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Vocational Apportionment: An Analysis of Medical and Vocational Factors Affecting Apportionment of Employability and Earning Capacity

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Abstract. *Vocational apportionment can impact an applicant's or plaintiff's employability and earning capacity. Medical factors and vocational factors affecting apportionment are discussed. Numerous recent court decisions regarding vocational apportionment are summarized. A new vocational apportionment analysis process is presented.*

Vocational apportionment refers to a pre-existing or non-industrial medical factor or a non-industrial vocational factor that impacts an applicant's or plaintiff's employability or earning capacity. Vocational apportionment can apply to applicants or plaintiffs in multiple judicial venues, such as workers' compensation, third party, personal injury, medical malpractice, longshore, and others. The primary focus of the discussion of vocational apportionment in this article is the California workers' compensation system. However, the issues discussed can apply to other judicial venues.

The discussion will begin with a review of regulations and court decisions related to medical apportionment. This will be followed by a summary of recent court decisions regarding vocational apportionment. A methodology for analyzing vocational apportionment will then be presented to assist vocational experts in developing defensible opinions. Reviewing this methodology will assist other interested parties in understanding the information, concepts and methods used by vocational experts to develop opinions regarding vocational apportionment.

Medical Apportionment

Medical apportionment is governed by Labor Code sections 4663 and 4664 in the California workers' compensation system. Labor Code section 4663 (Melchoir, 2015) states:

> §4663. Apportionment of permanent disability; causation as basis; physician's report; apportionment determination; disclosure by employee.
>
> (a) (Apportionment of permanent disability shall be based on causation.
>
> (b) (Any physician who prepares a report addressing the issue of permanent disability due to a claimed industrial injury shall in that report address the issue of causation of the permanent disability.
>
> (c) (In order for a physician's report to be considered complete on the issue of permanent disability, the report must include an apportionment determination. A physician shall make an apportionment determination by finding what approximate percentage of the permanent disability was caused by the direct result of injury arising out of and occurring in the course of employment and what approximate percentage of the permanent disability was caused by other factors both before and subsequent to the industrial injury, including prior industrial injuries. If the physician is unable to include an apportionment determination in his or her report, the physician shall state the specific reasons why the physician could not make a determination of the effect of that prior condition on the permanent disability arising from the injury. The physician shall then consult with other physicians or refer the employee to another physician from whom the employee is authorized to seek treatment or evaluation in accordance with the division in order to make the final determination.
>
> (d) (An employee who claims an industrial injury shall, upon request, disclose all previous permanent disabilities or physical impairments. (pp. 370-371)

Labor Code section 4664 (Melchoir, 2015) states:

> §4664. Liability of employer for percentage of permanent disability directly caused by injury; conclusive presumption from prior award of permanent disability; accumulation of permanent disability awards.
>
> (a) (The employer shall only be liable for the percentage of permanent disability directly caused by the in-

jury arising out of and occurring in the course of employment.

(b) (If the applicant has received a prior award of permanent disability, it shall be conclusively presumed that the prior permanent disability exists at the time of any subsequent industrial injury. This presumption is a presumption affecting the burden of proof.

(c)(1) The accumulation of all permanent disability awards issued with respect to any one region of the body in favor of one individual employee shall not exceed 100 percent over the employee's lifetime unless the employee's injury or illness is conclusively presumed to be total in character pursuant to Section 4662. As used in this section, the regions of the body are the following:

(A) (Hearing.

(B) (Vision.

(C) (Mental and behavioral disorders.

(D) (The spine.

(E) (The upper extremities, including the shoulders.

(F) (The lower extremities, including the hip joints.

(G) (The head, face, cardiovascular system, respiratory system, and all other systems or regions of the body not listed in subparagraphs (A) to (F), inclusive.

(2) Nothing in this section shall be construed to permit the permanent disability rating for each individual injury sustained by an employee arising from the same industrial accident, when added together, from exceeding 100 percent. Leg.H. 2004 ch. 34 (SB 899), effective April 19, 2004. (p. 371)

In *Brodie v. WCAB and Contra Costa Fire Protection District, et al.* (2007), the California Supreme Court affirmed Labor Code sections 4663 and 4664 by stating:

> Employers must compensate injured workers only for that portion of their permanent disability attributable to current industrial injury, not for that portion attributable to previous injuries or to nonindustrial factors. (p. 7)

Labor Code section 4664(b) (Melchoir, 2015) indicates that the employer has the burden to prove medical apportionment. However, as will be seen in the summary of recent court decisions below regarding vocational apportionment, applicant's vocational experts may be expected to prove that vocational apportionment does not exist, if that is their conclusion following a vocational evaluation.

Vocational experts who have evaluated injured workers with a claim before the California Subsequent Injuries Benefits Trust Fund (SIBTF) (Melchoir, 2015) are familiar with vocational apportionment regarding medical factors. The SIBTF can provide additional benefits to an injured worker who had a prior labor disabling medical condition and subsequently experienced a serious work injury. The work injury is the subsequent injury. Circumstances that could trigger a SIBTF claim are described in Labor Code section 4751 (Melchoir, 2015) as follows:

> §4751. Compensation for specified additions to permanent partial disabilities.
>
> If an employee who is permanently partially disabled receives a subsequent compensable injury resulting in additional permanent partial disability so that the degree of disability caused by the combination of both disabilities is greater than that which would have resulted from the subsequent injury alone, and the combined effect of the last injury and the previous disability or impairment is a permanent disability equal to 70 percent or more of total, he shall be paid in addition to the compensation due under this code for the permanent partial disability caused by the last injury compensation for the remainder of the combined permanent disability existing after the last injury as provided in this article; provided, that either (a) the previous disability or impairment affected a hand, an arm, a foot, a leg, or an eye, and the permanent disability resulting from the subsequent injury affects the opposite and corresponding member, and such latter permanent disability, when considered alone and without regard to, or adjustment for, the occupation or age of the employee, is equal to 5 percent or more of total, or (b) the permanent disability resulting from the subsequent injury, when considered alone and without regard to or adjustment for the occupation or the age of the employee, is equal to 35 percent or more of total. (p. 379)

Physicians who conduct medical evaluations involving SIBTF claims are commonly asked to provide an opinion regarding any permanent work restrictions for both the pre-existing medical condition and the subsequent work injury. Vocational experts who conduct vocational evaluations involving SIBTF claims are then commonly asked to provide an opinion regarding employability and earning capacity for the pre-existing medical condition alone and for the pre-existing medical condition and the subsequent work injury in combination. The primary reason for the latter request is that SIBTF claims often involve a claim for permanent and total disability.

Vocational apportionment regarding vocational factors has been a consideration in California workers' compensation cases for many years. Van de Bittner (2003) cited several court decisions issued from 1986 to 1998 which found that:

> . . . non-industrial factors such as illiteracy, limited occupational skills, limited educational background, and language barriers, which can affect vocational feasibility, often are not viewed as relevant or are given little weight by judges in claims for permanent and total disability. (p. 80)

Ogilvie v. WCAB and *City and County of San Francisco v. WCAB* (2011), commonly referred to as *Ogilvie III*, an en banc decision including all seven commissioners, stated:

> The application of the rating schedule is not rebutted by evidence that an employee's loss of future earnings is greater than the earning capacity adjustment that would apply to his or her scheduled rating due to non-industrial factors. (p. 15)

Examples of non-industrial factors are described in *Ogilvie III* as including "general economic conditions, illiteracy, proficiency to speak English, or an employee's lack of education" (p. 11).

There have been many recent court decisions regarding vocational apportionment in reference to medical and vocational factors. Numerous court decisions related to vocational apportionment are summarized below. As will be seen, in many of these court decisions, there is a clear indication that vocational experts should provide an analysis of vocational apportionment regarding both medical and vocational factors that will result in an opinion of diminished future earning capacity (DFEC) that is attributable to the current industrial injury alone. The court decisions will be described in chronological order.

In *Schroeder v. WCAB, State of California/Department of Corrections and Rehabilitation* (2013), the WCAB commissioners concluded in a Court of Appeal petition for writ of review denied decision that the applicant had not rebutted the future earning capacity factor in the 2005 *Schedule for Rating Permanent Disabilities* (California Division of Workers' Compensation, 2005) since the applicant's vocational expert considered impermissible non-industrial vocational factors in her analysis. The impermissible factors included limitations on employment based on geographic area and general economic conditions. The injured worker relocated from Marin County, where he was employed at the time of injury to Shasta County, after his work injury.

The vocational expert limited the analysis to Shasta County, where the job market was much weaker than in Marin County. The court also concluded that the vocational expert had misinterpreted medical evidence in assessing the applicant's vocational feasibility by stating that the applicant had a significant cognitive disability when the medical expert had found only a mild cognitive impairment.

In *Vista Ford v. WCAB (Nilsen)* (2013), another writ denied decision, the WCAB commissioners upheld the workers' compensation judge's (WCJ) decision that the applicant was permanently and totally disabled with no apportionment with no future earning capacity. The primary consideration was that the applicant was found to be 100% disabled based on the separate medical condition of chronic pain, and a related narcotic dependency and side effects of medication, despite pre-existing apportionment for other body parts. Additionally, an orthopedic panel qualified medical evaluator found that pre-existing medical conditions did not cause permanent work limitations.

Any consideration of vocational factors affecting apportionment was moot, since the applicant was 100% disabled based on medical evidence alone related to the chronic pain condition and related medication issues. The medication side effects were substantial and included, among other things, hallucinations, loss of concentration, depression, falling asleep, and tremors and shaking. The WCJ did not believe there was any vocational apportionment due to earnings since the applicant had previously earned $100,000.00 to $120,000.00 per year. There was no evidence that the applicant had lacked earning capacity or that his prior impairments caused a loss of earning capacity.

In *Williams v. WCAB, Berkeley Unified School District* (2013), a writ denied decision, neither vocational expert considered the opinion of the agreed medical evaluator regarding 20% apportionment in determining the applicant's diminished future earning capacity. The WCJ stated the ideal circumstance would be to start the DFEC analysis from the medically apportioned permanent disability and to apply the DFEC analysis based on the applicant's medical restrictions, after apportionment. Instead, to conserve time and expense, the WCJ applied the medical apportionment to the overall disability. The WCJ reduced the overall permanent disability award of 35%, based on the opinion of the vocational experts, by 20% to 28% final permanent disability.

In *Acme Steel et al. v. WCAB and Michael Borman* (2013), the Court of Appeal annulled the WCAB order, which upheld the WCJ decision of 100% permanent disability for 100% hearing loss and other injuries. The agreed medical evaluator for hearing reported that the applicant's 100% hearing loss was 60% due to noise-induced occupational hearing loss and 40% due to non-occupational factors, particularly cochlear degeneration. The agreed medical evaluator also reported that the applicant informed him he had been awarded a 22% disability award due to hearing loss for a

1994 factory explosion. The court stated it was proper for the WCJ to use vocational expert evidence to find the applicant 100% disabled based on a combination of factors. However, the Court of Appeal cited *Brodie v. WCAB* (2007) in stating that the WCJ must address apportionment and compensate the applicant for only that portion of permanent disability attributable to the current industrial injury. The court rejected the WCJ's decision that there was no apportionment under Labor Code section 4664 since the applicant had continued to work with no related loss of earnings after the prior award.

In *Lentz v. WCAB, Henry Mechanical* (2013), a writ denied decision, the court concluded that the opinion of the applicant's vocational expert that the applicant had a diminished future earning capacity of 100% was not substantial evidence since the vocational expert did not consider the applicant's pre-existing non-industrial disability and did not perform vocational testing. The applicant was awarded 69% permanent disability, after apportionment, based on the opinion of the orthopedic agreed medical evaluator that apportionment was 85% industrial and the opinion of the psychology panel qualified medical evaluator that apportionment was 60% industrial. Additionally, the court ruled that the applicant's vocational expert's fee should be paid by the defendant, since it represented a cost that was reasonable and necessary at the time it was incurred.

In *Brewer v. California Department of Corrections High Desert State Prison* (2013), a panel decision, the applicant's and defendant's vocational experts concluded that the applicant was permanently and totally disabled and that his diminished future earning capacity was 100%. Neither vocational expert considered apportionment, including primarily pre-existing medical apportionment. The WCJ relied on the applicant's vocational expert's opinion. The panel found the applicant's vocational expert's report and trial testimony were not substantial evidence. This was because the applicant's vocational expert's opinion that the applicant was unemployable was based on the applicant's overall medical disability. However, the WCJ found the medical disability in large extent to be apportionable, and the panel was in agreement. Moreover, the panel stated that a vocational expert cannot simply state that apportionment is not considered in a vocational evaluation. Ignoring or disregarding relevant factors does not constitute substantial evidence.

In *Warner Brothers Studios, Inc., v. WCAB (Crocker)* (2013), a writ denied decision, the WCAB commissioners upheld the WCJ's decision that the applicant was 100% disabled and had no future earning capacity. The WCJ found there was no apportionment since two prior injuries did not arise out of employment or in the course of employment and a third prior injury resulted in 0% permanent disability. The WCJ also found that the applicant's trial testimony was credible regarding the applicant's inability to compete in the open labor market and having diminished future earning capacity of 100%.

In *Edge v. Ralph's Grocery Store* (2013), a panel decision, the WCAB panel reversed the decision of the WCJ that the applicant was 100% disabled because the applicant's vocational expert had relied on non-industrial factors such as general economic conditions, illiteracy, proficiency to speak English, and an employee's lack of education. In addition, the panel concluded that the agreed medical evaluator and defense vocational expert did not find that the applicant could not be rehabilitated or was unable to compete in the open labor market. The panel also noted that the applicant's lack of post-injury employment did not prove the applicant was not amenable to rehabilitation.

In *Van Allen v. City of Los Angeles/Registrar-Recorder* (2013), a panel decision, the applicant had a 1998 industrial injury to multiple body parts. She had a prior industrial injury in 1990 that resulted in an award of 15.5% permanent disability based on work restrictions of no heavy lifting, repetitive bending, or stooping. The orthopedic agreed medical evaluator found 25% apportionment of the prior industrial injury. The internal medicine agreed medical evaluator found pre-existing apportionment to multiple internal conditions. The treating psychologist found no apportionment. The defense psychiatry qualified medical evaluator found 17.5% apportionment. The WCAB panel determined that the defendant met its burden of proof regarding the prior industrial injury and award. There was no dispute regarding the applicant's inability to compete in the open labor market. However, the WCAB determined that the applicant's vocational expert's opinion did not constitute substantial evidence because the vocational expert did not sufficiently analyze non-industrial factors that contributed to the applicant's inability to compete in the open labor market. The applicant's vocational expert concluded that the applicant was unable to compete in the open labor market based on a combination of industrial and non-industrial factors. There was no defense vocational expert.

In *New Axia Holdings, dba Ames Taping Tools v. WCAB (Martinez)* (2014), a panel decision, the WCAB panel found that the WCJ erred in finding medical apportionment to a prior award that was introduced into evidence with no supporting medical file or medical reports. The defendant has the burden to prove medical apportionment. The WCJ rejected the applicant's vocational expert's opinion that the applicant was 100% disabled and accepted the opinion of the defense vocational expert that the applicant was employable based on the applicant's testimony that he could return to the open labor market and the orthopedic agreed medical evaluator's opinion that the applicant was precluded from substantial work. A preclusion from substantial work means the individual has lost approximately 75% of pre-injury capac-

ity for lifting, pushing pulling, bending, stooping, climbing, and similar activities (California Division of Workers' Compensation, 1977).

In *Hines v. 3T 3C Transportation* (2014), a panel decision, the WCAB panel agreed with the WCJ that the applicant's vocational expert's report did not constitute substantial evidence. The vocational expert's opinion that the applicant was limited to part-time work was not supported by the medical reports. The vocational expert also relied on non-industrial medical conditions such as COPD and psychological conditions that required the use of medication as factors that limited the applicant's employability.

In *Pinzon v. RC Gramer Construction* (2014), a panel decision, the WCAB panel found that the opinion of the applicant's vocational expert did not constitute substantial evidence because the vocational expert disregarded the opinion of the orthopedic and psychiatry agreed medical evaluators in testifying at trial that the applicant was 100% disabled. The panel noted that the opinions of an agreed medical evaluator should be followed unless there is good reason to find them unpersuasive. Among other things, the applicant's vocational expert conducted no vocational testing and prepared no written report. The orthopedic agreed medical evaluator reported that the applicant could lift and carry 50 pounds and sit, stand, and walk 4 to 8 hours per day. The orthopedist found 10% apportionment to the low back. The psychiatry agreed medical evaluator reported that the applicant could return to his usual job as a carpenter.

In *Duplessis v. Network Appliance, Inc.* (2014), a panel decision, the WCAB affirmed that the applicant's industrial back injuries of 3/18/02 and 3/3/03 resulted in 69% orthopedic disability, before apportionment and 15% psychiatric disability. The applicant also had a 1979 non-industrial automobile accident and two industrial injuries in 1999 and 2000. The applicant's vocational expert's opinions were insufficient to rebut the scheduled rating or support a finding of 100% disability under Labor Code section 4662 (Melchoir, 2015). The court concluded that both vocational experts should provide an apportionment analysis for the two new industrial injuries and the prior non-industrial automobile accident and the 1999 and 2000 industrial injuries. The applicant's vocational expert also did not conclude that one of the current industrial injuries alone would result in 100% permanent disability.

In *Paz v. Marie Callender's, Inc.* (2014), a panel decision, the WCAB panel affirmed the WCJ's award of 80% permanent disability, after apportionment based on applicant's pre-existing diabetes, which required dialysis and right foot amputation. There was also a related stroke. The medical evaluators and the defense vocational expert considered apportionment and the applicant's vocational expert did not. The applicant's vocational expert stated that the applicant reported no pre-existing work restrictions, physical limitations, or work function limitations that prevented him from returning to work. The court responded by explaining that apportionment to pre-existing, non-industrial factors does not require that they be labor disabling at the time.

Moreover, apportionment can be based on pathology, asymptomatic prior conditions, and retroactive prophylactic work preclusions. The court also explained that a finding of 100% permanent disability under Labor Code section 4662 does not automatically preclude apportionment.

In *Morris v. WCAB, San Gorgonio Hospital* (2014), a writ denied decision, the WCAB panel held that apportionment was applicable even though the applicant was determined to be 100% permanently disabled under Labor Code section 4662(d), (Melchoir, 2015). The panel also found that the applicant was unable to rebut the scheduled rating without vocational evidence. Neither side had retained a vocational expert. The court concluded that it was improper for a physician to conclude that an applicant was unable to compete in the open labor market.

In *Diaz v. State of California, Corrections & Rehabilitation Parole* (2014), a panel decision, the WCAB panel remanded the case to the WCJ for further development of medical and vocational apportionment. The panel disagreed with the WCJ's determination that there was no medical apportionment when the psychiatry agreed medical evaluator found 20% apportionment and the internal medicine agreed medical evaluator found 25% apportionment.

The court also concluded that the agreed vocational evaluator's vocational history of the applicant was incomplete since the applicant had not disclosed concurrent part-time employment as a security guard at the time he was injured while employed as a police officer. The court ruled that an incomplete vocational history is similar to an incomplete medical history. Such a report cannot be relied upon as substantial evidence to support a finding of permanent total disability.

In *Mercer v. State of California, Department of Motor Vehicles* (2014), a panel decision, the WCAB panel amended the WCJ's 93% permanent disability after apportionment to 100%. The panel determined that the defendant had not met its burden to prove apportionment combined with the agreed vocational expert's opinion that the applicant was permanently totally disabled. Additionally, since the applicant was found to be 100% disabled based on the opinions of the orthopedic evaluator alone, there was no need to consider the 20% apportionment opinion of the psychology evaluator.

In *Pound v. WCAB* (2014), a writ denied decision, the WCAB panel affirmed the WCJ's decision that the industrial injury to the cervical spine, lumbar spine, and irritable bowel

syndrome caused 60% permanent disability, after apportionment to non-industrial factors found by the agreed medical evaluator. The WCJ found that apportionment to causation applied although a vocational expert had reported that the applicant was permanently totally disabled, citing *Borman* (2013).

In *Dufresne v. Sutter Maternity & Surgery Center of Santa Cruz* (2014), a panel decision, the WCAB panel concurred with the WCJ that the applicant was 100% disabled, without regard to apportionment. The panel found that apportionment is permissible under Labor Code section 4662(d), in accordance with the facts of the case. While the applicant's vocational expert concluded that the applicant was unemployable and had a total loss of earning capacity, the vocational expert did not demonstrate that the applicant's diminished future earnings were directly related to the work injury and not due to non-industrial factors. The commissioners stated that the vocational expert's assessment of the applicant's loss of earning capacity must be apportioned to causation when the applicant's non-amenability to rehabilitation is due to a combination of industrial and non-industrial factors.

In *Joberg v. Illuminations, Inc.* (2014), a panel decision, the WCAB panel found that the WCJ must address the substantial apportionment found by the orthopedic and psychiatric evaluators, despite the defense's vocational expert's opinion that the applicant was 100% disabled. The vocational expert's testimony did not address the apportionment opinions of the orthopedic and psychiatric evaluators. The defense vocational expert did not conduct vocational testing.

There was no applicant's vocational expert in *Joberg v. Illuninations, Inc.* (2014). The defense vocational expert was provided incomplete orthopedic and psychiatric records by the defense attorney. The defense attorney instructed the defense vocational expert not to prepare a written report since the vocational expert's opinion was that the applicant was 100% disabled based on the opinions of the psychiatric evaluator. The applicant's attorney then contacted the defense vocational expert and requested a report at the applicant's attorney's expense. The vocational expert felt ethically and legally bound to the referring defense attorney and declined the applicant's attorney's request. The applicant's attorney subpoenaed the defense vocational expert to trial, where the vocational expert testified the applicant was 100% disabled. The defendant refused to pay the defense vocational expert's trial fee. The court ordered further development of the record, including the defense vocational expert meeting with the applicant to complete the rest of the vocational evaluation. The defendant still refused to pay the fees of the defense vocational expert and petitioned to have the judge removed. The defense vocational expert advised the applicant's attorney that a court order to pay the past and future fees would be needed before proceeding. The defendant lost the petition to remove the judge and paid the defense vocational expert's invoices. The applicant's attorney requested sanctions and penalties against the defense because of failure to pay in a timely manner. The defense vocational expert was then provided the rest of the orthopedic and psychiatric records, which revealed significant orthopedic and psychiatric apportionment. The defense vocational expert was then scheduled to meet with the applicant to complete the remainder of the vocational evaluation and to prepare a written report.

In *Walter v. International Capital Group* (2015), a panel decision, the WCAB panel returned the matter to the WCJ after concluding that the applicant's vocational expert's report was not substantial evidence since the vocational expert failed to consider the orthopedic agreed medical evaluator's opinion on apportionment. The defense vocational expert's report was also not substantial evidence for failing to consider the opinion of the consulting psychiatrist. The matter was returned to the trial level with a recommendation that the parties select an agreed vocational evaluator to evaluate the applicant's future earning capacity.

In *Aima v. Buestad Construction, Inc.* (2015), a panel decision, the WCAB panel affirmed the WCJ's findings that the applicant was 100% disabled, without apportionment. The WCJ rejected the 15% apportionment to non-industrial factors found by the orthopedic agreed medical evaluator. The 15% non-industrial apportionment found by the psychiatry agreed medical evaluator was also rejected since the psychiatrist had adopted the apportionment opinion of the orthopedic agreed medical evaluator. The defendant had not met the burden of proof to justify orthopedic apportionment to degenerative changes. The WCJ then concluded that the applicant was 100% disabled based on the non-apportioned opinions of the orthopedic and psychiatry agreed medical evaluators, the applicant's trial testimony regarding cognitive impairment caused by side effects of medication, and the opinions of the applicant's vocational expert.

In summary, it is clear from a review of the above court decisions that vocational experts are expected to consider medical and vocational factors of apportionment. The court decisions also indicate that vocational experts should provide an opinion regarding diminished future earning capacity that is attributable to the current industrial injury alone. Vocational experts may be expected to provide an opinion regarding diminished future earning capacity attributable to pre-existing industrial injuries and non-industrial medical conditions. However, no process or method for analyzing vocational apportionment was provided in any of the court decisions. In the remainder of this article, a process for analyzing vocational apportionment will be presented and discussed.

Vocational Apportionment Analysis Process

The Vocational Apportionment Analysis Process (VA Process) is being presented at this time to assist vocational experts in discussing, analyzing, and developing empirically-based opinions regarding diminished future earning capacity that consider apportionment. Reviewing this process will assist other interested parties in understanding the issues addressed by vocational experts in developing opinions regarding diminished future earning capacity that consider apportionment. The process can be applied to workers' compensation, third party, personal injury, medical malpractice, and other types of cases. The process is outlined below.

I. Review Records Regarding Medical Factors Affecting Apportionment

Request, obtain, and review any medical, psychiatric, and related opinions regarding apportionment that will likely be relied upon by the court. Reviewing a complete medical record is a critical part of the process. Request medical reports and depositions that may contain an opinion on permanent work restrictions for the current and any prior medical conditions. Request court awards regarding prior conditions.

Interview the applicant or plaintiff regarding the current and any prior conditions and their impact on employability and earning capacity.

II. Review Records Regarding Vocational Factors Affecting Apportionment

Request, obtain, and review any vocational records that may address current and any pre-existing or non-industrial vocational factors. Request the deposition and other discovery records regarding the applicant or plaintiff. Interview the applicant or plaintiff regarding current and any pre-existing, non-industrial, or other vocational factors of a personal, social, legal, educational, or employment nature. Administer a complete battery of tests, the results of which may reveal non-industrial or unrelated factors. Consider interviewing or reviewing deposition transcripts of co-workers, supervisors, or family members.

For California workers' compensation cases, request, review and consider information regarding impermissible non-industrial factors cited in *Ogilvie III* (2011), such as "general economic conditions, illiteracy, proficiency to speak English, or an employee's lack of education" (p. 11). Regarding "lack of education," consider the level of education that is consistent with mandatory school attendance, which is designed to result in a high school diploma or GED certificate. Assuming a high school diploma or GED certificate post-injury would require a similar assumption pre-injury. Note that this educational assumption may or may not have an impact on any diminished future earning capacity. Examples of other factors to consider that may not be related to the injury include a learning disability, felony conviction, relocating to a geographic area with a poor labor market, family, child care, or elder care responsibilities, or lack of a financial incentive to work. Regarding felony convictions, be aware of laws such as AB 218 (Retrieved on 7/30/15) that prohibit state or local agencies in California from asking a job applicant about a criminal conviction, with some exceptions, before determining whether the applicant meets the minimum qualifications for the job. Request and consider information regarding the applicant's or plaintiff's earnings at the time of injury and for 3 to 5 years prior to the injury. Request and consider any post-injury employment-related earnings. Obtain and review information regarding the earnings of similarly situated employees. Clarify during the interview and request records regarding any permanent job modifications or alternative employment required by any pre-existing, non-industrial, or unrelated medical or vocational factors.

III. Clarify the Impact of Medical and Vocational Factors Affecting Apportionment on Employability

Clarify the impact of medical and vocational factors affecting apportionment on employability through a complete and empirically-based transferable skills analysis.

Complete a comprehensive and empirically-based employability analysis to clarify the percentage of the labor market that is related to the current claim, before apportionment, as well as the percentage of the labor market, if any, that was precluded by any pre-existing, non-industrial, or unrelated medical conditions or vocational factors.

Employment and occupational data from various sources, such as U.S. Publishing (2015), Field and Field (1999), Brault (2008), U.S. Department of Labor (2011), and California Division of Workers' Compensation (1997, 2005) can be used to develop an opinion regarding the percentage of labor market access attributable to the current work injury alone as well as to pre-existing and non-industrial medical conditions. Computerized transferable skills analysis programs also provide information regarding labor market access.

Focus on the most current medical opinions, and related work restrictions regarding apportionment by body part, e.g., cervical spine, headaches, GERD, cognition disorder, or psyche. Consider any related side effects of medication for the apportioned medical conditions.

Conduct a transferable skills analysis while considering only the portion of the medical condition and associated work restrictions that are related to the current claim. For comparison, conduct a transferable skills analysis based on any work restrictions for pre-existing non-industrial, or unrelated

medical conditions. For further comparison, consider completing a transferable skills analysis while considering all medical conditions, without apportionment.

Regarding impermissible vocational factors, conduct a transferable skills analysis under 2 scenarios. One scenario would include the results of the vocational tests administered by the vocational expert and a second would exclude test results and be based on the skill level of jobs in the applicant's or plaintiff's work history. Doing so provides an empirical method for analyzing the impact of any non-industrial or unrelated vocational factors on employability.

In the author's experience, conducting a transferable skills analysis with test scores for an injured worker with very limited academic achievement and related skills will often yield no job matches. However, conducting a second scenario of the transferable skills analysis while excluding test scores and using the skill level of jobs in the injured worker's work history will commonly yield several suitable job matches. In other cases, there are no job matches for the second scenario as well, because the underlying medical factors are so significant. The results can then be used by the vocational expert in developing an empirically-based opinion on employability and earning capacity.

IV. Clarify the Impact of Medical and Vocational Factors Affecting Apportionment on Earning Capacity

Clarify the impact of medical and vocational apportionment factors on the applicant's or plaintiff's pre-injury and post-injury earning capacity. Clarify the applicant's or plaintiff's pre-injury earning capacity including apportionment factors with the applicant's or plaintiff's pre-injury earning capacity while excluding the apportionment factors. Compare the applicant's or plaintiff's post-injury earning capacity including apportionment factors with the applicant's or plaintiff's post-injury earning capacity excluding apportionment factors. More specifically, compare the post-injury earning capacity for occupations with the work restrictions for the work injury alone with the pre-injury earning capacity, absent any non-industrial vocational factors both pre-injury and post-injury. Compare the post-injury earning capacity for occupations with work restrictions that are unrelated to the current work injury with the pre-injury earning capacity, absent any non-industrial vocational factors both pre-injury and post-injury. The examples below provide further clarification of these issues.

V. Determine Diminished Future Earning Capacity for the Current Injury Alone

In the ideal case, the vocational expert will have separate medical opinions regarding work restrictions for the current work injury alone and for any pre-existing work injuries and any non-industrial medical conditions. Similarly, the vocational expert will have sufficient information regarding any non-industrial or unrelated vocational factors. With this combination of medical opinions regarding work restrictions and information on vocational factors, the vocational expert can identify representative suitable occupations and expected wages consistent with the current injury alone.

The Earning Capacity Analysis Formula (EC Formula) (Van de Bittner, in press), formerly the Workers' Compensation Earning Capacity Formula (Van de Bittner, 2006) can be used by the vocational expert to develop an overall opinion of diminished future earning capacity attributable to the current work injury alone. Through the EC Formula, the calculation of diminished future earning capacity is expressed by the following equation:

Where:

$$DFEC = f(WLE) \times \left[\frac{PRE - POST}{PRE}\right]$$

DFEC = diminished future earning capacity, after medical and vocational apportionment, if any

WLE = worklife expectancy

PRE = pre-injury earning capacity

POST = post-injury earning capacity

f = function of

The vocational expert can use the EC Formula to determine the percentage of diminished future earning capacity attributable to the current industrial injury alone, absent any non-industrial vocational factors. Similarly, the vocational expert can use the EC Formula to determine the percentage of diminished future earning capacity attributable to any pre-existing or non-industrial medical factors and any non-industrial vocational factors.

For those cases where the vocational expert has a medical opinion only for the overall medical condition, the EC Formula can be used to develop an overall opinion of diminished future earning capacity. The vocational expert may then provide a preliminary opinion regarding apportionment based on the current medical opinions. For cases where there is only a modest degree of medical apportionment, such as 10% apportionment to asymptomatic degenerative disc disease, and no non-industrial vocational factors, the vocational expert may conclude that the overall apportionment of diminished future earning capacity is 100% industrial and 0% non-industrial. By contrast, for cases with a significant degree of non-industrial medical apportionment where the only medical restrictions relate to the overall medical condition, the vocational expert may recommend that the current opinion of the medical evaluator regarding medical appor-

tionment be adopted for an opinion regarding apportionment of diminished future earning capacity while awaiting additional medical opinions. For example, if the medical evaluator concluded that medical apportionment was 60% industrial and 40% non-industrial, the vocational expert may provide a preliminary opinion that apportionment of diminished future earning capacity is 60% industrial and 40% non- industrial.

VI. Application of Vocational Apportionment Analysis Results

The results of the vocational apportionment analysis can then be used by the attorneys in the case for their settlement negotiations. Should no settlement be reached, the results of the vocational apportionment analysis can be used by the court in rendering a decision.

Examples of Vocational Expert Opinions with the Vocational Apportionment Analysis Process (VA Process)

Example 1

A union carpenter with a high school diploma sustains a serious orthopedic injury with psychiatric and internal medicine complications. The orthopedic agreed medical evaluator concludes the applicant has no orthopedic apportionment and has permanent work restrictions of a limitation to part-time, irregular employment. The psychiatric and internal medicine evaluators conclude that apportionment is 50% industrial and 50% non- industrial in their respective specialties. The vocational expert concludes that the applicant is 100% disabled based on the opinions of the orthopedic evaluator alone since the vocational expert found no jobs in the open labor market within the orthopedic restrictions. As a result of the vocational evaluation, overall vocational apportionment based on medical and vocational factors combined is 100% industrial and 0% non- industrial. It is not necessary to opine on the apportionment opinions of the psychiatric and internal medicine evaluators since the opinions of the orthopedic evaluator are sufficient for an overall opinion on vocational apportionment.

Example 2

A plumber with only 6 years of formal education and tested reading comprehension and math computation achievement at the sixth grade level sustained a serious orthopedic injury and a head injury in a fall from a scaffold. The applicant was earning $110,000.00 per year at a union job. The orthopedic agreed medical evaluator provided a permanent work restriction of 20 pounds lifting and no apportionment. The neuropsychology agreed medical evaluator reported that the applicant was unable to work at jobs that required good memory and sustained concentration and attention, which was consistent with the results of the vocational expert's interview and vocational testing of the applicant. The neuropsychology evaluator found 20% apportionment to a pre-existing learning disability. As a result of the vocational evaluation, the vocational expert concluded that the applicant's diminished future earning capacity was 78%. The vocational expert also concluded that although there was apportionment of employability due to the pre-existing learning disability, apportionment of diminished future earning capacity was 100% industrial and 0% non-industrial. Among other things, the results of the vocational evaluation confirmed that the applicant had been earning wages at the 90th percentile for plumbers in his geographic area. The vocational expert also learned through wage research that the applicant's pre-injury earnings were twice as high as the earnings of the average wage of all workers in his geographic area. As such, it was unlikely that his pre-injury earning capacity absent his learning disability would have been higher than his actual earnings at the time of injury.

Example 3

A truck driver was involved in an accident in 2008 and injured his low back. His wage was $25.00 per hour. He had permanent work restrictions that precluded commercial truck driving. He obtained subsequent employment as a dispatcher with a trucking company and earned $18.00 per hour. He sustained a serious injury in 2012 when he tripped over a telephone cord at work, including multiple orthopedic injuries, and had a permanent work capacity of 3 hours per day, 3 days per week. The orthopedic agreed medical evaluator, the only medical evaluator in the case, found that medical apportionment was 50% to the 2008 injury and 50% to the 2012 injury. As a result of a vocational evaluation, the vocational expert concluded that the applicant was unemployable in the open labor market. Apportionment of diminished future earning capacity was 28% due to the 2008 injury and 72% due to the 2012 injury based on 2008 earnings of $25.00 per hour and 2012 earnings of $18.00 per hour.

Example 4

A janitor with no education in the United States and no ability to speak English was injured at work and sustained a shoulder injury with no medical apportionment. The janitor earned $15.00 per hour pre-injury and $12.00 per hour after returning to work at a less demanding job. Regarding vocational apportionment based on vocational factors of education and no English language achievement, the vocational expert concluded that the applicant could have worked as a janitor supervisor at a wage of at least $18.75 per hour with high school level achievement, and post-injury could have earned at least $15.00 per hour.

As a result, the vocational expert concluded that overall vocational apportionment based on combined medical and vocational factors was 25%, the difference between $15.00 per hour actual pre-injury earning capacity and $18.75 per hour as the expected pre-injury earning capacity, and the difference between $12.00 per hour expected post-injury earning capacity and $15.00 per hour as the expected post-injury earning capacity, when considering the vocational apportionment factors of no education in the United States and no English language achievement. The vocational expert then applied the expected pre-injury and post-injury earning capacity to the EC Formula and learned that the applicant's diminished future earning capacity was 20%, when considering vocational apportionment.

Summary and Implications for Practice

Vocational apportionment was discussed in regard to pre-existing, non-industrial, and unrelated medical and vocational factors that may impact an applicant's or plaintiff's employability and earning capacity. Established regulations and case law regarding medical apportionment were reviewed. Recent California workers' compensation court decisions regarding medical and vocational apportionment were reviewed. A new Vocational Apportionment Analysis Process (VA Process) was presented as a method to assist vocational experts in conducting an empirically-based analysis of vocational apportionment. Examples were provided.

The information contained in this article and the new Vocational Apportionment Analysis Process (VA Process) can be used by vocational experts in workers' compensation or civil cases to develop defensible opinions in evaluating the employability and earning capacity of applicants and plaintiffs. The information in this article can be used by vocational experts as a starting point for further discussion regarding effective ways to develop opinions regarding vocational apportionment. The information presented can also assist other interested parties in understanding the issues addressed by vocational experts in developing opinions regarding vocational apportionment.

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