one of the component elements of that rating, such as the injured employee's WPI under the AMA *Guides*;
- When determining an injured employee's WPI, it is not permissible to go outside the four corners of the AMA *Guides*; however,
- A physician may utilize any chapter, table, or method in the AMA *Guides* that most accurately reflects the injured employee's impairment.

WCAB Caveats

- The WCAB has rejected their prior 2/3/09 opinion and standard regarding "inequitable, disproportionate, and not a fair and accurate measure of the employee's permanent disability."

- The WCAB emphasizes that their "decision does not permit a physician to utilize any chapter, table, or method in the AMA *Guides* simply to achieve a desired result, e.g., a WPI that would result in a permanent disability rating based directly or indirectly on any Schedule in effect prior to 2005."

- The WCAB emphasizes that "A physician's opinion regarding an injured employee's WPI under the *Guides* must constitute substantial evidence; therefore, the opinion must set forth the facts and reasoning which justify it. Moreover, a physician's WPI opinion that is not based on the AMA *Guides* does not constitute substantial evidence."

When to Apply Almaraz-Guzman II

The evaluating physician should first provide a WPI using a "strict" or "traditional" approach to AMA *Guides*.

There is some question as to whether the evaluating physician should address Almaraz-Guzman II with the initial visit absent a subsequent letter of rebuttal from either the applicant or defense.

The WCAB in Almaraz-Guzman II states that *"... permanent disability rating established by the Schedule is rebuttable" and "... the burden of rebutting a scheduled permanent disability rating rests with the party disputing that rating" and "... one method of rebutting a scheduled permanent disability rating is to successfully challenge one of the component elements of that rating, such as the injured employee's whole person impairment (WPI) under the AMA Guides..." Also, "Once a treating physician, AME, or QME has offered an opinion regarding the injured employee's WPI under the AMA Guides, then the injured employee or the defendant may seek to challenge that opinion through rebuttal evidence."*

Thus, it is the permanent disability (PD) resulting from the 2005 Permanent Disability Rating Schedule (PDRS) which is rebuttable by either party.

It is important to remember that the physician only provides the WPI, which is only one part of the final permanent disability rating. The WPI is the starting point as the final permanent disability may increase per Ogilvie II after consideration of the DFEC (Diminished Future Earning Capacity), age and occupation. It is the WCAB and not any particular physician that is the ultimate trier-of-fact on medical issues.

The argument against addressing Almaraz-Guzman II in the initial report is that since it is unknown what the permanent disability rating will be when all factors are considered, the physician should await further query from the parties, and address it either in deposition or a supplemental report, if there are any concerns that the AMA *Guides* WPI does not lead to an accurate representation of permanent disability.

While on the surface it seems that the physician should not be addressing Almaraz-Guzman II in the initial report until the concerned parties have had a chance to review that report, and also consider the effects of the DFEC, age and occupation, the reality is that from a practical standpoint, attorneys may ask for Almaraz-Guzman II to be addressed up front. At a recent DWC Conference, DEU Director Mr. Blair Megowan suggested submitting the most accurate WPI even on the first determination.

How to Apply Almaraz-Guzman II

Activities of Daily Living (ADL)

The AMA *Guides* states that "Impairment percentages or ratings developed by medical specialists are consensus-derived estimates that reflect the severity of the medical condition and the degree to which the impairment decreases an individual's ability to perform common activities of daily living (ADL), *excluding* work."

In regards to actually addressing Almaraz-Guzman II, it is critical to analyze the injured workers activities of daily living (ADLs). If a "strict" or "traditional" AMA *Guides* WPI does not take into account the absence or presence of ADL deficits, then this may be a justification for applying Almaraz-Guzman II. Remember, it can go both ways; an impairment rating can be raised or lowered via Almaraz-Guzman II.

The issue surrounding ADLs is problematic as activities of daily living are subjective in nature and are not something the physician actually measures. The astute physician will compare what the patient reports in regards to ADL deficits/losses from what is expected from the objective findings and pathology.

To put it another way, while the physician should respect the patient's report regarding functional limitations in ADLs, the physician must determine if this report is consistent with the objective medical findings.

Objective Medical Findings

There are situations where the "strict" AMA *Guides* WPI does not provide the most accurate impairment when considering the pathology and the objective medical findings. In other words, if the strict WPI does not adequately address legitimate objective medical factors/pathology, then this may constitute substantial evidence to justify an alternate Almaraz-Guzman II WPI.

What Does Most Accurate Impairment Rating Mean?

The term "accurate" is not given in any context by the WCAB. While we can assume that the term "accurate impairment rating" refers to a relationship between the industrial injury and the permanent effects an objective medical condition has on the injured employee's ability to perform ADLs, the question becomes which ADLs we are talking about.

Some attorneys will argue that if a "traditional" rating does not reflect the injured worker's actual work impairment the physician should explain why. The physician must then prepare an alternative assessment of impairment by analogy, using the AMA *Guides* that would accurately reflect the actual work impairment, explaining why.

The defense may argue that the AMA *Guides* clearly does not account for work and that the impairment rating should be based on the activities of daily living as listed in the AMA *Guides* 5th Edition as follows:

Table 1 – AMA *Guides* ADLS
Self-care & personal hygiene: Urinating, defecating, brushing teeth, combing hair, bathing, dressing oneself, eating
Communication: Writing, typing, seeing, hearing, speaking
Physical activity: Standing, sitting, reclining, walking, climbing stairs
Sensory function: Hearing, seeing, tactile feeling, tasting, smelling
Non-specialized hand activities: Grasping, lifting, tactile discrimination
Travel: Riding, driving, flying
Sexual function: Orgasm, ejaculation, lubrication, erection
Sleep: Restful, nocturnal sleep pattern

The applicant may argue that since the goal is to provide an accurate permanent disability award, the impairment rating should bear some resemblance and have some relationship with the effects of that impairment rating on the injured worker's ADLs with respect to functioning/activities at work (e.g. work ADLs).

Below I have listed work activity ADLs. In this context, there must also be consideration for pacing (speed of activity), repetition (repetitive activities), time (prolonged activity), and positioning (static or awkward posturing) factors:

Table 2 – Work ADLs

Overhead work	Balancing
Work at or above shoulder level	Working at heights
Work below shoulder level	Climbing ladders
Torquing	Climbing stairs
Lifting	Walking on uneven terrain
Carrying	Standing / Walking
Reaching	Crouching
Pushing	Sitting
Pulling	Twisting
Grasping / Gripping	Bending
Feeling / Fingering	Squatting
Pinching	Kneeling
Handling / Holding	Stooping
Fine manipulation	Working around moving machinery
Keyboarding	Driving
	Spine flexing, extending, bending, and rotating

AG-II Summary

Almaraz-Guzman II is up for review and remains controversial but absent being overturned by a higher court, A-G II is the law currently. The defense and applicant community differ on how to interpret it. It is the responsibility of the evaluating physician to provide a thoughtful and balanced opinion that provides a WPI which is accepted as substantial evidence and which most accurately reflects the injured worker's impairment (WPI).

I have found it useful to provide an Almaraz-Guzman II WPI using several different methodologies. If they are fairly congruent, this may provide some basis for supporting the opinion as substantial evidence.

Remember, it is the WCAB and not any particular physician that is the ultimate trier-of-fact on medical issues.

Functional Capacity Evaluations

Regarding Functional Capacity Evaluations (FCEs), Functional Capacity Assessments (FCAs), and work capacity Assessments (WCAs); they can be extremely valuable in determining an individual's loss of work and self care (ADLs) capacity and retained abilities; particularly when that individual gives a full effort during testing. This testing can be particularly useful in assisting injured workers on assessing work ability while defining areas of inability that can be treated through rehabilitation.

FCEs/FCAs/WCAs can still be useful but provide a different level of information with individuals who do not provide a full effort secondary to a conscious lack of effort or from a legitimate fear of reinjury, psychiatric comorbidity and chronic pain behavior other than to document inconsistency or lack of a full effort.

A high quality FCE can be educational to the injured worker in pointing out lack of full effort despite ability and thus can be used as a teaching and rehabilitation tool.

Injured Workers with a Chronic Pain Syndrome

At least in my practice, I see quite a number of very decent patients who have developed a chronic pain syndrome and frankly do not provide a "full effort" during examination or functional testing. Subjective complaints may be high while objective correlates may be low or at least not match the degree of complaints.

A chronic pain syndrome with symptom magnification is not the same thing as malingering. A chronic pain syndrome is a legitimate treatable condition that deserves medical attention.

It is much harder with these individuals to identify the true ADL deficits and to assess both the disability and impairment. There may be legitimate psychiatric comorbidity that reasonably should be evaluated by a forensic AME/QME psychiatrist or psychologist.

Many evaluating physicians try to describe the true "physical" disability while noting that the patient has a chronic pain syndrome and stating that "non-physical" factors (psychiatric comorbidity) in concert with the "physical" factors may impede or prevent return to the open labor market and limit future earning capacity.

Using the AMA *Guides* is extremely difficult in these situations as the injured worker may not provide a consistent effort due to pain. The problem is that the injured worker may still have a significant disability and yet have certain findings that are discounted due to repeated testing not falling within certain ranges. Almaraz-Guzman II can be useful to provide the most accurate impairment rating in these situations.

Approaches to Almaraz-Guzman II – Describing the Most Accurate Impairment Rating

Describing loss of ADLs including loss of Work Capacity

Describing activity of daily living deficits can be described based on percentage of functional loss. The physician can describe a percentage loss of ADL and work capacity (which overlap and are subsumed within ADLs). For instance, the patient has lost 25% of preinjury capacity for lifting, carrying, pushing, pulling, grasping, gripping or manipulation.

Calculating Impairment Based on ADL Deficits

Within the four corners of the AMA *Guides* are two Tables (16-13 and 17-3) that provide conversion of impairment of the extremities to a WPI. Although controversial, one approach would be to calculate the impairment rating based on loss of ADLs and some would assert loss of work capacity. The physician evaluator should not provide or accept this approach to impairment rating carte blanche – it still has to be reasonable and justified clinically. It needs to provide the most accurate impairment rating per Almaraz-Guzman II.

If the physician chooses to provide this approach, my suggestion is that it should not be used in isolation as the only approach but rather be used to compare with other approaches / analogies. For example if using three methods to analogize under Almaraz-Guzman II (Table 13-22 for an upper extremity impairment; Grip strength; and WPI based on a percentage of ADL deficits) all provide similar values, this will bolster the opinion that the opinion rises to the level of substantial evidence. If the three WPIs are widely disparate, then the physician must choose the method that provides the most accurate WPI.

Upper Extremities

Under the AMA *Guides*, the upper extremity impairment can be up to 60% WPI per limb. If the individual had lost 25% of preinjury capacity in one upper extremity for lifting, carrying, pushing, pulling, grasping, gripping or manipulation, the physician evaluator could note that taking into account the true impact on ADLs and the ability to function at work, the impairment assessment would flow from the use of Table 16-3 (see below) where each upper extremity rates at 15% WPI (i.e., 25% of 60%). Per the Combined Values Chart, 15% WPI for the RUE combines with 15% WPI for the LUE for a 28% WPI.

Table 16-3 Conversion of Impairment of the Upper Extremity to Impairment of the Whole Person

% Impairment of		% Impairment of		% Impairment of		% Impairment of		% Impairment of	
Upper Extremity	Whole Person	Upper Extremity	Whole Person	Upper Extremity	Whole Person	Upper Extremity	Whole Person	Upper Extremity	Whole Person
0	0	20	12	40	24	60	36	80	48
1	1	21	13	41	25	61	37	81	49
2	1	22	13	42	25	62	37	82	49
3	2	23	14	43	26	63	38	83	50
4	2	24	14	44	26	64	38	84	50
5	3	25	15	45	27	65	39	85	51
6	4	26	16	46	28	66	40	86	52
7	4	27	16	47	28	67	40	87	52
8	5	28	17	48	29	68	41	88	53
9	5	29	17	49	29	69	41	89	53
10	6	30	18	50	30	70	42	90	54
11	7	31	19	51	31	71	43	91	55
12	7	32	19	52	31	72	43	92	55
13	8	33	20	53	32	73	44	93	56
14	8	34	20	54	32	74	44	94	56
15	9	35	21	55	33	75	45	95	57
16	10	36	22	56	34	76	46	96	58
17	10	37	22	57	34	77	46	97	58
18	11	38	23	58	35	78	47	98	59
19	11	39	23	59	35	79	47	99	59
								100	60

Lower Extremities

Under the AMA *Guides*, the lower extremity impairment can be up to 40% WPI per limb.

If the individual had lost 25% of preinjury capacity in one lower extremity for work activities, the physician evaluator could note that taking into account the true impact on ADLs and the ability to function at work, the most accurate assessment would flow from the use of Table 17-3 (see below) where each lower extremity rates at 10% WPI (i.e., 25% of 40%). Per the Combined Values Chart, 10% WPI for the RLE combines with 10% WPI for the LLE as a 19% WPI.

Table 17-3 Whole Person Impairment Values Calculated From Lower Extremity Impairment

% Impairment of		% Impairment of		% Impairment of	
Lower Extremity	Whole Person	Lower Extremity	Whole Person	Lower Extremity	Whole Person
0	0	34	14	68	27
1	0	35	14	69	28
2	1	36	14	70	28
3	1	37	15	71	28
4	2	38	15	72	29
5	2	39	16	73	29
6	2	40	16	74	30
7	3	41	16	75	30
8	3	42	17	76	30
9	4	43	17	77	31
10	4	44	18	78	31
11	4	45	18	79	32
12	5	46	18	80	32
13	5	47	19	81	32
14	6	48	19	82	33
15	6	49	20	83	33
16	6	50	20	84	34
17	7	51	20	85	34
18	7	52	21	86	34
19	8	53	21	87	35
20	8	54	22	88	35
21	8	55	22	89	36
22	9	56	22	90	36
23	9	57	23	91	36
24	10	58	23	92	37
25	10	59	24	93	37
26	10	60	24	94	38
27	11	61	24	95	38
28	11	62	25	96	38
29	12	63	25	97	39
30	12	64	26	98	39
31	12	65	26	99	40
32	13	66	26	100	40
33	13	67	27		

The Concept of Rating by Analogy

An analogy is a similarity between two things. The AMA *Guides* tells us that when there is no clear impairment rating, consider other impairments that create a similar effect on ADLs. There is support for this approach in the AMA *Guides* and now with Almaraz-Guzman II.

In situations where impairment ratings are not provided, the *Guides* suggests that physicians use clinical judgment, comparing measurable impairment resulting from the unlisted condition to measurable impairment resulting from similar conditions with similar impairment of function in performing activities of daily living *(AMA Guides, Chapter 1, page 11).*

Almaraz-Guzman II instructs physicians to provide the most accurate impairment rating using the four corners of the AMA *Guides* but the opinion must reach the level of substantial evidence.

The evaluating physician cannot just accept the injured worker's statements about ADL deficits and pain at face value. Subjective complaints (what the patient reports) are not the same thing as subjective factors (what the physician believes the patient can do based on objective correlates). Remember, the AMA *Guides* are very clear that if the patient does not give a full and complete effort, the impairment is not valid.

Specific Approaches to Rating by Analogy

Within the four corners of the AMA *Guides*, the physician can analogize using other Chapters, Tables, or Methods.

If you go to Table 13-22, Criteria for Rating Impairment Related to Chronic Pain in One Upper Extremity which is functionally based and if you look at each Class from 1 – 4, the physician could place the injured worker in the appropriate Class 1 – 4:

Table 13-22 Criteria for Rating Impairment Related to Chronic Pain in One Upper Extremity

Class 1		Class 2		Class 3		Class 4	
Dominant Extremity 1%-9% Impairment of the Whole Person	Nondominant Extremity 1%-4% Impairment of the Whole Person	Dominant Extremity 10%-24% Impairment of the Whole Person	Nondominant Extremity 5%-14% Impairment of the Whole Person	Dominant Extremity 25%-39% Impairment of the Whole Person	Nondominant Extremity 15%-29% Impairment of the Whole Person	Dominant Extremity 40%-60% Impairment of the Whole Person	Nondominant Extremity 30%-45% Impairment of the Whole Person
Individual can use the involved extremity for self-care, daily activities, and holding, but is limited in digital dexterity		Individual can use the involved extremity for self-care and can grasp and hold objects with difficulty, but has no digital dexterity		Individual can use the involved extremity but has difficulty with self-care activities		Individual cannot use the involved extremity for self-care or daily activities	

Likewise, when both upper extremities are affected, the physician could use Table 13-17, Criteria for Rating Impairment in Two Upper Extremities which is functionally based and if you look at each Class from 1 – 4, the physician could place the injured worker in the appropriate Class 1 – 4:

Table 13-17 Criteria for Rating Impairments of Two Upper Extremities

Class 1 1%-19% Impairment of the Whole Person	Class 2 20%-39% Impairment of the Whole Person	Class 3 40%-79% Impairment of the Whole Person	Class 4 80%+ Impairment of the Whole Person
Individual can use both upper extremities for self-care, grasping, and holding, but has difficulty with digital dexterity	Individual can use both upper extremities for self-care, can grasp and hold objects with difficulty, but has no digital dexterity	Individual can use both upper extremities but has difficulty with self-care activities	Individual cannot use upper extremities

For the lower extremities, an alternative method by analogy is to use a functional approach as would be the case by using Table 13-15 Criteria for Rating Impairments Due to Station and Gait Disorders. This does not work in every situation but many lower extremity problems affect gait and station.

Table 13-15 Criteria for Rating Impairments Due to Station and Gait Disorders

Class 1 1%-9% Impairment of the Whole Person	Class 2 10%-19% Impairment of the Whole Person	Class 3 20%-39% Impairment of the Whole Person	Class 4 40%-60% Impairment of the Whole Person
Rises to standing position; walks, but has difficulty with elevations, grades, stairs, deep chairs, and long distances	Rises to standing position; walks some distance with difficulty and without assistance, but is limited to level surfaces	Rises and maintains standing position with difficulty; cannot walk without assistance	Cannot stand without help, mechanical support, and/or an assistive device

Upper Extremities (other approaches)

For the individual who has a shoulder, elbow or wrist disability (with or without surgery), the injured worker may have a good outcome from treatment or surgery and even return to work, but the individual may still have symptoms along with both work and ADL limitations. Consider other conditions that may present with a similar impairment. For instance, for the shoulder, by analogy, consider using Table 16-27 for a distal clavicle excision (even if there wasn't one) which provides a 10% upper extremity impairment and a 6% WPI. This would be combined with any range of motion loss or other findings.

If there is loss of range of motion, using a "strict" or "traditional" approach, the physician could not also use a strength loss, but the evaluator might choose to do so if it was medically reasonable and doing so would make the impairment more accurate.

If the injured worker has had a poor (less than good) outcome from treatment or surgery, and the impairment does not seem accurate, there are several possible approaches. The physician could consider several methods including the percent loss of ADL/work capacity, use of one of the two Tables noted above (Table 13-17 or Table 13-22), or use of another AMA *Guides* Table that provides an impairment that is in keeping with the disability resulting from an ADL deficit.

There are a number of areas that the AMA *Guides* does not recommend using grip loss. If the grip loss is legitimate and reproducible, the physician could consider using it.

Lower Extremities (other approaches)

Another way to approach spine and lower extremity disability if the injured worker is sedentary with the use of an assistive device is by analogy using Table 17-7, Lower Limb Impairment due to Gait Derangement.

Table 17-5 Lower Limb Impairment Due to Gait Derangement

Severity	Individual's Signs	Whole Person Impairment
Mild	a. Antalgic limp with shortened stance phase and documented moderate to advanced arthritic changes of hip, knee, or ankle	7%
	b. Positive Trendelenburg sign and moderate to advanced osteoarthritis of hip	10%
	c. Same as category a or b above, but individual requires part-time use of cane or crutch for distance walking but not usually at home or in the workplace	15%
	d. Requires routine use of short leg brace (ankle-foot orthosis [AFO])	15%
Moderate	e. Requires routine use of cane, crutch, or long leg brace (knee-ankle-foot orthosis [KAFO])	20%
	f. Requires routine use of cane or crutch and a short leg brace (AFO)	30%
	g. Requires routine use of two canes or two crutches	40%
Severe	h. Requires routine use of two canes or two crutches and a short leg brace (AFO)	50%
	i. Requires routine use of two canes or two crutches and a long leg brace (KAFO)	60%
	j. Requires routine use of two canes or two crutches and two lower-extremity braces (either AFOs or KAFOs)	70%
	k. Wheelchair dependent	80%

For plantar fasciitis, the AMA *Guides* provides a 0% impairment rating. It seems that using Table 13-15 or Table 17-5 would be a reasonable approach when this problem legitimately affects ADLs and work ability and causes disability.

For a hip or knee problem, there is Table 17-33, 17-34, & 17-35 which include total joint replacement that could be considered even when there has not been a joint replacement surgery.

Table 17-33 Impairment Estimates for Certain Lower Extremity Impairments (excerpts)

Region and Condition	Whole Person (Lower Extremity) [Foot] Impairment (%)
Hip	
Total hip replacement; includes endoprosthesis, unipolar or bipolar	
Good results, 85-100 points†	15 (37)
Fair results, 50-84 points†	20 (50)
Poor results, less than 50 points†	30 (75)

Region and Condition	Whole Person (Lower Extremity) [Foot] Impairment (%)
Knee	
Total knee replacement including unicondylar replacement	
Good result, 85-100 points†	15 (37)
Fair results, 50-84 points†	20 (50)
Poor results, less than 50 points†	30 (75)
Proximal tibial osteotomy	
Good result	10 (25)
Poor result	Estimate impairment according to examination and arthritic degeneration

Table 17-34 Rating Hip Replacement Results*

	Number of Points
a. Pain	
None	44
Slight	40
Moderate, occasional	30
Moderate	20
Marked	10
b. Function	
Limp	
None	11
Slight	8
Moderate	5
Severe	0
Supportive device	
None	11
Cane for long walks	7
Cane	5
One crutch	3
Two canes	2
Two crutches	0
Distance walked	
Unlimited	11
Six blocks	8
Three blocks	5
Indoors	2
In bed or chair	0
c. Activities	
Stairs climbing	
Normal	4
Using railing	3
Cannot climb readily	1
Unable to climb	0
Putting on shoes and socks	
With ease	2
With difficulty	1
Unable to do	0
Sitting	
Any chair, 1 hour	4
High chair	2
Unable to sit comfortably	0
Public transportation	
Able to use	1
Unable to use	0

	Number of Points
d. Deformity	
Fixed adduction	
< 10°	1
≥ 10°	0
Fixed internal rotation	
< 10°	1
≥ 10°	0
Fixed external rotation	
< 10°	1
≥ 10°	0
Flexion contracture	
< 15°	1
≥ 15°	0
Leg length discrepancy	
< 3.5 cm	1
≥ 3.5 cm	0
e. Range of Motion	
Flexion	
> 90°	1
≤ 90°	0
Abduction	
> 15°	1
≤ 15°	0
Adduction	
> 15°	1
≤ 15°	0
External rotation	
> 30°	1
≤ 30°	0
Internal rotation	
> 15°	1
≤ 15°	0

* Add the points from categories a, b, c, d, and e to obtain the total score for the result of replacement. Source: modified from Oden AE, McDermott AGP, Lewis MS, et al. The use of allograft bone in revision hip arthroplasty. In: Brand R, ed. *Proceedings of the Eleventh Open Scientific Meeting of the Hip Society*. St Louis, Mo: CV Mosby Co. 1983:49; and Harris AH. Traumatic avulsion of the hip after dislocation or acetabular fractures: treatment by total arthroplasty. *J Bone Joint Surg Am* 1980;62A:735-745.

Table 17-35 Rating Knee Replacement Results*

	Number of Points
a. Pain	
None	50
Mild or occasional	45
Stairs only	40
Walking and stairs	30
Moderate	
Occasional	20
Continual	10
Severe	0
b. Range of Motion	
Add 1 point per 5°	25
c. Stability	
(maximum movement in any position)	
Anteroposterior	
< 5 mm	10
5-9 mm	5
> 9 mm	0
Mediolateral	
5°	15
6°-9°	10
10°-14°	5
≥ 15°	0
Subtotal	
Deductions (minus) d, e, f	
d. Flexion contracture	
5°-9°	2
10°-15°	5
16°-20°	10
> 20°	20
e. Extension lag	
< 10°	5
10°-20°	10
> 20°	15
f. Alignment	
0°- 4°	0
5°-10°	3 points per degree
11°-15°	3 points per degree
> 15°	20
Deductions subtotal	—

* The point total for examining knee replacement results is the sum of the points in categories a, b, and c minus the sum of the points in categories d, e, and f. Modified from Insall JN, Dorr LD, Scott RD, Scott WN. Rationale of the Knee Society clinical rating system. *Clin Orthop* 1989;248:13-14.

For Chapter 17, The Lower Extremities, Table 17-2 (see below) Guide to the Appropriate Combination of Evaluation Methods, the AMA *Guides* tells us which Evaluation Methods can and cannot be combined. If this results in an impairment that is not the most accurate, then the physician could consider combining all the Evaluation Methods that would provide a more accurate impairment result.

Table 17-2 Guide to the Appropriate Combination of Evaluation Methods

Open boxes indicate impairment ratings derived from these methods can be combined.

	Limb Length Discrepancy	Gait Derangement	Muscle Atrophy	Muscle Strength	ROM Ankylosis	Arthritis (DJD)	Amputation	Diagnosis-Based Estimates (DBE)	Skin Loss	Peripheral Nerve Injury	Complex Regional Pain Syndrome (CRPS)	Vascular
Limb Length Discrepancy		X					X					
Gait Derangement	X		X	X	X	X	X	X	X	X	X	X
Muscle Atrophy		X		X	X	X	X	X		X	X	
Muscle Strength		X	X		X	X		X		X	0	
ROM Ankylosis		X	X	X		X		X			0	
Arthritis (DJD)		X	X	X	X							
Amputation	X	X	X	X								
Diagnosis-Based Estimates (DBE)		X	X	X	X							
Skin Loss		X										
Peripheral Nerve Injury		X	X	X							X	
Complex Regional Pain Syndrome (CRPS)		X	X	0	0					X		X
Vascular		X									X	

X = Do not use these methods together for evaluating a single impairment.

0 = See specific instructions for CRPS of the lower extremity.

Spine

Many physicians calculate impairment using both the ROM and the DRE Methods and then make a clinical judgment as to which provides the more accurate impairment rating.

The DRE is the Method of choice per the AMA *Guides* 5th Edition, but the problem with the DRE Method (Table 15-3 Criteria for Rating Impairment Due to Lumbar Spine Injury - see below) has always been that if you don't have surgery and if you don't have a fusion/loss of motion segment integrity or a fracture, you cannot get up to the higher levels despite having a significant disability. Some evaluating physicians feel that you can now do so by analogy and per the instructions in Almaraz-Guzman II.

For instance, the evaluating physician could move the impairment rating to a DRE IV or V if there is radiculopathy even without alteration of motion segment integrity when there is significant lower extremity impairment is present as indicated by atrophy or loss of reflex(es), pain, and/or sensory changes within an anatomic distribution (dermatomal), or electromyographic findings. The physician would have to support that this results in the most accurate WPI.

Assuming ADLs are negatively affected, and the physician chooses a DRE V, that would provide a 28%. These individuals may well deserve an additional 3% for chronic pain from Chapter 18, Pain. This would bring the total to 31% WPI. Taking this further, the physician could then combine by using Table 15-6 Rating Corticospinal Tract Impairment. The corticospinal tract is part of the spinal cord but, by analogy, the physician evaluator may feel that it is reasonable to use this for nerve root involvement. As you can see below in Table 15-6, this can legitimately provide significant additional impairment.

As an example, a highly respected AME pointed out to me that for a lumbosacral radiculopathy that the

physician could consider providing a Gait Disorder rating (see Table 15-16c below), in addition to the DRE rating. His rationale was that the DRE III is a generic rating, but specific cases of radiculopathy vary, some have a normal gait, others (as with a total foot drop) have a very impaired gait, and some are in between.

Table 15-3 Criteria for Rating Impairment Due to Lumbar Spine Injury

DRE Lumbar Category I 0% Impairment of the Whole Person	DRE Lumbar Category II 5%-8% Impairment of the Whole Person	DRE Lumbar Category III 10%-13% Impairment of the Whole Person	DRE Lumbar Category IV 20%-23% Impairment of the Whole Person	DRE Lumbar Category V 25%-28% Impairment of the Whole Person
No significant clinical findings, no observed muscle guarding or spasm, no documentable neurologic impairment, no documented alteration in structural integrity, and no other indication of impairment related to injury or illness; no fractures	Clinical history and examination findings are compatible with a specific injury; findings may include significant muscle guarding or spasm observed at the time of the examination, asymmetric loss of range of motion, or nonverifiable radicular complaints, defined as complaints of radicular pain without objective findings; no alteration of the structural integrity and no significant radiculopathy *or* individual had a clinically significant radiculopathy and has an imaging study that demonstrates a herniated disk at the level and on the side that would be expected based on the previous radiculopathy, but no longer has the radiculopathy following conservative treatment *or* fractures: (1) less than 25% compression of one vertebral body; (2) posterior element fracture without dislocation (not developmental spondylolysis) that has healed without alteration of motion segment integrity; (3) a spinous or transverse process fracture with displacement without a vertebral body fracture, which does not disrupt the spinal canal	Significant signs of radiculopathy, such as dermatomal pain and/or in a dermatomal distribution, sensory loss, loss of relevant reflex(es), loss of muscle strength or measured unilateral atrophy above or below the knee compared to measurements on the contralateral side at the same location; impairment may be verified by electrodiagnostic findings *or* history of a herniated disk at the level and on the side that would be expected from objective clinical findings, associated with radiculopathy, or individuals who had surgery for radiculopathy but are now asymptomatic *or* fractures: (1) 25% to 50% compression of one vertebral body; (2) posterior element fracture with displacement disrupting the spinal canal; in both cases, the fracture has healed without alteration of structural integrity	Loss of motion segment integrity defined from flexion and extension radiographs as at least 4.5 mm of translation of one vertebra on another or angular motion greater than 15° at L1-2, L2-3, and L3-4, greater than 20° at L4-5, and greater than 25° at L5-S1 (Figure 15-3); may have complete or near complete loss of motion of a motion segment due to developmental fusion, or successful or unsuccessful attempt at surgical arthrodesis *or* fractures: (1) greater than 50% compression of one vertebral body without residual neurologic compromise	Meets the criteria of DRE lumbosacral categories III and IV; that is, both radiculopathy and alteration of motion segment integrity are present; significant lower extremity impairment is present as indicated by atrophy or loss of reflex(es), pain, and/or sensory changes within an anatomic distribution (dermatomal), or electromyographic findings as stated in lumbosacral category III and alteration of spine motion segment integrity as defined in lumbosacral category IV *or* fractures: (1) greater than 50% compression of one vertebral body with unilateral neurologic compromise

Table 15-6 Rating Corticospinal Tract Impairment

a. Impairment of One Upper Extremity Due to Corticospinal Tract Impairment

Class 1		Class 2		Class 3		Class 4	
Dominant Extremity 1%-9% Impairment of the Whole Person	**Nondominant Extremity 1%-4% Impairment of the Whole Person**	**Dominant Extremity 10%-24% Impairment of the Whole Person**	**Nondominant Extremity 5%-14% Impairment of the Whole Person**	**Dominant Extremity 25%-39% Impairment of the Whole Person**	**Nondominant Extremity 15%-29% Impairment of the Whole Person**	**Dominant Extremity 40%-60% Impairment of the Whole Person**	**Nondominant Extremity 30%-45% Impairment of the Whole Person**
Individual can use the involved extremity for self-care, daily activities, and holding, but has difficulty with digital dexterity		Individual can use the involved extremity for self-care, can grasp and hold objects with difficulty, but has no digital dexterity		Individual can use the involved extremity but has difficulty with self-care activities		Individual cannot use the involved extremity for self-care or daily activities	

b. Criteria for Rating Impairments of Two Upper Extremities

Class 1 1%-19% Impairment of the Whole Person	Class 2 20%-39% Impairment of the Whole Person	Class 3 40%-79% Impairment of the Whole Person	Class 4 80%+ Impairment of the Whole Person
Individual can use both upper extremities for self-care, grasping, and holding, but has difficulty with digital dexterity	Individual can use both upper extremities for self-care, can grasp and hold objects with difficulty, but has no digital dexterity	Individual can use both upper extremities but has difficulty with self-care activities	Individual cannot use upper extremities

c. Criteria for Rating Impairments Due to Station and Gait Disorders

Class 1 1%-9% Impairment of the Whole Person	Class 2 10%-19% Impairment of the Whole Person	Class 3 20%-39% Impairment of the Whole Person	Class 4 40%-60% Impairment of the Whole Person
Rises to standing position; walks, but has difficulty with elevations, grades, stairs, deep chairs, and long distances	Rises to standing position; walks some distance with difficulty and without assistance, but is limited to level surfaces	Rises and maintains standing position with difficulty; cannot walk without assistance	Cannot stand without help, mechanical support, and/or an assistive device

d. Criteria for Rating Neurologic Impairment of the Bladder

Class 1 1%-9% Impairment of the Whole Person	Class 2 10%-24% Impairment of the Whole Person	Class 3 25%-39% Impairment of the Whole Person	Class 4 40%-60% Impairment of the Whole Person
Individual has some degree of voluntary control but is impaired by urgency or intermittent incontinence	Individual has good bladder reflex activity, limited capacity, and intermittent emptying without voluntary control	Individual has poor bladder reflex activity, intermittent dribbling, and no voluntary control	Individual has no reflex or voluntary control of bladder

e. Criteria for Rating Neurologic Anorectal Impairment

Class 1 1%-19% Impairment of the Whole Person	Class 2 20%-39% Impairment of the Whole Person	Class 3 40%-50% Impairment of the Whole Person
Individual has reflex regulation but only limited voluntary control	Individual has reflex regulation but no voluntary control	Individual has no reflex regulation or voluntary control

f. Criteria for Rating Neurologic Sexual Impairment

Class 1 1%-9% Impairment of the Whole Person	Class 2 10%-19% Impairment of the Whole Person	Class 3 20% Impairment of the Whole Person
Sexual functioning is possible, but with difficulty of erection or ejaculation in men or lack of awareness, excitement, or lubrication in either sex	Reflex sexual functioning is possible, but there is no awareness	No sexual functioning

g. Criteria for Rating Neurologic Impairment of Respiration

Class 1 5%-19% Impairment of the Whole Person	Class 2 20%-49% Impairment of the Whole Person	Class 3 50%-89% Impairment of the Whole Person	Class 4 90%+ Impairment of the Whole Person
Individual can breathe spontaneously but has difficulty performing activities of daily living that require exertion	Individual is capable of spontaneous respiration but is restricted to sitting, standing, or limited ambulation	Individual is capable of spontaneous respiration but to such a limited degree that he or she is confined to bed	Individual has no capacity for spontaneous respiration

The physician evaluator needs to focus on the impairment rating being the most accurate. Given that the WCAB has clearly not directed use of the prior system of describing disability, the physician evaluator should avoid trying to connect the current impairment to prior descriptors in the old system but there is nothing wrong with using terms such as a loss of 50% of the preinjury lifting capacity or a limitation to sedentary work. These are universal terms that are accepted medically.

Another approach that I have seen promoted comes from The AMA *Guides*, Chapter 15, The Spine, page 427, 15.13 Criteria for Converting Whole Person Impairment to Regional Spine Impairment. The whole spine is divided into regions indicating the maximum whole person impairment represented by a total impairment of one region of the spine. The values are as follows: Lumbar 90%, Thoracic 40%, and Cervical 80%. If the evaluating physician felt that the injured worker had lost 50% of prior spine function for ADLS and work activities, then that percentage loss would be multiplied by the appropriate number of

that region of the spine to give an impairment rating. For example, a 50% loss of lumbar spine function would provide a 45% WPI (50% X 90% = 45%).

There may be another Table in a different Chapter that provides a reasonable and supportable impairment by analogy. For example, Chapter 6, The Digestive System, Table 6-9 (see below) Criteria for Rating Permanent Impairment Due to Herniation (hernias), Class 2 mentions "frequent discomfort, precluding heavy lifting but not hampering some activities of daily living." There could be a scenario where an individual without a hernia has similar restriction and this could be used by analogy (see the Ferras vs. United Airlines Decision).

Table 6-9 Criteria for Rating Permanent Impairment Due to Herniation

Class 1 0%-9% Impairment of the Whole Person	Class 2 10%-19% Impairment of the Whole Person	Class 3 20%-30% Impairment of the Whole Person
Palpable defect in supporting structures of abdominal wall ***and*** slight protrusion at site of defect with increased abdominal pressure; readily reducible ***or*** occasional mild discomfort at site of defect but not precluding most activities of daily living	Palpable defect in supporting structures of abdominal wall ***and*** frequent or persistent protrusion at site of defect with increased abdominal pressure; manually reducible ***or*** frequent discomfort, precluding heavy lifting but not hampering some activities of daily living	Palpable defect in supporting structures of abdominal wall ***and*** persistent, irreducible, or irreparable protrusion at site of defect ***and*** limitation in activities of daily living

Strength

Because strength measurements are functional tests influenced by subjective factors that are difficult to control and the *Guides* for the most part is based on anatomic impairment, the *Guides* does not assign a large role to such measurements (16.8 Strength Evaluation, page 507) but it does not say no role!

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*, the loss of strength may be rated separately (16.8a Principles, page 508). The physician determines what constitutes a "rare" case and when strength should be used!

While decreased strength *cannot* be rated in the presence of decreased motion, painful conditions, deformities, or absence of parts (e.g., thumb amputation) that prevent effective application of maximal force in the region being evaluated (16.8a Principles, page 508), the physician could choose to alternatively rate by loss of strength if clinically there is application of maximal force.

If an individual has had tendon rupture or has undergone surgical release of the flexor or extensor origins or medial or lateral epicondylitis, or has had excision of the epicondyle, there may be some permanent weakness of grip as a result of the tendon rupture or the surgery. In this case, impairment can be given on the basis of weakness of grip strength (16.8 Strength Evaluation, page 507). Grip strength can be used when there is a "loss of strength due to a severe muscle tear that healed leaving a palpable muscle defect (16.8a Principles, page 508). By analogy, the physician could rate based on consistent weakness due to an injury. It is critical that the physician clearly and unequivocally state that the injured worker is credible and the testing results are reliable.

Brain Injury

In Chapter 13, The Central and Peripheral Nervous System, for a brain injury, according to the AMA Guides, when injury or illness affects the CNS, several areas of function may be impaired. There are four

categories to be evaluated: (1) state of consciousness and level of awareness, whether permanent or episodic; (2) mental status evaluation and integrative functioning; (3) use and understanding of language; and (4) influence of behavior and mood. The motor and sensory systems, gait, and coordination are evaluated once the four categories of cerebral impairment have been determined.

According to the AMA Guides, the most severe of these four categories should be used to determine a cerebral impairment rating. With Almaraz-Guzman, there is an argument to be made that if this results in a impairment that is not the most accurate, then the physician should consider using all of the four categories that would provide a reasonable impairment result. In other words, instead of taking only the most severe (highest impairment) of the four categories; combine or add them instead.

Remember, the physician evaluator should not provide or accept any impairment rating carte blanche – it has to be reasonable and justified clinically. It most result in the most accurate impairment rating that reaches the threshold of substantial evidence.

Headache

A "strict" impairment rating for headache using the AMA Guides 5th Edition i at best allows for 3% using Chapter 18, Pain. Headaches can be quite disabling and affect alertness, mood, concentration, being able to work under bright lights and thus effect one's ADLs and work ability.

The evaluating physician could consider using Table 13-2 or Table 13-4, or Tables 13-5 and 13-6. The same caveat holds here too, the physician evaluator should not provide or accept any impairment rating carte blanche – it has to be reasonable and justified clinically.

Table 13-2 Criteria for Rating Impairment of Consciousness and Awareness

Class 1 0%-14% Impairment of the Whole Person	Class 2 15%-39% Impairment of the Whole Person	Class 3 40%-69% Impairment of the Whole Person	Class 4 70%-90% Impairment of the Whole Person
Brief repetitive or persistent alteration of state of consciousness *and* minimal limitation in performance of ADL	Brief repetitive or persistent alteration of state of consciousness *and* moderate limitation in performance of ADL	Prolonged alteration of state of consciousness, which diminishes capabilities in personal care and ADL	State of semicoma with complete dependency and subsistence on nursing care and artificial medical means of support *or* Irreversible coma requiring total medical support

Table 13-4 Criteria for Rating Impairment Due to Sleep and Arousal Disorders

Class 1 1%-9% Impairment of the Whole Person	Class 2 10%-29% Impairment of the Whole Person	Class 3 30%-69% Impairment of the Whole Person	Class 4 70%-90% Impairment of the Whole Person
Reduced daytime alertness; sleep pattern such that individual can perform most activities of daily living	Reduced daytime alertness; interferes with ability to perform some activities of daily living	Reduced daytime alertness; ability to perform activities of daily living significantly limited	Severe reduction of daytime alertness; individual unable to care for self in any situation or manner

Table 13-6 Criteria for Rating Impairment Related to Mental Status

Class 1 1%-14% Impairment of the Whole Person	Class 2 15%-29% Impairment of the Whole Person	Class 3 30%-49% Impairment of the Whole Person	Class 4 50%-70% Impairment of the Whole Person
Paroxysmal disorder with preimpairment exists, but is able to perform activities of daily living CDR = 0.5	Impairment requires direction of some activities of daily living CDR = 1.0	Impairment requires assistance and supervision for most activities of daily living CDR = 2.0	Unable to care for self and be safe in any situation without supervision CDR = 3.0

Table 13-5 Clinical Dementia Rating (CDR)

	Impairment Level and CDR Score		
	None 0	Questionable 0.5	Mild 1.0
Memory (M)	No memory loss or slight inconsistent forgetfulness	Consistent slight forgetfulness; partial recollection of events; "benign" forgetfulness	Moderate memory loss; more marked for recent events; defect interferes with everyday activities
Orientation (O)	Fully oriented	Fully oriented except for slight difficulty with time relationships	Moderate difficulty with time relationships; oriented for place at examination; may have geographic disorientation elsewhere
Judgment and Problem Solving (JPS)	Solves everyday problems and handles business and financial affairs well; judgment good in relation to past performance	Slight impairment in solving problems, similarities, and differences	Moderate difficulty in handling problems, similarities, and differences; social judgment usually maintained
Community Affairs (CA)	Independent function at usual level in job, shopping, volunteer and social groups	Slight impairment in these activities	Unable to function independently at these activities although may still be engaged in some; appears normal to casual inspection
Home and Hobbies (HH)	Life at home, hobbies, and intellectual interests well maintained	Life at home, hobbies, and intellectual interests slightly impaired	Mild but definite impairment of function at home; more difficult chores abandoned; more complicated hobbies and interests abandoned
Personal Care (PC)	Fully capable of self-care	Fully capable of self-care	Needs prompting

A highly respected AME neurologist told me that he had also been using Table 13-11. The rationale is that the trigeminal nerve is the anatomic pathway for the headache pain.

Table 13-11 Criteria for Rating Impairment of Cranial Nerve V (Trigeminal Nerve)

Class 1 0%-14% Impairment of the Whole Person	Class 2 15%-24% Impairment of the Whole Person	Class 3 25%-35% Impairment of the Whole Person
Mild uncontrolled facial neuralgic pain that may interfere with activities of daily living	Moderately severe, uncontrolled facial neuralgic pain that interferes with activities of daily living	Severe, uncontrolled, unilateral or bilateral facial neuralgic pain that prevents performance of activities of daily living

Myofascial Pain Syndrome & Fibromyalgia

The AMA Guides considers these conditions as without objective correlates and provides a 0% impairment rating. These conditions can result in fatigue and decreased alertness and can have an effect on ADLS and work capacity. When clinically appropriate, consider the use of Table 13-4 Criteria for Rating Impairment to Sleep and Arousal Disorders.

Table 13-4 Criteria for Rating Impairment Due to Sleep and Arousal Disorders

Class 1 1%-9% Impairment of the Whole Person	Class 2 10%-29% Impairment of the Whole Person	Class 3 30%-69% Impairment of the Whole Person	Class 4 70%-90% Impairment of the Whole Person
Reduced daytime alertness; sleep pattern such that individual can perform most activities of daily living	Reduced daytime alertness; interferes with ability to perform some activities of daily living	Reduced daytime alertness; ability to perform activities of daily living significantly limited	Severe reduction of daytime alertness; individual unable to care for self in any situation or manner

Combining and Adding

The AMA Guides does not allow combining certain impairments, i.e., you cannot use strength when there is a range of motion (ROM) loss or a compression neuropathy. There is an argument to be made that Almaraz-Guzman II gives the physician latitude to consider combining different impairments (i.e., a loss of strength even with a loss of ROM or with a compression neuropathy) that provide a fair, equitable and commensurate impairment to the disability even when the standard, traditional or literal approach to the

AMA Guides says you cannot combine the impairment values.

In general, the AMA concept and use of combining lowers the impairment rating (15% + 15% = 28%) prevents getting over a 100% impairment and even makes it hard to get to 100%. There is probably an argument (which has already been made by applicant attorneys) that combining may unfairly lower the impairment such that it is not accurate. The evaluating physician can consider the argument that various impairments should not be combined but rather added.

When this situation is the case, it will be necessary to justify such opinions by showing that adding rather than combining results in the most accurate WPI.

Summary

Physician evaluators find themselves in a precarious position with the controversial Almaraz-Guzman II Decision.

After providing an impairment rating using a "strict" or "traditional" approach to the AMA *Guides*, it is reasonable for the physician to provide a careful and thoughtful opinion about whether the impairment is the most accurate. The next step according to Almaraz-Guzman II is for the physician to provide a whole person impairment (WPI) rating utilizing any chapter, table, or method in the AMA *Guides* 5th Edition that most accurately reflects the injured worker's impairment. The opinion must be substantial evidence.

Sincerely,

Steven Feinberg MD

Steven D. Feinberg, M.D.
Adjunct Clinical Professor, Stanford University School of Medicine
Board Certified, Physical Medicine and Rehabilitation
Board Certified, Electrodiagnostic Medicine
Board Certified, Pain Medicine