

Determining Diminished Future Earning Capacity in State Workers' Compensation: The California Model

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Abstract: California's new workers' compensation law has changed the standard for determining permanent disability from diminished capacity to competing for jobs in the open labor market to diminished future earning capacity. A new *Schedule for Rating Permanent Disabilities*, with an adjustment factor for diminished future earning capacity, has been developed, and has attracted substantial challenges on the adequacy of permanent disability benefits by employees, unions, and applicants' attorneys. Vocational experts have been asked by attorneys to evaluate the actual diminished future earning capacity as compared with the adjustment for diminished future earning capacity included in the new *Schedule*. Three formulas are presented for evaluating diminished future earning capacity under the new law. Implications for practice by rehabilitation counselors and vocational experts are presented for California as well as for other states.

On April 19, 2004, California Governor Schwarzenegger signed into law Senate Bill 899, a comprehensive workers' compensation bill that addressed many of the concerns of employers regarding the cost of doing business in California (California Workers' Compensation Institute, 2004, April 20). Among other things, the new law changed the way permanent disability benefits are calculated. Specifically, the new law modified Labor Code § 4660 by replacing consideration of an injured employee's diminished ability to compete in an open labor market with an employee's diminished future earning capacity. Thus, with this provision of the new law, California changed from an employability standard to an earning capacity standard in determining an injured employee's permanent disability rating.

Labor Code § 4660 (Grant, Mawyer, Solomon, Ford, Hoover, Vollrath, Sofinski, Dempsey, & Kirby, 2005) now holds that "diminished future earning capacity shall be a numeric formula based on empirical data and findings that aggregate the average percentage of long-term loss of income resulting from each type of injury for similarly situated employees" (p.319). Further, the administrative director of the Cali

fornia Division of Workers' Compensation was required to develop a new rating schedule "based on empirical data and findings from the *Evaluation of California's Permanent Rating Schedule, Interim Report* (December 2003), prepared by the RAND Institute

Vocational experts have begun to evaluate the diminished future earning capacity of clients under the new law. Cases are starting to go to court where judges are being asked to rule on the adequacy of the adjustment factor for diminished future earning capacity under the new *Schedule*.

for Civil Justice, and upon data from additional empirical studies" (p. 319).

The new law applies to all injuries occurring on or after January 1, 2005. It also applies to prior injuries where the likelihood of any anticipated permanent disability was unknown prior to January 1, 2005 (Grant, et al., 2005). Van de Bittner (2003) presented a vo

national rehabilitation methodology for evaluating workers' compensation claims for permanent and total disability in California under the prior employability standard. The present article describes three formulas for assessing diminished future earning capacity in reference to the new workers' compensation law, which is based on the earning capacity standard.

Background of the Problem

A new *Schedule for Rating Permanent Disabilities (Schedule)* (California Division of Workers' Compensation, 2005) was developed and became effective on January 1, 2005. Among other things, the *Schedule* allows for an adjustment for diminished future earning capacity. The adjustment for diminished future earning capacity is to be applied to the whole person impairment scale by injury category. The diminished future earning capacity adjustment then ranges from 10% to 40% for each injury category (California Division of Workers' Compensation, 2005). Considerable controversy has developed regarding the manner in which the new *Schedule* was prepared. Among other things, the California Commission on Health and Safety and Workers' Compensation found

that permanent disability benefits are reduced by 50 percent under the new *Schedule* (Chorneau, 2006, p. C-1).

Moreover, in *Proving Permanent Disability Under SB 899*, Martin (2005), an applicant's attorney, contends that the *Schedule* does not adequately compensate injured employees. As a result, he suggests that applicants' attorneys evaluate the adequacy of the adjustment for diminished future earning capacity in each case. It is clear that applicants' attorneys feel compelled to challenge the *Schedule* in those instances where they believe the adjustment for future earning capacity is inadequate. However, the first court decision regarding a challenge to the *Schedule* was unfavorable for the applicant (Costa, 2006). But, in a subsequent case, the applicant prevailed (Navarro, 2006). Moreover, defense attorneys representing the interests of employers and claims administrators feel obligated to defend claims for diminished future earning capacity that exceed the adjustment for future earning capacity in the *Schedule*. Attorneys on both sides have begun to seek the assistance of vocational experts for assistance in clarifying the issues that are raised. The concerns of employees with an injury and their attorneys are understandable with respect to the adequacy of benefits. RAND (Reville, Seabury, & Neuhauser, 2003) found that permanent disability benefits replaced only 37% of earnings under the old law. Further, under the new law permanent disability benefits are less than 50% of benefits under the previous law (Sweet, 2005).

The American Medical Association's *Guides to the Evaluation of Permanent Impairment (Guides)* (Cocchiarella & Andersson, 2001) offer guidance regarding the need for vocational specialists in employability determinations. First, the *Guides* note that the whole person impairment rating developed by the physician includes common activities of daily living, but specifically excludes working. Further, the *Guides* note that physicians are expected to provide an impairment rating as well as information about work restrictions. Moreover, vo

ational specialists are expected to assist in employability determinations such as when a physician is asked to provide an opinion regarding an individual's ability to return to a job in his or her field. In this regard, vocational specialists are seen as best qualified to evaluate a "person's education, skills, and motivation, the state of the job market, and local economic considerations" (p. 14).

Moreover, in *Disability Evaluation*, which focuses on disability and complements the AMA's *Guides*, Williams (2003) described the role of the vocational rehabilitationist in clarifying the ability of an individual to work and earn income following an injury. Williams suggests that a vocational rehabilitationist "has the knowledge, skills, and professional experience to make decisions about work and earnings..." and that "...transferable skills, adaptation to change, impairment, work, and earnings must be addressed by a vocational rehabilitationist" (p. 644). Finally, the vocational rehabilitationist is best qualified to "speak to the probability of any given individual's being employed, earning wages, and maintaining a reasonable quality of life in the future" (p.647).

When considering the preceding narrative, challenges to the *Schedule* will likely continue in the coming months and years. Likewise, rehabilitation consultants who qualify as vocational experts will be called upon by the involved parties to clarify issues related to an injured employee's diminished future earning capacity.

Diminished Future Earning Capacity

Labor Code § 4660 states that "diminished future earning capacity shall be a numeric formula based on empirical data and findings that aggregate the average percentage of long-term loss of income resulting from each type of injury for similarly situated employees" (Grant, et al., 2005, p. 319). The various elements of this section are clarified below.

- Diminished Future Earning Capacity: According to *Black's Law*

Dictionary (Garner, 1999) earning capacity is defined as: 'A person's ability or power to earn money, given the person's talents, skills, training and experience. Earning capacity is one element considered when measuring the damages recoverable in a personal-injury lawsuit. And in family law, earning capacity is considered when awarding child support and spousal maintenance (or alimony) and in dividing property between spouses upon divorce. Also termed earning power' (pp. 547-548).

Lost earning capacity is 'a person's diminished earning power resulting from an injury' (Garner, 1999, p. 965). Earning capacity has also been defined by Weed and Field (2001) as, 'the ability of the individual to obtain and hold the highest paying job to which he/she would have access' (p. V-7).

Numeric Formula: This suggests that the process is based on a mathematical analysis to arrive at a conclusion. For the purpose of this article, numeric formula in its simplest form is the difference between pre-injury and post-injury earning capacity, expressed as a percentage.

- Empirical Data: According to the *Dictionary of Statistics & Methodology* (Vogt, 1999), empirical data is defined as being 'data based on observation or experience and of findings that can be verified by observation or experience. Often contrasted with 'theoretical' (p. 95).

That Aggregate the Average Percentage of Long-term Loss of Income: This suggests the need to quantify diminished future earning capacity over the injured employee's remaining worklife, expressed as a percentage. It appears to suggest the need to use aggregate wage data in computing the loss of income for an injured employee. This implies the need to quantify any changes in an injured employee's diminished future earning capacity over his or her remaining worklife. Further, it suggests a need to clarify any reduction in post-injury worklife expectancy.

- Resulting from Each Type of

Injury: This suggests the need to quantify any diminished future earning capacity for injured employees by injury type.

• For Similarly Situated Employees:

The intent here is unclear. It seems to imply comparing for body part injured combined with all other data that will impact that disability. In general, the concept of *similarly situated employees* can be addressed by comparing the diminished future earning capacity of a particular injured employee with that of injured individuals with similar skills from their work history and similar vocational test scores, or both.

Non-Industrial Factors

Van de Bittner (2003) identified a number of non-industrial factors that were often considered by the court in assessing an injured employee's ability to compete for work in the open labor market under the prior standard. Similarly, employers and claims administrators may argue that they should not be responsible for the impact of factors such as limited education, limited English language skills, felony convictions, and limited transferable skills on an employee's diminished future earning capacity. The recent case of *Escobedo v. MarshAs & CAN Insurance* (2005), which held that physicians should provide opinions on apportionment to pre-existing asymptomatic conditions exemplifies this point. Similarly, vocational experts are being asked to consider the impact of these factors on an injured employee's diminished future earning capacity.

On the other hand, applicants' attorneys will likely argue that Labor Code § 4660 requires determination of an employee's actual diminished future earning capacity, which is an individualized approach. Whether you can "apportion" to pre-existing limitations is debatable. The law may continue to be "you take them as you find them" (e.g., a college educated person would not likely be working in the fields).

Existing Methodologies For Assessing Future Earning Capacity

Bakkenson (2003) provided a methodology for evaluating future earning capacity in Arizona's workers' compensation system, a system which uses the AMA's *Guides* together with a wage-loss approach to determining permanent disability. Hultine (2003) provided a methodology for evaluating future earning capacity in Nebraska, which also requires an evaluation of future earning capacity for workers' compensation claims. However, neither the Arizona nor the Nebraska system is identical to the new California system. But, both states rely on the opinions of vocational experts in determining loss of earning capacity. Various general methodologies for assessing future earning capacity have been reported by Toppino and Boyd (1996), Toppino and Agrusa (2000), and Weed and Field (2001). The methodologies presented by these researchers provide a good general basis for assessing future earning capacity under California's new law. However, California's law will require some adaptation of existing methodologies.

Total Labor Market Approach

This approach relies on computerized job person matching programs to assess transferable skills and earning capacity. Some computerized transferable skills programs have a future earning capacity component while others do not. Three total labor market approaches to assessing future earning capacity are outlined below:

- McCroskey Transferable Skills Program.

The *McCroskey Transferable Skills Program (MTSP)* (2005) is a computerized job person matching program that includes an earning capacity component. Among other things, *MTSP* has been found to be reliable (McCroskey, Haskins, & Smolarski, 1995). Further, *MTSP* was found to be statistically valid in predicting wages in a population of Indiana vocational rehabilitation clients with disabilities (Mayer, 1998). The results of this study are pertinent to Labor Code § 4660 since, "the sample used for this statistical research is of par

ticular significance as iUs representative of real workers and the actual wages at which these workers entered or returned to the competitive labor market" (p. 13).

- Labor Market Access Plus 1999. *Labor Market Access Plus 1999* by Field and Field is another job person matching system that includes an earning capacity component. This program is outlined in detail in Weed and Field (2001).
- Other Total Labor Market Systems. Additional job person matching systems include *Occupational Access System (OASYS)* (Gibson, 2002) and *SkillTRAN* (Truthan, 2005). These programs do not currently include an earning capacity component. However, a vocational expert can incorporate wage data from other sources while using these programs.

Diminished Future Earning Capacity Formulas

Three formulas for evaluating future earning capacity under California's new workers' compensation law are presented in this section. All have features which should, at least, adequately address the factors required in assessing diminished future earning capacity under Labor Code § 4660. It is too early to know whether one formula or another can more effectively quantify diminished future earning capacity under the new law. Also, with experience, it may become evident that a particular formula will be better with one set of circumstances while another formula will be more appropriate with another set of circumstances.

Workers' Compensation Earning Capacity Formula

Van de Bittner has developed a formula for evaluating diminished future earning capacity to meet the specific requirements of the new California law. The title of the formula is Workers' Compensation Earning Capacity Formula (WCECFormula) and can be found at Table 1. The WCEC Formula has been carefully designed to address all of the specified factors in Labor

Code § 4660. Among other things, the WCEC Formula is a numeric formula. It is based on empirical data and findings, and the data and findings aggregate the average percentage of long term loss of income by using average aggregate wage data by occupation as published by the California Employment Development Department from Occupational Employment Surveys. The type of injury for similarly situated employees is addressed through a scientific comparison of average aggregate

transferable skills for injured employees with those of employees without a disability.

Under the WCEC Formula, the calculation of diminished future earning capacity is expressed in the following equation:

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

Where:

DFEC = diminished future earning capacity

WLE = worklife expectancy

PRE = pre-injury earning capacity

POST = post-injury earning capacity

f = function of

This formula provides the vocational expert an empirically based methodology for calculating post-injury employability and resultant earning capacity. The post-injury earning capacity figure can then be applied to the formula to determine diminished future earning capacity expressed as a percentage.

Table 1
Workers' Compensation Earning Capacity Formula (WCEC Formula)

The Workers' Compensation Earning Capacity Formula (WCEC Formula) can be applied in determining diminished future earning capacity relative to Labor Code § 4660.

I. Clarify Worklife Expectancy

- A. Clarify date of birth, date of injury, and permanent and stationary date.
- B. Determine pre-injury worklife expectancy.
- C. Determine post-injury worklife expectancy.

II. Establish Pre-injury Earning Capacity

- A. Clarify wages at time of injury.
- B. Clarify benefits at time of injury, particularly if they are likely to be substantially different post-injury.
- C. Combine wages and benefits to establish pre-injury earning capacity.
- D. Consider wages alone, if you expect benefits to represent a comparable portion of earnings post-injury.
- E. If necessary, convert partial work year earnings to full work year earnings.

III. Calculate Post-injury Earning Capacity

- A. Use a total labor market approach to determine post-injury employability and earning capacity.
- B. Use the *McCroskey Transferable Skills Program (MTSP)* or a comparable program to determine the average entry-level wage of all jobs for which the injured employee has some or all of the skills required for employment.
- C. Add a separate calculation for benefits if they are likely to be substantially different as a percentage of wages post-injury.
- D. Calculate earnings after 3 to 5 years through the *MTSP*.
- E. Add benefits, if substantially different as a percentage of wages post-injury.
- F. Determine earnings, if any, while in training.
- G. Calculate the average hourly earnings for the first 3 to 5 years post-injury.
- H. Calculate earnings for the remainder of the worklife post-injury.

IV. Calculate Future Earning Capacity

- A. Earnings for the first 3 to 5 years plus training time
- B. Plus earnings for the remainder of worklife
- C. Equals total future earning capacity (FEE)
- D. Pre-injury FEC less post-injury FEC
- E. Equals diminished FEC
- F. Divided by pre-injury FEC
- G. Equals the percentage of diminished FEC

- V. Calculate the Impact of Any Additional Disability Factors on FEC
 - A. Medically necessary use of a mobility aid such as a cane, crutches, walker, or wheelchair.
 - B. Artificial member or brace.
 - C. Limited to part-time work (e.g., 4 hours per day only or 3 days per week only).
 - D. Need for extra or extended rest breaks, lie-down breaks, or unscheduled absences due to flare-ups.
 - E. Absences from work for anticipated surgeries and other treatment.
 - F. Need for ready access to a bathroom.
 - G. Special environmental limitations.

- VI. Example of the Impact of Use of a Cane on FEC
 - A. Start with the percentage of diminished FEC
 - B. Calculate residual FEC
 - C. Add the impact of the use of a cane on employability.
 - D. Calculate residual FEC as a percentage
 - E. Obtain diminished FEC as a percentage

Van de Bittner has developed a three-level method for applying the WCEC Formula to meet the requirements of Labor Code § 4660. This total labor market approach to evaluating diminished future earning capacity under the new California law can be found at Table 2. Additional evaluation elements are added with each successive evaluation level. For example, the work history and testing evaluation at Level 2 adds a battery of ability, aptitude, achievement, and dexterity tests. Among other things, the results of testing will assist the vocational expert in determining the impact of pain and any side effects of medication on transferability of skills and the ability to learn new skills in school or on the job.

Table 2
Three-level Total Labor Market Evaluation Method for Labor Code § 4660

1. Work History Evaluation (based on work history; for settlement purposes only)
 - a. Review a complete and accurate Functional Capacity Assessment and Work and Earnings History Questionnaire provided by the referring attorney.
 - b. Calculate future earning capacity based on jobs in work history by comparing earning capacity at the date of injury or date last worked with post-injury earning capacity from *MTSP* job matches at entry level and with experience.
 - c. Prepare report.
 - d. Consult with attorney.

2. Work History and Testing Evaluation (based on work history and results of vocational tests; for settlement purposes only)
 - a. Review a complete and accurate Functional Capacity Assessment and Work and Earnings History Questionnaire provided by the referring attorney.
 - b. Administer a battery of ability, aptitude, achievement, and dexterity tests.
 - c. Calculate future earning capacity based on jobs in work history and test scores by comparing earning capacity at the date of injury or date last worked with post-injury earning capacity from *MTSP* job matches at entry level and with experience.
 - d. Prepare report.
 - e. Consult with attorney.

3. Comprehensive Evaluation (based on record review, comprehensive client interview, results of vocational tests, and work history; for deposition or trial testimony)
 - a. Include all diminished future earning capacity evaluation components from #2 above.
 - b. Review all medical, vocational, and wage records, deposition transcripts, and videotapes.
 - c. Conduct a comprehensive interview with the injured employee.
 - d. Calculate future earning capacity based on jobs in work history, test scores,

- interview data, and data from the record review. Compare earning capacity at the date of injury or date last worked with post injury earning capacity from *MTSP* job matches at entry level and with experience.
- e. Prepare a comprehensive report.
 - f. Participate in a pre-deposition or pre-trial conference with the referring attorney.
 - g. Complete an analysis of labor market access, if required, e.g., for permanent and total disability cases.
 - h. Complete a labor market survey, if required, e.g., for permanent and total disability cases.
 - i. Prepare for deposition or trial.
 - j. Appear at a deposition, hearing, or trial.

The Three-level Total Labor Market Evaluation Method for Labor Code § 4660 allows the vocational expert the flexibility to choose the most appropriate level of services indicated by the complexities of a particular case. This approach also allows the vocational expert to begin with one of the two simpler levels of services and to add additional elements should a case not settle and testimony be required at deposition or trial.

An injured employee's worklife expectancy can also be considered in this analysis. This is particularly important if an injured employee has a disability that will result in significant

absences from the labor force. One example would be for an individual who is limited to part-time employment. Another example would be for an individual who is expected to be absent from work for periods of time or to leave the workforce before retirement age because of an injury or progressive disease process.

Martin (2004) provides an excellent summary of the concept of worklife expectancy and various approaches to calculating worklife expectancy on the basis of government data and university studies. Richards and Abele (1999) provide another good resource of general information regarding worklife

expectancy. Finally, McNeil (1997) describes information regarding the employment rates of individuals with a disability that can be useful in the analysis of worklife expectancy.

The vocational expert will consider various vocational factors in evaluating the diminished future earning capacity of a client. These factors as outlined in Table 3 can be considered when applying the WCEC Formula to the evaluation method described in Table 2. Using Table 3 as a checklist for factors to consider will help ensure a complete and thorough analysis of a client's diminished future earning capacity.

Table 3
Factors Considered in Evaluating Diminished Future Earning Capacity

Below are factors that are commonly considered by a vocational expert when evaluating a client's diminished future earning capacity (DFEC).

A. Factors That Are Very Important in Evaluating DFEC

1. Specific medical restrictions.
2. General Assessment of Functioning (GAF) score.
3. Specific psychiatric impairments.
4. Specific cognitive impairments.
5. Environmental limitations.
6. Medical ability or inability to return to pre-injury employment.
7. Average weekly wage at DOL
8. Benefits at DOL as a percentage of wages.
9. Work schedule at DOL: Full-time, part-time, less than full year, seasonal, irregular schedule.
10. Date of birth (to determine worklife expectancy).
11. Permanent and stationary date.
12. Work history: Job titles and specific duties.
13. Test scores from a battery of ability, aptitude, achievement, and dexterity tests.
14. Transferability of skills based on medical restrictions, skills from work history, and test scores.
15. School history, diplomas, degrees, certificates, licenses.
16. Ability to learn new job skills in school or on the job.
17. Possession of a valid driver's license.
18. Ability to commute to work.

19. Having reliable transportation.
20. Use of mobility aids and other assistive devices or equipment.
21. Reported pain, intensity, and duration.
22. Side effects of medication and significance.
23. Any reduction in worklife expectancy: Limited to a part-time schedule; need for extra or extended breaks, number, duration, and predictability; anticipated surgeries and other treatment.
24. Need for ready access to a bathroom.
25. Incontinence.
26. Need for assistance with activities of daily living.
27. Outward signs of disability.
28. Results of any efforts to return to work.
29. Reliable source of wage and benefits data for future earning capacity calculations.
30. Requirements of jobs in the local labor market.

B. Factors That Are Somewhat Important in Evaluating DFEC

1. Age as a function of employment.
2. Family or social support.
3. Availability of public transportation for work commute.
4. Ability of client to take advantage of a training voucher.
5. Access to professional counseling services in the manner required for assistance in returning to work.
6. Adequacy of skills developed through a training voucher.
7. Availability of vocational training programs.
8. Financial ability to meet expenses during training and job search.
9. Elapsed time since last employed.
10. Elapsed time since last attended school.
11. Felony conviction.
12. Addiction to alcohol or other chemical dependencies.

C. Factors That Are Not Important in Evaluating DFEC

1. Whole person impairment rating from the AMA Guides.
2. A medical impairment based on a medical condition that excludes working.
3. DRE method for assessing the spine.
3. ROM method for assessing the spine.
4. Part of body injured (separate from medical restrictions).
5. Comparison of body parts injured.
6. Whether or how pain is assessed under the AMA Guides.
7. Impotence.
8. Whether pain is rated separately or in combination with another medical condition.
9. The Combined Values Chart.
10. Adjusting FEC by part of the body injured.

RAPEL Formula

The RAPEL method was established by Weed and has been described in numerous publications, including Weed and Field (2001). RAPEL is a mnemonic acronym that stands for the various elements in this approach

to assessing earning capacity, which is taken from Weed and Field (2001) and is presented in Table 4.

The RAPEL method provides a very comprehensive formula for evaluation of an individual's employability and earning capacity. While such a com

prehensive formula is not necessary in every case for evaluating diminished future earning capacity under Labor Code § 4660, various elements of this formula can be very useful to the vocational expert.

Table 4
RAPEL Method

R - Rehabilitation Plan

Determine the rehabilitation plan based on the client's vocational and functional limitations, vocational strengths, emotional functioning, and cognitive capabilities. This may include testing, counseling, training fees, rehab technology, job analysis, job coaching, placement, and other needs for increasing employment potential. Also consider reasonable accommodation. A life care plan may be needed for catastrophic injuries.

A - Access to the Labor Market

Determine the client's access to the labor market. Methods include the *LMA99* computer program, transferability of skills (or worker trait) analysis, disability statistics, and experience. This may also represent the client's loss of choice and is particularly relevant if earnings potential is based on very few positions.

P - Placeability

This represents the likelihood that the client could be successfully placed in a job. This is where the "rubber meets the road." Consider the employment statistics for people with disabilities, employment data for the specific medical condition (if available), economic situation of the community (may include a labor market survey), availability (not just existence) of jobs in chosen occupations. Note that the client's attitude, personality, and other factors will influence the ultimate outcome.

E - Earnings Capacity

Based on the above, what is the pre-incident capacity to earn compared to the post-incident capacity to earn. Methods include analysis of the specific job titles or class of jobs that a person could have engaged in pre- vs. post-incident, the ability to be educated (sometimes useful for people with acquired brain injury), family history for pediatric injuries, and *LMA99* computer analysis based on the individual's worker traits.

Special consideration applies to children, women with limited or no work history, people who chose to work below their capacity (e.g., highly educated who are farmers), and military trained.

L - Labor Force Participation

This represents the client's worklife expectancy. Determine the amount of time that is lost, if any, from the labor force as a result of the disability. Issues include longer time to find employment, part-time vs. full-time employment, medical treatment or follow up, earlier retirement, etc. Display data using specific dates or percentages. For example, an average of four hours per day may represent a 50% loss. (Weed & Field, 2001, p. 248)

SEDEC Formula

The Stepwise Estimate of Diminished Earnings Capacity (SEDEC) formula was developed and presented by Hall (2005) at the *Outside The Schedule Seminar-Providing Diminished Future Earnings Capacity* (California Applicants' Attorneys Association). According to Hall (2005), SEDEC "offers a reasonable option, combining an objective, empirically-based method with

needed simplicity and administrative efficiency" (p. VIII-I) for determining diminished future earning capacity. The basic elements of the SEDEC formula are outlined in Table 5.

The SEDEC formula is similar to the RAPEL formula, although more specific to the California workers' compensation law. In using the SEDEC formula, a vocational expert will need a sound basis for step 2-determining

the single job or pool of jobs-to insure that the most representative of all jobs are being considered for an injured employee. Otherwise, on cross-examination, a defense attorney may imply that an applicant's vocational expert intentionally selected a low-wage job or pool of jobs in an effort to increase the amount of the permanent disability benefit.

Table 5
Stepwise Estimate of Diminished Earning Capacity (SEDEC)

1. Determine historical average earnings and convert to hourly rate;
2. Determine single job and/or pool of jobs that most reasonably offer greatest employment potential to the worker;

3. Calculate average median entry-level hourly wage for job or pool of jobs;
4. Calculate average median experienced wage (with 3-5 years' experience) for job or pool of jobs;
5. Determine pre-injury worklife;
6. Consider potential loss due to reduced worklife;
7. Calculate loss scenarios using SEDEC formula;
8. Develop alternative scenarios to consider impact of receiving Vocational Rehabilitation, training, etc. (California Applicants' Attorneys Association, 2005, p. VIII-6)

Within this section, various formulas for evaluating diminished future earning capacity have been presented. In deciding which formula to use in a particular case, it is important that the vocational expert understand the inherent strengths and weaknesses of a particular formula as well as how it compares with other formulas. Being well-versed in a variety of formulas will allow the vocational expert to apply the best formula to the needs and circumstances of a particular injured employee whose diminished future earning capacity is being evaluated.

Finally, the very nature of the assessment of diminished future earning capacity in the California workers' compensation system suggests the need for a systematic, empirically based formula. At the same time, the clinical judgment of the vocational expert is also important in evaluating an injured employee's diminished future earning capacity (Choppa, et al., 2004). Further, Barros-Bailey and Neulicht (2005) have argued for a broader approach to rehabilitation research that they have termed Opinion Validity, which they have noted "combines internal and external qualitative and quantitative validity research methods to arrive at a defensible opinion that is more probable than not" (p. 40). In the context of Labor Code § 4660, this suggests that the most accurate evaluation of an injured employee's future earning capacity is likely to result from a vocational expert applying an empirical formula to the particular circumstances of an injured employee.

Conclusions and Implications for Practice

The new California workers' compensation law changed the standard for determining permanent disability from diminished ability to compete in an open labor market to diminished future earning capacity. Considerable controversy developed surrounding the enactment of a new *Schedule for Rating Permanent Disabilities*, which includes an adjustment for diminished future earning capacity. This has resulted in numerous challenges to the adequacy of the new *Schedule* in compensating injured employees for their actual diminished future earning capacity. Vocational experts are being called upon to assist attorneys in advancing and defending claims for diminished future earning capacity.

The adequacy of permanent disability benefits afforded to injured employees under the *Schedule* is the primary focus of the controversy. As noted, the prior *Schedule* returned 37% of pre-injury wages to injured employees in the form of permanent partial disability benefits (Reville, Seabury, & Neuhauser, 2003). The new *Schedule* is estimated to provide permanent partial disability benefits to injured employees that will be approximately 50% lower than the benefits injured employees would have received under the old *Schedule*. Therefore, injured employees and their representatives consider the new law to represent a significant regression in terms of the delivery of benefits to injured employees with a compensable injury or illness. At the same time, a primary political focus of the new law was to bring economic relief to California employers. This goal is being

accomplished since workers' compensation benefits paid by employers have decreased since the implementation of the new law. In addition, the workers' compensation insurance business has become so profitable that insurance carriers from around the United States have returned to the California workers' compensation insurance market (Paulin, 2005). The expectation is that with more competition, premiums will continue to fall, and employers will benefit further.

Vocational experts have begun to evaluate the diminished future earning capacity of clients under the new law. Cases are starting to go to court where judges are being asked to rule on the adequacy of the adjustment factor for diminished future earning capacity under the new *Schedule*. The results of vocational evaluations completed to date by Van de Bittner and other vocational experts have found that the actual diminished future earning capacity of injured employees is often higher than the adjustment for diminished future earning capacity in the new *Schedule*. At the same time, attorneys representing employers and claims administrators have argued in court that the opinions of vocational experts should be excluded since the *Schedule* exists for the purpose of providing an adjustment factor for diminished future earning capacity. In addition, defense attorneys will continue to argue that non-industrial factors such as the impact of limited education and limited English skills on diminished future earning capacity should not be the responsibility of employers and claims administrators. In addition, defense attorneys will request that the

adjustment factor for diminished future earning capacity in the *Schedule* be reduced in those instances where the injured employee returns to work at the same or a similar job with no actual wage loss. All of these issues are expected to be argued in the courts for months and years to come, often with the assistance of a vocational expert or consultant.

The focus of this article has been on the new workers' compensation law in California. However, the implications for the use of vocational experts in California under this law will likely carryover to other states in the future. The California law has developed stringent, empirically-based requirements for providing permanent partial disability benefits that include an adjustment for diminished future earning capacity. The new *Schedule* was developed quickly and includes imperfections in terms of the adjustment for diminished future earning capacity. As an example, any employee with a knee injury will receive the same increase in his or her disability rating. Therefore, an accountant who returns to work at the same occupation following a knee injury with permanent disability will

receive the same diminished future earning capacity adjustment as a laborer who is required to change occupations following a knee injury. Thus, vocational experts will be called upon to determine the actual diminished future earning capacity of the laborer and the applicant's attorney will argue in court for a higher benefit.

Another controversy relates to the adjustment for diminished future earning capacity in the new *Schedule* based on injury descriptions that were used in the old *Schedule*. Injury descriptions under the *AMA Guides* are not considered under either schedule (Reville, Seabury, & Neuhauser, 2005). While the new *Schedule* will be more empirically based than before, "there is potentially room to further incorporate empirical evidence on earnings losses" (Reville, Seabury, & Neuhauser, 2005, p. 93).

Finally, several studies by RAND have concluded that, "California's PPD benefits consistently fall short of the benchmark adequacy standard of two-thirds wage replacement" (Reville, Seabury, & Neuhauser, 2005, p. 94). Again, considering all of this information as it exists today, the controversy and re

sultant litigation are likely to continue, with the need for well qualified vocational experts to assist the parties in clarifying issues related to diminished future earning capacity.

The Screening Checklist for Diminished Future Earning Capacity (DFEC) Referrals as noted in Table 6 can be used by vocational experts, attorneys, and claims administrators to determine whether a client is a good candidate for a DFEC evaluation. Use of the checklist can help ensure that professional services and monetary resources are applied to those clients where DFEC is most likely to vary from the *Schedule*.

As these issues become resolved in California, other states are likely to consider what has happened in California in attempting to improve the workers' compensation system in their state. This, in turn, will have implications for vocational experts who practice in other states.

Another implication for practice is the discussion in California regarding the qualifications of a vocational expert called upon to evaluate diminished future earning capacity. In the past, qualifications to serve as a

Table 6
Screening Checklist for Diminished Future Earning Capacity (DFEC) Referrals

- A. For the Applicant
 - 1. Unable to return to pre-injury job.
 - 2. High pre-injury wage.
 - 3. Limited or no transferable skills.
 - 4. Limited education.
 - 5. Long remaining worklife.
 - 6. Intense, chronic pain.
 - 7. Use of narcotic pain medication.
 - 8. Significant medical restrictions, psychiatric impairment, cognitive impairment, or environmental limitations.
 - 9. Need for mobility aids.

- B. For the Defendant
 - 1. Evaluated by an applicant's vocational expert.
 - 2. Able to return to pre-injury job.
 - 3. Good transferable skills.
 - 4. Low pre-injury wage in relation to transferable skills.
 - 5. High education.
 - 6. Limited medical restrictions, psychiatric impairment, cognitive impairment, or environmental limitations.
 - 7. Limited remaining worklife.

qualified rehabilitation representative to provide vocational rehabilitation services in California's workers' compensation system have been modest in terms of education and experience requirements. However, mandated workers' compensation vocational rehabilitation services ended in California for injured employees who were injured after December 31, 2003. As the demand for rehabilitation counseling services has decreased, many qualified rehabilitation representatives are considering transferring their skills to the role of a vocational expert. Thus, the qualifications of a vocational expert in California are being considered at this time in this context.

The qualifications of a vocational expert chosen to conduct a diminished future earning capacity evaluation should be considered at the time of referral. The training, skills, and experience of the individual selected to conduct the evaluation will likely have an impact on the outcome. The parties may wish to consider the minimum requirements for certification as a vocational expert by the American Board of Vocational Experts (2003) in this regard. Among other things, certification at the diplomate level requires a master's degree or a doctorate in human services or a related field plus seven years of vocational expert forensics experience. Fellow status has the same education requirement but with three years of vocational expert forensics experience.

Payment for vocational expert services also has implications for practice for vocational experts in California as well as in other states. There is no expressed provision in the Labor Code for payment for vocational expert services, when services are requested by the applicant and payment is refused by the defendant. However, Labor Code § 5811 may be used to argue for payment as a court cost. Also, case law such as

Rodriguez v. Walker Communications, et al. (2006), *Whitley v. Diamond International Corporation* (1985), and *Zenith v. WCAB (Smith)* (1978) confirm that workers' compensation judges have ordered payment for a vocational evaluation requested by the applicant.

As an alternative, the parties may want to consider an agreed vocational evaluation for the assessment of diminished future earning capacity. In terms of cost, this would be beneficial to both the applicant and the defendant. The applicant would not need to pay for a vocational evaluation in advance while waiting for a judge to order payment, and the defendant would bear the cost of only one evaluation. Another option available to applicants' attorneys is to petition the court for an order for payment in advance of an evaluation. Still another option would be to negotiate at the time of a mandatory settlement conference for the payment of the vocational expert's fees in exchange for another issue that may be in contention.

Unlike civil plaintiffs' attorneys, many California workers' compensation applicants' attorneys are not accustomed to paying expert fees prior to an evaluation or testimony. As a result, some have asked vocational experts to provide evaluation and testimony services on a lien basis. This should be discouraged for a variety of professional and business reasons. Among other things, a vocational expert who accepts cases on a lien basis with the expectation of future referrals for having made this concession may find this action to be viewed as a variation of a referral fee by the Code of Professional Ethics for Rehabilitation Counselors (Commission on Rehabilitation Counselor Certification, 2002). Also, the Code of Ethics for the California Association of Rehabilitation and Reemployment Professionals (2006, p. 50) states that,

"Rehabilitation Professionals will nei

ther give nor receive a commission nor rebate or any other form of remuneration for referral of clients for potential services." Also, "Rehabilitation Professionals will not enter into financial commitments that may compromise the quality of their services" (p. 50).

In summary, California's new workers' compensation law has brought with it many implications for practice for vocational experts in California. For now, there is an increased interest in retaining vocational experts to evaluate the actual diminished future earning capacity of injured employees. What is occurring in California will likely have implications for practice for vocational experts in other states as the impact of changes brought by the new California law become more apparent.

About the Author

Eugene E. Van de Bittner, Ph.D. is a certified rehabilitation counselor, a certified life care planner, and a diplomate with the American Board of Vocational Experts. He served as president of the California Association of Rehabilitation and Reemployment Professionals in 1983. He was president of the American Board of Vocational Experts in 1997. He has also served on the ethics committees of CARRP and ABVE. He was the managing editor of a special issue of the *Journal of Forensic Vocational Analysis* in which several vocational experts researched and reported on the use of vocational expert opinion and testimony in their respective states. He has testified at the Workers' Compensation Appeals Board throughout Northern California, as well as at Superior Court in California, and at U.S. District Court. Dr. Van de Bittner is the first recipient of the Scott E. Streater Award presented this past March, 2006.

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