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Calculation of damages from personal injury, wrongful death, and employment discrimination : a nonauthoritative guide; Consulting services practice aid, 98-2

Holly Sharp

American Institute of Certified Public Accountants. Management Consulting Services Team

American Institute of Certified Public Accountants. Litigation and Dispute Resolution Services Subcommittee

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**CONSULTING SERVICES
PRACTICE AID 98-2**

AICPA

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

Technical Consulting

***Calculation of Damages
From Personal Injury,
Wrongful Death,
and Employment
Discrimination***

A Nonauthoritative Guide

Consulting Services Team

NOTICE TO READERS

This Practice Aid is designed as educational and reference material for AICPA members and others who provide consulting services as defined in the Statement on Standards for Consulting Services (SSCS) issued by the AICPA. It does not establish standards or preferred practices. Other approaches, methodologies, procedures, and presentations may be appropriate because of the widely varying nature of management consulting services as well as specific or unique facts about the client and engagement. Readers may need to consult with counsel about local requirements and state laws that may differ from the general guidance contained in the Practice Aid.

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PREFACE

This Practice Aid is one of a series intended to assist practitioners in applying their knowledge of organizational functions and technical disciplines in the course of providing consulting services. Although these Practice Aids often deal with aspects of consulting services knowledge in the context of a consulting engagement, they are also intended to be useful to practitioners who provide advice on the same subjects in the form of consultation. Consulting services engagements and consultations are defined in the Statement on Standards for Consulting Services (SSCS), *Consulting Services: Definitions and Standards*, issued by the AICPA.

This series of technical consulting Practice Aids should be particularly helpful to practitioners who use the expertise of others while remaining responsible for the work performed. It may also prove useful to members in industry and government in providing advice and assistance to management.

Technical consulting Practice Aids do not purport to include everything a practitioner needs to know or do to undertake a specific type of service. Furthermore, engagement circumstances differ and therefore the practitioner's professional judgment may cause him or her to conclude that an approach described in a particular Practice Aid is inappropriate.

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CALCULATION OF DAMAGES FROM PERSONAL INJURY, WRONGFUL DEATH, AND EMPLOYMENT DISCRIMINATION

1. INTRODUCTION

.01 Litigation and dispute resolution services are provided by a CPA using accounting and consulting skills. The CPA assists a client in a matter that involves a pending or potential formal legal or regulatory proceeding before a “trier of fact” (for example, a judge, jury, arbitrator, mediator, or special master) in connection with the resolution of a dispute between two or more parties.¹ Litigation services, a type of consulting service, are provided by a CPA acting as a consultant, usually to an attorney, or as an expert witness. The services provided may include fact finding (such as assistance in the discovery and analysis of data), damage calculation, document management, preparation of demonstrative evidence, expert testimony, and other professional services. “Damages” include—

- General damages.
- Special damages.
- Punitive or exemplary damages, when applicable.

.02 General damages and punitive or exemplary damages are not susceptible to precise calculation and are generally the sole province of the finder of fact, whereas special damages may be calculated with reasonable certainty. Special damages include monetary and economic losses, medical expenses, and other expenses that can be calculated with reasonable certainty.

.03 Calculation of special damages resulting from personal injury, wrongful death, and employment discrimination is one of the many services considered litigation services.² For purposes of this Practice Aid, these damages are referred to as personal damages.

.04 Litigation services are classified as transaction services subject to Statement on Standards for Consulting Services (SSCS) No. 1,³ and are subject to the SSCS as well as the professional standards embodied in the AICPA Code of Professional Conduct.

.05 The CPA’s communication responsibilities are set forth in SSCS No. 1, which provides the client be informed of—

- Conflicts of interest that may occur pursuant to interpretations of rule 102 of the AICPA Code of Professional Conduct.
- Significant reservations or benefits of the engagement.
- Significant engagement findings or events.

¹ As defined in Attestation Standards Interpretation No. 3, “Applicability of Attestation Standards to Litigation Services” (AICPA, *Professional Standards*, vol. 1, AT sec. 9100.48).

² See Consulting Services Practice Aid 93-4, *Providing Litigation Services* (New York: AICPA, 1993).

³ Statement on Standards for Consulting Services (SSCS) No. 1, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*, vol. 2, CS sec. 100), effective January 1, 1992, states that litigation services are subject to the following standards: professional competence, due professional care, planning and supervision, sufficient relevant data, client interest, understanding with client, and communication with client.

.06 Conflicts of interest in litigation services engagements are discussed in Consulting Services Special Report 93-2, *Conflicts of Interest in Litigation Services Engagements*.⁴ A conflict of interest⁵ may occur if a significant relationship could be viewed as impairing the practitioner's objectivity in the performance of a professional service. Before accepting a personal damages engagement, the practitioner generally discloses to the client any situations that may be viewed as conflicts of interest. SSCS No. 1 also requires practitioners, before accepting or during the engagement, to communicate to the client any serious reservations concerning the engagement. This communication may be oral or in writing.

.07 SSCS No. 1 does not require communication of significant reservations and significant engagement findings or events to be written. However, written summary of the expert opinion may be required by the Federal Rules of Civil Procedure⁶ or by the rules of civil procedure governing state courts.

.08 Federal rule 26 establishes the duty of disclosure of expert testimony. The expert opinion subject to Federal Rules of Civil Procedure should be disclosed in a written report prepared and signed by the witness. The following written disclosures are required by rule 26:

- A complete statement of all opinions to be expressed and the basis and reasons therefor
- The data or other information considered by the witness in forming the opinions
- Any exhibits to be used as a summary of or support for the opinions
- The qualifications of the witness, including a list of all publications written by the witness within the preceding ten years
- The compensation to be paid for the study and testimony
- A listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

.09 Federal Rules of Civil Procedure apply to expert testimony in federal district courts. Written reports may also be requested by the trier of fact in other jurisdictions or by the client. Consulting Practice Aid 95-2, *Communicating Understandings in Litigation Services: Engagement Letters*, and Consulting Practice Aid 96-3, *Communicating in Litigation Services: Reports*, may provide additional guidance.

2. SCOPE OF THIS PRACTICE AID

.01 Civil litigation involving damages from personal injury, wrongful death, and employment discrimination often requires financial calculations. For purposes of this Practice Aid, these damages are referred to as personal damages.

.02 This Practice Aid discusses the types of engagements, the engagement scope and acceptance considerations, the types of damages, general approaches to damage estimation, and various specific methods of damage calculation used in personal damages cases. This Practice Aid does not set standards for the performance of such engagements or other litigation services.

⁴ Consulting Services Special Report 93-2, *Conflicts of Interest in Litigation Services Engagements* (New York: AICPA, 1993).

⁵ AICPA Code of Professional Conduct, Rule 102, Integrity and Objectivity, states, "In the performance of any professional service, a member ...shall be free of conflicts of interest."

⁶ Federal Rules of Civil Procedure 26 (a)(2)(B).

3. USEFUL SKILLS FOR THE CPA IN THIS TECHNICAL AREA

.01 The CPA performing services in personal damages engagements generally uses time-value-of-money concepts and analytical skills. The determination of the elements of the calculation often requires analysis of historical financial and economic data, including surveys and studies. Familiarity with statistics and sampling may be helpful in evaluating such data's reliability.

.02 Computer skills may assist the practitioner in the personal-damages engagement. The Internet provides many information sources that may be useful in formulating the elements of the calculation. Spreadsheet software provides a time-efficient method to perform the calculation.

4. NONAUTHORITATIVE GUIDANCE AND PROFESSIONAL STANDARDS

.01 SSCS No. 1 applies to personal damages as litigation services and subjects such engagements to Rule 201, General Standards, of the AICPA Code of Professional Conduct, which includes the standards of professional competence, due professional care, planning and supervision, and sufficient relevant data. SSCS No. 1 establishes the standards of client interest, understanding with client, and communication with client. Such engagements are also subject to the AICPA Code of Professional Conduct.⁷

.02 In addition to this Practice Aid, other AICPA Practice Aids and special reports may provide nonauthoritative guidance to the CPA for personal damages engagements in litigation services. These publications discuss the nature of litigation services more fully, including applicable professional standards, conflicts of interest, and communication considerations in consulting engagements and engagement letters.

Nonauthoritative Literature

.03 The nonauthoritative publications include—

- Consulting Services Special Report 93-1, *Application of AICPA Professional Standards in the Performance of Litigation Services* (New York: AICPA, 1993).
- Consulting Services Special Report 93-2, *Conflicts of Interest in Litigation Services Engagements* (New York: AICPA, 1993).
- Consulting Services Practice Aid 93-4, *Providing Litigation Services* (New York: AICPA, 1993).
- Management Advisory Services Practice Administration Aid No. 3, *Written Communication of Results in MAS Engagements* (New York: AICPA, 1995).
- Consulting Services Practice Aid 95-2, *Communicating Understandings in Litigation Services: Engagement Letters* (New York: AICPA, 1995).
- Consulting Services Practice Aid 96-3, *Communicating in Litigation Services: Reports* (New York: AICPA, 1996).
- Consulting Services Practice Aid 97-1, *Fraud Investigations in Litigation and Dispute Resolution Services* (New York: AICPA, 1997).

⁷ In addition to Rule 201, General Standards, the CPA personal damages engagement is subject to such code requirements as Rule 102, Integrity and Objectivity, including "Applicability of Rule 102 to Members Performing Educational Services" (AICPA, *Professional Standards*, vol. 2, ET sec. 102.06), and "Professional Services Involving Client Advocacy" (AICPA, *Professional Standards*, vol. 2, ET sec. 102.07).

Authoritative Literature

.04 Readers should also be aware that the following authoritative literature applies to litigation services as well as any other service provided by CPAs in public practice:

- AICPA Code of Professional Conduct (particularly rule 201)
- SSCS No. 1, *Consulting Services: Definitions and Standards*

5. TYPES OF ENGAGEMENTS

Consultant

.01 The CPA may be retained as a consultant to advise the client on alternative methods of calculation and presentation of personal damages for purposes of settlement negotiations, among other reasons. The consultant's work, unlike that of the expert witness, may be shielded from discovery through the attorney work-product privilege. The consultant is not a testifying expert and is often not identified to the opposing parties. However, the consultant may subsequently become a testifying expert.

Expert Witness (Testifying Expert)

.02 The CPA's function when retained as a testifying expert is to assist the trier of fact in understanding the evidence or to determine a fact in issue. The CPA expert advocates an opinion (not the opinion of the attorney or the attorney's client) with objectivity. The expert may be an advocate for his or her unbiased opinion but not be an advocate for the retaining party.

.03 The CPA may also be retained for rebuttal of the opposing expert witness. In this capacity, the CPA may provide evidence that statements of opposing experts are inaccurate, misleading, or not true.

6. ENGAGEMENT SCOPE AND ENGAGEMENT CONSIDERATIONS

Engagement Acceptance Issues

.01 The CPA first determines there are no conflicts of interest that could preclude him or her from accepting the engagement.

.02 Before undertaking an engagement calculating personal damages, the CPA ascertains the needs of the client. This in turn assists the CPA to evaluate whether his or her ability meets the requirements of the engagement. The CPA identifies the nature of the services to be provided, which may include fact finding (such as assistance in the discovery and analysis of data), damage calculations, document management, preparation of demonstrative evidence, testimony, or other professional services. The CPA ascertains the reporting and timing requirements of the engagement. The CPA also resolves any issues that may be viewed as conflicts of interest and may then determine the staffing requirements of the engagement.

⁸ Rebuttal evidence, as defined in *Black's Law Dictionary*, 6th edition, is "evidence given to explain, repel, counteract, or disprove facts given in evidence by the opposing party. That which tends to explain or contradict or disprove evidence offered by the adverse party. *Layton v. State*, 261 Ind. 251, 301 N.E.2d 633, 636."

Fee Arrangements

.03 Next, the CPA inquires what party will pay the fees and then determines whether this party will be able to make payment if the litigation is unsuccessful. If not, the engagement might be viewed as one involving a contingency fee. A contingency fee arrangement for an attorney is entirely proper. The AICPA now permits a CPA to receive contingent fees; however, a number of states still prohibit such fees. Furthermore, most canons of the bar make it improper for an expert witness to be part of a contingency fee arrangement. The CPA needs to consider the adverse effect that such an arrangement has on the testifying expert's credibility. It is difficult to explain that a contingency fee arrangement does not bias the expert's opinion. Thus, a CPA generally should not accept an engagement that may require expert testimony on a contingency fee basis.⁹

.04 The fees and terms of payment are generally agreed to before work begins. The CPA may obtain a retainer upon acceptance of the engagement and may apply this amount against the final bill.

Understanding With Clients

.05 Understanding with clients may be either oral or written.¹⁰ Nonauthoritative guidance is provided in AICPA Practice Aid 95-2.

7. LOSS CALCULATION

.01 Many cases involving personal damages may require a CPA's services to quantify the net economic losses sustained by the claimant. Specifically, CPAs are called upon to estimate monetary losses, such as lost earnings, lost fringe benefits, household services, and medical expenses.

.02 The CPA determines monetary amounts that would have been realized "but for" the personal damages incident and then applies reductions for amounts actually realized or received. A further reduction may apply for amounts that would have been received had the plaintiff mitigated damages, depending on the facts of the case. A reduction for personal consumption generally applies in cases involving wrongful death and may apply in other personal damages cases.

.03 The loss period is generally the claimant's worklife expectancy, or life expectancy, depending on the injury and the loss.¹¹ The loss is projected over this period, based on appropriate growth factors, and discounted to present-day dollars, based on appropriate discount factors.

⁹ See Consulting Services Practice Aid 93-4, paragraphs 70/119-120, "Engagement Acceptance Considerations."

¹⁰ SCS No. 1.

¹¹ In cases involving employment discrimination, the loss period may be much shorter than worklife expectancy because it may be influenced by such factors as the plaintiff's expected job tenure based on his or her prior work history, the average time in position at the defendant firm, the average retirement age at the defendant firm, or the expected convergence of mitigating earnings.

.04 Examples of economic or monetary losses in personal damages cases are as follow:

- Earnings
- Fringe benefits
- Other income, costs, or both
- Household services
- Medical costs

Life Expectancy

.05 Life expectancy represents the number of years the claimant would have lived but for the loss event. This number is generally determined from reference to tables prepared by the Vital Statistics Division of the National Center for Health Statistics¹² and varies according to age, ethnic background, and gender. Consideration should be given to life expectancy both before and after the injury is sustained.

Worklife Expectancy

.06 Worklife expectancy represents the number of years the claimant would have worked but for the loss event. This number is generally taken from tables provided by the Bureau of Labor Statistics (BLS). The worklife tables vary according to age, ethnic background, gender, and education level.¹³ The BLS tables do not vary with occupation but instead represent the average time a person is expected to be in the labor force, regardless of occupation. The BLS worklife tables represent the number of years men and women are expected to be in the workforce but not which specific years will be spent working. Calculations of personal damages generally assume that the worklife is uninterrupted.¹⁴

.07 Worklife tables other than the BLS worklife tables may be used to determine an individual's worklife expectancy; however, the BLS worklife tables represent the legal standard in many courts. Studies of worklife expectancy have been performed and conclude results other than the BLS worklife tables.¹⁵ Consideration may be given to particular circumstances with respect to the occupation of the individual.¹⁶ An individual's personal situation may also be evaluated to determine whether modification should be made to the worklife expectancy determined from the BLS worklife tables.¹⁷

¹² U.S. National Center for Health Statistics, *Vital Statistics of the United States* (Department of Health and Human Services).

¹³ U. S. Department of Labor, Bureau of Labor Statistics, "Worklife Estimates: Effects of Race and Education," Bulletin 2254 (Feb. 1986). These tables were based on data from 1979-80 and the Department of Labor presently has no plans to update them. A new set of tables has been prepared, using the same methodology as in the U. S. Department of Labor tables. See "A Markov Process Model of Work-Life Expectancies Based on Labor Market Activity in 1992-93," by Drs. James Ciecka, Thomas Donley, and Jerry Goldman, *Journal of Legal Economics*, American Academy of Economic & Financial Experts, vol. 5, no. 3, winter 1995, pages 17-41.

¹⁴ The BLS worklife tables are based on average life expectancy, and this assumes that the individual would be expected to live an average life span. Modification of the worklife expectancy may be considered for persons who would not be expected to live an average life span.

¹⁵ See discussion in Gerald D. Martin, "New Worklife Expectancy Tables," chap. 7 in *Determining Economic Damages* (Santa Ana, Calif.: James Publishing, Inc., 1997).

¹⁶ Hugh Richards and Richard J. Solie, "Worklife Estimates by Occupation," *Journal of Forensic Economics*, vol. 9, no. 2, spring/summer 1996, pages 145-167.

¹⁷ It is not uncommon for persons in the military or with large corporations to use their retirement benefits to retire before the end of their worklife expectancy. The worklife tables may overstate the earnings in this situation. It is also not unusual for owners of closely held businesses to work beyond normal retirement age. The worklife tables may understate the earnings in this situation.

Past Losses Versus Future Losses

.08 The claimant's losses should be calculated as of a certain point in time, usually the trial date.¹⁸ The losses sustained from the date of injury to the trial date are referred to as *past losses*. The losses sustained from the trial date through the loss period are referred to as *future losses*. The loss period may extend through the claimant's expected worklife or life expectancy, depending on the type of loss sustained.¹⁹ Past losses are distinguished from future losses because past losses are not discounted to present-dollar amounts. Past losses are generally computed through the trial date, and then judicial or prejudgment interest may be added to reflect the value as of the trial date.²⁰ Future losses are computed through the worklife expectancy, life expectancy, or other loss period and then discounted back to the trial date, based on the appropriate discount rate.

Lost Earnings

.09 Lost earnings represent the claimant's earning capacity but for the injury, less the actual earning capacity. Earning capacity should be based on a reasonably certain estimate of the plaintiff's ability to earn wages, compensation, or other form of remuneration. But-for earnings are referred to as *unimpaired earnings*, whereas actual earnings, expected future earnings, or both are referred to as *impaired earnings*. Lost earnings are classified into past lost earnings and future lost earnings.

.10 The calculation of past lost earnings requires an estimate of the claimant's unimpaired earnings between the injury date and the trial date. This amount is then reduced by the actual impaired earnings realized between the injury date and the trial date. Mitigating circumstances may further reduce the calculated amount.²¹ The following factors are generally considered in determining past lost earnings:

- Historical actual annual earnings of the claimant before the injury
- Historical information regarding the claimant's job positions, performance ratings, salary, and benefit information, including information on positions held before the position at the date of the loss incident
- The claimant's employment status before the injury
- Actual or expected occupation or position, including the likelihood that claimant would have enjoyed future advancement
- Information concerning the efforts extended by the claimant to find alternative employment
- Actual or expected educational level of the claimant
- Actual earnings of individuals working in comparable employment positions
- Actual earnings of individuals working in similar industries

¹⁸ The losses may be calculated as of the date of the report instead of the trial date if the trial date is uncertain.

¹⁹ The loss period will not necessarily extend throughout the worklife expectancy or life expectancy, and the particular facts of the case will determine the loss period. For example, a plaintiff may find employment to replace or partially replace amounts lost, and replacement amounts may in some instances exceed amounts lost.

²⁰ The applicability of judicial or prejudgment interest and the applicable rate or rates will vary by jurisdiction. See *Litigation Services Handbook*, chapter 40, "Interest as Damages," by John R. Phillips, C.P.A., and Neill W. Freeman, C.P.A.

²¹ Actual impaired earnings realized between the injury date and the trial date may be different from the plaintiff's actual earning capacity. For example, a plaintiff might have accepted a new position at a pay level less than his or her earning capacity.

.11 Generally, the methodology in calculating future lost earnings is the same as the calculation of past lost earnings. Future lost earnings, however, are discounted back to the date of trial. The claimant's estimated annual unimpaired earnings are reduced by the estimated annual impaired earnings, with consideration given to mitigating circumstances, and projected over the worklife expectancy, life expectancy, or other loss period, depending on the type or nature of the loss. Another significant difference between calculating future and past lost earnings is that future earnings calculations include age and earnings profile issues, whereas past earnings do not.

Fringe Benefits

.12 Fringe benefits from employment that are lost due to the injury may represent an additional loss to the claimant. Fringe benefit information may be obtained directly from the claimant's employer. A union member's fringe benefits may be obtained from the union contract. National studies are also available from the Department of Labor²² and the U. S. Chamber of Commerce.²³ Lost fringe benefits may include the following:

- Employer contributions for Social Security, workers' compensation, and unemployment insurance
- Employer contributions to stock option, profit sharing, and retirement plans
- Employer contributions for health, life, and disability insurance premiums
- Paid time not worked for vacations, holidays, and sick leave that is in addition to regular compensation

.13 Lost fringe benefits may be computed as a percentage of annual lost earnings.²⁴ This percentage is then applied uniformly to each year in which wages were lost. This method, however, may result in errors and should be carefully reviewed. The following examples illustrate errors that may result when lost fringe benefits are computed as a percentage of annual lost earnings:

- The claimant obtains new employment, but at a reduced level of compensation. The new employment provides the same number of days for vacations, holidays, and sick leave. This fringe benefit has been replaced; however, the percentage method of establishing lost fringe benefits may provide a loss and overstate the total loss.
- Employer contributions for Social Security provide insurance for old age, survivors, disability, and health. The portion allocated to health insurance may not represent a lost fringe benefit because once a person qualifies for Social Security, he or she receives the health insurance benefit regardless of the dollar amount contributed on his or her behalf. The percentage method of establishing lost fringe benefits may provide a loss and overstate the total loss.

.14 Lost fringe benefits may also be computed by determining the value lost in the year of injury and then applying a rate of growth over each year of worklife expectancy or life expectancy, depending on the benefit provision. This method may also result in error when the fringe benefit would not have been lost over the entire worklife expectancy or life expectancy, as illustrated in the examples in the previous paragraph.

²² Department of Labor, *Monthly Labor Review*.

²³ U. S. Chamber of Commerce, *Employee Benefits*.

²⁴ The application of a percentage to determine lost fringe benefits should be evaluated for reasonableness. The growth rate for fringe benefits is not necessarily the same as the growth rate used for earnings.

Lost Income From Other Sources

.15 An individual's income from other sources, such as rental properties, interest, dividends, or royalties, may be examined to determine if it was affected by the loss event. Similarly, the loss event may cause the individual to incur additional expenses that would not have been incurred but for the loss event. Examples of possible effects of personal injury to other income sources follow:

- Before the injury, the claimant performed management and repair services for rental properties owned but is unable to perform these services after the injury. The cost of hiring an outside maintenance or management company would represent an increased expense and therefore may be a monetary loss to the claimant.
- Before the injury, royalty income was earned by the individual from a textbook that required periodic updating to be marketable. The cost to hire another person to perform this service would represent an increased expense and therefore may be a monetary loss to the claimant.

Household Services

.16 Household services that can no longer be performed due to personal injury may represent another component of personal damages. The monetary loss is computed for both the past and future loss periods, based on the estimated life expectancy of the claimant. Examples of household services include—

- Home maintenance and repairs.
- Managing finances.
- Child care.
- Housekeeping, cooking, and shopping.

.17 The following may be acceptable bases for estimating the value of household services:

- *Replacement cost.* The loss is based on the cost to hire someone to perform the services the claimant can no longer perform. The actual amounts spent during the past economic-loss period are combined with the amounts expected to be expended over the future economic loss period to determine the loss of household services due to the injury.
- *Opportunity cost.* An individual may voluntarily spend time performing household services, as opposed to obtaining outside employment. The time to perform the household services may be considered a compensable opportunity cost, and an estimate may be made of the dollar value associated with this opportunity cost. This calculation of loss is not recognized in all jurisdictions and may not be relevant.

.18 Numerous studies have been performed that measure the value of household services. Information from these studies may be used to estimate the value of household services lost but for the injury.²⁵

²⁵ See Gerald D. Martin, *Determining Economic Damages*, chapter 6, section 620. See also William Gary Baker and Michael K. Seck, *Determining Economic Loss in Injury and Death Cases*, 2nd edition, chapter 9, sections 9.02–9.10.

Medical and Rehabilitation Costs

.19 Medical and rehabilitation costs related to the injury may be included in the loss calculation. The past medical and past rehabilitation costs are generally based on actual costs incurred and should be supported by invoices or other corroborative documentation. Expected future medical and rehabilitation costs may be computed using reports along with other data provided by medical and vocational rehabilitation experts.

.20 The following may be considered in computing future medical costs:

- The nature of the injury and the expected duration
- The effect, if any, of the injury to the individual's life expectancy
- Past medical and rehabilitation costs (as an indicator of future costs)
- Testimony or reports by medical or rehabilitation experts
- A growth rate specifically for medical expenses, which may be different from the growth rate applied to earnings

Personal Consumption

.21 Personal consumption is the amount a person spends on, or on behalf of, one's self and as a result would not be available to one's survivors. Examples of personal consumption include amounts spent on food, clothing, medical expenses, entertainment, and vacations.

.22 Personal consumption is considered in wrongful death cases because not all lost earnings may represent a net loss to the survivors. The amount that would have been consumed by the deceased party is generally subtracted from the loss claim because this amount would have been lost to the survivors had there been no injury.

.23 Personal consumption may also be considered in cases other than wrongful death when personal expenses of the individual are reduced or compensated as a result of the injury.²⁶

.24 The past annual amounts spent on, or on behalf of, the claimant provide strong evidence for the personal consumption expenses. Many families, however, do not maintain documentation related to the amount of family income used exclusively for each family member; therefore, figures are often based on studies of the average consumption of individuals.

.25 Certain government studies provide the average percentages and dollar amounts of household income consumed by each family member.²⁷ Studies have also been performed that provide percentages of household income consumed by each family member.²⁸

.26 A review of the components of personal consumption should be performed to ensure no items representing savings are included in personal consumption, no items are included that are compensated for elsewhere, and the treatment of income tax is indicated.

²⁶ For example, the claimant requires lifetime care in a nursing home due to an injury. Personal expenses, such as food and living expenses, will be provided by a nursing home, and these expenses have been compensated in the medical expense calculation. A personal consumption adjustment may be made to the lost earnings to reflect the compensation of this expense as part of medical expenses.

²⁷ U. S. Bureau of Labor Statistics, *Revised Equivalence Scale*.

²⁸ The study performed by Earl Cheit, *Injury and Recovery in the Course of Employment (1961)*, was the first study that was widely accepted in determining the percentage of personal consumption, and it is still relied on. Other studies, however, have expanded the Cheit study, such as Patton and Nelson, "Estimating Personal Consumption Costs in Wrongful Death Cases," *Journal of Forensic Economics*, spring, 1991.

Inflation and Growth Factors

.27 A rate of growth is generally applied to the base elements of the loss claim to calculate the loss over the loss period. The loss period is generally the worklife or life expectancy. The rate of growth may be established by reference to historical information of the claimant, employer or industry data, and national and international statistics.

.28 Inflation is generally considered when determining and applying growth and discount rates used to calculate the present value of lost earnings of an individual. When calculating the present value of future lost earnings, growth and discount rates can be applied either in “nominal” terms (inclusive of an inflation factor) or in “real” terms (excluding inflation), provided the treatment of inflation is consistent between the discount and growth rates. Past lost earnings are not discounted or adjusted for the time value of money. Certain jurisdictions, however, dictate statutory prejudgment interest rates that are applied to losses incurred before trial.

.29 The Consumer Price Index (CPI) represents the rate of change in prices. The yearly change in the CPI represents the annual rate of price inflation and provides inflation and growth in wage and price information.

.30 Specific information on the industry in which the claimant was working, or would have been working, may provide information on the future outlook and expected future growth of wages and benefits. Past earnings growth may also be analyzed to determine any trend of future expected earnings. Government publications, such as *Employment and Earnings*, published monthly by the Department of Labor, provide historical wage and earnings information. *The Economic Report of the President* is published annually and may also provide growth information. The *U.S. Industry & Trade Outlook* is published annually by the Department of Commerce and provides information on U.S. industries.

.31 Different rates may be used to grow the various components of a claim. Growth rates should generally be based on empirical data.²⁹

Discounting of Losses to Present Value

.32 The base elements of the future loss claim, as adjusted to reflect growth over the future loss period, are discounted to present value to provide the lump sum representing the future loss.

.33 Generally, the discount rate represents the rate at which the claimant or the survivors can invest the lump sum with no risk of loss. Interest-bearing U.S. government securities may be selected for this purpose. U.S. government bills have a term of one year or less (short-term securities); U.S. government notes have terms from one year to ten years (intermediate-term securities); and U.S. government bonds have maturities from ten years to thirty years (long-term securities). The period of loss may be used as the measure to select the security term, although some studies support the use of short-term securities regardless of the period of loss.

²⁹ Medical expenses, for example, may be projected into the future based on the Medical Care Cost Index (published by the Department of Labor), whereas household services may be projected into the future based on the Consumer Price Index. The specific facts of the case will be the guide in selecting the factors to use in establishing growth.

.34 Some elements of compensation are subject to higher risk than other forms of compensation. For example, stock options or other incentive-based compensation may be less certain to be received by an employee when compared with a set salary. Accordingly, the loss of such compensation in, for example, an employment discrimination case may be discounted to reflect this additional risk.

State Law Considerations in Calculation of Loss

.35 It is important to be familiar with state law regarding the calculation of loss from personal damages. The practitioner does not practice law, and the attorney may be consulted to determine the appropriate method for discounting future losses to present value.

.36 State law may affect the discounting of losses to present value. For example, some states provide that the growth rate equals the discount rate and therefore fully offset each other. This is known as the “Alaska method” or the total offset method. The base losses are summed over the loss period to provide the total loss. This, however, will not extend to federal cases because the U.S. Supreme Court has held the Alaska method will be accepted only if the evidence supporting the growth rate in fact equals the discount rate.³⁰

.37 Depending on the jurisdiction, a “partial offset rate” or a “net discount rate” may also be acceptable. This method provides that historically, the discount rate has exceeded the growth rate by a set percentage, and therefore this net figure is applied to determine the loss.

.38 Future losses are discounted to the date of the trial. Past losses are presented in absolute dollars. A prejudgment interest rate may be applied to past losses. The jurisdiction of the case determines the applicable legal rate of interest.

.39 State law may also affect the calculation with respect to the consideration of income taxes.

Income Taxes

.40 The taxation of damage awards varies. Compensatory damages arising from the tort claims of personal injury or wrongful death are excluded from income taxation under Internal Revenue Code (IRC) sec. 104(a)(2).³¹ Punitive damages may be excluded from income taxation when awarded in a civil action that is a wrongful-death action, provided applicable state law specifies that only punitive damages may be awarded in such an action.³² The Small Business Job Protection Act of 1996 clarifies that damage awards not resulting from personal physical injury will not be excluded from income taxation. The law further states that emotional distress shall not be treated as a physical injury or physical sickness.

³⁰ *Jones & Laughlin Steel Corp. v. Pfeifer*, 462 U.S. 523 (1983).

³¹ Internal Revenue Code sec. 104(a)(2) was amended in the Small Business Job Protection Act of 1996 to provide exclusion from gross income for “the amount of any damages (other than punitive damages) received (whether by suit or agreement and whether as lump sums or as periodic payments) on account of personal physical injuries or physical sickness.”

³² This exclusion relates to the applicable state law as in effect on September 13, 1995, and without regard to any modification after such date, or court decision issued on or before September 13, 1995, that only punitive damages may be awarded in such an action.

.41 The jurisdiction governs the treatment of taxes in calculating damages, and counsel may be consulted to determine the consideration to be made for income taxes. The U.S. Supreme Court addressed the issue in 1980 in *Norfolk & Western Railway Co. v. Liepelt*³³ and held lost earnings in a wrongful-death action should be estimated on an aftertax basis. Some jurisdictions allow damages to be presented without regard to taxes because there may be an offsetting effect. This is based on the argument that a tax adjustment on income that would have been earned is offset by the tax adjustment on the award. The income tax attributable to lost income is deducted; however, the damage award is increased by the allocable income tax.

Hedonic Losses

.42 Hedonic losses represent the loss of enjoyment and pleasures of life. In this area, a loss calculation attempts to quantify the diminished enjoyment of life caused by the injury.

.43 This is a calculation of losses not recognized in all jurisdictions. There is considerable debate regarding the calculation of loss of enjoyment of life with no national consensus regarding the application to personal damages cases.³⁴ The CPA should be aware of the jurisdictional laws and hedonic calculation methods before calculating hedonic losses.³⁵

8. INFORMATION THAT MAY BE OBTAINED FOR DAMAGE CALCULATIONS

.01 Checklists may be used to identify and obtain documents and information for the calculation of personal injury damages. The information in appendix A provides guidance regarding information to obtain.

.02 The Internet may be used to obtain information. Useful Internet sites include the following:

- AICPA: <http://www.aicpa.org>
- Bureau of Labor Statistics: <http://www.bls.gov>
- Occupational Outlook Handbook, Bureau of Labor Statistics: <http://stats.bls.gov/ocohome.htm>
- Federal Reserve Statistical Release. Selected interest rates: <http://www.bog.frb.fed.us/releases/h15/current/>
- National Center for Health Statistics: <http://www.cdc.gov/nchswww/default.htm>
- Federal Rules of Evidence: www.law.cornell.edu/rules/fre/overview.html
- U.S. Department of Commerce: <http://www.doc.gov>

9. CONCLUSION

.01 This Practice Aid provides an overview of the calculation of damages related to losses from personal injury, wrongful death, and employment discrimination cases. Consideration should be given to local requirements and state laws that may differ from the general guidance contained in the Practice Aid. This is a nonauthoritative guide to the calculation of damages in this area.

³³ *Norfolk & Western Railway Company v. Liepelt*, 444 U.S. 490 (1980).

³⁴ Thomas Havrilesky, "The Misapplication of the Hedonic Damages Concept to Wrongful Death and Personal Injury Litigation," *Journal of Forensic Economics*, vol. 6, no. 3, summer, 1993, pages 93-98.

³⁵ See Martin, chap. 15 in *Determining Economic Damages*.

APPENDIX A**INFORMATION THAT MAY ASSIST IN CALCULATION OF PERSONAL DAMAGES**

The following data are generally obtained for any personal damages engagement:

- Name of claimant
- Date of birth, race, and sex
- Date of injury, death, or incident
- Educational level of claimant
- Professional licenses or certifications held by claimant
- Marital status of claimant
- Spouse's name and date of birth
- Children's names and dates of birth
- Income-tax returns
- Forms W-2 and 1099
- Personal employment records
- Educational records
- Medical records
- Vocational report
- Report of independent medical examiner
- Depositions
- Lawsuit complaint or petition; pleadings
- Report of opposing expert

Additional information, records and documents that may be obtained are detailed in exhibits A.1, A.2, and A.3.

*Exhibit A.1***Information That May Be Obtained for Personal Injury Cases****Employment Information**

Job position at time of injury
Employer's name and address
Employer-paid fringe benefits

Medical Information

Medical history of claimant
Medical treatment as a result of the injury
Continuing medical consequences of the injury
Medical expenses incurred to date
Medical expenses expected to be incurred in the future

Fringe Benefit Information

Health insurance benefits before injury
Retirement benefits before injury
Vacation, holiday, and sick leave policy of employer

Postinjury Employment

Actual or expected date of return to employment
Actual or expected job upon return to employment
Actual or expected wages upon return to employment

Personal Information

Amount of work time missed or expected to be missed as a result of injury
Expected retirement age before injury
Expected retirement age after injury
Description of housework and chores performed before injury
Hours spent per week on housework and chores before injury
Description of housework and chores performed after injury
Hours spent per week on housework and chores after injury
Child-care information, including ages of children and time spent in care and training

*Exhibit A.2***Information That May Be Obtained for Wrongful Death Cases****General Information**

Educational level of parents and siblings, if decedent was a minor

Work experience of parents and siblings, if decedent was a minor

Employment Information

Most recent employer of decedent and dates of employment

Job position held at date of death

Job promotions anticipated with expected compensation

Employer's name and address

Employer-paid fringe benefits

Medical Information

Medical history of deceased

Medical treatment as a result of the incident (this may apply if death was not immediate and medical expenses were incurred)

Fringe Benefit Information

Health insurance benefits before death

Retirement benefits before death

Vacation, holiday, and sick leave policy of employer

Personal Information

Expected retirement age of decedent

Description of housework and chores performed before death

Hours spent per week on housework and chores before death

Child-care information, including ages of children and time spent in care and training

*Exhibit A.3***Information That May Be Obtained for Employment Discrimination Cases****Employment Information**

Job position at time of termination or incident

Employer's name and address

Employer-paid fringe benefits

Promotions and pay raises anticipated by claimant

Date of return to employment

Description of employment after incident, including name of employer, date of employment, job title, and job description

Wages of employment after incident

Union contract

Medical Information

Medical history of claimant before termination or incident

Medical treatment as a result of termination or incident

Continuing medical consequences of the injury

Medical expenses incurred to date

Medical expenses expected to be incurred in the future

(Psychiatric and psychological medical expenses may apply to cases involving employment discrimination.)

Fringe Benefit Information

Health insurance benefits before injury

Retirement benefits before injury

Vacation, holiday, and sick leave policy of employer

Postinjury Employment

Actual or expected date of return to employment

Actual or expected job upon return to employment

Actual or expected wages upon return to employment

Personal Information

Amount of time absent or expected to be absent from work as a result of injury

Expected retirement age before injury

Expected retirement age after injury

Child-care information, including time spent in care and training

APPENDIX B

CASE STUDY: PERSONAL INJURY DAMAGES STUDY FOR SARAH BACKPAIN

Background

Sarah Backpain was injured in an automobile accident and has been unable to work since. She alleges it is unlikely she will ever be able to return to work. Sarah was an assistant manager with a Fortune 500 company and had been employed with this company for eight years. Additional information is as follows:

| | |
|-------------------------------------|--|
| Name of case | <i>Sarah Backpain v. Insurance Company, Inc.</i> |
| Date of accident | August 1, 1996 |
| Date of trial | March 15, 1998 |
| Sex | Female |
| Race | White |
| Date of birth | February 7, 1959 |
| Annual earnings at time of accident | \$55,000 |

Scope of Engagement

1. Calculate the personal injury economic damages attributable to Sarah Backpain's accident.
2. Prepare a personal injury economic damages report.

Factors Analyzed to Calculate Personal Injury Damages

Earnings and Fringe Benefits

Payroll records reflect an annual salary of \$55,000. Analysis of the company policy manual and other company records reflect fringe benefits averaging 20.9 percent of compensation. These amounts are projected to have grown by 1 percent over the amount of inflation, based on historical employment information.

Worklife and Life Expectancy

The worklife expectancy tables in "A Markov Process Model of Work Life Expectancies Based on Labor Market Activity in 1992-93"¹ are used to determine Sarah's remaining worklife as of the injury date to be 19.16 years. The life expectancy tables in *Vital Statistics of the United States*² are used to determine Sarah's remaining life expectancy as of the injury date to be 43.52 years.

Household Services

Sarah has hired someone to handle the household services she is no longer able to perform. The annual cost as of the date of the injury is \$15,000. This amount will grow by 1 percent over the amount of inflation, based on Department of Labor information.

Medical and Rehabilitation Costs

Sarah incurred medical costs totaling \$26,600 for surgery performed on September 15, 1997. She will have physical therapy costs of \$6,000 per year from the trial date through the end of her life. This amount will grow by 1.5 percent over the amount of inflation, based on the Medical Care Cost Index.

¹ James Ciecka, Thomas Donely, and Jerry Goldman, "A Markov Process Model of Work-Life Expectancies Based on Labor Market Activity in 1992-93," *Journal of Legal Economics*, 5, no. 3 (winter 1995): p. 17-41.

² U.S. National Center for Health Statistics, *Vital Statistics of the United States*, vol. 2 (Washington, D.C.: U.S. Department of Health and Human Services, 1991), 2: section 6, p. 1-20.

Discount Rate

The net discount rate method is used to discount values, and a range of 2 percent to 4 percent is applied as the difference between the growth rate and the interest rate.

Summary and Conclusions

The loss to the date of trial, reflecting an interest rate of 6 percent, totals \$170,915. The loss from the date of trial through life expectancy ranges from \$1,421,631 to \$1,817,302. These amounts are detailed in exhibit B.1. A sample written report of the damages is provided in exhibit B.2.

Exhibit B.1
Case Study: Personal Injury Damages Study for Sarah Backpain

| | | |
|--|------------------|-------------|
| Name of Injured Party | Sarah Backpain | |
| Date of injury | 8/1/96 | |
| Date of trial | 3/15/98 | |
| Sex | Female | |
| Race | White | |
| Marital status | Married | |
| Children | 2 (twins) | |
| Age of children at date of injury | Both 3 years old | |
| Date of birth of injured party | 2/7/59 | |
| Worklife expectancy | 19.16 | |
| End date of worklife expectancy | 9/29/15 | |
| Life expectancy | 43.52 | |
| End date of life expectancy | 2/7/40 | |
| Rate of growth over inflation—earnings | 1.0% | |
| Rate of growth over inflation—medical | 1.5% | |
| Net discount rate—low | 2.0% | |
| Net discount rate—high | 4.0% | |
| Rate of interest to date of trial | 6.0% | |
| Salary at time of injury | \$55,000 | |
| Fringe benefits as percentage of salary | 20.9% | |
| Medical to date of trial | \$26,600 | |
| Medical from date of trial | \$6,000 | |
| Household chores | \$15,000 | |
| Age at injury | 37.48 | |
| Age at retirement | 56.64 | |
| Age at end of life expectancy | 81.00 | |
| Summary of loss | | |
| To date of trial | \$ 170,915 | |
| From date of trial through life expectancy (range) | \$1,421,628 | \$1,817,301 |

Losses from date of injury to date of trial

| <i>From</i> | <i>To</i> | <i>Salary</i> | <i>Fringes</i> | <i>Household</i> | <i>Medical</i> | <i>Total</i> | <i>Time to Trial</i> | <i>Value at Trial</i> |
|---------------|-----------|---------------|----------------|------------------|----------------|--------------|----------------------|-----------------------|
| | | (\$) | (\$) | (\$) | (\$) | (\$) | | (\$) |
| 8/1/96 | 12/31/96 | 22,904 | 4,787 | 6,247 | | 33,938 | 1.62 | 37,295 |
| 1/1/97 | 12/31/97 | 55,550 | 11,610 | 15,150 | 26,600 | 108,910 | 1.20 | 116,798 |
| 1/1/98 | 3/15/98 | 11,221 | 2,345 | 3,060 | | 16,627 | 0.20 | 16,822 |
| Totals | | 89,675 | 18,742 | 24,457 | 26,600 | | | 170,915 |

Losses from date of trial to end of life

| <i>From</i> | <i>To</i> | <i>Age</i> | <i>Time from Trial</i> | <i>Salary</i> | <i>Fringes</i> | <i>Household</i> | <i>Medical</i> | <i>Total</i> | <i>PV to Trial Low Discount</i> | <i>PV to Trial High Discount</i> |
|-------------|-----------|------------|------------------------|---------------|----------------|------------------|----------------|--------------|---------------------------------|----------------------------------|
| | | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| 3/16/98 | 3/15/99 | 40.13 | 1.00 | 56,106 | 11,726 | 15,302 | 6,000 | 89,134 | \$87,387 | \$85,707 |
| 3/16/99 | 3/15/00 | 41.13 | 2.00 | 56,667 | 11,843 | 15,455 | 6,090 | 90,055 | \$86,555 | \$83,256 |
| 3/16/00 | 3/15/01 | 42.13 | 3.00 | 57,233 | 11,962 | 15,609 | 6,181 | 90,985 | \$85,736 | \$80,883 |
| 3/16/01 | 3/15/02 | 43.13 | 4.00 | 57,806 | 12,081 | 15,765 | 6,274 | 91,926 | \$84,926 | \$78,579 |
| 3/16/02 | 3/15/03 | 44.13 | 5.00 | 58,384 | 12,202 | 15,923 | 6,368 | 92,877 | \$84,122 | \$76,340 |
| 3/16/03 | 3/15/04 | 45.13 | 6.00 | 58,967 | 12,324 | 16,082 | 6,464 | 93,837 | \$83,323 | \$74,157 |
| 3/16/04 | 3/15/05 | 46.13 | 7.00 | 59,557 | 12,447 | 16,243 | 6,561 | 94,808 | \$82,535 | \$72,044 |
| 3/16/05 | 3/15/06 | 47.13 | 8.00 | 60,153 | 12,572 | 16,405 | 6,659 | 95,789 | \$81,755 | \$69,992 |
| 3/16/06 | 3/15/07 | 48.13 | 9.00 | 60,754 | 12,698 | 16,569 | 6,759 | 96,780 | \$80,982 | \$67,998 |
| 3/16/07 | 3/15/08 | 49.13 | 10.00 | 61,362 | 12,825 | 16,735 | 6,860 | 97,782 | \$80,213 | \$66,054 |
| 3/16/08 | 3/15/09 | 50.13 | 11.00 | 61,975 | 12,953 | 16,902 | 6,963 | 98,793 | \$79,455 | \$64,173 |
| 3/16/09 | 3/15/10 | 51.13 | 12.00 | 62,595 | 13,082 | 17,071 | 7,068 | 99,816 | \$78,705 | \$62,345 |

| <i>From</i> | <i>To</i> | <i>Age</i> | <i>Trial</i> | <i>Salary</i> | <i>Fringes</i> | <i>Household</i> | <i>Medical</i> | <i>Total</i> | <i>PV to Trial</i> | <i>PV to Trial</i> |
|-------------|-----------|------------|--------------|---------------|----------------|------------------|----------------|--------------|--------------------|--------------------|
| | | | | | | | | | <i>Low</i> | <i>High</i> |
| | | | | | | | | | <i>Discount</i> | <i>Discount</i> |
| | | | | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| 3/16/10 | 3/15/11 | 52.13 | 13.00 | 63,221 | 13,213 | 17,242 | 7,174 | 100,850 | \$77,961 | \$60,570 |
| 3/16/11 | 3/15/12 | 53.14 | 14.00 | 63,853 | 13,345 | 17,415 | 7,281 | 101,894 | \$77,221 | \$58,838 |
| 3/16/12 | 3/15/13 | 54.14 | 15.00 | 64,492 | 13,479 | 17,589 | 7,391 | 102,951 | \$76,492 | \$57,163 |
| 3/16/13 | 3/15/14 | 55.14 | 16.00 | 65,137 | 13,614 | 17,765 | 7,501 | 104,017 | \$75,770 | \$55,535 |
| 3/16/14 | 3/15/15 | 56.14 | 17.00 | 65,788 | 13,750 | 17,942 | 7,614 | 105,094 | \$75,055 | \$53,954 |
| 3/16/15 | 3/15/16 | 57.14 | 18.00 | 35,873 | 7,497 | 18,122 | 7,728 | 69,220 | \$48,464 | \$34,167 |
| 3/16/16 | 3/15/17 | 58.14 | 19.00 | | | 18,303 | 7,844 | 26,147 | \$17,948 | \$12,410 |
| 3/16/17 | 3/15/18 | 59.14 | 20.00 | | | 18,486 | 7,962 | 26,448 | \$17,798 | \$12,070 |
| 3/16/18 | 3/15/19 | 60.14 | 21.00 | | | 18,671 | 8,081 | 26,752 | \$17,650 | \$11,740 |
| 3/16/19 | 3/15/20 | 61.14 | 22.00 | | | 18,857 | 8,202 | 27,059 | \$17,503 | \$11,417 |
| 3/16/20 | 3/15/21 | 62.14 | 23.00 | | | 19,046 | 8,325 | 27,371 | \$17,358 | \$11,105 |
| 3/16/21 | 3/15/22 | 63.14 | 24.00 | | | 19,236 | 8,450 | 27,686 | \$17,213 | \$10,801 |
| 3/16/22 | 3/15/23 | 64.14 | 25.00 | | | 19,429 | 8,577 | 28,006 | \$17,071 | \$10,506 |
| 3/16/23 | 3/15/24 | 65.15 | 26.00 | | | 19,623 | 8,706 | 28,329 | \$16,928 | \$10,217 |
| 3/16/24 | 3/15/25 | 66.15 | 27.00 | | | 19,819 | 8,836 | 28,655 | \$16,788 | \$9,938 |
| 3/16/25 | 3/15/26 | 67.15 | 28.00 | | | 20,018 | 8,969 | 28,987 | \$16,649 | \$9,666 |
| 3/16/26 | 3/15/27 | 68.15 | 29.00 | | | 20,218 | 9,103 | 29,321 | \$16,511 | \$9,402 |
| 3/16/27 | 3/15/28 | 69.15 | 30.00 | | | 20,420 | 9,240 | 29,660 | \$16,374 | \$9,144 |
| 3/16/28 | 3/15/29 | 70.15 | 31.00 | | | 20,624 | 9,378 | 30,002 | \$16,239 | \$8,894 |
| 3/16/29 | 3/15/30 | 71.15 | 32.00 | | | 20,830 | 9,519 | 30,349 | \$16,104 | \$8,651 |
| 3/16/30 | 3/15/31 | 72.15 | 33.00 | | | 21,039 | 9,662 | 30,701 | \$15,972 | \$8,415 |
| 3/16/31 | 3/15/32 | 73.15 | 34.00 | | | 21,249 | 9,807 | 31,056 | \$15,839 | \$8,184 |
| 3/16/32 | 3/15/33 | 74.15 | 35.00 | | | 21,462 | 9,954 | 31,416 | \$15,708 | \$7,961 |

| <i>From</i> | <i>To</i> | <i>Age</i> | <i>Time from Trial</i> | <i>Salary</i> | <i>Fringes</i> | <i>Household</i> | <i>Medical</i> | <i>Total</i> | <i>PV to Trial</i> | <i>PV to Trial</i> |
|---------------|-----------|------------|----------------------------|---------------|----------------|------------------|----------------|--------------|--------------------|--------------------|
| | | | | | | | | | <i>Low</i> | <i>High</i> |
| | | | | <i>(\$)</i> | <i>(\$)</i> | <i>(\$)</i> | <i>(\$)</i> | <i>(\$)</i> | <i>Discount</i> | <i>Discount</i> |
| 3/16/33 | 3/15/34 | 75.15 | 36.00 | | | 21,676 | 10,103 | 31,779 | \$15,579 | \$7,744 |
| 3/16/34 | 3/15/35 | 76.15 | 37.00 | | | 21,893 | 10,255 | 32,148 | \$15,451 | \$7,532 |
| 3/16/35 | 3/15/36 | 77.15 | 38.00 | | | 22,112 | 10,409 | 32,521 | \$15,323 | \$7,326 |
| 3/16/36 | 3/15/37 | 78.15 | 39.00 | | | 22,333 | 10,565 | 32,898 | \$15,197 | \$7,126 |
| 3/16/37 | 3/15/38 | 79.15 | 40.00 | | | 22,556 | 10,723 | 33,279 | \$15,072 | \$6,932 |
| 3/16/38 | 3/15/39 | 80.15 | 41.00 | | | 22,782 | 10,884 | 33,666 | \$14,948 | \$6,743 |
| 3/16/39 | 2/7/40 | 81.06 | 41.90 | | | 20,823 | 9,948 | 30,771 | \$13,421 | \$5,949 |
| Totals | | | | | | | | | \$1,817,301 | \$1,421,628 |

Exhibit B.2
Sample Written Report in a Personal Injury Case

Sarah Backpain v. Insurance Company, Inc.

December 29, 1997

Christopher Palmer, Esquire
Jones, Powell & Palmer
100 South Street, Suite 3500
Anytown, USA

RE: *Sarah Backpain v. Insurance Company, Inc.*
28th JDC, No. 6,197

Dear Mr. Palmer:

I have been retained by your firm and your client, Insurance Company, Inc., to review certain records and documents pertaining to the above captioned litigation and render my professional opinion with respect to the following issue:

- The economic loss, if any, to Sarah Backpain resulting from her injury on August 1, 1996

In the course of my work, I reviewed the following documents:

1. Report of Mr. Opposing Expert, C.P.A., dated November 28, 1997
2. Individual income-tax returns of Sarah Backpain for years 1992 through 1996
3. Forms W-2 and payroll records of Sarah Backpain for years 1992 through 1996
4. Fringe benefit information of Sarah Backpain's employer, as of August 1, 1996
5. Deposition of Sarah Backpain dated November 1, 1997
6. Medical records of Sarah Backpain
7. Vocational rehabilitation report of Ms. Opposing Rehab, dated November 15, 1997

The following summarizes my understanding of the pertinent material facts:

Sarah Backpain was injured in an automobile accident on August 1, 1996. She is married and has two children (twins), age three. Her date of birth is February 7, 1959. She is a white female. She had surgery on September 15, 1997, and alleges she is unable to return to work.

ANALYSIS

The economic loss, if any, as a result of the injury of Sarah Backpain is calculated based on past losses and future losses. The past loss represents the amount of income Sarah Backpain would have earned from the date of injury to the estimated date of trial, but for her injury. The future loss is the present net cash value of earnings from the date of trial through the expected worklife of Sarah Backpain, plus the net cash value of household and medical expenses through the expected life of Sarah Backpain.

Past and Future Earnings

The income-tax returns of Sarah Backpain for years 1992 through 1996 provide information of income earned. I have analyzed these returns and payroll records to establish the earnings base for Sarah Backpain. The salary in effect as of the date of the accident was \$55,000, and this amount has been used as the earnings base. I have established this amount would grow by 1 percent over the amount of inflation, based on my analysis of past earnings data of Sarah Backpain, as well as information pertaining to her position and the industry.

Fringe Benefits

I have analyzed information from Sarah Backpain's employer to establish the amount of fringe benefits received as a result of her employment. This amount is determined to be 20.9 percent of annual earnings.

Household Expenses

Sarah Backpain stated in her deposition that she is paying \$15,000 annually for someone to perform the household chores she is no longer able to perform. She expects this amount to last for her lifetime. I have determined annual increases of 1 percent over the amount of inflation.

Worklife Expectancy and Life Expectancy

I refer to the worklife expectancy tables in "A Markov Process Model of Work Life Expectancies Based on Labor Market Activity in 1992-93" (*Journal of Legal Economics*, 5, no. 3, winter 1995) and determine Sarah's remaining worklife as of the injury date to be 19.16 years. I refer to the life expectancy tables in *Vital Statistics of the United States* (the National Center for Health Statistics, Washington, D.C.: U.S. Department of Health and Human Services, 1995) and determine Sarah's remaining life expectancy as of the injury date to be 43.52 years.

Medical and Rehabilitation Costs

Sarah incurred medical costs totaling \$26,600 for an operation on September 15, 1997. Her medical records indicate she will have physical therapy costs of \$6,000 per year from the trial date through the end of her life. I have determined this amount will grow by 1.5 percent over the amount of inflation.

Discount Rate

The net discount rate method is used to discount values, and a range of 2 percent to 4 percent is applied as the difference between the growth rate and the interest rate.

Summary and Conclusions

The loss to the date of trial, reflecting an interest rate of 6 percent, totals \$170,915. The loss from the date of trial through life expectancy ranges from \$1,421,628 to \$1,817,301.

I reserve the right to update this report for additional information received.

Sincerely,
CERTIFIED PUBLIC ACCOUNTANTS
A Professional Accounting Corporation

Elizabeth Smith, CPA

COMPENSATION

The fees for performing this engagement are based on my standard hourly rate of \$XXX per hour.

EXPERT WITNESS TESTIMONY

I have testified as an expert at trial or by deposition in the following cases within the preceding four years:

| | |
|---|---------------------------------|
| <i>Frontier Company v. C. Insurance</i> | County of Jefferson No. 44-7197 |
| <i>Franklin v. Franklin</i> | County of Lewisburg No. 12-456 |
| <i>Anyco v. F. Walken</i> | County of E. Redstick No. 96-90 |

Published materials include—

“The Accountant’s Role in Personal Injury Cases,” *The Accountant*, March 1994.

“Forensic Examination of Economic Damages,” *Proof of Personal Injury Damages*, 1996.

APPENDIX C

CASE STUDY: EMPLOYMENT DISCRIMINATION DAMAGES STUDY FOR STEVE BROWN

Background

Steve Brown was terminated from employment with Discriminating Services Company, Inc. (Discrimco) on July 1, 1996, after twenty-four years of service. Mr. Brown was age fifty-five when terminated and was the vice president of sales. He alleges wrongful termination and employment discrimination. He has not obtained replacement employment and does not anticipate finding replacement employment. Additional information is as follows:

| | |
|--------------------------------|---|
| Name of case | <i>Steve Brown v. Discriminating Services Company, Inc.</i> |
| Date of termination | July 1, 1996 |
| Date of trial | October 1, 1998 |
| Sex | Male |
| Race | White |
| Date of birth | December 11, 1940 |
| Annual earnings at termination | \$78,000 |

Scope of Engagement

1. Calculate the economic damages attributable to Steve Brown's employment termination.
2. Prepare an employment discrimination economic damages report.

Factors Analyzed to Calculate Employment Discrimination Damages

Earnings and Fringe Benefits

Payroll records reflect an annual salary of \$78,000 as of the year of termination. Analysis of the company policy manual and other company records reflect loss of the following fringe benefits. Discrimco contributed 1.5 percent of salary to a 401(k) retirement program. Discrimco provided major medical and hospital insurance for Mr. Brown. Replacement of this benefit will cost \$3,600 per year. These fringe benefits represent 6.12 percent of annual salary. Mr. Brown's compensation and fringe benefits have grown by 1 percent over the amount of inflation, based on historical employment information.

Worklife and Life Expectancy

The worklife expectancy tables in *Worklife Estimates: Effects of Race and Education*¹ (Bureau of Labor Statistics, Bulletin 2254, February, 1986) are used to determine Mr. Brown's remaining worklife as of the termination date of 10.3 years. The life expectancy tables in *Vital Statistics of the United States*² are used to determine Mr. Brown's remaining life expectancy as of the termination date to be 22.26 years.

Discount Rate

U. S. Treasury securities are relied upon to provide a discount rate of 5.5 percent.

¹ U.S. Department of Labor, Bureau of Labor Statistics, *Worklife Estimates: Effects of Race and Education*, Bulletin 2254, February 1986.

² U.S. National Center for Health Statistics, *Vital Statistics of the United States*, vol. 2 (Washington, D.C.: U.S. Department of Health and Human Services, 1991), 2: section 6, p. 1-20.

Summary and Conclusions

The loss to the date of trial totals \$192,437. This amount does not reflect any prejudgment interest. The loss from the date of trial through worklife expectancy totals \$616,972. These amounts are detailed in exhibit C.1. A sample written report of the damages is provided in exhibit C.2. Issues that might be raised by the opposing expert are detailed in exhibit C.3.

Exhibit C.1
Case Study: Employment Discrimination Damages Study for Steve Brown

| | |
|--|-------------|
| Name of injured party | Steve Brown |
| Date of termination | 7/1/96 |
| Date of trial | 10/1/98 |
| Sex | Male |
| Race | White |
| Date of birth | 12/11/40 |
| Worklife expectancy | 10.3 |
| End date of worklife expectancy | 10/19/06 |
| Life expectancy | 22.26 |
| End date of life expectancy | 10/4/18 |
| Rate of growth—earnings | 3.0% |
| Rate of growth—fringe benefits | 3.0% |
| Discount rate | 5.5% |
| Salary at time of termination | \$78,000 |
| Fringe benefits as percentage of salary | 6.1% |
| Age at injury | 55.55 |
| Age at retirement | 65.85 |
| Age at end of life expectancy | 77.81 |
| Summary of loss | |
| To date of trial | \$192,437 |
| From date of trial through life expectancy | \$616,972 |

Losses from date of termination to date of trial

| <i>From</i> | <i>To</i> | <i>Salary</i> (\$) | <i>Fringes</i> (\$) | <i>Total</i> (\$) | <i>Time to Trial</i> | <i>Value at Trial</i> (\$) |
|---------------|-----------|-----------------------|------------------------|----------------------|----------------------|-------------------------------|
| 7/1/96 | 12/31/96 | 39,107 | 2,393 | 41,500 | 2.25 | 41,500 |
| 1/1/97 | 12/31/97 | 80,340 | 4,917 | 85,257 | 1.75 | 85,257 |
| 1/1/98 | 10/1/98 | 61,893 | 3,788 | 65,681 | 0.75 | 65,681 |
| Totals | | 181,339 | 11,098 | | | 192,437 |

Losses from date of trial to end of worklife

| <i>From</i> | <i>To</i> | <i>Age</i> | <i>Time from</i> <i>Trial</i> | <i>Salary</i> (\$) | <i>Fringes</i> (\$) | <i>Total</i> (\$) | <i>PV to Trial</i> (\$) |
|---------------|-----------|------------|----------------------------------|-----------------------|------------------------|----------------------|----------------------------|
| 10/1/98 | 10/1/99 | 58.80 | 1.00 | 82,750 | 5,064 | 87,814 | 83,240 |
| 10/1/99 | 10/1/00 | 59.81 | 2.00 | 85,233 | 5,216 | 90,449 | 81,258 |
| 10/1/00 | 10/1/01 | 60.80 | 3.00 | 87,790 | 5,373 | 93,163 | 79,335 |
| 10/1/01 | 10/1/02 | 61.80 | 4.00 | 90,423 | 5,534 | 95,957 | 77,458 |
| 10/1/02 | 10/1/03 | 62.80 | 5.00 | 93,136 | 5,700 | 98,836 | 75,626 |
| 10/1/03 | 10/1/04 | 63.81 | 6.00 | 95,930 | 5,871 | 101,801 | 73,825 |
| 10/1/04 | 10/1/05 | 64.80 | 7.00 | 98,808 | 6,047 | 104,855 | 72,079 |
| 10/1/05 | 10/1/06 | 65.80 | 8.00 | 101,772 | 6,228 | 108,001 | 70,373 |
| 10/1/06 | 10/19/06 | 65.85 | 8.05 | 5,478 | 335 | 5,813 | 3,778 |
| Totals | | | | | | 786,689 | 616,972 |

Exhibit C.2
Sample Written Report in an Employment Discrimination Case

Steve Brown v. Discriminating Services Company, Inc.

July 6, 1998

Christopher Palmer, Esquire
Jones, Powell & Palmer
100 South Street, Suite 3500
Anytown, USA

RE: *Steve Brown v. Discriminating Services Company, Inc.*
24th JDC, No. 1,454

Dear Mr. Palmer:

I have been retained by your firm and your client, Mr. Steve Brown, to review certain records and documents pertaining to the above captioned litigation and render my professional opinion with respect to the following issue:

- The economic loss, if any, to Steve Brown resulting from his employment termination on July 1, 1996

In the course of my work, I reviewed the following documents:

1. Individual income tax returns of Steve Brown for years 1992 through 1997
2. Forms W-2 and payroll records of Steve Brown for years 1992 through 1996
3. Fringe benefit information of Steve Brown's employer, as of July 1, 1996

The following summarizes my understanding of the pertinent material facts:

Steve Brown was terminated from employment at Discriminating Services Company, Inc. (Discrimco) on July 1, 1996. Mr. Brown had been employed by Discrimco for twenty-four years. He was age fifty-five when terminated and was the vice president of sales. He has not obtained replacement employment as of the date of this report and he does not anticipate finding replacement employment. Mr. Brown alleges he was wrongfully terminated.

ANALYSIS

The economic loss, if any, as a result of the employment termination of Steve Brown is calculated based on past losses and future losses. The past loss represents the amount of income and fringe benefits Steve Brown would have earned from the date of injury to the estimated date of trial, but for his employment termination. The future loss is the present net cash value of earnings from the date of trial through the expected worklife of Steve Brown, plus the net cash value of employment fringe benefits.

Past and Future Earnings

The income-tax returns of Steve Brown for years 1992 through 1996 provide information of income earned. I have analyzed these returns and payroll records to establish the earnings base for Steve Brown. The salary in effect as of the date of termination was \$78,000, and this amount has been used as the earnings base. I have established this amount would grow 3 percent annually, based on my analysis of past earnings data of Steve Brown, as well as information pertaining to his position and the industry.

Fringe Benefits

I have analyzed information from Discrimco to establish the amount of fringe benefits lost by Steve Brown as a result of his employment termination. This amount is determined to be 6.12 percent of annual earnings and is projected to have grown at the same rate as earnings.

Worklife Expectancy and Life Expectancy

I refer to the worklife expectancy tables in *Worklife Estimates: Effects of Race and Education* (Bureau of Labor Statistics, Bulletin 2254, February, 1986) and determine Steve Brown's remaining worklife as of the termination date to be 10.3 years. I refer to the life expectancy tables in *Vital Statistics of the United States*, (The National Center for Health Statistics, Washington, D.C.: U.S. Department of Health and Human Services, 1995) and determine Steve Brown's remaining life expectancy as of the termination date to be 22.26 years.

Discount Rate

I refer to the *Economic Report of the President 1997 and Selected Interest Rates* (Federal Reserve Statistical Release, June 29, 1998) to establish the discount rate of 5.5 percent. This rate is based on short-term U.S. Treasury securities.

Summary and Conclusions

The loss to the date of trial totals \$192,437. This amount does not reflect any prejudgment interest. The loss from the date of trial through worklife expectancy totals \$616,972.

I reserve the right to update this report for additional information received.

Sincerely,
CERTIFIED PUBLIC ACCOUNTANTS
A Professional Accounting Corporation

Elizabeth Smith, CPA

COMPENSATION

The fees for performing this engagement are based on my standard hourly rate of \$XXX per hour.

EXPERT WITNESS TESTIMONY

I have testified as an expert at trial or by deposition in the following cases within the preceding four years:

| | |
|---|---------------------------------|
| <i>Frontier Company v. C. Insurance</i> | County of Jefferson No. 44-7197 |
| <i>Franklin v. Franklin</i> | County of Lewisburg No. 12-456 |
| <i>Anyco v. F. Walken</i> | County of E. Redstick No. 96-90 |

Published materials include—

“The Accountant’s Role in Personal Injury Cases,” *The Accountant*, March 1994.

“Forensic Examination of Economic Damages,” *Proof of Personal Injury Damages*, 1996.

Exhibit C.3
Steve Brown v. Discriminating Services Company, Inc.
Issues raised by opposing expert

1. Mitigation of Earnings

The estimate of loss disregards any mitigation of earnings by Mr. Brown. If Mr. Brown finds other employment, or the evidence shows other employment is available, the alleged damages should be reduced.

2. Discount Rate

The discount rate selected is based on three-month Treasury securities. If the discount rate were based on Treasury securities ranging over the period of loss, the discount rate would be higher and the alleged damages should be reduced.

3. Rate of Growth in Earnings and Fringe Benefits

The analysis of employment records of Mr. Brown and records provided by Discriminating Services Company, Inc. support future increases to equal only the rate of inflation. This amount is estimated to be 2.2 percent over the period of loss. If the rate of growth were based on 2.2 percent instead of 3 percent, the alleged damages should be reduced.

4. Worklife Expectancy

The analysis of personnel records of Mr. Brown and the deposition of Mr. Brown supports that he planned to retire at age sixty-two. If the worklife were based on retirement at age sixty-two, the alleged damages should be reduced.

APPENDIX D

CASE STUDY: WRONGFUL DEATH DAMAGES STUDY FOR MAX K. LEBLANC, M.D.

Background

Max K. LeBlanc, M.D., was killed in an automobile accident on May 5, 1996. He was a physician pursuing a career in internal medicine and was in the first year of a three-year residency. Upon completion of his residency, he planned to enter private practice in internal medicine. Additional information is as follows:

| | |
|--------------------------|--|
| Name of case | <i>Heirs of Max K. LeBlanc v. C. C. Driver, et al.</i> |
| Date of death | May 5, 1996 |
| Date of trial | Not set; use date of December 31, 1999, per attorney |
| Sex | Male |
| Marital Status | Single |
| Dependents | None |
| Date of birth | September 1, 1966 |
| Annual earnings at death | \$33,280 |

Scope of Engagement

1. Calculate the economic loss to the heirs of Dr. LeBlanc as the result of the death of Dr. LeBlanc.
2. Prepare a wrongful death economic damages report.

Factors Analyzed to Calculate Wrongful Death Economic Loss

Earnings and Fringe Benefits

Payroll records reflect an annual salary of \$33,280 as of the year of death. This salary would continue during the three-year residency period with 4 percent annual increases, based on compensation schedules provided by the employer, City University Hospital. Dr. LeBlanc received no fringe benefits during the residency period that would have benefited his heirs but for his death. Upon completion of the residency program, Dr. LeBlanc would have entered private practice as an internal medicine physician. Fringe benefits to Dr. LeBlanc in private practice would have been included in his annual compensation. Analysis of compensation surveys performed by the American Medical Association and the Medical Group Management Association provide summary statistics regarding the compensation levels of physicians. Median compensation for internal medicine physicians in 1996 was \$150,000. The past five years reflect an average rate of growth of 4 percent for internal medicine physician compensation. Projections by the American Medical Association support this rate of increase in the future. This trend is also supported in *Occupational Outlook Handbook*¹.

Worklife Expectancy

The worklife expectancy tables in *Worklife Estimates: Effects of Race and Education*² are used to determine Dr. LeBlanc's remaining worklife of 32.6 years as of the date of death.

Discount Rate

U. S. Treasury securities are relied on to provide a discount rate of 5.7 percent.

¹ U.S. Department of Labor, Bureau of Labor Statistics, *Worklife Estimates: Effects of Race and Education*, Bulletin 2254, February 1986.

² U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook* (Indianapolis, IN: JIST Works, Inc.: 1998).

Summary and Conclusions

The loss to the date of trial (December 31, 1999, for purposes of this report) totals \$182,854. This amount does not reflect any prejudgment interest. The loss from the date of trial through worklife expectancy totals \$2,706,315. These amounts are detailed in exhibit D.1. A sample written report of the damages is provided in exhibit D.2.

Exhibit D.1
Case Study: Wrongful Death Damages Study for Max K. LeBlanc, M.D.

| | |
|--|----------------|
| Name of deceased | Max K. LeBlanc |
| Date of death | 5/5/96 |
| Date of trial | 12/31/99 |
| Sex | Male |
| Marital status | Single |
| Children | None |
| Other dependents | None |
| Date of birth | 9/1/66 |
| Worklife expectancy | 32.6 |
| End date of worklife expectancy | 12/10/28 |
| Rate of growth—earnings | 4.0% |
| Rate of consumption | 30.0% |
| Discount rate | 5.7% |
| Salary at time of death | \$ 33,280 |
| Salary upon entering private practice | \$168,730 |
| Fringe benefits as percentage of salary | 0.0% |
| Age at injury | 29.68 |
| Age at retirement | 62.28 |
| Summary of loss | |
| To date of trial | \$ 182,854 |
| From date of trial through life expectancy | \$2,706,315 |

Losses from date of termination to date of trial

| <i>From</i> | <i>To</i> | <i>Age</i> | <i>Salary</i> <i>(\$)</i> | <i>Consumption</i> <i>(\$)</i> | <i>Total</i> <i>(\$)</i> | <i>Time to Trial</i> | <i>Value at Trial</i> <i>(\$)</i> |
|---------------|-----------|------------|------------------------------|-----------------------------------|-----------------------------|----------------------|--------------------------------------|
| 5/5/96 | 12/31/96 | 30.33 | 21,883 | (6,565) | 15,318 | 3.66 | 15,318 |
| 1/1/97 | 12/31/97 | 31.33 | 34,611 | (10,383) | 24,228 | 3.00 | 24,228 |
| 1/1/98 | 12/31/98 | 32.33 | 35,996 | (10,799) | 25,197 | 2.00 | 25,197 |
| 1/1/99 | 12/31/99 | 33.33 | 168,730 | (50,619) | 118,111 | 1.00 | 118,111 |
| Totals | | | 261,220 | (78,366) | | | 182,854 |

Losses from date of trial to end of worklife

| <i>From</i> | <i>To</i> | <i>Age</i> | <i>Time from Trial</i> | <i>Salary</i> | <i>Consumption</i> | <i>Total</i> | <i>PV to Trial</i> |
|---------------|-----------|------------|------------------------|---------------|--------------------|--------------------|--------------------|
| | | | | <i>(\$)</i> | <i>(\$)</i> | <i>(\$)</i> | <i>(\$)</i> |
| 1/1/00 | 12/31/00 | 34.33 | 1.00 | 175,479 | (52,644) | 122,835 | 116,198 |
| 1/1/01 | 12/31/01 | 35.33 | 2.00 | 182,498 | (54,750) | 127,748 | 114,334 |
| 1/1/02 | 12/31/02 | 36.33 | 3.00 | 189,798 | (56,939) | 132,859 | 112,499 |
| 1/1/03 | 12/31/03 | 37.33 | 4.00 | 197,390 | (59,217) | 138,173 | 110,694 |
| 1/1/04 | 12/31/04 | 38.33 | 5.00 | 205,286 | (61,586) | 143,700 | 108,901 |
| 1/1/05 | 12/31/05 | 39.33 | 6.00 | 213,497 | (64,049) | 149,448 | 107,154 |
| 1/1/06 | 12/31/06 | 40.33 | 7.00 | 222,037 | (66,611) | 155,426 | 105,434 |
| 1/1/07 | 12/31/07 | 41.33 | 8.00 | 230,919 | (69,276) | 161,643 | 103,743 |
| 1/1/08 | 12/31/08 | 42.33 | 9.00 | 240,155 | (72,047) | 168,108 | 102,062 |
| 1/1/09 | 12/31/09 | 43.33 | 10.00 | 249,762 | (74,928) | 174,834 | 100,425 |
| 1/1/10 | 12/31/10 | 44.33 | 11.00 | 259,752 | (77,926) | 181,826 | 98,813 |
| 1/1/11 | 12/31/11 | 45.33 | 12.00 | 270,142 | (81,043) | 189,099 | 97,228 |
| 1/1/12 | 12/31/12 | 46.33 | 13.00 | 280,948 | (84,284) | 196,664 | 95,653 |
| 1/1/13 | 12/31/13 | 47.33 | 14.00 | 292,186 | (87,656) | 204,530 | 94,118 |
| 1/1/14 | 12/31/14 | 48.33 | 15.00 | 303,873 | (91,162) | 212,711 | 92,608 |
| 1/1/15 | 12/31/15 | 49.33 | 16.00 | 316,028 | (94,808) | 221,220 | 91,122 |
| 1/1/16 | 12/31/16 | 50.33 | 17.00 | 328,669 | (98,601) | 230,068 | 89,647 |
| 1/1/17 | 12/31/17 | 51.33 | 18.00 | 341,816 | (102,545) | 239,271 | 88,208 |
| 1/1/18 | 12/31/18 | 52.33 | 19.00 | 355,489 | (106,647) | 248,842 | 86,793 |
| 1/1/19 | 12/31/19 | 53.33 | 20.00 | 369,708 | (110,912) | 258,796 | 85,400 |
| 1/1/20 | 12/31/20 | 54.33 | 21.00 | 384,497 | (115,349) | 269,148 | 84,017 |
| 1/1/21 | 12/31/21 | 55.33 | 22.00 | 399,876 | (119,963) | 279,913 | 82,669 |
| 1/1/22 | 12/31/22 | 56.33 | 23.00 | 415,871 | (124,761) | 291,110 | 81,342 |
| 1/1/23 | 12/31/23 | 57.33 | 24.00 | 432,506 | (129,752) | 302,754 | 80,037 |
| 1/1/24 | 12/31/24 | 58.33 | 25.00 | 449,807 | (134,942) | 314,865 | 78,741 |
| 1/1/25 | 12/31/25 | 59.33 | 26.00 | 467,799 | (140,340) | 327,459 | 77,477 |
| 1/1/26 | 12/31/26 | 60.33 | 27.00 | 486,511 | (145,953) | 340,558 | 76,234 |
| 1/1/27 | 12/31/27 | 61.33 | 28.00 | 505,971 | (151,791) | 354,180 | 75,011 |
| 1/1/28 | 12/10/28 | 62.28 | 28.94 | 495,812 | (148,743) | 347,069 | 69,753 |
| Totals | | | | | | \$6,484,857 | \$2,706,315 |

Exhibit D.2
Sample Written Report in a Wrongful Death Case

Heirs of Max K. LeBlanc v. C. C. Driver, et al.

June 16, 1998

Christopher Palmer, Esquire
Jones, Powell & Palmer
100 South Street, Suite 3500
Anytown, USA

RE: *Heirs of Max K. LeBlanc v. C. C. Driver, et al.*
Case No. J96-4897

Dear Mr. Palmer:

I have been retained by your firm and your client, C. C. Driver, to review certain records and documents pertaining to the above captioned litigation and render my professional opinion with respect to the following issue:

- The economic loss, if any, to the heirs of Max K. LeBlanc resulting from his death on May 5, 1996

In the course of my work, I reviewed the following:

1. Forms W-2 and payroll records of Max K. LeBlanc for year 1996
2. Fringe benefit information of Max K. LeBlanc as of year 1996
3. Selected data from the *Economic Report of the President (1997)*
4. *Socioeconomic Characteristics of Medical Practice 1997/98* (American Medical Association)
5. *Physician Compensation and Production Survey: 1997 Report Based on 1996 Data* (Medical Group Management Association)

The following summarizes my understanding of the pertinent material facts:

Max K. LeBlanc, M.D., was killed in an automobile accident on May 5, 1996. He was a physician pursuing a career in internal medicine and was in the first year of a three-year residency. Upon completion of his residency, he planned to enter private practice in internal medicine.

ANALYSIS

The economic loss, if any, as a result of the death of Max K. LeBlanc, M.D., is calculated based on past losses and future losses. The past loss represents the amount of income Dr. LeBlanc would have earned, less his personal consumption, from the date of death to the estimated date of trial, but for his death. The future loss is the present net cash value of earnings, less personal consumption, from the date of trial through the expected worklife of Dr. LeBlanc.

Past and Future Earnings

The payroll records of Max K. LeBlanc, M.D., and compensation schedules of City University Hospital provide information of income earned by internal medical resident physicians. I have analyzed these payroll records to establish the earnings base for Dr. LeBlanc during his three-year residency. The salary in effect as of the date of death was \$33,280 and this amount has been used as the earnings base. I have established this amount would grow 4 percent annually, based on information provided by City University Hospital, Inc.

Upon completion of the three-year residency program, Dr. LeBlanc planned to enter private practice as an internal medicine physician. Analysis of compensation surveys performed by the American Medical Association and the Medical Group Management Association provide summary statistics regarding the compensation levels of physicians. Median compensation for internal medicine physicians in 1996 was \$150,000. The past five years reflect an average rate of growth of 4 percent for internal medicine physician compensation. Projections by the American Medical Association support this increase rate in the future. This trend is also supported in *Occupational Outlook Handbook* (Bureau of Labor Statistics, 1998).

Personal Consumption

A reduction is applied to annual income for the income that would have been spent on behalf of Dr. LeBlanc and not benefited his heirs. Personal consumption of Dr. LeBlanc is determined to be 30 percent of annual income, based on *Injury and Recovery in the Course of Employment*, by Earl Cheit (1961).

Worklife Expectancy and Life Expectancy

I refer to the worklife expectancy tables in *Worklife Estimates: Effects of Race and Education* (Bureau of Labor Statistics, Bulletin 2254, February, 1986) and determine Dr. LeBlanc's remaining worklife as of the date of death to be 32.6 years.

Discount Rate

I refer to *The Economic Report of the President, 1997* and *Selected Interest Rates* (Federal Reserve Statistical Release, June 29, 1998) to establish the discount rate of 5.7 percent. This rate is based on U.S. Treasury securities.

Summary and Conclusions

The loss to the trial date totals \$182,854. This amount does not reflect any prejudgment interest. The loss from the trial date through worklife expectancy totals \$2,706,315.

I reserve the right to update this report for additional information received.

Sincerely,
CERTIFIED PUBLIC ACCOUNTANTS
A Professional Accounting Corporation

Elizabeth Smith, CPA

COMPENSATION

The fees for performing this engagement are based on my standard hourly rate of \$XXX per hour.

EXPERT WITNESS TESTIMONY

I have testified as an expert at trial or by deposition in the following cases within the preceding four years:

| | |
|---|---------------------------------|
| <i>Frontier Company v. C. Insurance</i> | County of Jefferson No. 44-7197 |
| <i>Franklin v. Franklin</i> | County of Lewisburg No. 12-456 |
| <i>Anyco v. F. Walken</i> | County of E. Redstick No. 96-90 |

Published materials include—

“The Accountant’s Role in Personal Injury Cases,” *The Accountant*, March 1994.
“Forensic Examination of Economic Damages,” *Proof of Personal Injury Damages*, 1996.

GLOSSARY

Discount rate. The interest rate used to calculate the present value of future income.

Discrimination. A failure to treat all equally when no reasonable distinction can be found between those favored and those not favored.

Economic damages. The total monetary losses to a plaintiff as a result of injury; amounts attributable to lost income, such as wages and fringe benefits, and expenses, such as medical costs and other quantifiable costs due to the injury.

Fringe benefits. Payment made to, or on behalf of, workers as additional compensation.

Future value. The value at some future date of an amount or series of payments, evaluated at the appropriate growth rate.

Impaired earnings. The earnings of a claimant, after the effect of the injury.

Inflation rate. The rate of change in prices; generally, the change in the Consumer Price Index and Producer Price Index, as measured by the U. S. Department of Labor, Bureau of Labor Statistics.

Judicial interest. The rate of interest to be awarded to the claimant, as determined by statutory law. This may also be referred to as prejudgment interest.

Life expectancy. Number of years or period of time an individual is expected to live, based on such factors as gender, age, and race.

Mitigating circumstances. Conditions that reduce, diminish, or lessen an amount.

Monetary loss. Losses that have a dollar value attached.

Net pecuniary losses. The net out-of-pocket monetary loss of the claimant.

Personal injury. A harm or damage done to an individual.

Remaining life expectancy. The number of years the claimant is expected to live from the injury date.

Remaining worklife expectancy. The number of years the claimant would have been expected, but for the injury, to remain in the workforce, from the date of injury to the date of retirement.

Unimpaired earnings. The earnings of the claimant if the injury had not occurred.

Worklife expectancy. Number of years an individual is expected to be in the workforce, based on such factors as gender, age, race, and education.

Wrongful death. Injurious conduct that results in death of an individual.

Wrongful termination. The severance of the relationship between employer and employee unjustly or in a wrong manner.

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