

A STUDY OF COMPENSATION PAYMENTS FOR SERVICE-CONNECTED DISABILITIES

Volume IV

**Review of Non-VA Disability Programs
and QOL Elements**



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A Study of Compensation Payments for Service-Connected Disabilities

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VOLUME IV - REVIEW OF NON-VA DISABILITY PROGRAMS AND QOL MEASURES

TABLE OF CONTENTS

I.	SUMMARY.....	1
	State Workers' Compensation Programs	5
	Other U.S. Programs	6
	Return-to-Work Programs	7
	Participation in VA Vocational Rehabilitation and Employment Program.....	8
	Foreign Government Temporary and Partial Disability Programs	9
	Private Disability Programs	10
	QOL Elements in Disability Programs.....	12
	Of Potential Interest to Decisionmakers	13
	Transition or Rehabilitation	13
	Earnings Loss.....	14
	Quality of Life.....	14
	General	15
II.	INTRODUCTION.....	16
III.	STATE WORKERS' COMPENSATION PROGRAMS.....	18
	Transitional or Temporary Disability Benefits.....	20
	Temporary Total Disability Benefits.....	20
	Temporary Partial Disability Benefits.....	21
	Permanent Disability Benefits.....	23
	Permanent Partial Disability Benefits	23
	Permanent Total Disability Benefits	35
	Adequacy of State Workers' Compensation Benefits.....	35
	Earnings Loss.....	35
	Approaches for Calculating Lost Earnings.....	36
	The Calculation of Lost Earnings: Lessons for the Veterans' Disability Compensation Program	39
	Possible Approaches to Determining Benefit Adequacy	39
	Equity of Workers' Compensation Benefits.....	42
	Workers' Compensation: Lessons and Suggestions for VA to Consider in Revising the Decisionmakers Disability Compensation Program	43
IV.	OTHER U.S. COMPENSATION PROGRAMS.....	46
	Program Descriptions	52
	SSDI Benefits.....	52
	Federal Employees Compensation Act.....	55

Longshore and Harbor Workers Compensation Act.....	58
Energy Employees Occupational Illness Program.....	59
V. RETURN-TO-WORK PROGRAMS	62
Factors Affecting Return-to-Work Prospects	62
Demographic Characteristics Affecting Return-to-Work Prospects	63
Family Support While in Vocational Rehabilitation	64
Clinical Evidence of the Need for Family Support.....	64
Benefits for Families in the Canadian Veterans Vocational Rehabilitation Program	66
Incentive Programs for Vocational Rehabilitation	67
Bonus Incentives for Participants Completing Parts of Vocational Rehabilitation – the Drebing Study	68
Incentives in the Social Security Disability Insurance Program.....	70
Other Programs with Incentives	72
Disincentives	73
Transition into Vocational Rehabilitation Programs	78
Vocational Rehabilitation Experience within Workers’ Compensation Programs.....	79
Contrasting Workers’ Compensation’s VR with VA’s VR&E Chapter 31 Program	81
Contrasting non-VA Public Sector VR with VA’s VR&E Program.....	82
Vocational Rehabilitation and Reintegration in Foreign Countries	84
VR and Reintegration in Germany	85
VR and Reintegration in the Netherlands.....	85
VR and Reintegration in Norway	86
Veterans’ Employment and Training Service	88
Jobs for Veterans State Grants	88
Transition Assistance Program	88
Disabled Transition Assistance Program.....	89
Homeless Veterans’ Reintegration Program	89
DOL Veterans Workforce Investment Program.....	89
Related Activities	89
Program Impacts	90
Summary.....	92
VI. FOREIGN GOVERNMENT DISABILITY PROGRAMS	93
Canadian Programs.....	93
Detailed Review of Canadian Workers’ Compensation Programs.....	95
Long-term Disability Benefits.....	96
Other Foreign Government Programs	107
Australia.....	107
Germany	108
The United Kingdom.....	109

Japan.....	110
The Netherlands	110
Norway	111
Sweden	111
Denmark	112
Summary	112
VII. U.S. PRIVATE DISABILITY PROGRAMS	114
Methodological Approach	114
Overview of Private Disability Programs.....	115
Short-Term Disability Programs	122
Sick Leave Programs	122
Short-term Disability Programs	124
LTD Programs.....	127
Design Goals	127
Key Features	127
Typical Employer Practice.....	129
Other Sources of Benefits and Coordination of Benefits.....	130
Partial Disability and Rehabilitation.....	130
Disability Benefits in Private Pension Programs.....	131
Typical Features.....	131
Disadvantages.....	131
Individually-Purchased Disability Income Insurance.....	132
Design Goals	132
Key Features	132
Typical Use.....	133
Disability Management in Private Employer-Sponsored Plans.....	133
VIII. QOL ELEMENTS IN DISABILITY PROGRAMS.....	136
Workers' Compensation Programs.....	136
Dual Benefits Approach in U.S. Workers' Compensation Programs.....	136
QOL in Five State Workers' Compensation Programs	137
Inconsistencies in Schedule Awards	139
QOL in Federal Programs	139
Canadian Workers' Compensation Programs.....	141
Analytical Approach.....	141
QOL as a Concept.....	142
Definitions of QOL	142
How QOL and Loss of Earnings Are Taken into Account.....	144
Calculation, Duration, and Frequency of QOL payments	147
Administrative Lessons and Best Practices for Decisionmakers to Consider.....	147
Foreign Government Veterans' Programs	148
Background.....	148
Foreign Program Administrative Structure.....	149

Analytical Approach.....	150
QOL as a Concept.....	151
Definitions of QOL	152
How QOL and Loss of Earnings Are Taken into Account.....	155
United Kingdom - Earnings Loss	167
The Underlying Basis of QOL Payments.....	168
The Method of Calculation, Duration, and Frequency of QOL payments	169
Administrative Best Practices	171
Summary of QOL in Non-VA Programs.....	173
BIBLIOGRAPHY.....	175
ABBREVIATIONS.....	184

LIST OF TABLES

Table I-1. Comparison of Selected Features of VA and Non-VA Programs	3
Table I-2. Comparison of Benefits Provided by VA and State Workers' Compensation Programs.....	6
Table IV-1. Comparison of VA and Federal Disability Compensation Programs	48
Table IV-2. Service-Connected Disabled Veterans also Receiving Social Security Disability Insurance	54
Table V-1. Veterans Affairs Canada Rehabilitation Program Incentives	74
Table V-2. Australian Transition Management Service Process.....	78
Table V-3. Performance Outcomes by State, State Workforce Agency Career Centers, Quarter Ending December 31, 2007	90
Table V-4. Entered Employment Rates for Veterans, Disabled Veterans, Special Disabled Veterans, and for Veterans Receiving VETS-funded services, by Selected States: 2005.....	91
Table VI-1. Weekly Benefits and Other Features of Canadian Temporary Disability Programs (2008).....	97
Table VI-2. Features of Canadian Long-term Disability Programs (2008)	98
Table VII-1. Purpose of Three Private Disability Plans.....	115
Table VII-2. Prevalence of Private Disability Programs.....	116
Table VII-3. How Disability Programs Relate to One Another	121
Table VII-4. Example of Short-term Disability Payments to Employees at Different Salary Levels	125
Table VII-5. LTD Benefit Level as Percentage of Pay	128
Table VII-6. Maximum Monthly Benefit Amount.....	128
Table VII-7. Waiting Periods for LTD Benefits	128
Table VIII-1. Maximum Disability Payments for Selected Schedule Injuries: States and FECA in 2006 and 2007.....	140
Table VIII-2. QOL Definitions: Canadian Provinces.....	143
Table VIII-3. How QOL is Independently Taken into Account in Three Canadian Provinces	145

Table VIII-4. How Loss of Earnings Is Independently Taken into Account.....	146
Table VIII-5. Method of Calculation, Frequency, and Duration of QOL Payments.....	148
Table VIII-6. QOL Definitions: Selected Foreign Veterans Disability Programs	153
Table VIII-7. How QOL is Independently Taken into Account by Foreign Veterans’ Programs and Service Providers.....	156
Table VIII-8. How Loss of Earnings is Independently Taken into Account in Foreign Veterans’ Programs.....	157
Table VIII-9. Israeli Veterans’ Disability Payment Schedule for Permanent Inability to Work (2008)	166
Table VIII-10: United Kingdom Disability Payment Schedule	167
Table VIII-11. Calculation, Frequency & Duration of Veterans’ QOL Payments by Foreign Governments.....	170

LIST OF FIGURES

Figure III-1. Three Time Periods in a Workers’ Compensation Case Where the Injury Has Permanent Consequences.....	19
Figure III-2. The Consequences of an Injury or Disease Resulting in Work Disability.....	23
Figure III-3. Actual Losses of Earnings for a Worker with a Permanent Disability.....	25
Figure III-4. Money Earnings (Mean) for Full-Time, Year-Round Male Workers, 2006	37
Figure III-5. Money Earnings (Mean) for Full-Time, Year-Round Female Workers, 2006.....	38
Figure III-6. Average Weekly Temporary Total Disability Benefit Relative to the Poverty Threshold, 1972-1998	40
Figure III-7. Actual Statutory Workers’ Compensation Provisions Relative to the Model Act Recommendations	41
Figure V-1. Longer Time Away from Work Reduces the Probability of Ever Returning to Work.....	77

I. SUMMARY

This document, *Review of Non-VA Disability Programs and QOL Measures*, prepared for the Department of Veterans Affairs (VA), is Volume IV of the Final Report for *A Study of Compensation Payments for Service-Connected Disabilities*. The overall Final Report has five volumes:

- Volume I: Executive Report
- Volume II: Transition Benefit Analysis
- Volume III: Earnings and Quality of Life Loss Analysis
- Volume IV: Review of Non-VA Programs and QOL Elements
- Volume V: Disability Forum Presentations

Volume IV is divided into the following chapters:

- I. Summary
- II. Introduction
- III. U.S. State Workers' Compensation Programs
- IV. Other U.S. Compensation Programs
- V. Return-to-Work Programs
- VI. Foreign Government Disability Programs
- VII. U.S. Private Disability Programs
- VIII. QOL Elements in Disability Programs

These chapters contain information regarding the two major topics of interest in this study: (1) transition benefits and return-to-work programs and (2) disability compensation for loss of earnings and quality of life (QOL). During the course of our review of different programs, we compare non-VA programs to VA Disability Compensation Program and assess the applicability of concepts and features of non-VA programs to VA Disability Compensation Program.

Table I-1 provides an overview of many of the features of the VA Disability Compensation Program and presents a side-by-side comparison of these features with those of selected non-VA programs. This table focuses on selected features but is not intended to provide a detailed, comprehensive analysis of all features of all programs. As the table reveals these programs vary widely in their methods of compensation. The non-VA programs include:

- U.S. state workers' compensation programs;
- Workers' compensation programs in Canada, Australia, Germany, the United Kingdom (UK), Japan, the Netherlands, Norway, Sweden, and Denmark;

- U.S. national disability programs: Social Security Disability Insurance, Federal Employees Compensation Act, Longshore and Harbor Workers Compensation Act, and Energy Employees Occupational Illness Program;
- Private disability insurance programs including Northwestern, Prudential, and Unum; and
- Foreign Veterans' Programs: Australia, Canada, Germany, Israel, and the United Kingdom.

Canadian provincial/territorial workers' compensation programs, the Canadian New Veterans Charter, and veterans programs in UK and Australia are particularly worthy of investigation because they provide both loss of QOL awards and work disability benefits. Loss of QOL awards in Canadian workers' compensation programs are based on an assessment of the degree of permanent impairment, and awards are often adjusted for age by increasing the amount for every year under 45 and decreasing the amount for every year between 45 and 65 to a minimum amount that is continued for life. This is to account for the proportion of lifetime spent with reduced QOL. Most work disability benefits in these programs are based on loss of earnings capacity. Noteworthy is the fact that one territorial program (Yukon) includes a yearly increase of two percent to account for promotion or advancement and the change in the average industrial wage rate.

Table I-1. Comparison of Selected Features of VA and Non-VA Programs

	VA Disability Compensation Program	Foreign Countries' Veterans' Benefits	Canadian Provincial/Territorial Workers' Compensation	State Workers' Compensation	Private Disability Insurance	Non-VA Federal Programs
Purpose or definition of QOL	None stated; disability benefits legislated as earnings loss only	Impact of impairment on lifestyle and activities outside of the workplace	To compensate for pain, suffering, and loss of QOL due to impairment that is permanent in nature	None stated	None stated	None stated
Inferred QOL	SMCs for loss of or loss of use of certain organs or extremities	In the UK, lump-sum payment for pain and suffering	N/A	None	None	None
Minimum conditions establishing disability	Presence of disabling condition listed in VASRD	Presence of disabling condition listed in country's rating schedule	For QOL award, injury must be "work related" and result in a permanent impairment. For loss of earnings capacity benefit, additional criterion that impairment has an impact on the person's "ability to earn wages."	Disability must have arisen in the course of employment and worker must be unable to earn his/her pre-injury salary for temporary disability benefits. In most states, partial disability benefits are paid based on the impairment or loss of earning capacity, and do not depend on loss of wages.	Inability to work at 80% of pre-disability salary	Total disability from any source (SSDI); partial or total disability sustained on the job (FECA)
Method of establishing disability	Application stating disabling conditions, physical examination, medical records compared with VASRD	Some use a two-fold assessment if separate QOL payments. Includes impairment rating plus QOL rating that is based on lifestyle (in some places) or "pain and suffering" (in other places).	For QOL award, medical examination by physician or qualified consultant and provincial-based rating schedule. For loss of earnings capacity, an assessment of current earnings capacity.	Injured worker's physician assesses impairment using <i>AMA Guides</i> to Evaluation of Permanent Impairment or other state guidelines. Disability determination depends on other factors in some states such as age and occupation.	Medical staff of disability insurer evaluate claims as submitted by injured worker's physician	Medical staff of overseeing agency and injured party's physician
Conditions triggering explicit /inferred QOL payment	Physical only	Physical and mental	Physical (functional or structural) and sometimes mental permanent impairment, depending on province	N/A	N/A	N/A

Table I-1. Comparison of Selected Features of VA and Non-VA Programs (Continued)

	VA Disability Compensation	Foreign Countries' Veterans' Benefits	Canadian Provincial/Territorial Workers' Compensation	State Workers' Compensation	Private Disability Insurance	Non-VA Federal Programs
Relation of explicit /inferred QOL payment to earnings loss payment	SMC benefits independent of earnings loss; paid on top of earnings loss payment	Lump-sum in some countries is equal to the death benefit; in others, QOL benefits are lower but acknowledged separately. Economic wage loss typically set at a percent of pre-injury military wages.	Disfigurement and non-economic impairment can range as high as \$75,000. QOL payment not related to loss of earnings capacity.	N/A	N/A	N/A
Basis for earnings loss payment	Average earnings of U.S. workers	Canada: worker's pre-injury salary up to \$1293/month. U.K.: £7,188/month. Australia: 100% of normal earnings/paid weekly for 45 weeks.	Loss of earnings capacity average 85-90% of difference between net pre-injury earnings and net post-injury earnings capacity.	Payment based on wage loss and/or loss of earnings capacity, with most states offering just one. Massachusetts pays wage loss at 60% of injured worker's average weekly wage (66.67% for total impairment). Loss of earnings capacity is based on schedule award or impairment rating, depending on injury.	Worker's pre-injury salary (50-80% replaced) to provide basic "income protection"	Worker's pre-injury salary (66.67%), combined with level of impairment
Basis for explicit /inferred QOL payment	To compensate for the loss, or loss of use, of certain organs or extremities	Assessed by self-report questionnaire, needs-based questionnaire, and/or level of impairment	Assessed by degree of permanent impairment	N/A	N/A	N/A
Duration of QOL payment	Lifetime or until re-assessment requested by beneficiary	One time lump-sum; monthly typically ends or offset by retirement pension. Lifetime for some cases.	One time lump-sum; monthly over lifetime in cases	N/A	N/A	N/A

Source: EconSys Study Team.

State Workers' Compensation Programs

State workers' compensation programs provide cash benefits, medical care, and rehabilitation services to workers who experience work-related injuries or diseases. Both temporary and permanent disabilities are covered, and benefits may be received for partial disability or total disability. Temporary disability is the period between injury and maximum medical improvement. Partial disability means that the worker retains some earning capacity. The dominant view of the purpose of permanent partial disability benefits is to compensate for work disability and not for other consequences. These programs vary among the states and thus provide an opportunity to analyze the variations.

Benefits are typically two-thirds of pre-injury earnings or a percentage of the difference between pre-injury and post-injury earnings with various minimums and maximums. Fourteen states automatically increase permanent total disability benefits as wages increase or as cost of living increases, and many states' benefits are offset by Social Security and unemployment benefits.

In state programs five concepts are used to determine the relationship between impairment and earnings loss:

1. Medical impairment/anatomical loss;
2. Medical impairment/functional loss;
3. Limitations in activities of daily living;
4. Loss of earnings capacity; and
5. Actual loss of earnings/wages.

Operationally three approaches are used to assess the extent of work disability: permanent impairment, loss of earnings capacity, and actual wage loss. The essential difference among the three approaches is that actual wage loss requires the injured worker to demonstrate both a permanent impairment and an actual wage loss, while the permanent impairment and loss of earnings capacity approaches pay benefits even if there is no actual loss of earnings. The impairment or earnings capacity approaches attempt to predict future earnings loss; hence their classification as loss of earnings *capacity* payments. All three approaches may not be accurate for younger workers who have not reached their potential levels of education, training, and useful job skills if they are based solely on actual or past wages and do not take into account the potential for future wage increases. Young veterans are a good example of these young workers.

Vertical equity of a rating system for disability requires that actual loss of wages increases in proportion to the ratings assigned by the rating system. Horizontal equity of a rating system for disability requires that actual losses of wages be similar or the same for disabled persons with the same disability rating. Similar analysis for vertical and horizontal equity can be used for the ability of the disability benefits systems to match benefits to actual loss of wages. Several studies of workers' compensation beneficiaries

have identified a mixed record of success for the programs' ability to achieve equity for both the disability rating systems and the systems of disability benefits.

The Institute of Medicine (IOM) reviewed programs in Wisconsin and California and found that Wisconsin did an excellent job of providing vertical equity and California did a moderately good job of achieving vertical equity. Both states had serious problems with horizontal equity.

The key differences between VA disability compensation and the state workers' compensation programs are shown in Table I-2. All state workers' compensation programs provide benefits for extremely serious physical injuries such as loss of limbs or disfigurement. However these benefits are not intended for QOL but rather are a proxy for wage loss.

Table I-2. Comparison of Benefits Provided by VA and State Workers' Compensation Programs

	VA	State Workers' Compensation Programs
Purpose	Recognize and compensate for disability incurred due to military service	Compensation for earnings lost because of work-related injuries or diseases. Rehabilitation for return to prior employment followed by rehabilitation for return to any type of work
Possible QOL Benefit	None stated. However, SMC payments can exceed 100% of average U.S. worker earnings.	None stated
Duration of Disability Payments	Lifelong monthly payments	Temporary benefits terminate when gainful employment is resumed or statutory limit on duration reached. Permanent partial disability (PPD) benefits in most jurisdictions are paid for a duration determined by the seriousness of the worker's permanent impairment or loss of earnings capacity. The actual duration of lost wages does not affect the amount of PPD benefits in most states, as discussed in Chapter III of this volume.
Duration or Amount of QOL Benefit	Lifelong monthly payments	N/A
Eligibility	Presence of service-connected disability	In Massachusetts, proof of work-related injury or disease that resulted in a "specific injury"

Source: EconSys Study Team.

Other U.S. Programs

Four other disability programs in U.S. were reviewed: Social Security Disability Insurance (SSDI), Federal Employees Compensation Act (FECA), Longshore and Harbor Workers Compensation Act (LHWCA), and Energy Employee Occupational Illness Compensation Program (EEOICP). The main purpose of all of these programs is to replace lost earnings caused by disabilities that limit or make gainful employment impossible. None pay benefits for non-economic or non-work factors. There is variability among these programs, even among the three administered by the Department of Labor's Office of Workers' Compensation Programs (OWCP) which are FECA, LHWCA, and EEOICP. These three are similar to state workers' compensation programs but tend to be more generous, that is the percentage paid can be higher, for example, 75 percent of pre-

injury earnings in FECA. All three provide retraining benefits, and FECA offers up to \$200 per month for personal expenses while in training, and LHWCA offers \$100 per month. SSDI offers graduated reduction in benefits for returning to work but no rehabilitation benefit.

FECA and LHWCA provide both total disability and partial disability payments. EEOICP provides lump-sum benefits for individuals ill from radiation exposure; part of the determination of the magnitude of the payment is calculated based on earnings loss.

SSDI is the largest U.S. program for disability benefits. SSDI only provides benefits for total disability and inability to work. Recipients must be deemed unable to engage in substantial gainful activity, which, among other criteria, is defined as employment for pay or profit exceeding \$940 per month for a single person in 2008. If blind, the limit is \$1,570. This is an insurance program that requires minimum employment periods paying Social Security taxes. For someone less than 24 years of age, six credits are required. After two years, SSDI recipients are eligible for Medicare benefits.

Return-to-Work Programs

The literature reflects that at the center of vocational rehabilitation programs is the goal of rehabilitating individuals to improve their probability of obtaining and retaining employment after injury. To accomplish this, most disability programs provide various services that facilitate an injured worker's transition back to work: on-the-job training; education; and job placement assistance. Additionally, some professional literature shows the significant burdens incurred by caregivers of injured family members. The Canadian veterans' program offers benefits directly to families in addition to the injured veteran transitioning from military to civilian life.

Some of the literature concludes that successfully rehabilitated individuals can undertake a wider array of employment tasks, have higher earnings potential, and become less dependent on public services. Identifying individuals who would benefit from a vocational rehabilitation program is therefore a desirable goal. A review of best practices reveals that early identification and intervention are critical factors in a successful return-to-work outcome. To facilitate achieving successful return-to-work outcomes, the literature identifies several incentives that encourage participation and completion of a vocational rehabilitation program. Literature examples of return-to-work incentives include pay for performance plans for rehabilitation service providers that achieve agreed upon outcome criteria, financial incentives payable to vocational rehabilitation participants as they successfully complete rehabilitation tasks, federal and state programs that encourage employers to hire temporary and permanently disabled workers, and various incentives in the SSDI program such as the Ticket to Work program in which individuals test their ability to function as employed persons while still receiving disability benefits.

The literature also identifies some disincentives to entering and completing some current vocational rehabilitation programs. A major disincentive identified is the opportunity cost of foregone earnings; this means that spending time in rehabilitation

prohibits one from spending that same time earning immediate income. A second disincentive is psychological. For example, obtaining Medicare coverage first requires receipt of SSDI for two years; obtaining SSDI requires proof of inability to work. Thus, during the waiting period one may become emotionally and psychologically invested in the notion that one cannot work. Finally, incentives are of limited value to certain subgroups of vocational rehabilitation participants such as individuals with severe head trauma who may not be able to contemplate the meaning or impact of incentives.

The literature review reveals that demographic characteristics such as age, education, income and/or wage replacement rate, pre-injury employment history, tenure with current employer, and individual prediction of continued disability all can affect the duration and ultimate outcome of disability claims. This in turn affects provider costs and worker economic consequences. Older workers have an increased likelihood of permanent disability and unexpected medical costs. Workers with relatively less education experience lower return-to-work rates. Workers with relatively higher earned income have stronger financial incentives to return to work quickly given the relatively larger opportunity cost of foregone income, especially when they face a low maximum-capped benefit relative to their earned income. In addition, workers with intermittent pre-injury employment experience substantially longer return-to-work rates than workers having continuous employment in the year prior to injury. For those workers who cannot or do not return to their pre-injury employer, their time-off work is two to three times longer. Finally, when injured workers view themselves as disabled and unable to perform some or all daily work activities irrespective of the diagnosis or physician's orders, they typically experience longer delays in returning to work.

Participation in VA Vocational Rehabilitation and Employment Program

Analysis presented in *Volume II: Transition Benefit Analysis* indicates that U.S. veterans with a service-connected disability on average do not apply for the Vocational Rehabilitation and Employment (VR&E) program for 12 years after release from military service. From 2001 to 2007, this average dropped to 9 years while the median dropped from 8 to 2 indicating that veterans are applying much sooner after discharge. The restructure of the VA and Department of Defense (DoD) disability processes offers the prospect of significant improvement for those medically discharged.

Finally, there are expenses related to working outside the home which may create a barrier for disabled veterans who want to return to the workplace. Service-connected disabled veterans transitioning to civilian life experience additional living expenses before and during vocational rehabilitation that veterans transitioning without service-connected disabilities do not experience. These costs include increases in general living costs such as transportation costs for travel to and from medical appointments due to the service-connected disability. In addition, they may have special needs and non-medical costs such as the need for personal assistance.

Several factors or characteristics may increase or decrease the likelihood that a veteran with a service-connected disability will enter and complete VA's vocational

rehabilitation program. The impact that each of these factors may have on veterans seeking and obtaining VA vocational rehabilitation is considered as VA's transition benefit program is developed. The following factors have influence on the entry and completion of vocational rehabilitation programs:

- Providing transition assistance benefits to caregivers and family members reduces their levels of stress and depression, which raises the overall quality of life for both the patient and family members or caregivers.
- Providing and aligning financial incentives with successful completion of specific rehabilitation tasks increases the likelihood that patients enter and successfully complete rehabilitation.
- Higher levels of pre-injury education attainment combined with strong provision of job placement assistance increases the likelihood of obtaining and retaining employment.
- Providing transition assistance payments offsets the foregone cost of earnings (time spent in rehabilitation and not working), which in turn increases the likelihood of entry and completion of rehabilitation.
- Providing a VA transition assistance coordinator with clearly defined roles and responsibilities who works with veterans before they leave active duty provides a smoother transition and significantly reduces the time from medical discharge to entry into vocational rehabilitation, which increases the likelihood of successful completion of vocational rehabilitation.
- Transition assistance payments must acknowledge and partially offset increases in general living costs, special needs, and non-medical costs to provide appropriate incentives for veterans with service-connected disabilities to enter early and successfully complete vocational rehabilitation.

Foreign Government Temporary and Partial Disability Programs

Nine foreign government programs were reviewed. The workers' compensation programs in Canada were reviewed in-depth because most provide separate benefits for economic loss and non-economic/quality of life losses. Snapshots are presented of eight other countries: Australia, Germany, the United Kingdom, Japan, the Netherlands, Norway, Sweden, and Denmark.

- In Canada, labor legislation is in the jurisdiction of the ten provinces and three territories whose workers' compensation programs vary somewhat. The programs all cover wage loss, medical care and other treatment, and vocational rehabilitation associated with occupational injuries and diseases. The four forms of benefits offered include temporary wage loss, permanent earnings loss (in some instances non-economic losses and foregone retirement savings), survivor's benefits, and health care. Between 65 and 100 percent of workers in each jurisdiction are covered. Non-economic loss for pain, suffering, and loss of

quality of life for permanent impairment is provided, and the amount is determined by a formula that includes age of the recipient and is usually a lump-sum payment. A detailed summary of benefits and features by province is provided in Chapter VI of this volume.

- In Australia, all state and territorial programs and the federal workers' compensation programs are no-fault programs. Three states have monopoly insurance programs; the other programs use private insurance coverage.
- In Germany, wage replacement is paid directly by employers for six weeks and thereafter through an insurer. Germany's permanent disability benefits are limited to three years except in the case of the most severely disabled. Germany's benefits include wage replacement, health care, vocational services, disability pension, and nursing care.
- The United Kingdom's social security system includes multiple programs for disability compensation, unemployment insurance, state pensions, and other benefits. Employers are responsible for purchasing civil liability insurance.
- In Japan, short-term disability benefits are provided through private sector health insurance and are not universal. Large companies are required to offer health insurance plans that include short-term disability benefits.
- Employers are responsible in the Netherlands for two years of short-term wage replacement, and they may self-insure or purchase insurance. Norway provides full or partial disability benefits of two-thirds of earned income for one to four years. Sweden has four temporary disability programs that are both pension-related and means-tested.
- Finally, in Denmark, employers are required to purchase insurance for accidents and short-term effects of exposure to hazardous substances. A modest means-tested disability pension is also provided to individuals who are 18 to 64 years of age.

Private Disability Programs

Although significant differences exist between private disability programs and VA's Disability Compensation Program, there are a number of potential lessons suggested by the best practices of private disability programs.

Private disability insurers do not view disabilities and benefits resulting from them as permanent. These private insurers are always working towards an ultimate resolution of the disability, even in the case of long-term situations. In the VA Disability Compensation Program, in contrast, individuals receive permanent ratings, and the expectation is that benefits will continue throughout the veteran's lifetime.

Private employers and disability insurers view occupational training and retraining as an integral part of managing disability claims. While VA programs provide assistance with occupational training and retraining, this is separate from disability compensation itself.

Private disability insurers do not assume that a recovered worker will necessarily return to the original employer. If a disabled worker who is receiving benefits recovers, he or she is expected to start looking for a job, even if the former or original employer that is providing the disability benefits has an opening. In contrast, regardless of the reason, VA's disability compensation benefits and ratings are not contingent upon occupation, and occupational assistance is not seen as an integral part of the disability program.

Because the purpose of employer-sponsored disability programs in the private sector is income replacement, long-term disability benefits stop when pension payments begin. In contrast, under the current VA Disability Compensation Program, the commencement of Social Security retirement benefits or other retirement income does not affect the payment of disability benefits. The fact that such benefits are not offset against other income is sometimes offered as evidence of an implicit quality of life element in veterans' disability benefits.

There are a number of potential purposes for benefits paid in the event of impairment. Among these are compensation for the loss of physical or mental functioning, compensation for the loss of quality of life, replacement of lost income, and maintenance of a minimum standard of living. Private employers explicitly separate the goals of income replacement and compensation for a loss of physical functioning or quality of life and address them through separate benefits or programs. Disability income benefits address income replacement. Programs such as business travel accident plans can be seen as addressing physical functioning or non-economic loss. Splitting the two makes it much easier to design an effective income replacement program as well as to clarify the level of compensation provided for the reduced quality of life. Separate benefits are easier to design and test than a combined benefit that attempts to achieve two disparate goals.

The purpose of some disability programs is to protect workers against the loss of earnings while they are unable to work due to injury or illness. Because jobs vary in their physical and mental demands, a given physical impairment may prevent one individual from working but not another. As a result, earnings loss does not depend solely on the severity of a physical impairment – contextual factors such as the individual's specific job duties are equally important. Ignoring these contextual factors may result in benefits that provide inadequate income protection in some cases while replacing more than the income loss due to impairment in other cases.

Financial incentives matter. Well-designed private sector disability programs seek to strike an appropriate balance between income protection and maintaining a financial incentive for employees to return to work. Creating an appropriate financial incentive involves multiple aspects of the program including the benefit level chosen, provisions for coordinating with other sources of disability income, and the definition of disability used.

Generally, disability benefits are less than pre-injury earnings and long-term benefits are lower than short-term benefits and often coordinated with or offset by other benefits.

Becoming disabled can be a challenging event for anyone. Retraining requires time, and depending on the degree of physical or mental impairment involved, may require learning new ways of functioning. Combining an initial “own occupation” benefit period with an “any occupation” requirement for continuing benefits after that initial period is an approach that provides both time and an incentive for a disabled individual to adjust to his or her changed circumstances, retrain, and seek alternative employment. To be highly effective, the program requires the availability of meaningful rehabilitation, occupational therapy, and retraining assistance. The more sophisticated private programs provide targeted rehabilitation, retraining, and assistive technology based on a case-by-case evaluation of each claimant.

QOL Elements in Disability Programs

All disability programs in the U.S. that were reviewed, public and private, are silent on quality of life. None make explicit payments for quality of life. Work disability programs provided in both the public and private sectors in the U.S. emphasize return-to-work efforts and generally either offer rehabilitative services or allowances for rehabilitative services to facilitate return-to-work efforts. Programs reviewed pay less than 100 percent of actual wage loss to provide an incentive for return-to-work efforts. Inability to work at all or a reduction in earnings capacity due to a work injury must be established by the claimant before benefits are awarded. Mental conditions such as post-traumatic stress disorder (PTSD) are not typical in civilian occupations and are not covered by state disability compensation. Private disability insurance offered to first responders does cover mental conditions, but the claimant must establish that the condition resulted from work.

While other U.S. programs are silent on quality of life, disability benefits are paid as either loss of earnings or loss of earnings *capacity*. Payments made for loss of earnings capacity are often paid for listed or scheduled serious physical injuries such as amputations. U.S. programs vary widely in the amount they compensate for the same injury. For example, the range among states for loss of a big toe is from \$4,140 to \$73,413 and for loss of a hand from \$37,400 to \$229,778. This variation accentuates the subjective nature of these payments and raises the question as to whether quality of life is indeed a consideration that goes into the determination of the amount of payment, even though it is intended as payment for loss in earnings or earnings *capacity*.

Most Canadian workers’ compensation programs provide a separate award for loss of quality of life. Although these programs vary among the provinces and territories concerning payment for QOL, where QOL is awarded the range of maximum award is \$45,200 to \$92,262 U.S.

The five foreign veterans’ programs reviewed recognize and acknowledge quality of life. Germany and Israel provide services but not cash payments to support QOL. The United Kingdom, Australia, and Canada modernized their veterans’ disability programs in the past four years, and each provides cash compensation for loss of quality of life as a lump-sum payment. Level of impairment figures prominently into the amount of the

QOL payment. It should be noted that Australia gives the veteran the option of an age adjusted lump sum (up to \$334,819 U.S. for a 30-year old) or monthly payment (ranging from \$254 to \$1,021 U.S.). In 2008, Canada's maximum lump-sum is equivalent to \$258,187 in U.S. currency, and UK's is \$560,651 in U.S. currency. There are three important distinctions that relate to QOL payments for disabled veterans:

- QOL is paid in addition to earnings loss. However, earnings loss payments are set at a percent of the disabled veteran's prior wages, not 100 percent¹ of prior wages or the average country wage in Australia, Canada, and the United Kingdom.
- For less serious injuries in the United Kingdom, no earnings loss payments are made and a QOL payment is the only payment made.
- Earnings loss payments stop or are offset by pensions from other sources when disabled veterans reach retirement age in Australia, Canada, and the United Kingdom.

Israel provides services intended to improve QOL but no cash benefits. Germany does not have a separate program for disabled veterans and veterans receive the same benefits and services as non-veterans. All countries reviewed emphasize rehabilitation and supportive services as a part of their QOL concept, and these services are provided through the veterans' agency and/or the country's general social service programs. The aim is to integrate the disabled veteran into society as much as possible and that includes services to support disabled veterans in securing and maintaining employment. Integration into society is viewed as integral to quality of life, and it is typical for disabled veterans to be served in the same fashion as other disabled individuals in the country.

Disabled veterans in Canada and Australia assess their QOL through self-administered instruments or interviews. Individuals who score themselves as significantly worse off than the average, have their scores adjusted to reflect an average. In the UK, the QOL payment for "pain and suffering" is linked to the impairment, and increases with level of severity of the impairment.

Of Potential Interest to Decisionmakers

The review of non-VA disability programs revealed features, aspects, or factors that should be of interest to VA. These are described in each chapter and major aspects are summarized here.

Transition or Rehabilitation

- Early entry into vocational rehabilitation has proven to enhance success.

¹ Except in Australia, which pays 100 percent of loss of earnings for the first 45 weeks; thereafter it is reduced.

- The Canadian Veterans Affairs program requires participation in vocational rehabilitation by disabled veterans. All foreign veterans' programs emphasize rehabilitation and return-to-work features.
- Support for the families of those participating in vocational rehabilitation has proven to be successful, particularly for caregivers of individuals with PTSD.
- The DOL Office of Workers' Compensation Programs and the Oregon Employer-at-Injury program provide subsidies to public or private employers who hire workers who are difficult to place.
- Private disability programs view disabilities as temporary and constantly strive to resolve the conditions using case management and interaction with employers.

Earnings Loss

- Benefits are generally limited to two-thirds of wage loss in workers' compensation and other programs to encourage return-to-work efforts.
- Use of actual wage loss rather than impairment assessment may not be appropriate for younger workers (or veterans) who have limited work experience.
- Replacement of gross wage losses due to disability is the norm but some state workers' compensation programs use spendable earnings as the measure to recognize the impact of progressive federal and state income taxes.
 - Yukon Territory includes an annual two percent increase to allow for promotion and advancement that would have occurred but for the disability.

Quality of Life

- The assessment process for quality of life used by foreign programs is straightforward and accessible and often involves self assessment. Degree of impairment is a consideration in determining QOL loss.
- Quality of life payments are often made in lump-sum rather than continuing payments. Some allow resubmission of quality of life applications if conditions worsen.
- Foreign quality of life payment amounts were based on research on their workers' compensation programs and injury awards.
- Other U.S. programs are silent on quality of life while Canadian programs, both workers' compensation and veterans', use dual award systems.

General

- Dual tracks for compensation for the economic and non-economic impacts of disability are used in Canada's workers' compensation programs and some other foreign veterans' disability programs and may offer advantages rather than trying to have a single benefit serve both purposes.
- The differences between loss of earnings payments and payment for loss of quality of life should be clearly stated.
- Analytical techniques and comparison groups used in empirical studies of other programs offer suggestions for evaluating adequacy and equity of benefits.
- Some foreign veterans' programs place the burden of proof on the program to prove that injury or illness is not caused by service.

II. INTRODUCTION

This volume, *Review of Non-VA Disability Programs and QOL Measures*, prepared for the U.S. Department of Veterans Affairs (VA), is Volume IV of the Final Report for *A Study of Compensation Payments for Service-Connected Disabilities*. The overall Final Report has five volumes:

- Volume I: Executive Summary
- Volume II: Transition Benefit Analysis
- Volume III: Earnings and Quality of Life (QOL) Loss Analysis
- Volume IV: Review of Non-VA Programs and QOL Elements
- Volume V: Disability Forum Presentations

The EconSys Study Team’s review of non-VA disability programs and QOL measures in Volume IV is divided into the following chapters:

- I. Summary
- II. Introduction
- III. U.S. State Workers’ Compensation Programs
- IV. Other U.S. Compensation Programs
- V. Return-to-Work Programs
- VI. Foreign Government Disability Programs
- VII. U.S. Private Disability Programs
- VIII. QOL Elements in Disability Programs

The purpose of reviewing non-VA programs is to examine the features of the programs with an eye toward assessing the extent to which of those features could be adapted or applied in some way to the VA Disability Compensation Program. We assessed the nature and type of injuries and diseases that are compensated by non-VA programs and how these programs determine the extent of earnings loss or quality of life impact.

Even though the nature of military service makes it unique in terms of the types of injuries and diseases that are experienced, we identified and selected programs whose populations are as similar as possible to the population of veterans served by the VA Disability Compensation Program. We also included programs that provide payments for the impact of disability on an individual’s quality of life.

VA asked that we review at least three different State programs and at least three different federal systems. We addressed workers’ compensation broadly by identifying the differences in temporary and permanent disability benefits and in partial and total disability benefits. We reviewed the Federal Employees’ Compensation Act (FECA),

which provides workers' compensation for federal employees, and the Longshore and Harbor Workers' Compensation Act which, as its name indicates, provides workers' compensation for the dangerous occupation of longshoreman. In addition, we reviewed disability programs other than workers' compensation: Social Security Disability Insurance (SSDI), the major U.S. disability program, and the Energy Employees Occupational Illness Fund.

VA also asked that we review at least five foreign countries' programs and specifically to consider Canada, Australia, the United Kingdom, Israel, and at least one other foreign nation. We selected Canada, Australia, Germany, the United Kingdom, Japan, the Netherlands, Norway, Sweden, and Israel and reviewed their general disability programs. We focused extensively on the workers' compensation programs of the 10 provinces and 3 territories of Canada because those programs provide separate benefits for economic and non-economic losses. We also reviewed the foreign government veterans' disability programs of Canada, Australia, Germany, Israel, and the United Kingdom specifically to examine how those programs addressed quality of life and earnings loss.

Finally, we reviewed private disability insurance programs, some provided by employers and some purchased by individuals.

Each of these different types of programs is addressed in separate chapters of this volume.

III. STATE WORKERS’ COMPENSATION PROGRAMS

State workers’ compensation programs provide cash benefits, medical care, and rehabilitation services to workers who experience work-related injuries or diseases.² Each state has a workers’ compensation program.³ In this chapter, we examine the programs in the 50 states and the District of Columbia (collectively referred to as states) and suggest some lessons for the design of the VA Disability Compensation Program.

There are some common features of these state workers’ compensation programs including the use in most jurisdictions of four legal tests to determine which injuries are work related and therefore entitle workers to benefits.⁴ However, in recent decades a number of states have added more restrictive rules for determining which workers qualify for benefits, which has increased the differences among states.⁵

Another common feature of workers’ compensation programs is that cash benefits are paid for both temporary disability and permanent disability, for both partial and total disability, and for fatalities. As illustrated in Figure III-1, temporary disability is the period between the date of injury and the date of maximum medical improvement (MMI) and permanent disability is the period after the date of MMI. Partial disability means the worker retains some earning capacity and total disability means the worker is unable to work. The most expensive type of cash benefit nationally is permanent partial disability (PPD) benefits, which are paid when the worker has permanent consequences of the workplace injury or diseases that are not totally disabling.

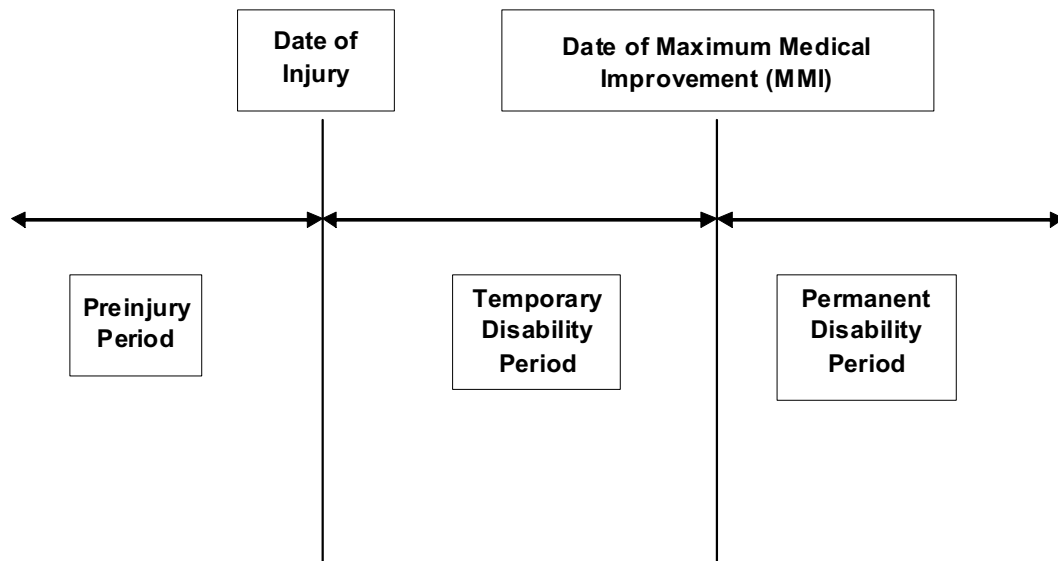
² An introduction to the programs is: Burton, J.F. Jr. (2005). Workers’ compensation. In J.S. Rosenbloom (Ed.), *The handbook of employee benefits* (pp. 567-600). New York: McGraw-Hill.

³ A recent comprehensive summary of state workers’ compensation programs and several federal programs is *State Workers’ Compensation Laws*, which was published by the U.S. Department of Labor (DOL), Employment Standards Administration, Office of Workers’ Compensation Programs. The publication (cited as *DOL State Laws*) and the DOL website provide tables summarizing the features of workers’ compensation programs. DOL discontinued this publication after January 2006. It is to be replaced by a new publication from the Workers’ Compensation Research Institute and the International Association of Industrial Accident Boards and Commissions. However, at the time of this report that publication was not yet available. Another publication providing information on workers’ compensation programs in U.S. plus Canada is U.S. Chamber of Commerce. (2008). *Analysis of Workers’ Compensation Laws 2008*, Washington, DC: Chamber of Commerce Research and Analysis Center. which was published by the U.S. Chamber of Commerce and is cited as *CofC Analysis*. Even though these publications only contain summaries of workers’ compensation statutes, each is over 100 pages. In this chapter, we provide an overview of state workers’ compensation laws as well as references to *DOL State Laws* and *CofC Analysis* for those interested in more details.

⁴ The four legal tests, all of which must be met in order for the worker’s injury to be compensable, are that there must be (i) an injury (ii) resulting from an accident that (iii) arose out of employment (the “AOE test”) and (iv) in the course of employment (the “COE” test). These tests are examined in Larson, A. & Larson, L. (2008). *Larson’s workers’ compensation desk edition*. Newark, NJ: LexisNexis, §§ 3.01-56.06.

⁵ These limits on compensability include changes in compensability of particular conditions such as carpal tunnel syndrome; limitations when the injury aggravates a pre-existing condition; and procedural and evidentiary changes in claims processing such the requirement that medical conditions be documented by “objective medical” evidence. These changes are examined in Spieler, E. & Burton, J.F. Jr. (1998). *Compensation for disabled workers: Workers’ compensation*. In T. Thomason, J. Burton, and D. Hyatt (Eds.), *New approaches to disability in the workplace* (pp. 205-244). Madison, WI: Industrial Relations Research Association.

Figure III-1. Three Time Periods in a Workers’ Compensation Case Where the Injury Has Permanent Consequences



Source: Institute of Medicine. (2007). A 21st century system for evaluating veterans for disability benefits, p. 305. Washington, DC: National Academies Press.

Relevance of Workers’ Compensation for the VA Disability Compensation Program

Most other disability benefits such as Social Security Disability Insurance (SSDI) are limited to persons with total disabilities. Because workers’ compensation pays PPD benefits as well as permanent total disability (PTD) benefits, the program can inform the design of a compensation system for veterans that will compensate both total and partial disability of a permanent nature. Also, because workers’ compensation pays benefits during the healing period, which includes temporary total disability (TTD) benefits and rehabilitation benefits, the workers’ compensation program provides a model for transitional benefits for disabled veterans.

Another reason workers’ compensation is potentially useful for designing a compensation system for veterans is that there are variations among the states in terms of benefit levels and operational approaches for PPD benefits that can inform the process of designing a system of cash benefits for disabled veterans.

Lessons for the VA Disability Compensation Program based on the experience of state workers’ compensation programs are suggested as this chapter progresses, and are revisited and summarized in the concluding section.

Transitional or Temporary Disability Benefits

During the initial period of recovery, earnings losses may be greater than after a stable condition has been reached. The temporary benefit is intended to provide support either until the individual has recovered enough to return to work or until it has been determined that the worker qualifies for permanent disability benefits. Medical benefits are provided to workers during the healing period (as well as during the permanent disability period) and include services designed to rehabilitate the worker medically. Vocational rehabilitation also may be provided during this period to facilitate transition to work that does not exceed the disabled person’s capacity for work based on the nature and degree of disability.⁶

Two types of cash benefits are paid during the temporary disability period:

- Temporary total disability benefits (TTD)
- Temporary partial disability benefits (TPD)

Temporary Total Disability Benefits

TTD benefits replace a percentage of pre-injury wages subject to maximum and weekly benefit amounts. In this section, we discuss the weekly amount of benefits, waiting periods before benefits are provided, and the duration of benefits.

Weekly Amount of Benefits

The amount of the weekly benefit for TTD is stated as a percentage of the pre-injury weekly earnings.⁷ Of the 51 state programs, 35 provide weekly benefits calculated at 66.67 percent of the workers’ pre-injury gross wages as compensation during the period of TTD. For eight other jurisdictions, the replacement rates ranged from 60 to 75 percent of pre-injury gross wages. In addition, six states (Alaska, Connecticut, Iowa, Maine, Michigan, and Rhode Island) based the TTD benefits on “spendable earnings” to account for the impact of income and payroll tax deductions on weekly wages. In these states, the weekly TTD benefit is 75 or 80 percent of the worker’s pre-injury spendable earnings. (The replacement of less than 100 percent of lost wages is a form of co-insurance.)

In all jurisdictions, the TTD benefits are capped at a maximum weekly benefit. In most states, the maximum is statutorily set as a percentage of the jurisdiction’s average weekly wage (AWW). Most jurisdictions also have a minimum weekly TTD benefit.

Workers’ compensation TTD benefits provide wage replacement only during the duration of the disability without any escalation over time for inflation or professional growth. TTD benefits (and all other types of workers’ compensation benefits) are not subject to federal or state income taxes. However, the benefits do not include payments

⁶ The workers’ compensation return-to-work programs are discussed in Chapter V.

⁷ The information on temporary total disability benefits in Table 6 of *DOL State Laws*.

for contributions to health care or retirement programs or any compensation for non-economic loss or additional family costs. The loss of Social Security payroll taxes on wages lost because of the injury also causes a reduction in potential SSDI or Old Age (OA) benefits from the Social Security program.

Waiting Periods

In all 51 state workers’ compensation programs there is a waiting period between the date of injury and the date when temporary disability benefits begin. The waiting period, which is a form of deductible, ranges from three to seven days depending upon the jurisdiction.⁸ However, in all but four states (Hawaii, Oklahoma, Rhode Island, and Montana) after a certain number of days of disability (usually 14 to 21), benefits are paid retroactively for the waiting period.

Duration of Benefits

All states limit the amount of time that total temporary disability payments are paid.⁹ Thirty-three of the 51 jurisdictions specify either the “duration of temporary disability” or a close variation thereof, at which time the worker with permanent consequences of his or her injury may qualify for another type of cash benefit. The other 18 jurisdictions limit the duration of TTD benefits to a specific maximum, ranging from 104 weeks (two years) up to 500 weeks (just under 10 years).

Temporary Partial Disability Benefits

All state workers’ compensation programs except Kentucky and New Jersey also provide TPD benefits to workers who have not yet reached the date of maximum medical improvement and have returned to work at wages below their pre-injury wages.¹⁰

In those states that provide TPD benefits, the weekly benefit is a percentage of the difference between the worker’s pre-injury wages and the worker’s current earnings (or the worker’s current earning capacity). The percentage is normally the same percentage used to calculate TTD benefits. Thus, in a state like Alabama, which replaces 66.67 percent of pre-injury wages for TTD, the TPD weekly benefit is also 66.67 percent of the reduction in wages resulting from the injury. For example, if the worker averaged \$400 a week in wages before the injury and now earns \$100 a week, the weekly TPD benefit will be \$200 (that is, two-thirds of the \$300 in reduced wages). In Maryland and South Dakota, TTD benefits replace 66.67 percent of pre-injury wages, but TPD benefits only replace 50 percent of the loss of wages resulting from the injury.

⁸ The information on waiting periods is in Table 14 of *DOL State Laws*.

⁹ The information on durations of TTD benefits is in Table 6 of *DOL State Laws*.

¹⁰ Neither the *DOL State Laws* nor the *CofC Analysis* contains information on temporary partial disability benefits. The 2008 Edition of the *Annual Statistical Bulletin*, published by the National Council on Compensation (*NCCI ASB*), provides information on states with private carriers but not the states with exclusive state funds such as Ohio and Washington. Exhibit VII of the *NCCI ASB* contains an incomplete list of states with private carriers that provide TPD benefits. The statutes for all states with exclusive state funds and all states with private carriers that did not have TPD benefits shown in the *NCCI ASB* were examined for this report.

Among the six states that base TTD benefits on spendable earnings, Alaska, Connecticut, Maine, Michigan, and Rhode Island replace the same percentage of the loss of spendable earnings for TPD benefits as the percentage of pre-injury wages used to calculate TTD benefits. However, Iowa replaces 80 percent of pre-injury spendable earnings for TTD benefits and 66.67 percent of the loss of gross wages for TPD benefits.

The weekly TPD benefits in almost all jurisdictions are subject to the same maximum weekly benefits as TTD benefits. The only exceptions are Georgia, where the weekly maximum for TTD benefits is \$450 but the maximum for TPD is \$300 per week, and Maryland, with a TTD maximum of \$877 and a TPD maximum of \$439. In four states (Arkansas, Florida, Illinois, and Indiana), the minimum weekly benefit for TPD is the same as the minimum for TTD benefits. In Florida for example, the minimum weekly benefit is \$20 for both TTD and TPD benefits. In other states including Alabama and Georgia, there is a minimum weekly benefit for TTD but no minimum for TPD benefits.

The TPD benefits are subject to the same limits on duration as TTD benefits in some states such as Florida, where both types of benefits are limited to 104 weeks. Other states have shorter durations for TPD benefits than for TTD benefits. In Alabama, for example, TTD benefits are paid for the duration of the disability, while TPD benefits are limited to 300 weeks; and in Georgia TTD benefits cannot exceed 400 weeks, and TPD benefits can not be paid for more than 350 weeks.

There is a paucity of data on temporary partial disability benefits. For example, the *Annual Statistical Bulletin* published by the National Council on Compensation Insurance (NCCI ASB) contains data on the frequency and average cash benefits per claim for four types of cash benefits (TTD, PPD, PTD, and death) but provides no such data for TPD benefits. Likewise, the annual publication of the National Academy of Social Insurance,¹¹ which is a repository of national and state data on coverage, benefits, and costs, contains no data on TPD benefits. We are unaware of any state workers' compensation agency that currently publishes data on the numbers and costs of TPD benefits. Despite the lack of data on TPD benefits, their inclusion in almost all state workers' compensation programs suggests that such benefits may be an important component of successful rehabilitation and return-to-work programs in order to encourage workers to return to part-time work during the healing period.

¹¹ Sengupta, I., Reno, V.A., & Burton, J.F. Jr. (2007). *Workers' compensation: Benefits, coverage, and costs, 2005*. Washington, DC: National Academy of Social Insurance. Cited as *NASI Report*.

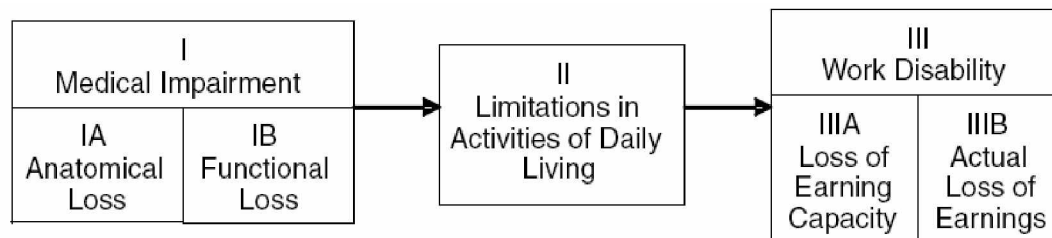
Permanent Disability Benefits

Permanent partial disability (PPD) benefits are the most expensive and complicated type of workers’ compensation cash benefits.¹²

Permanent Partial Disability Benefits

This section relies on the conceptual relationships shown in Figure III-2, which provides a useful framework for presenting the evidence on the relationship between impairment ratings and earnings losses discussed later in the section. The concepts in Figure III-2 correspond to the operational measures currently used to determine the amounts of PPD cash benefits provided by workers’ compensation programs.

Figure III-2. The Consequences of an Injury or Disease Resulting in Work Disability



Source: Institute of Medicine. (2007). *A 21st century system for evaluating veterans for disability benefits*, p. 306. Washington, DC: National Academies Press.

IA. Medical Impairment: Anatomical Loss – The American Medical Association’s Guides to the Evaluation of Permanent Impairment, Sixth Edition¹³ (hereafter referred to as the *AMA Guides*) provide impairment ratings for certain medical conditions based on anatomical loss. For example, amputation of the leg above the knee at the mid-thigh is rated at 90% of the loss of the leg unless there are proximal problems that increase the rating.¹⁴ Further, the *AMA Guides* indicate that a 90% impairment rating of the lower extremity is equivalent to a 36% impairment rating for the whole person.¹⁵

IB. Medical Impairment: Functional Loss – The *AMA Guides* provide impairment ratings for certain medical conditions based on the extent of the functional loss. For example, the *AMA Guides* explain how to determine the rating for a person who sustains significant shoulder motion deficits related to constant overhead work. This deficit

¹² Permanent partial disability benefits were received in 35 percent of all cases in which workers received cash benefits, but those cases accounted for 69 percent of all cash benefits in 2002. The 69 percent includes any TTD benefits paid in those cases. NASI Report, Figure 3, p. 7.

¹³ Rondinelli, R. (2008). *Guides to the evaluation of permanent impairment, (6th ed.)*. Chicago, IL: American Medical Association. Cited as *AMA Guides*.

¹⁴ *Ibid*, p. 542.

¹⁵ *Ibid*, p. 495.

warrants a 19% impairment rating for the upper extremity and an 11% impairment rating for the whole person.¹⁶

II. Limitations in Activities of Daily Living – These are the limitations in the activities of daily living resulting from the impairment such as limits on bending, kneeling, stooping, hearing, and memory.

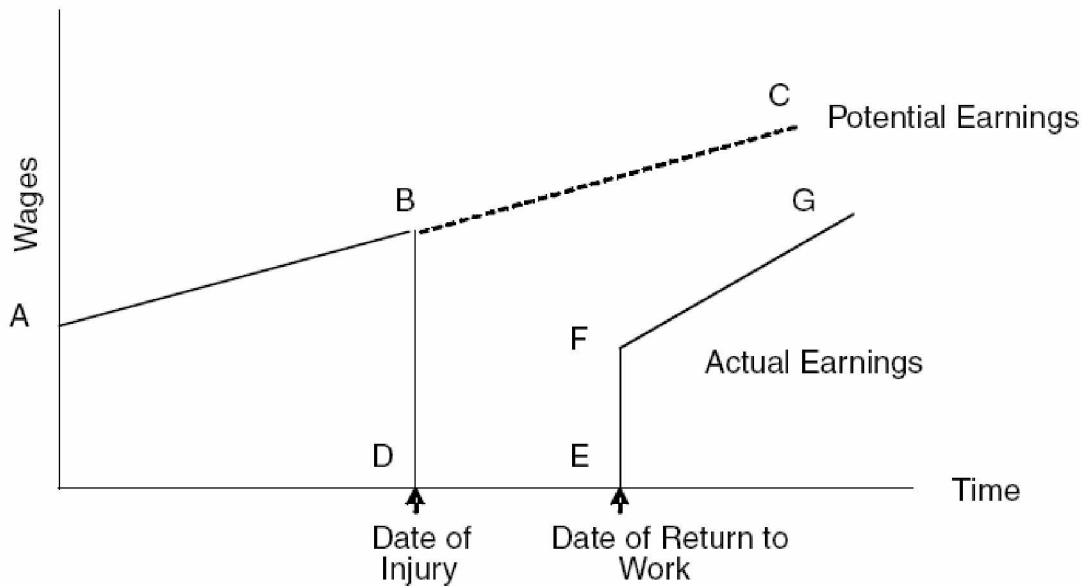
IIIA. Work Disability: Loss of Earning Capacity – This is the presumed loss of earning capacity resulting from the functional limitations and is based on factors such as the nature and severity of the injury and the worker's age, education, and work experience.

IIIB. Work Disability: Actual Loss of Earnings – This is the actual loss of earnings resulting from the injury or disease and its consequences (for example, medical impairment).

The actual loss of earnings is measured by the difference between the worker's actual earnings and the earnings the individual could have expected to earn if he or she had not been injured (potential earnings) as shown in Figure III-3. In this example, prior to the date of injury, wages increased through time from A to B, reflecting the worker's increased productivity and other factors that cause wages to increase over time such as inflation. At point B, the worker experiences a work-related injury that permanently reduces his or her earnings. Had the worker not been injured, his or her earnings would have continued to grow along the line BC. However, the worker's actual earnings in this example dropped from B to D and continued at this zero earnings level until point E when the worker returned to work at wage level F. Thereafter, the worker's actual earnings grew along line F to G. In this example, it is assumed the worker's actual earnings never returned to the potential earnings (line BC) that he or she would have earned if the injury had never occurred. The worker's true wage loss due to the injury is equal to his or her potential earnings after the date of injury (BC) minus the actual earnings after the date of injury (BDEFG).

The calculation of potential earnings (line BC) is a crucial step in this analysis. We discuss several methods that researchers have relied on later in this section and note the particular difficulties of estimating potential earnings for veterans.

¹⁶ *AMA Guides*, p. 477.

Figure III-3. Actual Losses of Earnings for a Worker with a Permanent Disability

Source: Institute of Medicine. (2007). *A 21st century system for evaluating veterans for disability benefits*, p. 307. Washington, DC: National Academies Press.

The Purpose of PPD Benefits

A fundamental issue is which of the consequences of injuries or diseases shown in Figure III-2 provides the reason or purpose for the cash benefits provided by workers' compensation programs. Although, as discussed in the *IOM Study*¹⁷ there are competing views, the dominant view is that the sole purpose of cash benefits in U.S. workers' compensation programs is to compensate for work disability and not other consequences. Some argue that another purpose of the cash benefits is to compensate for permanent impairment. This argument is based on the use of scheduled benefits in most states, which determine the amount of PPD benefits by determining the extent of the worker's permanent impairment. (The permanent impairment operational approach is discussed below.)

¹⁷ Institute of Medicine. (2007). *A 21st century system for evaluating veterans for disability benefits*, p. 309. Washington, DC: National Academies Press. *benefits*, p. 309. Washington, DC: National Academies Press. Cited as *IOM Study*.

This argument was rejected, however, by Arthur Larson, the leading legal scholar in workers’ compensation:¹⁸

The schedule principle, however, is not a departure from the wage loss principle. . . The only difference is that the wage loss in the schedule case is conclusively presumed. This is justifiable because the full extent of the wage loss from a permanent partial disability will typically never be known at the time of the hearing. It stretches out over a lifetime, but the award must be paid now.

We assume for most of the balance of this section that the sole purpose of PPD benefits is to compensate for work disability and, in particular, the actual loss of wages resulting from the workplace injury or disease.

The Three Basic Operational Approaches for PPD Benefits

Although the sole purpose of PPD benefits is to compensate for work disability, most states use another of the permanent consequences shown in Figure III-2 as a proxy or predictor of the extent of work disability. Burton identified three basic operational approaches for PPD benefits used in U.S. workers’ compensation,¹⁹ which are briefly described here. We will discuss the relevance of these multiple operational approaches for the compensation system for veterans later in the chapter.

Operation Approach I: The Permanent Impairment Approach

The first basic operational approach evaluates the seriousness of the worker’s anatomical loss and/or functional loss resulting from the work-related injury. A permanent impairment rating is made, which is used to determine the amount (weekly benefit and/or duration) of the PPD benefits. The permanent impairment rating is a proxy for the actual wage losses that are assumed to result from the impairment.

In Wisconsin, for example, the statute provides that a worker who has a total physical loss or total loss of the use of a leg is entitled to 500 weeks of permanent partial disability benefits. A worker who has permanent damage to his or her leg that is rated at 20% will receive 100 weeks of PPD benefits.²⁰ The weekly benefit is two-thirds of the worker’s pre-injury wage, subject to the Wisconsin weekly maximums for PPD benefits. The implicit assumption is that the 100 weeks of PPD benefits represents the expected duration of lost wages due to this injury. However, the worker receives 100 weeks of PPD benefits regardless of his or her actual labor market experience.

¹⁸ Larson, A. (1973). Basic concepts and objectives of workmen’s compensation. In P.S. Barth and M. Berkowitz (Eds.), *Supplemental studies for the National Commission on State Workmen’s Compensation Laws, Volume I* (pp. 31-39). Washington, DC: The National Commission on State Workmen’s Compensation Laws. Cited as *Larson Basic Concepts*.

¹⁹ Burton, J.F. Jr (2005). Permanent partial disability benefits. In K. Roberts, J.F. Burton Jr. & M.M. Bodah. (Eds.), *Workplace injuries and diseases: Prevention and compensation: Essays in honor of Terry Thomason* (pp. 81-87). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. Cited as *Burton PPD Benefits*.

²⁰ The worker will receive an additional 30 percent of the award if the leg or part of the leg is amputated.

Operational Approach II: The Loss of Earning Capacity Approach

The second basic operational approach considers the seriousness of the worker’s permanent impairment as well as other factors that may affect the worker’s loss of earning capacity (LEC) resulting from the injury. These factors may include the worker’s age, prior education, prior work experience, and job opportunities. An LEC rating is made, which is used to determine the amount (weekly benefit and/or duration) of the PPD benefits. Six states (Arkansas, Florida, Montana, New Mexico, Tennessee, and Wisconsin) reduce the LEC rating if the worker has returned to work,²¹ but lack of actual earnings losses does not preclude PPD benefits under this approach. The LEC rating is a proxy for the actual wage losses that are assumed to result over the worker’s career from the loss of earning capacity.

In Iowa, for example, the workers’ compensation statute provides that a worker with an injury that is unclassified (a term explained below) will have the consequences of his or her injury being rated as an “industrial disability.” This rating takes into account the seriousness of the worker’s impairment plus the worker’s age, education, intellectual ability, work skills, and employability. The disability rating (or LEC rating) is multiplied by 500 weeks to determine the duration of the PPD benefits. Thus, a worker who has permanent damage to his or her back that is rated at 20% will receive 100 weeks of PPD benefits. The weekly benefit is 80 percent of the worker’s pre-injury spendable earnings, subject to the Iowa maximum for PPD benefits. The implicit assumption is that the 100 weeks of PPD benefits represents the expected duration of lost wages due to this injury. However, the worker receives the 100 weeks of PPD benefits regardless of his or her actual labor market experience.

Operational Approach III: The Actual Wage-loss Approach

The third basic operational approach determines the actual wage loss due to the work-related injury by comparing the worker’s actual earnings in the period after the date of MMI with the worker’s earnings before the date of injury. The duration and amount of PPD benefits are then related to the duration and amount of actual wage loss.

In New York, for example, a worker with an unclassified injury with permanent consequences must establish that he or she is experiencing an actual loss of wages in order to receive any PPD benefits. If the worker returns to work at a wage equal or higher than the pre-injury wage, the worker receives no PPD benefits even though the worker has a permanent impairment and/or a loss of earning capacity. If the worker experiences wage loss after the date of MMI, then the PPD benefits are two-thirds of the difference between the pre-injury wages and the actual earnings in the permanent disability period, subject to the state’s maximum weekly benefit for PPD benefits. The duration of these PPD benefits for unclassified injuries until 2007 was for the duration

²¹ Welch, E.M. (2008). The shape of permanent partial disability benefits. *Workers’ Compensation Policy Review*, 8(3), 3-27. Cited as *Welch PPD Benefits*.

of the disability (including, in some cases, lifetime), when maximum durations for the nonscheduled benefits were established that vary by the seriousness of the injury.²²

The Essential Differences Among the Three Operational Approaches

There are two crucial differences between the first two operational approaches – the permanent impairment approach and the loss of earning capacity approach – and the actual wage-loss approach.

The first difference is that those states relying on the actual wage-loss approach require the worker (1) to demonstrate that a work-related injury has produced a permanent impairment and a loss of earning capacity and (2) to demonstrate that he or she has experienced an actual loss of earnings because of the work-related injury or disease. In contrast, the impairment and loss of earning capacity approaches will pay PPD benefits even if there is no actual loss of earnings so long as the worker can demonstrate that the work injury or disease caused a diminution in one of the proxies for actual wage loss.

The second difference between the first two operational approaches and the actual wage-loss approach pertains to the time when the decisions about the amount of PPD benefits are determined. In the permanent impairment approach and the loss of earning capacity approach, the worker is evaluated as soon as possible after the date of MMI, when extent of the permanent impairment resulting from the workplace injury can first be assessed. The result is a permanent impairment rating or a loss of earning capacity rating that determines the weekly amount and the duration of PPD benefits the worker will receive. In essence, the PPD benefits are determined near the beginning of permanent disability period even though the purpose of the benefits is to compensate the workers for lost wages during the entire period of permanent disability.

Once the decision is made about the PPD benefits in the impairment approach or the loss of earning capacity approach, the award is rarely revisited regardless of what happens subsequently to the worker in the labor market. This is the *ex ante* approach because the PPD benefits are designed to compensate for losses that are expected to occur; benefits are awarded before losses are known or proven.²³ In contrast, in the actual wage-loss approach, the amount and duration of the PPD benefits are not determined until the worker’s actual experience in the labor market is known. The wage-loss approach is termed the *ex post* approach because PPD benefits are designed to compensate for losses that have already occurred, that is, benefits are awarded after losses are known or proven.

²² The nonscheduled PPD benefits in New York are even more complicated than the example conveys. More details are provided in Berkowitz, M. & Burton, J.F. Jr., (1987). *Permanent disability benefits in workers’ compensation*, pp. 244-249. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research. Cited as *Berkowitz and Burton*.

²³ *Berkowitz and Burton*, pp. 265-66.

Common Distinctions Within and Among States for PPD Benefits

All jurisdictions have different PPD benefits (measured by weekly amount or duration) for different categories of injuries and diseases, and some jurisdictions use different operational approaches for different categories of injuries. Three factors are involved in the most common distinctions:

(1) *Distinctions between injuries and diseases.* Several states provide more restricted PPD benefits for diseases than for injuries.

(2) *Distinctions among different types of injuries.* Most states treat scheduled injuries differently than nonscheduled injuries. Unfortunately, these terms are not used in a uniform fashion. The most common meaning is that a *scheduled injury* is any injury that is specifically listed in the workers’ compensation statute, which typically involves injuries to the upper and lower extremities. A *nonscheduled injury* (or *unscheduled injury*) is any injury to the trunk, back, internal organs, nervous system, or other body systems not included in the list of injuries found in the statute.²⁴ States that treat scheduled injuries and nonscheduled injuries differently in the operational approaches to PPD benefits are referred to as *scheduled/nonscheduled distinction states*.

Eleven states do not distinguish between scheduled injuries and nonscheduled injuries.²⁵ These unitary rating system states treat all injuries the same way in the workers’ compensation statute, either by specifying that a particular rating system should be used for all injuries or by authorizing the workers’ compensation agency to adopt a comprehensive rating system.

(3) *Distinctions among injuries with different degrees of severity.* Many jurisdictions provide more generous benefits (in terms of weekly amount and/or potential duration) for more serious injuries than for less serious injuries. Some states also distinguish between injuries that result in amputations of body members and injuries that involve permanent loss of use of the body member. The former are entitled to PPD benefits (or benefits with extended durations) while the latter are not.

State Systems of PPD Benefits

In 1999, Barth and Niss provided detailed descriptions of workers’ compensation benefits for PPD in the fifty states and Washington, DC.²⁶ These descriptions can be used to construct a taxonomy of seven systems of PPD benefits used in U.S. and Canada.²⁷

System I PPD benefits: Scheduled/nonscheduled distinction states that rely on the permanent impairment approach for nonscheduled injuries. Most states have PPD

²⁴ Welch, E. (1994). *Employer’s guide to workers’ compensation*, p. 91. Washington, DC: Bureau of National Affairs.

²⁵ Welch PPD Benefits.

²⁶ Barth, P. S. & Niss, M., (1999). *Permanent partial disability benefits: Interstate differences*. Cambridge, MA: Workers Compensation Research Institute. Cited as *Barth and Niss*.

²⁷ Systems I to V and VII of the PPD benefits are discussed in Burton PPD Benefits., pp. 69-116. System VI of the PPD benefits is discussed in Burton, J.F. Jr. (2008). Workers’ compensation cash benefits: Part one: The building blocks. *Workers’ Compensation Policy Review*, 8(2), 15-28.

benefit systems that distinguish between scheduled and nonscheduled injuries. *Barth PPD Benefits* indicates there are 19 states that rely on this distinction.²⁸ An example is New Jersey, where both scheduled and nonscheduled injuries receive PPD benefits based on the extent of permanent impairment.

System II PPD benefits: Scheduled/nonscheduled distinction states that rely on the loss of earning capacity approach for nonscheduled injuries. *Barth PPD Benefits* indicates that 13 states that rely on this system of PPD benefits. An example is Iowa, in which scheduled injuries receive PPD benefits based on the extent of permanent impairment and nonscheduled injuries receive PPD benefits based on the loss of earning capacity.

System III PPD benefits: Scheduled/nonscheduled distinction states that rely on the actual wage-loss approach for nonscheduled injuries. *Barth PPD Benefits* indicates that 10 states use this approach. In New York, scheduled injuries receive PPD benefits based on the extent of permanent impairment and nonscheduled injuries receive PPD benefits based on the actual loss of earnings.

System IV PPD benefits: Unitary rating system states with a single operational approach for PPD benefits. California is an example of a jurisdiction in which all injuries are rated using the same approach. California relies on a formula to combine the impairment ratings with age and occupational factors to produce a disability rating, which is a variant of the loss of earning capacity approach.

System V PPD benefits: States with multiple operational approaches for PPD benefits for the same injury, which are paid on a sequential basis (the hybrid approach). The essence of the hybrid approach is that potentially two types of PPD are paid on a sequential basis. This approach is used in Connecticut and Texas and was used in Florida between 1994 and 2003. In Texas, the initial phase of PPD benefits are based on the impairment approach with three weeks of PPD benefits for each 1% impairment rating using the *AMA Guides*. Those workers who have a permanent impairment rating of at least 15% have an opportunity to receive actual wage-loss benefits (known as “supplemental income benefits” in Texas) after the impairment benefits expire.

System VI PPD benefits: States with multiple operational approaches for PPD benefits for the same injury, which are paid on an alternative basis. This is termed the bifurcated approach by Barth and Niss.²⁹ An example is North Carolina, where a worker with a scheduled injury (such as an injury to the arm) can choose between two operational approaches to determine benefits: *either* the impairment approach *or* the loss of earning capacity approach.

System VII PPD benefits: The concurrent or dual benefits approach (work disability benefits and/or non-work disability benefits) depending on the type of injury. Although earlier we assumed that the sole purpose of PPD benefits was to compensate for work disability, there are two examples of states that have explicitly paid non-work disability

²⁸ Barth, P.S. (2004). Compensating workers for permanent partial disability. *Social Security Bulletin*, 65(4), 16-23. Cited as *Barth PPD Benefits*.

²⁹ Barth and Niss. p. 96.

(or non-economic loss) benefits in addition to work disability benefits. Florida had two types of PPD benefits between 1979 and 1990, although the formulations of the benefits changed over time. Impairment benefits were paid for certain types of permanent impairments including amputations, loss of 80 percent or more of vision, and serious head or facial disfigurements. Other types of permanent impairments such as total or partial loss of use of a body member without amputation, did not qualify for the impairment benefits. In addition to the impairment benefits, workers who experienced at least a 15 percent decline in wages as a result of their workplace injury were eligible for actual wage-loss benefits. Prior to 1990, a Florida worker with a permanent impairment might qualify for both the wage-loss and impairment benefits on one or the other or neither, depending on the nature and severity of the injury and the extent of the actual loss of wages.

Massachusetts apparently is the only state that currently provides two tracks of benefits that are paid concurrently, one of which is designed to compensate for work disability and the other is designed to compensate for non-work disability. The law provides that “In addition to all other compensation . . . the employee shall be paid the sums hereafter designated for the following specific injuries . . .” The statute then provides a list of injuries with corresponding amounts of payments. A worker with the amputation or permanent and total loss of use of the major arm is paid a sum equal to the state’s AWW multiplied by 43, while a worker with the amputation or total loss of use of either leg is paid a sum equal to the AWW multiplied by 39.

While only a few states have adopted concurrent or dual benefits approach, most Canadian provinces currently use the approach, as described in Chapter VI.

Some Observations on the Purposes and the Three Operational Approaches to PPD Benefits and Their Relevance for a Compensation Program for Veterans

The Purpose or Purposes of Benefits: Lessons for the VA Disability Compensation Program. Historically, according to Arthur Larson and most scholars,³⁰ the sole purpose of PPD benefits in the U.S. workers’ compensation programs was to compensate for work disability: either loss of earning capacity or actual loss of earnings. However, that narrow reading of the purpose of the program is not immutable as demonstrated by the position adopted by the National Commission on State Workmen’s Compensation laws in its 1972 report:³¹

[W]e believe that the primary basis for workmen’s compensation benefits should be the worker’s loss of wages. We also believe that limited payments for permanent impairments are appropriate.

³⁰ *Larson Basic Concepts*, pp. 31-39. The view of Larson and other scholars are examined in Burton, J.F. Jr. (2008). Workers’ compensation cash benefits: Part one: The building blocks. *Workers’ Compensation Policy Review*, 8(2), 15-28.

³¹ The National Commission on State Workmen’s Compensation Laws. (1972). *The report of the National Commission on State Workmen’s Compensation Laws*, pp. 68-69. Washington, DC: Government Printing Office. Cited as *National Commission Report*.

The National Commission thus broke with the historical view that the sole purpose of cash benefits in workers’ compensation was to compensate for work disability by endorsing both loss of wages and payments for permanent impairment (or non-work disability) as appropriate purposes of PPD benefits. The National Commission also suggested a system of PPD benefits that would clearly serve the two purposes:³²

A major difficulty with present permanent partial benefits provisions is that most seem to use one formula which bases benefits on both the impairment and disability bases. Combining both bases into one formula appears unworkable.

Consideration should be given to the use of two types of benefits:

-- *permanent partial impairment benefits*, paid to a worker solely because of a work-related impairment

-- *permanent partial disability benefits*, paid to a worker because he has both a work-related impairment and a resultant disability.

A worker might be eligible for both types of benefits...

Impairment benefits are justified because of losses an impaired worker experiences that are unrelated to lost remuneration. The impairment may, for example, have lifetime effects on the personality and normal activities of the worker...

In contrast, the disability benefits could be based on actual wage loss or loss in wage earning capacity.

The broadening of the historical purpose of workers’ compensation PPD benefits from strictly work disability to both work disability and non-economic losses (or non-work disability or diminution in the quality of life) as purposes may provide a useful analogy for the veterans’ disability compensation program. Under the current law, the sole purpose of the cash benefits is to compensate for work disability:³³

The percentage ratings represent as far as can practicably be determined the average impairment rating in earning capacity resulting from such diseases and injuries and their residual conditions in civil occupations.

³² National Commission Report, p. 69.

³³ In addition to the cash benefits specified by §4.1 of the Code of Federal Regulations, some veterans qualify for one or two other types of cash benefits. “Individual Unemployability benefits” (UI) are provided when veterans are unable to secure substantially gainful employment because of their service-connected disabilities even though their disabilities according to VA’s Schedule for Rating Disabilities (VASRD) do not reach 100%. The UI monthly benefit is the same as the benefit for a veteran rated 100 % on the schedule. The purpose of the UI monthly benefits is clearly to compensate for work disability. In addition, veterans with severe injuries may qualify for special monthly compensation (SMC) benefits, which are based on “anatomical loss or loss of use of extremities and in some cases the loss of certain bodily function.” The monthly SMC benefit depends on the severity of the injury and the veteran’s dependency status. The purposes of the SMC benefits are unclear, but arguably one purpose is to compensate veterans for non-work disability or diminution in the quality of life. If this is a purpose, then the system of benefits for disabled veterans is an example of the dual benefits approach.

This narrow view of the purpose of the compensation benefits for veterans was criticized in the 2007 report of the IOM Committee on Medical Evaluation of Veterans for Disability Compensation:³⁴

Recommendation 3-1. The purpose of the current veterans’ disability compensation program as stated in statute currently is to compensate for average impairment in earning capacity, that is, work disability. This is an unduly restrictive rationale for the program and is inconsistent with current models of disability. The veterans’ disability compensation program should compensate for three consequences of service-connected injuries and diseases: work disability, loss of ability to engage in usual life activities other than work, and loss in quality of life.

The Operational Approaches to Benefits: Lessons for the Veterans’ Disability Compensation Program. The experience of the state workers’ compensation program in the use of several operational approaches is also relevant for analyzing the veterans’ disability compensation program. As pointed out in the report of the IOM Committee, while the stated purpose of the cash benefits in the veterans’ disability compensation program is to compensate for work disability, the program is similar to workers’ compensation programs in the use of proxies for work disability as the operational basis for benefits. The general guidance for the basis of the ratings in VA’s Schedule for Rating Disabilities (VASRD) appears to direct that ratings should be based on at least two concepts as shown in Figure III-2 earlier in this chapter, namely limitations in the activities of daily living and loss of earning capacity.³⁵

The experience of state workers’ compensation programs and the IOM Committee’s analysis of the current compensation programs for veterans indicates that there is no inconsistency in using one or more of the initial consequences of an injury or disease such as the medical impairment or the limitations in the activities of daily living, as the basis for the *operational approach to benefits* even though the *purpose* of the benefits is to compensate for work disability. While there may be no logical problems with the use of these operational approaches, the more important question is whether use of the initial consequence as proxies for work disability produces ratings that accurately predict the actual loss of wages due to the injuries or diseases.

The major shortcoming of the impairment approach is that the percentage of permanent impairment may not be a good predictor of lost earnings. The theory underlying the impairment approach is that the impairment ratings provide a good predictor or proxy for the actual loss of earnings that are a consequence of the workplace injury, as shown in Figure III-3. The difficulty lies in the fact that earnings losses can be due to more than just the impairment *per se*. Factors such as the level of education, amount of work experience, financial resources, and individual preferences as well as local labor market conditions and an employer’s willingness to accommodate disabled workers can all bear on labor market re-entry and earnings success.

³⁴ *IOM Study*, p. 89.

³⁵ *IOM Study*, p. 341.

The loss of earning capacity approach can be justified because the LEC ratings incorporate some of the factors discussed above such as the level of work experience in addition to the impairment ratings. The loss of earning capacity approach still does not capture individual differences that might affect actual earnings after the workplace injury. Personal factors not measured or captured by labor market conditions or demographic factors may produce differences in earnings.

While there is a logical appeal to the notion that the additional information incorporated into the LEC ratings may improve the accuracy of a disability rating system to predict the actual losses of earnings, the analysis contained in the *IOM Study* of the use of proxies in workers’ compensation programs to predict earnings losses is instructive.³⁶

One issue we have considered is whether the disability rating systems would do a better job of predicting actual wage loss if they placed more emphasis on impairment as the proxy for wage loss and more emphasis on functional limitations and loss of earning capacity as proxies. That is, should we be “shifting to the right” in the factors in Figure C-1 [equivalent to Figure III-2 in this chapter] to find better proxies for actual wage loss? The answer – based on comparison of Wisconsin and California results – is no. . . . We therefore tentatively conclude based on the workers’ compensation data that there is no reason to incorporate consequences of injuries and diseases other than medical impairment in order to improve the accuracy of the predictions of actual earnings losses. We want to make clear that this tentative conclusion needs to be carefully examined in subsequent research, especially in studies of the veterans’ disability compensation program.

The applicability of the LEC approach to veterans is also problematic in that many veterans enter the military before going as far as they might have otherwise in pursuing a formal education and other training or acquiring other useful and critical job skills. The job skills, training, and education they receive while in the military might not translate readily to the civilian labor market. Using such factors might under estimate a disabled veteran’s true earnings potential for the rest of his or her life had the service-related injury never occurred.

The wage-loss approach for injured workers potentially does the best job of matching benefits to an individual’s actual loss of earnings. However, its applicability to veterans is problematic for the same reasons that the LEC approach is problematic. Individuals often enter the military before completing formal education or obtaining other skills or gaining workplace experience. Hence, their pre-injury wages will be those that the military paid or nothing at all if they had no work experience prior to joining the military, or based on part-time and/or temporary jobs, a choice made frequently by individuals who have not yet committed to a career.

³⁶ *IOM Study*, pp. 355-56.

Permanent Total Disability Benefits

All state and federal workers’ compensation programs provide PTD benefits to workers who are unable to work because of their work-related injuries or diseases.³⁷ In 38 of the 51 states, the permanent total disability benefit is two-thirds of the worker’s pre-injury wages. The replacement rate in seven other states (Idaho, New Hampshire, New Jersey, Oklahoma, Texas, Washington, and Wyoming) that base benefits on gross wages varies from 60 to 90 percent. There are six states (Alaska, Connecticut, Iowa, Maine, Michigan, and Rhode Island) in which PTD benefits replace from 75 percent to 80 percent of spendable earnings.

The duration of permanent total disability benefits is for life or the period of total disability in 39 states. However, 12 states (Florida, Indiana, Minnesota, Mississippi, Montana, New Jersey, North Dakota, South Carolina, Tennessee, Texas, Utah, and West Virginia) limit the duration of PTD benefits. Examples of states with limited durations of PTD benefits are Indiana and South Carolina (where the maximum period of PTD benefits is 500 weeks), Mississippi (where the maximum duration is 450 weeks), and Montana (where PTD benefits end when the worker is eligible for full Old Age benefits from Social Security).

In 14 states, benefits are automatically increased over time as wages or the cost of living increase.³⁸ In 18 states, these benefits are offset by Social Security OA benefits or by Unemployment Insurance benefits when the recipient receives or becomes eligible for these benefits. Also, under the Federal Social Security law, the combined total of workers’ compensation and SSDI benefits cannot exceed 80 percent of the worker’s earnings prior to disability. In 35 states SSDI benefits are reduced to meet this limit, but in 16 states with “reverse offset” provisions, the workers’ compensation benefits are reduced to meet the 80 percent requirement.

Adequacy of State Workers’ Compensation Benefits

Earnings Loss

Workers’ compensation benefits are nontaxable. Since most workers’ compensation benefits are based on gross wages prior to the withholding of income taxes, the benefits could compensate a very high percentage (in extreme cases, over 100 percent) of the loss of the take-home pay of workers for high-wage workers. This is one justification for limiting workers’ compensation benefits with a maximum weekly benefit. An alternative basis for benefits, and one endorsed by the National Commission on State Workmen’s Compensation Laws in its 1972 report, is to calculate total disability benefits as 80 percent of “spendable earnings.” Replacing only 66.67 percent of gross wages or 80 percent of spendable earnings can be justified as a form of coinsurance designed to deal

³⁷ The information on PTD benefits is in Table 7 of *DOL State Laws*.

³⁸ The information on jurisdictions with automatic increases in PTD benefits is based on entries in the Automatic Cost of living Increase column in Chart VI of *CofC Analysis*.

with the so-called “moral hazard” problem associated with benefits that are high enough to encourage workers to take undue risks, to report injuries that might otherwise be ignored, or to extend the period of disability.

While an argument can be made to limit the replacement rate for workers' compensation benefits, it should be noted that workers' compensation benefits, with rare exceptions, do not replace employee benefits such as pensions or health insurance covering non-occupational medical conditions, which are lost when the injured employee stops working.

Approaches for Calculating Lost Earnings

As discussed in connection with Figure III-3, the most accurate measure of earnings losses is the difference between the worker's potential earnings (what the worker would have earned if he or she had not been injured) and what the worker actually earned after the injury. There are several approaches to estimating potential earnings and thus calculating the amount of lost earnings.

Pre-injury Earnings

Workers' compensation programs typically utilize pre-injury wages as a basis for estimating what earnings would have been in the absence of the disability. That is, pre-injury wages are assumed to be the worker's potential earnings after the workplace injury and the earnings losses are calculated as the difference between post-injury wages and pre-injury wages. These earnings losses are then used to determine the appropriate level of temporary or permanent workers' compensation benefits. While this procedure may be appropriate for short-term or temporary benefits, most workers' earnings increase over time, particularly for young workers, and so the use of pre-injury wages as the measure of potential earnings after the injury is deleterious to workers and is inappropriate from the perspective of researchers attempting to assess the consequences of workplace injuries and diseases. Likewise, this approach is particularly inappropriate for disabled veterans, many of whom enter military service with sparse employment histories.

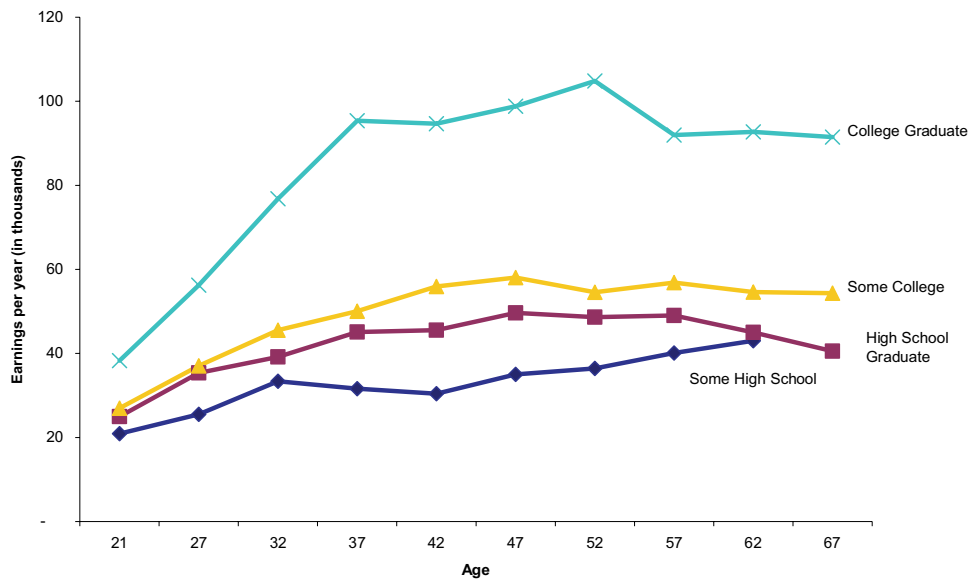
Age-Earnings Profile

The normal pattern of real earnings for an individual is a curve rising fairly rapidly at an early age before leveling off or turning downward as the individual ages or approaches retirement. These age-earnings profiles differ based on personal characteristics such as gender, race, and education. Two examples of age-earnings profiles, which are updated versions of figures contained in a recent labor economics textbook, are presented in Figure III-4 and Figure III-5.³⁹ For males working year-round in 2006, Figure III-4 shows that higher earnings are generally associated with higher levels of education. For most

³⁹ Figure III-4 and Figure III-5 correspond to Figures 9.3 and 9.4 (at pages 289 -290) in Ehrenberg, R.G. & Smith, R.S. (2006). *Modern labor economics: Theory and public policy* (9th ed.). The textbook figures use data from 2003, which have been updated using 2006 data in Figure III-4 and Figure III-5.

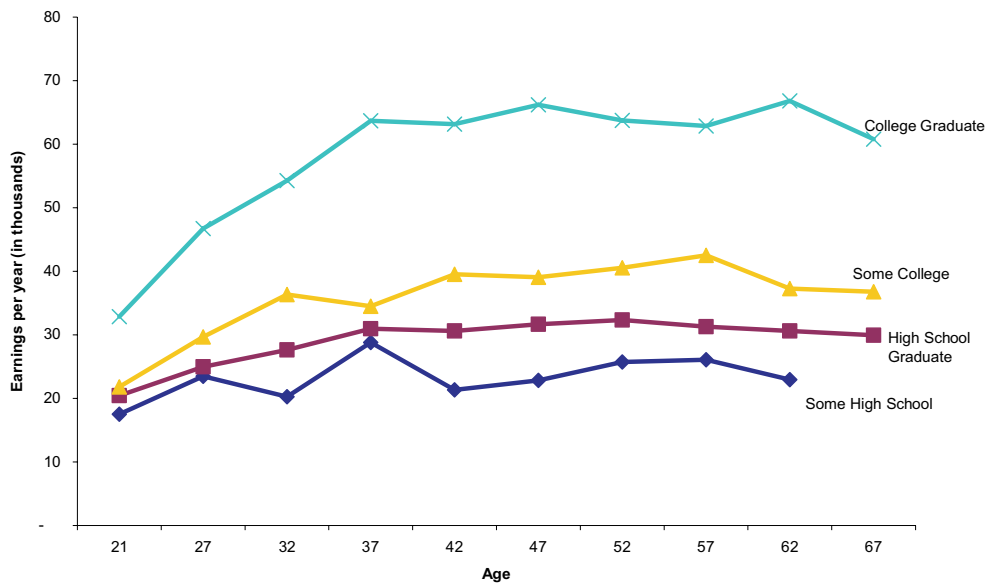
levels of education, the earnings are highest for male workers in their 40s or early 50s and are somewhat lower for male workers in their late 50 and 60s. For females working year-round in 2006, Figure III-5 indicates that higher earnings are generally associated with higher levels of education. Earnings for women generally increase until their late 30s or early 40s, and then are relatively flat until the female workers are in their late 50s or early 60s, when earnings are somewhat lower.

Figure III-4. Money Earnings (Mean) for Full-Time, Year-Round Male Workers, 2006



Source: U.S. Census Bureau, Current Population Survey (CPS). Table PINC-04-Part 10. Years in figure are midpoints of age categories in CPS. (For example, age 21 is midpoint of age category 18-24.)

Figure III-5. Money Earnings (Mean) for Full-Time, Year-Round Female Workers, 2006



Source: U.S. Census Bureau, Current Population Survey (CPS). Table PINC-04-Part 10. Years in figure are midpoints of age categories in CPS. (For example, age 21 is midpoint of age category 18-24.)

A profile for the earnings an injured individual would have received if she or he had not been injured can be estimated based on the age and other personal characteristics at the time of the injury and other information such as the worker’s pre-injury earnings. Prior earnings levels can be adjusted based on inflation and average productivity changes for the economy over time to complete an age-earnings profile for an individual.

Earnings may increase or decrease over time for workers based on a number of factors in addition to personal characteristics such as inflation and average productivity changes for the economy. Earnings may also increase as the result of economic factors causing differences in the worker’s industry or even his or her firm.

It is possible to match an injured individual of a given age, education, industry, and job description to other individuals with similar characteristics to determine the likely earnings pattern of the injured individual. By comparing the earnings of the workers in a comparison group with those of disabled individual, one can better estimate the worker’s potential earnings after the injury, which in turn will produce a more accurate estimate of the individual’s loss of earnings. Although this comparison can be made effectively, some of the studies conducted have had methodological flaws. The comparison group in some studies involving seriously injured workers who received permanent partial disability benefits consisted of other workers who had relatively

minor work-related injuries and who received temporary total disability benefits.⁴⁰ Other workers’ compensation studies have matched each worker who experienced work-related injury with other workers in the same firm who were not injured.⁴¹

The Calculation of Lost Earnings: Lessons for the Veterans’ Disability Compensation Program

The results of the wage-loss studies involving workers’ compensation beneficiaries make clear that the choice of an appropriate comparison group is a crucial step to accurate estimates of the consequences of work-related injuries on earnings. By combining information on the worker’s pre-injury earnings with data on the earnings history of workers in the comparison group, a reasonably accurate estimate of the worker’s potential earnings (what the worker would have been made if he or she had not been injured) can be made.

There are several challenges to adapting the methodology for wage-loss studies involving injured workers to a study of the consequences for veterans of service-connected injuries or disabilities. The pre-injury wages for a person injured while in the military are likely to be relatively low, in part because many members of the military enter the service without a significant prior work history. In addition, many members of the military without service-connected disabilities learn valuable skills while in the service or obtain post-service education and training that substantially increases their lifetime earnings. This suggests that an appropriate comparison group for a disabled veteran consists of persons who entered the military in the same year as the disabled veteran who had similar demographic characteristics (for example, age, and education) at the date of entry into the military. The assumption is that the disabled veteran would have received the same valuable skills through training in the service and after discharge and would have achieved the same civilian earnings as the veteran who did not experience service-related injuries or diseases.

Possible Approaches to Determining Benefit Adequacy

In 1998, the National Academy of Social Insurance (NASI) convened a study panel of the Workers’ Compensation Steering Committee to review the adequacy of cash benefits under the various workers’ compensation programs. The report of the project, referred to hereafter as the *NASI Adequacy Report*, was published in 2004.⁴² In an article based on the *NASI Adequacy Report*, Allan Hunt⁴³ identified three possible approaches to

⁴⁰ This was the approach used in Berkowitz, M., & Burton, John F. Jr. (1987). *Permanent disability benefits in workers’ compensation*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

⁴¹ This was the approach used in series of recent studies conducted by RAND, including Reville, R.T., Seabury, S.A., & Neuhauser, F.W. (2005). *An evaluation of California’s permanent disability rating system*, pp. 102-103. Santa Monica, CA: RAND Institute for Civil Justice.

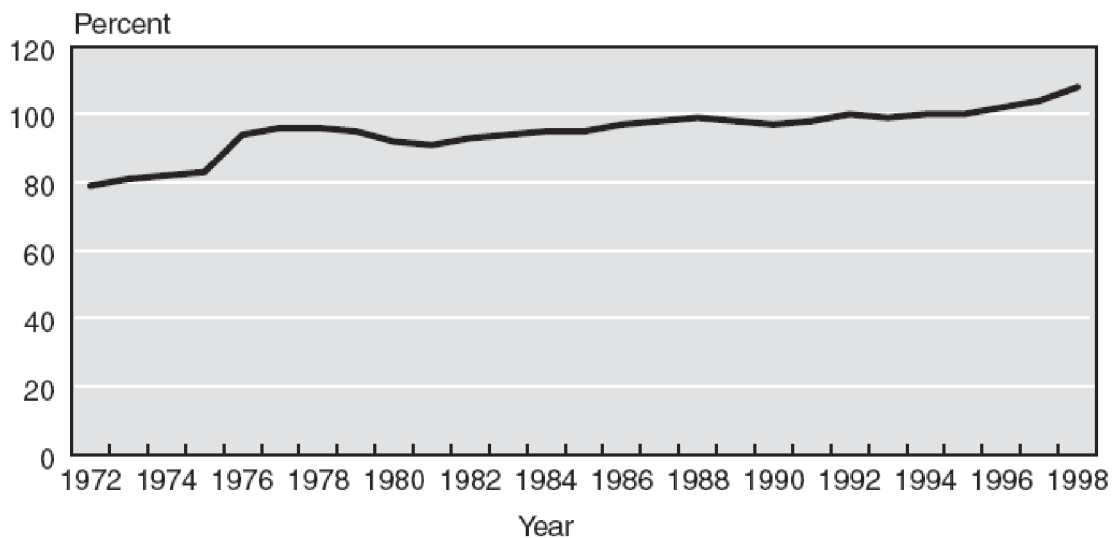
⁴² Hunt, H. A. (2004). *Adequacy of earnings replacement in workers’ compensation programs: A report of the study panel on benefit adequacy of the workers’ compensation steering committee*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. Cited as *NASI Adequacy Report*.

⁴³ Hunt, H. A., (2005). Benefit adequacy in U.S. workers’ compensation programs. *Workers’ Compensation Policy Review*, 5(2), 9-14.

determining benefit adequacy for workers’ compensation programs: (1) Statutory Benefit Comparisons, (2) Model Act Comparisons, and (3) Wage-loss Studies.

(1) *Statutory Benefit Comparisons.* In his article, Hunt used the national average of expected TTD benefits as the basis for the statutory benefit comparison. According to Figure 3 of the *NASI Report* (at p.7), claims for temporary total disability are the most common type of cash benefit in U.S. workers’ compensation, making up about 64 percent of claims involving cash benefits and 20 percent of all payments for cash benefits. The *NASI Adequacy Report* compared the national average of TTD benefits to the poverty thresholds for a family of four.⁴⁴ The data in Figure III-6 shows that U.S. has been making progress since 1972 in this measure of adequacy of workers’ compensation benefits. However, since the national average of TTD benefits was only about 107 percent of poverty in 1998, TTD benefits are minimally adequate.

Figure III-6. Average Weekly Temporary Total Disability Benefit Relative to the Poverty Threshold, 1972-1998



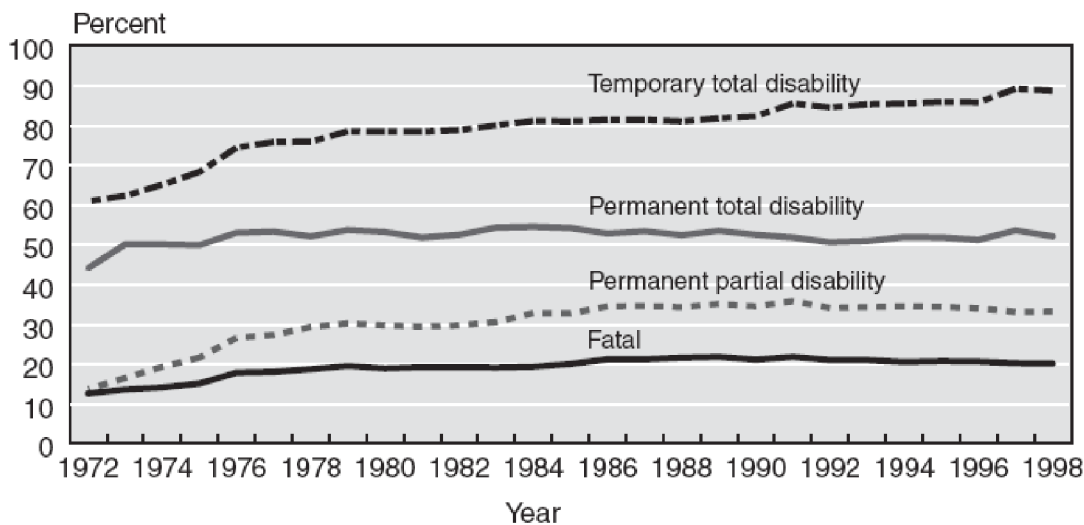
Source: National Academy of Social Insurance. (2004). *Adequacy of earnings replacement in workers’ compensation programs* (Figure 4.3, p. 74). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

(2) *Model Act Comparisons.* An alternative to using the poverty threshold as a basis for assessing adequacy is to compare state workers’ compensation statutes to a set of standards specifically applicable to the program. The Model Workers’

⁴⁴ Poverty thresholds are issued by the U.S. Census Bureau. Weighted average poverty thresholds for nonfarm families for 1959 to 2006 are included in Table 3.E1 (at pages 3.13-3.14) of the U.S. Social Security Administration. (2008). *Annual Statistical Supplement to the Social Security Bulletin, 2007*. Retrieved July 7, 2008, from <http://www.ssa.gov/policy/docs/statcomps/supplement/2007/#contact>

Compensation Act was endorsed by the Council of State Governments in 1974.⁴⁵ The Model Act incorporated the recommendations of the Report of the National Commission on State Workmen’s Compensation Laws (1972). When actual state workers’ compensation laws are compared to the Model Act, temporary total disability benefits are marginally inadequate (with the states averaging TTD benefits that were nearly 90 percent of the Model Act provisions for this type of benefit). However, as shown in Figure III-7, the record for other types of cash benefits is less impressive: benefits are roughly 50 percent or less of the Model Act levels as of 1998. Moreover, there are no upward trends for fatal, permanent total disability, and permanent partial disability benefits since the late 1970s.

Figure III-7. Actual Statutory Workers’ Compensation Provisions Relative to the Model Act Recommendations



Source: NASI. (2004). *Adequacy of earnings replacement in workers’ compensation programs* (Figure 4.9, pp. 88). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

(3) *Wage-loss Studies*. One objective of modern workers’ compensation programs is to replace a high proportion of a disabled worker’s lost earnings with workers’ compensation benefits. The National Commission on State Workmen’s Compensation Laws indicated that this objective meant that temporary total, permanent total, and death benefits should replace at least two-thirds of the worker’s pre-injury wages. The *NASI Adequacy Report*, while acknowledging that the decision was somewhat arbitrary, recommended that permanent partial disability benefits should also replace 66.67 percent of lost wages.

⁴⁵ The Council of State Governments. (1974). *Workmen’s compensation and rehabilitation law (Revised)*. Lexington, KY: The Council of State Governments. Reprinted in part in J.F. Burton, Jr. and F. Blum (Eds.), *Workers’ compensation compendium 2005-06, Vol. 2* (pp. 104-124). Princeton, NJ: Workers’ Disability Income Systems, Inc.

In the last decade, there have been a series of wage-loss studies, which are summarized by Boden, Reville, and Biddle.⁴⁶ The replacement rates (benefits divided by wage losses due to workplace injuries) for the 10 years after the injury were 46 percent in New Mexico, 41 percent in Washington, 37 percent in California, 36 percent in Oregon, and 30 percent in Wisconsin. The authors concluded that the replacement rates do not approach the benchmark for adequacy.

Equity of Workers’ Compensation Benefits

Adequacy is one criterion for evaluating workers’ compensation cash benefits. Another criterion for evaluating these cash benefits is equity. One way to visualize adequacy is to ask whether, on average, the workers’ compensation benefits replace an appropriate percent of lost wages. Thus, if a wage-loss study of a state found that 70 percent of the lost wages of the workers in the state were replaced by cash benefits, the benefits can be considered adequate. One way to visualize equity is to ask whether the replacement rates for individual workers or groups of workers were similar in the state. For example, if half of the workers had 40 percent of their lost wages replaced by cash benefits while the other half had 100 percent of their lost wages replaced by benefits, the benefits can be considered inequitable.

The *IOM Study*⁴⁷ provides a more detailed discussion of several tests of equity. Equity tests can be applied to the ability of a disability rating system to accurately predict the actual earnings experienced by injured workers. *Vertical equity for ratings* requires that actual wage losses increase in proportion to the increase in disability ratings. *Inter-injury horizontal equity for ratings* requires that the actual wage losses for workers with the same disability ratings, but with different types of injuries, should be the same or similar. *Intra-injury horizontal equity for ratings* requires that the actual losses for workers with the same disability ratings and the same type of injury be the same or similar.

The equity tests can also be applied to the ability of a disability benefits system to provide benefits that are matched to the worker’s losses of actual earnings. *Vertical equity for benefits* requires that the same proportion of lost wages should be replaced for workers at all disability ratings. *Inter-injury horizontal equity for benefits* requires that the replacement rates (benefits divided by lost wages) for workers with the same disability ratings and different types of injuries should be the same or similar. *Intra-injury horizontal equity for benefits* requires that the replacement rates for workers with the same disability rating and the same type of injury should be the same or similar.

⁴⁶ Boden, L., Reville, R., & Biddle, J. (2005). The adequacy of workers’ compensation cash benefits. In K. Roberts, J.F. Burton, Jr., and M. M. Bodah (Eds.), *Workplace injuries and diseases: Prevention and compensation: Essays in honor of Terry Thomason*, (pp. 37-68). Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

⁴⁷ *IOM Study*, pp. 318-327.

The *IOM Study*⁴⁸ analyzed the ability of the Wisconsin and California workers’ compensation programs to satisfy these various equity tests. The record, which will only be summarized here, was mixed. For example, the Wisconsin rating system did an excellent job of providing vertical equity when the entire sample of injured workers was analyzed, but the rating system had serious equity problems in terms of inter-injury horizontal equity: there were significant differences in Wisconsin among the four types of injuries analyzed in the study in the relationships between disability ratings and lost earnings.

When the entire sample of injured workers was analyzed, the California ratings system did a moderately good job of providing vertical equity,⁴⁹ but there were serious equity problems in the terms of horizontal equity for the California rating system.⁵⁰

The record was mixed in terms of the workers’ compensation programs’ ability to match benefits to lost wages. The Wisconsin system did a fairly good job of providing vertical equity for benefits, but had serious problems with inter-industry horizontal equity. Data were not available to assess the ability of the California workers’ compensation program to match benefits to loss wages.

Workers’ Compensation: Lessons and Suggestions for VA to Consider in Revising the Decisionmakers Disability Compensation Program

There are several lessons and suggestions based on the experience of state workers’ compensation programs that the decisionmakers may wish to consider in revising the VA Disability Compensation Program. Most of these have been discussed at greater length earlier in this chapter.

(1) The workers’ compensation program provides benefits during the temporary disability period, unlike many other disability programs. Several features of workers’ compensation temporary disability period benefits are worth considering:

(a) Most states replace a percentage of pre-injury gross wages. However, because of the progressive income taxes at the federal level and in most states, the benefits (which are not taxable) replace an increasing proportion of take-home pay as income levels increase. This in turn can cause disincentive problems for reemployment

⁴⁸ *IOM Study*, pp.304-361.

⁴⁹ There was a monotonic relationship between ratings categories and percentage earnings losses in the data for the California workers’ compensation program: they consistently increased together. However, the magnitudes of the ratings and the losses were not particularly close. For the three lowest rating categories (1-5, 6-10, and 11-15%) earnings losses clearly exceeded the ratings, while for two of the three highest rating categories (21-25 and 26-50%), earnings losses clearly exceeded the ratings. At this level of aggregation, the California rating system did a moderately good job of providing vertical equity, according to the *IOM Study*, pp. 338-339.

⁵⁰ Figures C-11 and C-12 of the *IOM Study* at page 227 indicated there were substantial differences in the earnings losses for similar disability ratings for eight types of injuries. For example, among the five lowest disability rating categories ((1-5, 6-10, 11-15, 16-20, and 21-25%), hearing impairments had the highest earnings losses in Figure C-11 and, without exception, psychiatric impairment had the highest earnings losses for every rating category in Figure C-12.

and rehabilitation. Several states have therefore based benefits on a percentage of spendable earnings, which subtract income taxes and the employee's social security contribution from gross wages. This approach insures that benefits as a proportion of potential earnings do not become excessively high for high wage workers. Decisionmakers could consider a compensation program for veterans that is based on spendable earnings.

(b) All states provide temporary total disability benefits for workers who are unable to work. In addition, almost all states provide temporary partial disability benefits that replace a proportion of reduced earnings for workers who are able to return to part-time work. This provides an incentive for workers to engage in rehabilitation activities and return-to-work programs since their benefits will not be completely terminated in they begin to have earnings. VA compensates for permanent disabilities but schedules re-examinations for instance in which the rater believes the condition is likely to improve or worsen so in that way temporary disability is compensated.

(c) Workers' compensation programs provide rehabilitation and return-to-work programs during the healing period, which provide lessons for the VA Disability Compensation Program. These are discussed in Chapter V of this volume.

(2) The workers' compensation program provides benefits during the permanent disability period, like many other disability programs. However, several distinctive features of workers' compensation programs are worth considering by VA:

(a) There are two possible purposes of benefits during the permanent disability period: (1) to compensate for work disability (lost earnings or loss of earning capacity), and (2) to compensate for non-economic losses. Unlike Canada provinces, most states have implicitly or explicitly decided to only compensate for work disability. However, the National Commission in its 1972 report endorsed the two purposes. Decisionmakers should consider an explicit endorsement of both purposes for the VA Disability Compensation Program in order to facilitate the design of the program. The limited U.S. experience also suggests that both purposes can best be served by dual tracks of benefits, rather than trying to have a single benefit serve both purposes.

(b) The workers' compensation programs have relied on three operational approaches to implement the purpose of compensating work disability: the impairment operational approach, the loss of earning capacity operational approach, and the wage-loss approach. There are trade-offs among these approaches. Presumably, the wage-loss approach can best match benefits to actual loss of wage. However, this approach requires that cases be open for extended periods, which has not been acceptable to most participants in the workers' compensation program. There probably is more tolerance for long-term monitoring of labor marker experience in a disability benefits program for veterans. Nonetheless, such monitoring is expensive. Another issue is whether the impairment operational approach provides better or worse predictions of actual wage-loss than a system that also considers factors such as education that presumably affect loss of earning capacity. The limited evidence from workers'

compensation suggests that more information does not necessarily result in better estimates of earnings losses. This is clearly an issue that needs to be explored in the context of veterans with disabilities.

(3) The workers' compensation program has a number of empirical studies and policy debates about the proper criterion to evaluate disability benefit programs.

(a) The adequacy of benefits – essentially what proportion of lost wages should be replaced by benefits? – has been debated in terms of the appropriate replacement rate and several recent studies have examined the ability of workers' compensation to meet the goal of adequate benefits. The policy debate in workers' compensation can help frame the debate for the VA Disability Compensation Program. For various reasons, the generally accepted view in workers' compensation – that benefits should replace two-thirds of lost wages – may not be the appropriate standard of adequacy for veterans' benefits, but the various meanings of adequacy that have been examined in the workers' compensation program to resolve this policy issue are relevant for the veterans program.

(b) The equity of benefits – essentially are persons with equal losses treated equally and are persons with different levels of losses treated differently in proportion to their losses? – is a criterion that has been used in evaluating workers' compensation programs for decades. The notions of horizontal equity and vertical equity can be used to evaluate both the disability rating system and the benefits provided to disabled persons. These equity tests can readily be applied to the VA Disability Compensation Program.

(4) The methodology to evaluate the adequacy and equity of the workers' compensation has been used in numerous studies in recent decades. There is general agreement on the importance of matters such as identifying appropriate comparison groups to which the experience of disabled workers can be compared. While there are differences between injured workers and injured veterans, much of the methodology used to examine the workers' compensation programs can be readily adapted to studies of veterans with service-connected disabilities.

IV. OTHER U.S. COMPENSATION PROGRAMS

The EconSys Study Team reviewed four federal disability compensation programs: three for individuals with work-related disabilities and one for persons with disabilities regardless of origin:

- Social Security Disability Insurance (SSDI)⁵¹ – Established as a program in 1956 as part of the Social Security program, SSDI provides benefits to workers who are unable to engage in “substantial gainful” employment for at least one year (or the rest of their life), conditioned on their having worked a sufficient amount of time in jobs paying Social Security taxes. SSDI benefits are provided whether or not the disability was work-related. SSDI is funded through payroll taxes paid by both the employer and the employee. SSDI is the largest disability program in U.S. In 2006, 6.8 million disabled workers received \$79.9 billion in cash benefits and 997,774 widows and adult children received \$7.7 billion in cash benefits.⁵²
- Federal Employees’ Compensation Act (FECA)⁵³ – A program that provides cash benefits, medical care, and vocational rehabilitation to federal employees who sustain disabling injuries or diseases as a result of their federal employment. In 2005, FECA paid \$1.791 billion in cash benefits and \$671 million in medical benefits to disabled workers.⁵⁴
- Longshore and Harbor Workers’ Compensation Act (LHWCA)⁵⁵ – Passed in 1927, the program initially covered Longshore workers’ work-related injuries who were working on U.S. navigable waters in which state workers’ compensation did not apply. Subsequently the program was expanded to offer protection to all maritime workers including longshoremen, harbor workers, and other special classes of private industry employees including employees working overseas for companies under contract with the U.S. government, who are covered by the Defense Base Act (DBA). In 2005, the Longshore paid \$795 million in total benefits (cash plus medical) including \$59.8 million under DBA.⁵⁶

⁵¹ U.S. Social Security Administration. (2008). *Disability planner: Social security protection if you become disabled*. Retrieved June 6, 2008, from <http://www.socialsecurity.gov/dibplan/index.htm>

⁵² U.S. Social Security Administration. (2008). Retrieved July 6, 2008, from http://www.socialsecurity.gov/policy/docs/statcomps/di_asr/2006/sect01b.pdf

⁵³ U.S. Department of Labor. Office of Workers Compensation Program. (2008). *Federal employees’ compensation act*. Retrieved April 3, 2008, from http://www.dol.gov/esa/regs/compliance/owcp/ca_feca.htm

⁵⁴ Sengupta, I., Reno, V., & Burton, J.F., Jr. (2007). *Workers’ compensation: Benefits, coverage, and costs, 2005*, pp. 77, Table H1. Washington, DC: National Academy of Social Insurance.

⁵⁵ U.S. Department of Labor. Office of Workers’ Compensation Programs. (2008). *Division of longshore & harbor workers compensation*. Retrieved June 13, 2008, from <http://www.dol.gov/esa/owcp/dlhwc/lstable.htm>

⁵⁶ Sengupta, I., Reno, V., & Burton, J.F., Jr. (2007). *Workers’ compensation: benefits, coverage, and costs, 2005*, pp. 77, Table H2. Washington, DC: National Academy of Social Insurance.

- Energy Employee Occupational Illness Compensation Program (EEOICP)⁵⁷ – This program provides cash and medical benefits for occupational illness and death arising from work in the nuclear weapons industry for the U.S. Department of Energy. The EEOICP Act applies to civilian workers and their survivors. Believing that the slow-developing effects of this hazardous work were often not covered by state workers' compensation programs, Congress set up EEOICP to ensure that workers and their survivors received adequate compensation. In 2005, EEOICP paid \$359 million in cash benefits and \$34 million in medical benefits.⁵⁸

Table IV-1 provides a comparative summary of selected key features of these programs. The federal programs reviewed do not pay dual benefits, defined as simultaneous work disability and non-work disability benefits. Since the main purpose of these programs is to replace lost earnings, they are focused on assessing and compensating for disabilities that limit, or make impossible, gainful employment. As with state workers' compensation programs, there is variability among the federal programs. Even the three that are administered by the Office of Workers' Compensation Programs (OWCP)—FECA, LHWCA, and EEOICP—have different ways of compensating workers.

In terms of vocational rehabilitation, the Office of Workers' Compensation Programs provides retraining benefits for the three programs noted; FECA also includes up to \$200 per month for personal expenses. Social Security Administration (SSA) does not provide rehabilitation but has the Ticket to Work Program that permits an SSDI recipient to return to work on a trial basis for a period of up to 9 months in a 60-month period. The Ticket to Work Program allows SSDI recipients to see if they are up to performing sustained work without risk of losing SSDI benefits.

⁵⁷ U.S. Department of Labor. Office of Workers' Compensation Programs. (2008). *Energy employees occupational illness compensation program*. Retrieved June 13, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/eeoicp/main.htm>

⁵⁸ Sengupta, I., Reno, V., & Burton, J.F. Jr. (2007). *Workers' compensation: Benefits, coverage, and costs, 2005*, pp. 80, Table H4. Washington, DC: National Academy of Social Insurance.

Table IV-1. Comparison of VA and Federal Disability Compensation Programs

	VA Disability Compensation	Federal Employees' Compensation Act (FECA)	Social Security Disability Insurance (SSDI)	Longshore ⁱ & Harbor Workers Compensation Act (LHWCA) ⁱⁱ	Energy Employees Occupational Illness Compensation Program (EEOICP)
Administering Organization	U.S. Department of Veterans Affairs	U.S. Department of Labor's Employment Standards Administration, Office of Workers' Compensation Programs	Social Security Administration	U.S. Department of Labor's Employment Standards Administration, Office of Workers' Compensation Programs	U.S. Department of Labor's Employment Standards Administration, Office of Workers' Compensation Programs
Program History and Frequency of Updates	Established in 1930, modified by Congress periodically; basic program parameters intact since 1945.	Founded in 1916, it has been modified by Congress since then; in 1949, benefits were reduced after age 70; however, this was reversed in 1974 in part due to issues of age discrimination. ⁱⁱⁱ	Established in 1956, it was originally just for individuals 50 years and older. It now serves all injured workers who have paid into Social Security for a specified period of time (usually 40 credits).	Passed by the U.S. Congress in 1927, it was originally set up for longshore workers not compensated by the state. Amended in 1984, it now offers protection to all maritime workers including Longshoremen, harbor workers and other special classes of private industry employees.	Provides compensation for illness or death resulting from employment in the nuclear industry through the Department of Energy (DOE) or its subcontractors. The original program compensated for specific conditions like cancer that were caused by exposure to radiation. A second part was added for workers suffering from illnesses with long latency periods not covered by state workers' compensation.
Conceptual Basis of Disability Benefits	VA compensates veterans disabled by injury or disease incurred or aggravated during military service, for the average loss in earnings capacity in civilian occupations associated with the severity of service-connected conditions. ^{iv}	FECA provides compensation benefits to civilian employees of U.S. for disability due to personal injury or disease sustained while in the performance of duty. Intended to be remedial in nature. ^v If injured off the job, Federal employees qualify for a lower-paying OPM disability program. <i>AMA Guides</i> used to assess disability. ^{vi}	SSDI "is wage replacement income for individuals who pay FICA taxes when they have a disability meeting Social Security disability rules." ^{vii} <i>AMA Guides</i> used to assess disability.	LHWCA compensates workers who have suffered occupational injuries or diseases ^{viii} that may not be covered under regular workers' compensation. Intended to minimize the financial hardships of claimants.	The mission of EEOICP is to provide lump-sum compensation and health benefits to eligible Department of Energy nuclear workers and contractors at covered DOE facilities. <i>AMA Guides</i> used to assess disability.
Possible Dual Benefits	Special monthly compensation (SMC) awards in addition to earnings loss	None	None	None	None

Table IV-1. Comparison of VA and Federal Disability Compensation Programs (continued)

	VA Disability Compensation	Federal Employees' Compensation Act (FECA)	Social Security Disability Insurance (SSDI)	Longshore ^{ix} & Harbor Workers Compensation Act (LHWCA) ^x	Energy Employees Occupational Illness Compensation Program (EEOICP)
Work Disability Payments	Wage loss based on "average" impairment in earnings capacity caused by the particular degree of disability.	Wage-loss compensation of 66.7% (or 75% if one has dependents). Provisions for schedule awards (body parts and organ function) as well as disfigurement (not to exceed \$3,500). Disfigurement and schedule loss may NOT be paid concurrently with wage loss. Offsets for VA service-related disability. ^{xi}	The monthly disability benefit amount is based on the Social Security earnings record of the insured worker. Eligibility begins 5 months after onset of disability. Offsets for Social Security income and pensions from jobs where Social Security taxes not paid. ^{xii}	Wage-loss compensation of 66.7% of AWW, not to exceed 200% of national AWW. Provisions for schedule awards (body parts). Schedule awards may NOT be paid concurrently with wage loss. ^{xiii}	Wage loss paid at \$10,000 for each year in which wages were 25-50% less than worker's 3 year average; \$15,000 if less than 50%. Permanent physical injury is paid at \$2,500 for each percentage of whole body impairment. Total compensation capped at \$250,000.
Qualifying Condition(s)	All service-connected injuries, diseases, and conditions.	All employment-caused injuries and diseases except those caused by intoxication and willful misconduct. Pre-existing medical conditions covered if precipitated or aggravated by factors of employment. ^{xiv}	All injuries, illnesses, and diseases which leave the worker unable to work for at least year or that lead to death.	All accidental injuries, diseases or infections arising out of such employment. Excludes disabilities stemming from intoxication or the willful intention of the employee to injure or kill himself/herself or another. ^{xv}	Any illness including radiogenic cancer, beryllium disease, and silicosis, as a result of occupational exposure to any toxic substances at a covered DOE facility.
Method of Assessment	VA reviews medical record and assesses impairment based on VASRD, Code of Federal Regulations (CFR).	The injured worker is entitled to select a "qualified" physician. In most cases the percent of impairment is determined in accordance with the <i>AMA Guides</i> . ^{xvi}	Qualifying under the "Listing Level of Impairments" ^{xvii} outlined in SSA's "Blue Book" or under SSA's sequential evaluation rules ^{xviii} for determining disability.	The injured worker chooses a physician (within a 25 mile radius of home or work) from among individuals authorized by the Director, OWCP. Permanent impairment is determined using <i>AMA Guides</i> .	Part E: For each 1% of impairment, \$2,500 is awarded. Board-certified physician of worker's choice determines the percentage of impairment based on the <i>AMA Guides</i> .
Determination of Benefit Amount - lump-sum:	Not typical	OWCP will consider making a lump-sum payment of compensation to pay a schedule award	None	Wage benefits paid every 2 weeks	Paid as lump-sum

Table IV-1. Comparison of VA and Federal Disability Compensation Programs (continued)

	VA Disability Compensation	Federal Employees' Compensation Act (FECA)	Social Security Disability Insurance (SSDI)	Longshore ^{xix} & Harbor Workers Compensation Act (LHWCA) ^{xx}	Energy Employees Occupational Illness Compensation Program (EEOICP)
Vocational Services	For qualifying veterans, vocational rehabilitation counseling, planning, and job seeking help. Plus independent living services.	Rehabilitation service is supervised by OWCP but usually provided in cooperation with state and private agencies. Pays up to \$200/month for personal expenses. Offers vocational rehabilitation counseling.	Has a Trial Work Program (TWP) that permits worker to return to work for a period of about 9 months in a 60-month period. The program lets workers see if they are up to performing sustained work without risk of losing SSDI benefits.	Vocational rehabilitation may include testing, evaluation, counseling, guidance, training, placement, and follow-up.	Secretary of Labor may direct a permanently disabled individual to undergo vocational rehabilitation and shall provide for furnishing such services.

ⁱ Longshoreman is a person employed on the wharves of a port, for example loading and unloading vessels.

ⁱⁱ U.S. Department of Labor. Office of Workers' Compensation Programs. (2008). *Benefits for nuclear weapons workers*. Retrieved May 11, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/eeoicp/main.htm>.

ⁱⁱⁱ U.S. General Accountability Office. (1996). *Federal employees' compensation act: Issues associated with changing benefits for older beneficiaries* (GAO/GGD-96-138BR). Retrieved July 28, 2008, from <http://www.gao.gov/archive/1996/gg96138b.pdf>

^{iv} U.S. Department of Veterans Affairs. OIG. (2005). Review of state variances in VA disability compensation payments.

^v U.S. Department of Labor. (1999). *Injury compensation for Federal employees - Publication CA-810*. Retrieved May 6, 2008, from <http://www.dol.gov/esa/regs/compliance/OWCP/DFECFolio/agencyhb.pdf>.

^{vi} Brigham & Associates. (2008). *Use of AMA guides*. Retrieved July 7, 2008, from http://www.impairment.com/Use_of_AMA_Guides.htm.

^{vii} World Institute on Disability. (2008). *Social Security Disability Insurance (SSDI): Program description*. Retrieved June 9, 2008, from http://www.disabilitybenefits101.org/ca/programs/income_support/ss_disability/ssdi/program.htm.

^{viii} U.S. Department of Labor. (2008). *Mission statement*. Retrieved May 2, 2008, from <http://www.dol.gov/esa/owcp/dlhwc/lsmis.htm>

^{ix} Longshoreman is a person employed on the wharves of a port, for example loading and unloading vessels.

^x U.S. Department of Labor. Office of Workers' Compensation Programs. (2008). *Benefits for nuclear weapons workers*. Retrieved May 11, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/eeoicp/main.htm>

^{xi} U.S. Department of Labor. (2008). Retrieved May 2, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/feca550q.htm>

^{xii} For example, from the Federal civil service system, some state or local pension systems, nonprofit organizations or a foreign government.

^{xiii} U.S. Department of Labor. (2008). Retrieved May 2, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/feca550q.htm>

^{xiv} U.S. Department of Labor. (2008). *Questions & answers about federal employees' compensation act*. Retrieved May 5, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/DFECFolio/q-and-a.pdf>

^{xv} Cornell University Law School. *U.S. Code Collection, Title 33 - Chapter 18: Longshore and harbor workers' compensation*. Retrieved May 13, 2008, from http://www.law.cornell.edu/uscode/33/usc_sup_01_33_10_18.html

^{xvi} "Qualified physician" means licensed and never convicted of fraud. Source: U.S. Department of Labor. (1999). *Injury compensation for Federal employees - Publication CA-810* (pp. 14-15). Retrieved May 6, 2008, from <http://www.dol.gov/esa/regs/compliance/OWCP/DFECFolio/agencyhb.pdf>

^{xvii} U.S. Social Security Administration. (2007). *Listing of impairments*. Retrieved May 19, 2008, from <http://www.ssa.gov/disability/professionals/bluebook/AdultListings.htm>

^{xviii} U.S. Social Security Administration. (2008). *How we decide if you are disabled*. Retrieved May 16, 2008, from <http://www.ssa.gov/dibplan/dqualify5.htm>

^{xix} Longshoreman is a person employed on the wharves of a port, for example loading and unloading vessels

^{xx} U.S. Department of Labor. Office of Workers' Compensation Programs. (2008). *Benefits for nuclear weapons workers*. Retrieved May 11, 2008, from <http://www.dol.gov/esa/regs/compliance/owcp/eeoicp/main.htm>

Program Descriptions

SSDI Benefits

The SSDI program is a federal insurance program managed by SSA. SSDI is a social insurance program (not a welfare program) designed to provide cash benefits to individuals who have contributed Social Security taxes in the past and who are now unable to work due to total disability. Partial or short-term disabilities are not covered under the program. Benefits are granted only after a lengthy determination process, whereby the applicant must prove that he or she is totally disabled. The purpose of SSDI is to provide income until the applicant's condition improves, and it is intended to guarantee income if the individual's condition does not improve. To qualify for the program, the applicants must meet *all* of the following criteria:

- Condition must prevent the applicant from taking any kind of job that will earn more than the \$940 threshold.
- Disability must be severe enough to “interfere with basic work-related activities.”
- Condition must be found in the SSA's Listing of Impairments.
- Condition must interfere with ability to do work done previously.

The strictness of the rules is to ensure that only individuals with the most need have access to the benefits. The SSDI program assumes that “working families have access to other resources to provide support during periods of short-term disabilities including workers' compensation, insurance, savings, and investments.”⁵⁹ For this reason, applicants must demonstrate total disability that is expected to last for at least 12 months or result in death in order to qualify for federal disability payments.

To qualify for SSDI benefits, the applicant must have worked in jobs covered by Social Security, and have a medical condition that meets the definition of a disability. Applicants must also earn a minimum number of work credits (depending on the age at which they became disabled) in order to qualify.

Disability is defined as the inability to engage in any substantial gainful activity. Substantial gainful activity is defined as employment for pay or profit paying \$940 per month or more in 2008 if the individual is not blind. If the individual is blind, substantial gainful activity is defined as monthly activity paying \$1,570 or more. Substantial gainful activity involves doing significant physical or mental activity or a combination of both including activity performed on a part-time basis.

The total of SSDI and workers' compensation or other public disability benefits cannot exceed 80 percent of average earnings before the individual became disabled. This

⁵⁹ U.S. Social Security Administration. (2008). *2008 Red Book*. Retrieved July 25, 2008, from <http://www.ssa.gov/redbook/eng/overview-disability.htm>

total excludes VA benefits, SSA's Supplemental Security Income (SSI) benefits, and any State or local benefits if Social Security taxes were deducted from pay as a part of the program. In essence, this means that any disability or retirement benefits based on income not subject to Social Security tax deduction are not included in the calculation of the SSDI benefit or of the maximum benefit under the program.⁶⁰ For example, most states will pay a supplemental security benefit to eligible individuals in addition to their Social Security benefit.⁶¹

In order to be eligible for SSDI benefits, the individual must have worked for five of the last ten years in a job for which Social Security taxes were deducted from pay. If less than 24 years of age, six credits are required. Social Security taxes paid on \$870 or more qualify as having paid Social Security taxes for the year and qualify the individual to receive four Social Security credits for the year. To qualify for the receipt of benefits, the individual must have been disabled for five months. Benefits are then paid in a lump sum for the period from six months to the current date and then subsequently by monthly check. Eligibility for benefits is subject to regular review which takes into account changes in medical treatment and science that might improve employability. Benefit payments last as long as the condition does not improve and the individual cannot work.

When the recipient reaches full retirement age the benefits convert to Social Security Old Age benefits at the same level of payment. Old Age benefits are taxable if an individual tax return is filed and annual income is above \$25,000 or if a joint return is filed and income is above \$32,000. Pensions not covered by Social Security (for example, Federal Civil Service or nonprofit organizations) may be taxed (for example, Social Security benefits are reduced by the amount of non-covered benefits). Social Security benefits are reduced by two-thirds of the amount of a government pension.

The program offers incentives to encourage recipients whose health has improved or who wish to return to work. The program allows up to a nine-month trial work period before benefits are removed. The program provides special rules to help these recipients through the nine-month trial period so they can keep their benefits while they "test" their ability to work. The "work incentive rules" as they are called and the Ticket to Work Program help recipients by providing education, training, rehabilitation, job referrals, and other employment support services free of charge.

SSDI allows special rules for the blind, widows/widowers who are disabled, children who are disabled, and military service members designated as Wounded Warriors.

Severely injured military service members applications are given expedited processing and are eligible to receive disability payments from Social Security while they remain on active duty. Expedited processing by Social Security occurs if they became disabled

⁶⁰ U.S. Social Security Administration. (2004). *How workers' compensation and other disability payments can affect your benefits*. Retrieved July 25, 2008, from <http://www.ssa.gov/pubs/10018.html>

⁶¹ U.S. Social Security Administration. (2008). *2008 Red Book*. Retrieved July 25, 2008, from <http://www.ssa.gov/redbook/eng/overview-disability.htm>

while on active military service on or after October 1, 2001, regardless of where the disability occurs.⁶² Family members may also be eligible for benefits such as spouses aged 62 or over or caring for children under age 16 or disabled or children less than 18 years of age or disabled before age 22. Other than expedited processing for those severely injured pending discharge, disabled veterans must meet the same requirements as all other citizens.

Some young service members with no prior work experience will not meet minimum qualifications. Due to the requirements for total disability, most service-connected disabled veterans will not be eligible for SSDI.

The Veterans' Disability Benefits Commission (VDBC) and the study team both matched the records of SCD veterans with Social Security Administration records to determine the rate receipt of both benefits. The rates varied somewhat between 2004 and 2006, most notably the rate of dual receipt by SCD veterans awarded IU decreased from 61 percent to 48 percent (see Table IV-2).

The reasons that higher percentage of severely disabled veterans are not receiving both is not known. One reason that a veteran could qualify for IU but not qualify for SSDI is that a worker must have a minimum of quarters in covered employment to be eligible for SSDI benefits. Other reasons could be that the veterans' applications could have been denied or that the veterans were either unaware they might be eligible or may have chosen not to apply.

Table IV-2. Service-Connected Disabled Veterans also Receiving Social Security Disability Insurance

SCD Veterans <65 Receiving SSDI	2004 ⁱ	2006 ⁱⁱ
All SCD Veterans	16	19
SCD Receiving IU	61	48
SCD Rated 100%	54	52
SCD Rated 100% & Receiving SMC (L), (M), (N), (O), or (P)	61	66

Source: EconSys Study Team.

ⁱ Veterans' Disability Benefits Commission (VDBC). (2007). *Honoring the call to duty: Veterans' disability benefits in the 21st Century* (p. 374). Washington, DC: Veterans' Disability Benefits Commission.

ⁱⁱ SCD veterans data match with SSA data in 2008.

⁶² U.S. Social Security Administration. (2007). *Disability benefits for wounded warriors*. SSA Publication No. 05-10030.

Benefit Amount. Using the Social Security Retirement/Disability Quick Calculator, estimates of monthly disability payments were generated for two individuals: (1) age 60 and (2) Age 25. Monthly and annual amounts are for the individual and the maximum for the family.⁶³ Income at the time of application is assumed to be the median income for those ages, \$28,019 for age 60 and \$26,418 for age 25.⁶⁴ The results are as follows.

<u>Age</u>	<u>Monthly</u>	<u>Annual</u>
60 - Single	\$913	\$10,956
Family Maximum	\$1,376	\$16,512
25 – Single	\$1,045	\$12,540
Family Maximum	\$1,763	\$21,156

Note: National average monthly payment for disabled workers in 2006 was \$977.70.⁶⁵

Subsequent military pay does not affect the disability payment on the assumption that the work environment is adjusted to the disability. However, it may result in an evaluation of the nature of the work.

SSDI benefits are subject to an annual cost of living adjustment using the Social Security benefit inflation adjustment. After two years the individual is eligible to receive Medicare benefits.

Note that Supplemental Security Income (SSI) is available to the small number of disabled veterans less than 24 years of age without 6 credits who do not qualify for SSDI. SSI benefits are also available to persons receiving small amounts of SSDI benefits. SSI benefits are provided by both the federal and state governments. Average payments for June 2008 were \$477 per month including both federal and state portions with about 8 percent of the funding provided by the states.⁶⁶

Federal Employees Compensation Act

FECA provides workers' compensation coverage to over three million federal and postal workers for employment-related injuries and occupational diseases. The benefits include:

- Wage replacement (cash) benefits
- Payment for medical care

⁶³ Social Security Quick Calculator. Retrieved July 7, 2008 from <http://www.socialsecurity.gov/OACT/quickcalc/index.html>

⁶⁴ U.S. Census Bureau. Current Population Survey. (2007). *Annual social and economic supplement*. Retrieved July 7, 2008, from http://pubdb3.census.gov/macro/032007/perinc/new01_001.htm

⁶⁵ U.S. Social Security Administration. (2006). *Annual statistical report on the Social Security Disability Insurance Program*. Retrieved July 24, 2008, from http://www.ssa.gov/policy/docs/statcomps/di_asr/2006/index.html#highlights

⁶⁶ U.S. Social Security Administration. (2008). *SSI monthly statistics*. Retrieved July 24, 2008, from http://www.ssa.gov/policy/docs/statcomps/ssi_monthly/2008-06/table01.pdf

- Compensation for loss or loss of use of a body organ or member
- Medical and vocational rehabilitation assistance in returning to work

The FECA program is overseen by the OWCP in the Employment Standards Administration (ESA) of the U.S. Department of Labor (DOL). A broad-based evaluation of the program was conducted in March 2004.⁶⁷ Findings included:

- The amount of organizational effort spent on chronic conditions such as emotional stress and back injuries is significantly higher than that spent on other types of claims.
- District offices expressed a need for more collaboration (sharing ideas, training opportunities, and best practices) with other offices; there is a strong suggestion that current levels of training and sharing of lessons learned is not sufficient.
- Vocational rehabilitation (VR), when it is used, comes very late in the process; there is a strong suggestion that it should come earlier and be utilized more frequently.
- Recent Quality Case Management initiatives have been successful in reducing lost production days for non-traumatic cases.
- FECA's 45-day continuance of pay period was found to be an impediment to achieving returns to work.⁶⁸
- The evaluation also looked at Oregon's Preferred Worker Program and found that it is helpful in finding work for disabled workers by indemnifying prospective employers for the costs of workers' compensation benefits for up to three years.⁶⁹

Periodic Roll Management

FECA disability cases can be coded as permanent or not. For those not coded as permanent, each case is reviewed on an annual basis (called periodic roll management, or PRM) to determine if medical or other changes have occurred that should affect compensation benefit levels and/or might allow the worker to return to work or to enter VR services. The program has been successful in reducing overall compensation costs, returning workers to work, and removing deceased beneficiaries from the rolls.

⁶⁷ ICF Consulting. (2004). *Federal Employees' Compensation Act (FECA) program effectiveness study*. Retrieved July 28, 2008, from <http://www.dol.gov/esa/owcp/OWCPFinalReport2004b.pdf>

⁶⁸ FECA has a three-day waiting period before TTD benefits begin. However, the waiting period does not begin until 45 days after the date the worker is initially disabled. The apparent explanation is that it takes 45 days for the federal government to process the paperwork that stops wages after a worker is disabled.

⁶⁹ *Ibid.*

FECA's Vocational Rehabilitation Program

Employees covered by FECA are provided access to OWCP VR specialists who provide up to 95 hours of counseling to assist employees in returning to work. An initial 25 hours of time is provided over a three-month period to attempt to place the workers with their original employers.

If that is unsuccessful, counselors then have an additional 20 hours over the next three months to develop a rehabilitation plan. This plan includes diagnostic testing and evaluation to determine marketable and transferable skills and vocational interests. The plan also includes an assessment of the local labor market to determine the availability of suitable job opportunities within a reasonable commuting distance or whether retraining is needed.

If the employee has transferable skills, an additional 50 hours of counseling are provided during the next three months to assist in finding *any* suitable employment—not necessarily within the federal government.

If the employee does not have any transferable/marketable skills, then retraining is considered. OWCP provides up to two years of training, typically in vocational or proprietary schools rather than degree-awarding programs. Counseling is provided during and after training to help locate suitable employment. Counselors remain assigned to claimants for two months following placement to provide additional assistance when/if needed.

Rehabilitation Benefits for FECA-Covered Workers

FECA-covered employees are provided the following VR benefits:

- An allowance of up to \$200 per month to assist with childcare, transportation, and other transitional costs;
- Total disability rating during the rehabilitation period until the employee returns to work (at the original or a different job);
- All rehabilitation costs are paid by the worker's date-of-injury employer;
- When the employee returns to work, OWCP reduces compensation to reflect the change in actual earnings capacity if the new job pays less than the old;
- If the new job pays the same or more than the old, then disability compensation stops;
- If employment is not found, compensation is adjusted to reflect the "presumed" wage earning capacity (capacity is evaluated based on the degree of impairment, the worker's age, the worker's skills and capacity for work, the availability of suitable work, and any other factors that might affect the ability to work); and
- If the worker refuses to take part in early VR (counseling, testing, work evaluation), then OWCP assumes that VR would have resulted in employment

with no loss of wage earning capacity (in the absence of evidence indicating otherwise) and compensation is terminated.

Assisted Reemployment

In 1992, Congress authorized OWCP to use the Employees' Compensation Fund to subsidize salaries paid to re-employed injured/disabled employees working for either public or private employers. Wage subsidies are used to assist in reemploying workers who otherwise are difficult to place. The subsidies represent a win-win situation since the funds come from a fund that would otherwise be paid as compensation to the disabled worker. Subsidies are available to private as well as Federal, state, and local government employers.

Rates of reimbursement are determined on a case-by-case basis by OWCP. The following maximums apply however:

- The wage subsidy cannot exceed the total amount of disability compensation that would be paid in the absence of employment.
- Rehabilitation specialists can offer a short-term (up to six months) subsidy to pay up to 75 percent of the first six months wages when the likely result is a job offer.
- The subsidy cannot exceed 75 percent of the employee's gross wages in the first year.
- The subsidy cannot exceed 50 percent of the employee's gross wages in the second and third years.

Longshore and Harbor Workers Compensation Act

LHWCA provides medical benefits, compensation for lost wages, and rehabilitation services to covered workers in maritime and other industries who are injured during the course of employment or contract an occupational disease related to employment. Survivor benefits also are provided if the work-related injury or disease causes, contributes to, or hastens the employee's death.

Medical Care

- Includes all medical, surgical, and hospital treatment, other medical supplies, and other services required by the employment-related injury as well as travel and mileage incidental to the treatment.
- Physician of the employee's choice, provided the physician is not on the list of individuals who are not authorized to provide care under LHWCA.

Disability Compensation

- Disability is earnings-based, that is the “inability to earn the same wages earned at the time of the injury.” Compensation is payable for disabilities that are permanent total, temporary total, permanent partial, or temporary partial.
- Paid every two weeks during the employee’s total work-related disability; paid at a lesser rate if the disability is not total.

Benefits

Compensation for both temporary and permanent disability is two-thirds of the employee's average weekly wage not to exceed 200 percent of the National Average Weekly Wage (NAWW). The maximum weekly benefit as of October 1, 2007, is \$1,073.63 and the minimum is \$290.09.⁷⁰

Permanent Partial Disability

Compensation is payable for the permanent loss or loss of use of certain parts or functions of the body such as the loss of the arm, hand, fingers, leg, foot, toes, hearing, or vision. Compensation is payable for a certain number of weeks for each type of disability as specified in the Act. For example, total loss of use of a foot entitles the employee to 205 weeks of compensation.

Permanent Partial Disability for Retirees

If a worker suffers the onset of a latent occupational disease after retirement, compensation is two-thirds of the NAWW multiplied by the percentage of impairment resulting from the disease.

Rehabilitation

Vocational rehabilitation may include evaluation, testing, counseling, selective placement, and retraining if the employee is injured and cannot return to his/her former job. Rehabilitation services may include the cost of tuition, books, and supplies. A maintenance allowance not to exceed \$25 per week is also provided during retraining. The cost of vocational rehabilitation services is paid by DOL.

Energy Employees Occupational Illness Program

EEOICP was created to aid employees who have been in contact with dangerous materials while working in Department of Energy facilities. Most payments are given in lump-sum amounts and are also available for survivors if they meet certain criteria. Fund distribution is broken down into two parts, B and E.

⁷⁰ U.S. Department of Labor. Office of Workers’ Compensation Programs. (2008). *Division of longshore and harbor workers’ compensation*. Retrieved July 18, 2008, from <http://www.dol.gov/esa/owcp/dlhwc/NAWWinfo.htm>

Part B

Part B went into effect on July 31, 2001. It provides compensation to workers and contractors who fell ill due to exposure to radiation. Part B also provides compensation to employees who have developed beryllium sensitivity, chronic beryllium disease, or silicosis. Compensation is broken into two groups based on the illness or disease of the employee and which materials he/she has contacted.

Compensation of \$150,000 is awarded for illnesses such as radiation-induced cancer, chronic beryllium disease, and chronic silicosis. Employees who have been exposed to beryllium and are now experiencing beryllium sensitivity receive monitoring to check for chronic beryllium disease but do not receive compensation if no disease is present. Compensation of \$50,000 is awarded to workers who were previously awarded benefits under the Radiation Exposure Compensation Act (RECA). In addition to the compensation awarded in both cases, workers are eligible for medical benefits. Medical benefits include any direct treatment, drugs, and travel necessitated by the covered condition.

Part E

Part E went into effect on October 28, 2004, to compensate workers and contractors who fell ill due to contact with toxic substances. Toxic substances include radiation, chemicals, solvents, and metals.

Lump-sum compensation of up to \$250,000 can be given based on wage-loss, survivorship, and impairment. As in Part B, medical benefits, described above, are available in addition to compensation awarded.

- Wage loss is determined by calculating the percent difference between the employee's wage and the Average Annual Wage (AAW) for his/her position. \$10,000/year is awarded to employees whose wages fall between 25 percent and 50 percent. Currently, \$15,000 is awarded to employees whose wages are in the 50 percent and above group. Applying for compensation requires an investigation of the decreased capacity to work.
- Impairment is calculated once the employee has reached Maximum Medical Improvement. A rating is done based on the percent of whole body impairment. Employees receive \$2,500 for each one percent increase in whole body impairment. An employee can request reevaluation every two years under the program. The employee may also be reevaluated if a new condition causes an increase in impairment.
- Survivor benefits can be awarded at one of three levels. The award is based on the numbers of years in which wage loss occurred until the deceased worker's Full Retirement Age.
 - Level one compensation of \$125,000 is given if it is determined that toxic exposure caused or contributed to death.

- Level two compensation of \$150,000 is given if it is determined that toxic exposure caused or contributed to death and resulted in at least 10 years of wage loss.
- Level one compensation of \$175,000 is given if it is determined that toxic exposure caused or contributed to death and resulted in at least 20 years of wage loss.

Eligible survivors include living spouse with at least one year of marriage prior to death. If no spouse is present, benefits may be paid to children under 18 or under 23 if the child is enrolled in a college or university.

V. RETURN-TO-WORK PROGRAMS

In this chapter, we review the return-to-work literature relative to programs that focus on returning disabled individuals to work. The objective is to gain an understanding of the salient features of various programs and how they may apply to developing a U.S. Department of Veterans Affairs (VA) transition benefit program. The study team reviewed information on vocational rehabilitation (VR) programs including incentives and disincentives for entry and completion; benefits the programs offer to the participant, caregiver, and family; demographic characteristics of participants; and time from injury to entry into VR programs. Additionally, we provide an overview of vocational rehabilitation components in workers' compensation programs and briefly examine rehabilitation programs in selected European countries.

Factors Affecting Return-to-Work Prospects

Many disability programs provide on-the-job training, traditional degree-seeking education opportunities, or job placement assistance to facilitate a disabled individual's return-to-work efforts. One study of employees with work-related disabilities identified a number of factors that are critical in determining whether an injured worker returns to the job. The first factor was clear communication about all aspects of a potential disability: how to prevent injuries, what to do when an injury occurs, how the workers' compensation program works, and what workers can do to improve recovery. A related factor was a sense of care and concern from the employer as expressed by follow-up calls, cards, personal visits, assistance with paperwork, and assistance in finding qualified medical care.

In addition, ensuring prompt care is critical – the longer workers waited before seeing a doctor for the disabling condition, the longer they remained out of work. Ninety-five percent of employees who were given a recommendation by the employer about where to seek medical care followed through on it. Return-to-work programs cut in half the likelihood that an employee would be off work for more than a month. The most common accommodations were modified work environments, therapy, short-term assignments, and employee assistance programs.⁷¹

Another study found that the same factors are important for non-work-related disabilities. Non-occupational disabilities tended to be shorter than work-related disabilities, and workers were generally more satisfied with their employers' involvement.⁷² However, while workers appear more satisfied with their non-

⁷¹ Intracorp. (1997). *A study of injured workers and their experiences with the workers' compensation system*. Retrieved March 10, 2008, from <http://www.intracorp.com/IntracorpHome/tools/pdf/Gallup%20Injured%20Worker%20Study.pdf>

⁷² Intracorp. (2001). *The disability experience: What helps and hinders return to work*. Retrieved March 13, 2008, from <http://www.intracorp.com/IntracorpHome/tools/pdf/2001Gallup.pdf>

occupational disability programs, there is still significant room for employers to improve employee understanding of those programs.⁷³

Demographic Characteristics Affecting Return-to-Work Prospects

Several publications in the last 15 years shed more light on which claims are likely to become longer disability claims and, therefore, result in higher costs for providers and negative economic consequences for workers.

- **Age:** The older the worker, the longer temporary disability duration and an increase in the likelihood of a permanent disability and unexpected medical costs.⁷⁴
- **Education:** In general, workers who had lower educational attainment were less likely to return to work in all states. Most at risk are those with only a grade school education, but return-to-work rates are lower for individuals with only a high school education over those with more education.⁷⁵
- **Income and/or wage replacement rate:** It is likely that injured workers with a low wage have other disadvantages in the labor market (such as limited education, few marketable skills, or do not speak English as their primary language) making re-employment for these workers particularly difficult. Additionally, workers whose workers' compensation benefits equal or exceed their take home wages have little or no economic incentive to recover quickly and return to work. Lastly, workers whose wages were higher than their workers' compensation payment at the time of injury have a financial incentive to return to work, especially if their benefit levels are capped by a low maximum benefit.⁷⁶
- **Pre-injury employment history:** Workers with gaps in pre-injury employment, a history of absenteeism prior to injury and/or disability, or performance problems prior to injury are less likely to return to work. Gallizzi and Boden found workers with just one instance of being off work in the year prior to injury took 34 percent longer to return to work than those with no instances being off work prior to the injury. Additionally, even for shorter duration injuries, workers with intermittent pre-injury employment took substantially longer to return to work,

⁷³ Wiskowski, J. (2008). Study finds gap in employee understanding of disability insurance. *National Underwriter*, 2(4). Retrieved March 12, 2008, from <http://www.lifeandhealthinsurancenews.com/cms/nulh/Weekly%20Issues/issues/2008/04/Focus/L04-track4-worksite-wiskowski>

⁷⁴ Fox, S.E., Victor, R.A., & Lui, T.C. (2006). *Comparing outcomes for injured workers in seven large states*. Cambridge, MA: Workers' Compensation Research Institute.

⁷⁵ Ibid.

⁷⁶ Ibid.

more than twice as long as workers who had continuous employment in the year prior to injury.⁷⁷

- **Tenure with current employer:** For those workers who cannot or do not return to their pre-injury employer, time off work is two to three times longer than individuals who do not return to their pre-injury employment.⁷⁸
- **Individual prediction of continued disability:** If an injured worker sees himself or herself as disabled and unable to do daily work activities, irrespective of the diagnosis or physician's orders, the employee is more likely to remain disabled longer.⁷⁹ This factor can be a predictor of longer term disability.

Family Support While in Vocational Rehabilitation

The central goal of VR programs is rehabilitating an individual to improve employability. Since the Smith-Hughes Act of 1917 and the Soldier Rehabilitation Act of 1918, VR has existed as a means of both cost containment and empowerment.⁸⁰

The focus of most VR plans is on the participant as opposed to the participant's entire family. Veterans returning from wars often are in need of rehabilitation that places large burdens—financial and otherwise—on the family.

VA does not provide *direct* assistance to the family. By law and regulation, VA is not allowed to offer services such as marital counseling and family support groups unless such services are deemed to benefit the veteran.⁸¹ Distinguishing between which services to the family would and would not benefit the veteran can be difficult. However, the literature establishes that a feedback loop exists between the well-being of the veteran's family and the veteran.

Clinical Evidence of the Need for Family Support

The study team examined a few studies that provide clinical evidence of the need for family support for certain disabilities as described below.

⁷⁷ Galizzi, M. & Boden, L.I. (1996). *What are the most important factors shaping return to work? Evidence from Wisconsin*. Cambridge, MA: Workers' Compensation Research Institute.

⁷⁸ Galizzi, M., Boden, L.I., & Lui, T.C. (1998). *The workers' story: Results of a survey of workers injured in Wisconsin*. Cambridge, MA: Workers' Compensation Research Institute.

⁷⁹ Turner, J.A., Franklin, G., Fulton-Kehoe, D., Sheppard, L., Wickizer, T.M., Wu, R., and others. (2006). Worker recovery expectations and fear-avoidance predict work disability in a population-based workers' compensation back pain sample. *Spine*, 31(6), 682-689.

⁸⁰ Gasbarre, A.D. (2008). History of vocational rehabilitation. In *Encyclopedia for Business* (2nd ed.). Retrieved February 27, 2008, from <http://www.referenceforbusiness.com/encyclopedia/Val-Z/Vocational-Rehabilitation.html>

⁸¹ U.S. Department of Veterans Affairs. (2008). *VA health care eligibility & enrollment*. Retrieved March 12, 2008, from <http://www.va.gov/healtheligibility/familymembers/#cg>

Caregivers of Individuals with Spinal Cord Injuries

In 2004, Lucke and others⁸² looked at the quality of life (QOL) associated with family members of spinal cord injuries (SCIs) six months after medical rehabilitation. Earlier studies on the well-being of SCI patients show that subjects with adequate social support, income, education, and employment reported higher scores on the Satisfaction With Life Scale (SWLS).⁸³ Lucke and others reveal that caregivers and family members of SCI patients reported significantly higher levels of stress and depression. Therefore, a full appreciation of the loss in QOL following a traumatic injury such as SCI requires understanding the impact of the injury on both the patient and his or her family.

Caregivers of Stroke Survivors

White and others⁸⁴ looked at various studies of caregivers of stroke survivors. Consistent with studies of other serious injuries, caregivers in this context tend to suffer most immediately following the injury and improve over time. White and others found that financial concerns are a big contributor to loss in QOL among family members.

Caregivers of Individuals with Post Traumatic Stress Disorder

Post-traumatic Stress Disorder (PTSD) on the surface may appear to be a less severe condition than other mental illnesses or traumatic brain injuries. However, PTSD is a condition that warrants attention from VR programs because (1) PTSD is difficult to diagnose, (2) PTSD has a stigma associated with it that makes sufferers embarrassed or reluctant to seek treatment, and (3) the increasing numbers of veterans diagnosed with PTSD is at least partially the result of medical and military advances that save more lives on today's battlefield.

An important part of PTSD treatment is correcting adjustment disorders⁸⁵ and assisting with social reintegration.⁸⁶ A study on the burden of PTSD among partners of Vietnam veterans⁸⁷ found that, "when accounting for patient PTSD symptom severity, hostility, presence of major depression, level of interpersonal violence, and health complaints, only PTSD severity was uniquely associated with caregiver burden."

⁸² Lucke, K.T., Coccia, H., Goode, J.S., & Lucke, J.F. (2004). Quality of life in spinal cord injured individuals and their caregivers during the initial 6 months following rehabilitation. *Quality of Life Research*, 13(1), 97-110.

⁸³ Dowler, R., Richards, J.S., Putzke, J.D., Gordon, W., & Tate, D. (2001). Impact of demographic and medical factors on satisfaction with life after spinal cord injury: A normative study. *Journal of Spinal Cord Medicine*, 24(2), 87-91.

⁸⁴ White, C.L., Lauzon, S., Yaffe, M.J., & Wood-Dauphinee, S. (2004). Toward a model of quality of life for family caregivers of stroke survivors. *Quality of Life Research*, 13(3), 625-638.

⁸⁵ Atizado, A.M. (2008, April 1). *Statement before the Committee on Veterans' Affairs, Subcommittee on Health*. United States House of Representatives. Retrieved July 7, 2008, from http://www.dav.org/voters/documents/statement_atizado_052208.pdf

⁸⁶ Baum, C.M. (2008, April 1). *Statement before the Committee on Veterans' Affairs, Subcommittee on Health*. United States House of Representatives. Retrieved July 7, 2008, from <http://veterans.house.gov/hearings/Testimony.aspx?TID=16658&Newsid=188&Name=%20Carolyn%20M.%20Baum,%20PhD,%20OTR/L,%20FAOTA>

⁸⁷ Calhoun, P.S., Beckham, J.C., & Bosworth, H.B. (2002). Caregiver burden and psychological distress in partners of veterans with chronic posttraumatic stress disorder. *Journal of Traumatic Stress*, 15(3), 205-212.

The VA National Center for PTSD recognizes that families of veterans with PTSD are susceptible to emotional, mental, and physical health problems.⁸⁸ Many of the Center's recommendations for veterans (for example, readjustment counseling at a VA treatment center) would be more effective if the entire family had access to counseling resources so that more than just a part of the family unit was treated.

Veterans Affairs Canada (VAC) also recognizes the effects that PTSD has on a veteran's family and provides general help tips on their website and encourages spouses to seek help should PTSD-related problems become serious.⁸⁹

Benefits for Families in the Canadian Veterans Vocational Rehabilitation Program

Canada also recognizes the importance of the well being of the family as well as the well being of the veteran. Under the Canadian Forces Members and Veterans Reestablishment and Compensation Act of April 1, 2006 (the New Veterans Charter), Canadian Forces (CF) veterans in the transition process from military to civilian life *and* their families may receive assistance by accessing the following programs:⁹⁰

- Rehabilitation
- Financial Benefits
- Job Placement
- Health Benefits
- Disability Award
- Other Benefits
- Family Support⁹¹
 - Case management services
 - Individual or family counseling
 - Rehabilitation⁹²
 - Group health insurance
 - Other family support services

Rehabilitation benefits may be available for the wife, husband, or common-law partner of a service member who too disabled to participate in the rehabilitation program or who dies. For example, if the spouse or partner wishes to go back to school, get more

⁸⁸ Carlson, E.B. & Ruzek, J. (2007). *PTSD and the family: How does PTSD affect family members?* Retrieved April 16, 2008, from http://ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_family.html

⁸⁹ Veterans Affairs Canada. (2006). *Post-traumatic stress disorder (PTSD) and the family*. Retrieved March 6, 2008, from http://www.vac-acc.gc.ca/clients/sub.cfm?source=mhealth/ptsd_families

⁹⁰ Veterans Affairs Canada. (2006). *The New Veterans Charter: For CF veterans and their families*. Retrieved April 17, 2008, from <http://www.vac-acc.gc.ca/clients/sub.cfm?source=Forces/nvc>

⁹¹ Veterans Affairs Canada. (2008). *The New Veterans Charter family support*. Retrieved April 3, 2008, from <http://www.vac-acc.gc.ca/clients/sub.cfm?source=forces/nvc/programs/fs>

⁹² Veterans Affairs Canada. (2008). *The New Veterans Charter family support*. Retrieved April 11, 2008, from <http://www.vac-acc.gc.ca/clients/sub.cfm?source=forces/nvc/programs/fs>

job training, or get help finding a job, the program will pay for many of the costs related to training or education including child care.

Incentive Programs for Vocational Rehabilitation

Successfully rehabilitated individuals can take on a wider array of employment tasks, have a higher earnings potential, and become less dependent on public services. For example, with respect to VR, for FY 2005 the state of Hawaii reports⁹³ that:

The VR program is cost effective. The average case service cost was \$1,973. VR services increased the average annual earning power of people with disabilities from a weekly average of \$49 at referral to \$303 a week at closure. These are yearly earnings increases of around 618%, from \$2,548 to \$15,756.

Similarly, with respect to individuals on an independent living track, in 2005 the state of Oregon reports⁹⁴ that:

One of the exciting outcomes of the provision of Independent Living services is the reduction of tax dollars needed by individuals with disabilities who utilize these services to become more self-reliant... With nine of the ten Centers reporting, the savings from the attached data alone totals \$3,733,683.22. This represents an average savings of \$5,266.13 per individual served.

However according to some authors, studies assessing the efficacy of public sector programs assemble data using federal form RSA-911, which is only available for participants who are deemed successfully rehabilitated and omits individuals who received significant services but were not ultimately employed upon termination from the program. This results in selection bias. There is little evidence of the efficacy of public sector vocational rehabilitation programs.⁹⁵

With respect to return-to-work prospects in general, according to the literature that has emerged over the past several decades, the consensus is that early identification and intervention after a worker is injured is often the critical factor in the return-to-work outcome.⁹⁶ Simply being more proactive in terms of commencing a program can have a lot to do with lowering the costs incurred for workers' compensation.

Getting individuals who would benefit from a VR program into such programs is therefore a desirable aim.

⁹³ Hawaii Department of Human Services. (2008). *Vocational rehabilitation and services for the blind division*. Retrieved March 28, 2008, from <http://hawaii.gov/dhs/self-sufficiency/vr>

⁹⁴ Oregon Department of Human Services. (2005). *Cost savings from independent living services* [PPT document]. Retrieved July 7, 2008, from <http://www.puc.state.or.us/DHS/vr/silc/cost-savings2005.pdf>

⁹⁵ Dean, D. & Schmidt, R. (2005). *An outcomes-based assessment of the Chapter 31 Program*. Washington, DC: Veterans Affairs, VBA Vocational Rehabilitation and Employment Services. Final report (delivery order: 101-Y27247) submitted for publication.

⁹⁶ American College of Occupational & Environmental Medicine. (2005). *Preventing needless work disability by helping people stay employed*. Stay-at-Work & Return-to-Work Committee. Retrieved July 7, 2008, from <http://www.cdonaldwilliamsmd.com/PreventingNeedlessDisability-finalpdf2005-11-30.pdf>

There are many ways to encourage participation in a VR program:

- Pay for performance plans are found in some workers' compensation programs. These programs pay financial benefits to health care providers that achieve a certain level of quality, efficiency, or customer satisfaction. Such incentives can be offered to a variety of providers: doctors properly treating the injured worker⁹⁷ and Employment Networks helping participants in the Ticket to Work Program (TTW).⁹⁸
- Financial incentives directly payable to vocational rehabilitation participants are less commonly seen in practice but are frequently advocated.
 - As stated in the study conducted on enhanced incentives to vocational rehabilitation patients by Drebing and others in 2005, "To our knowledge, this is the first study of contingency management techniques adapted to the specific task of transitioning adults to competitive employment in a VR setting."⁹⁹
 - The Institute of Medicine's report recommends that "VA should develop and test incentive models that would promote vocational rehabilitation and return to gainful employment among veterans for whom this is a realistic goal."¹⁰⁰ This was their reaction to what IOM felt was (1) a low proportion (25 percent) of eligible veterans who applied for Vocational Rehabilitation and Employment (VR&E) in FY 2005 compared to the number (160,000) who began receiving benefits for service-connected disabilities in that year and (2) the high proportion (between a quarter and a third) of applicants found eligible who fail to complete the program.¹⁰¹

Bonus Incentives for Participants Completing Parts of Vocational Rehabilitation – the Drebing Study

Drebing and others recently conducted an experimental statistical analysis of U.S. veterans going through vocational rehabilitation in the Veterans Health Administration's Compensated Work Therapy (CWT) program. The CWT program has different goals and serves a different population compared to the VR&E program. Drebing found that VR&E participants who were receiving enhanced incentives (cash bonuses) for completing certain tasks during rehabilitation were more likely to complete rehabilitation and avoid

⁹⁷ Wynn, B.O. & Sorbero, M.E. (2007). Pay-for-performance in California's workers' compensation medical treatment system. *RAND working paper*. Retrieved March 12, 2008, from

http://www.dir.ca.gov/chswc/Reports/Pay_for_Performance_Report_2007.pdf

⁹⁸ Ticket to Work. (n.d.). *SSA's official Ticket to Work Program*. Retrieved March 31, 2008, from

<http://www.yourtickettowork.com/>

⁹⁹ Drebing, C.E., Van Ormer, E.A., Krebs, C., Rosenheck, R., Rounsaville, B., Herz, L., and others. (2005). The impact of enhanced incentives on vocational rehabilitation outcomes for dually diagnosed veterans. *Journal of Applied Behavior Analysis*, 38(3), 359-372.

¹⁰⁰ Institute of Medicine. (2007). *A 21st century system for evaluating veterans for disability benefits*. Washington, DC: National Academies Press.

¹⁰¹ Ibid.

alcohol and drugs during rehabilitation. They were also found to earn approximately 68 percent more in wages than CWT participants not receiving incentives.

Enhanced incentives provided to the test group were related to obtaining and retaining a competitive job:

- producing a usable resume (\$20),
- attending a job interview (\$30),
- obtaining a job and working 1 week (\$40),
- working a second consecutive week (\$50),
- working a third consecutive week (\$60), and
- working a fourth consecutive week (\$70).

This resulted in a total possible payment of \$270.

Additionally, incentives were provided to avoid drug or alcohol consumption during the 16-week study period and participants could receive up to an additional \$736 for meeting the sobriety criteria. As reflected in the title of the study, veterans examined were dually diagnosed, meaning that they had both a mental disorder and an alcohol or drug problem. According to a 2002 article by Drebing and others,¹⁰² about half of all veterans in VHA's CWT program are dually diagnosed.

In their conclusion, Drebing and others discuss why the incentives worked so effectively. First, the incentives kept participants motivated in achieving what they call intermediate goals, which include rapid and intensive job search and avoidance of substance abuse relapse. According to Vinokur and Schul¹⁰³ these intermediate factors are the most predictive of a successful transition to competitive employment yet are typically not a central focus of vocational rehabilitation programs.

The authors suspect a second reason: while some other vocational rehabilitation programs pay participants for general constructive participation, the success rate of these individuals is not as substantial because these programs do not explicitly link cash payments to clinical goals.

Direct Link between VR and Employment

If the ultimate goal of VR is to increase the participant's employability, it would follow that VR job placement services are those that are most appreciated by the participant. Conversely, VR services not directly related to job placement are looked upon with less

¹⁰² Drebing, C.E., Fleitas, R., Moore, A., Krebs, C., Van Ormer, A. Penk, W., and others. (2002). Patterns of work functioning and vocational rehabilitation associated with coexisting psychiatric and substance use disorders. *Rehabilitation Counseling Bulletin*, 46(1), 5-13.

¹⁰³ Vinokur, A.D. & Schul, Y. (2002). The web of coping resources and pathways to reemployment following a job loss. *Journal of Occupational Health Psychology*, 7, 68-83.

appreciation. Hennessey and Muller¹⁰⁴ describe how 68 percent of Social Security Disability Insurance (SSDI) survey respondents receiving *job placement* VR services believed VR to be helpful, while only 24 percent receiving *physical therapy* VR services believed VR to be helpful.

Incentives in the Social Security Disability Insurance Program

The Social Security Administration's (SSA) SSDI program is the largest of several federal programs that assist individuals with disabilities.¹⁰⁵ Individuals are eligible for SSDI if they:

- become disabled,
- cannot work as they did before and cannot adjust to other work due to their new medical condition,
- have a disability that is expected to last at least one year or result in death, and
- have worked sufficiently long given their age.

SSDI beneficiaries become eligible for Medicare health coverage after being in SSDI for two years.

SSA has several programs available that are designed to increase motivation of SSDI beneficiaries to engage in and complete vocational rehabilitation.

SSDI - Trial Work Period

SSDI beneficiaries may enter a Trial Work Period (TWP)¹⁰⁶ in which they are allowed to test their ability to function as an employed person and still receive disability benefits. The disability status of participants does not change until nine months (not necessarily consecutive months) of earnings (\$670 in 2008). Hennessey and Muller¹⁰⁷ conducted an analysis of new SSDI beneficiaries and, through a statistical analysis, determined that *simply having knowledge of* the existence of the TWP program made a beneficiary twice as likely to return to work.

SSDI - Extended Period of Eligibility

After TWP ends, beneficiaries have 36 months during which they can work and still receive benefits for any month their earnings are not below substantial gainful

¹⁰⁴ Hennessey, J.C. & Muller, L.S. (1995). The effect of vocational rehabilitation and work incentives on helping the disabled-worker beneficiary back to work. *Social Security Bulletin*, 58(1), 15-28.

¹⁰⁵ Social Security Online. (2008). *Disability programs: Benefits for people with disabilities*. Retrieved February 27, 2008, from <http://www.ssa.gov/disability>

¹⁰⁶ Social Security Online. (2007). *Automatic increases: Trial work period*. Retrieved February 29, 2008, from <http://www.ssa.gov/OACT/COLA/twp.html>

¹⁰⁷ Hennessey, J.C. & Muller, L.S. (1995). The effect of vocational rehabilitation and work incentives on helping the disabled-worker beneficiary back to work. *Social Security Bulletin*, 58(1), 15-28.

activity.¹⁰⁸ In 2008, monthly earnings of \$940 or more (\$1,570 if you are blind) are considered substantial.

SSDI - Extended Medicare Coverage

Health benefits are a significant benefit to anyone but especially for individuals who are or have become disabled. Allowing SSDI beneficiaries who have returned to work to keep their Medicare coverage while working is another incentive provided. For eligible individuals, this Extended Medicare Coverage (EMC) will continue for at least seven years and nine months beyond the trial period.¹⁰⁹

Somewhat paradoxically, Hennessey and Muller's analysis also found that knowledge of EMC had a negative effect on a beneficiary returning to work. They theorize that EMC is actually a disincentive because beneficiaries see this as the last step prior to termination of their benefits.

SSDI - Ticket to Work Program¹¹⁰

The TTW Program was created as a result of TTW and Work Incentives Improvement Act of 1999. This program can be seen as an expansion (not a replacement) of the incentives provided to SSDI beneficiaries described above. Beneficiaries of SSDI (or Supplemental Security Income (SSI)) can request a TTW ticket, which acts as a voucher that can be used with traditional providers (that is, state vocational rehabilitation agencies or private employment networks that offer similar services).

Incentives are in effect throughout this program. First, beneficiaries with a desire to go back to work but who are disenchanted with traditional providers have an additional option in private employment networks. Second, beneficiaries are allowed to keep their medical benefits during rehabilitation and financial benefits do not completely offset earnings while individuals remain in the program. Third, payment amounts to providers are tied to their ability to rehabilitate beneficiaries, measured by timely, successful return-to-work status without termination.

As the TTW program is less than a decade old, the jury is still out concerning TTW's overall effectiveness. The Urban Institute has produced a series of reports¹¹¹ on the potential for success or failure. Stated concerns include: improper pricing of services that misstate the value of rehabilitation can result in suboptimal outcomes and improper incentives for cases to be quickly closed out can result in workers not being

¹⁰⁸ Cornell University. ILR School.(n.d.) *Disability Medicare wizard: Extended periods of eligibility (EPE)*. Retrieved March 4, 2008, from <http://www.ilr.cornell.edu/edi/MedicareWizard/t3.cfm>

¹⁰⁹ Social Security Online. (2008). *Program development and research: Questions and answers on extended Medicare coverage for working people with disabilities*. Retrieved February 21, 2008, from <http://www.socialsecurity.gov/disabilityresearch/wi/extended.htm>

¹¹⁰ Ticket to Work. (n.d.). *SSA's official Ticket to Work Program*. Retrieved April 1, 2008, from <http://www.yourtickettowork.com/>

¹¹¹ Urban Institute. (2008). *Paying for results in vocational rehabilitation*. Retrieved March 12, 2008, from <http://www.urban.org/publications/310603.html>

fully rehabilitated. For example, there have been reports¹¹² showing that Ohio Managed Care Organizations get bonus money from the state based on how quickly they close injured worker cases, not necessarily on whether the workers get services they need most. As a result, it is the contention of some that the goal of the affiliated rehabilitation providers is to bill all the expensive services and then close the case as soon as possible.

SSDI - Work Incentives Planning and Assistance

In October 2006, SSA replaced the Benefits Planning, Assistance and Outreach Program with the Work Incentives Planning and Assistance (WIPA) program. The program was renamed because of an increased emphasis on work incentives, return-to-work supports, and jobs for beneficiaries.¹¹³

Thus, an advantage of being in the SSDI program is that it allows individuals to access the following valuable information through WIPA:

- Information on federal and state benefit programs
- Assistance with federal and state benefit and work incentive problems
- Assessment of a beneficiary's situation and the impact of work on federal and state benefits
- Assistance with developing a long-term plan incorporating the beneficiary's work goal and available work incentives
- Assistance with managing benefits when a beneficiary experiences changes that affect benefits

Other Programs with Incentives

Oregon's Employer-At-Injury-Program (EAIP),¹¹⁴ created in 1993, is a program that has used incentives designed to get employers to hire individuals with both temporary and permanent work restrictions. Types of incentives EAIP offers to employers hiring "preferred workers" include wage subsidies of 50 percent (possibly more if hiring someone with an "exceptional" level of disability) and exemptions from workers' compensation premiums for a period of three years. Oregon examined the use of the Preferred Worker program in 2002 and found that using the program makes an injured worker 39 percent more likely to be employed (80 percent of Preferred Workers vs. 51 percent of non-Preferred Workers). Moreover, Preferred Workers regained 110 percent of their pre-injury wage while non-Preferred Workers regained 94 percent of their pre-

¹¹² Paynter, B. (2006). Big money to be made in referrals for rehab. *Cleveland.com: The Plain Dealer*. Retrieved July 7, 2008, from http://www.cleveland.com/millions/plaindealer/index.ssf?/millions/more/102606_big_money.html

¹¹³ Ticket to Work. (n.d.). *Work incentives planning and assistance program*. Retrieved April 1, 2008, from <http://www.yourtickettowork.com/wipas>.

¹¹⁴ Oregon.gov. (n.d.). *Workers' compensation division*. Retrieved March 18, 2008, from <http://wcd.oregon.gov/rdrs/rau/returntowork.html>

injury wage. It is estimated that the \$7.3 million in wage subsidies under EAIP resulted in \$10.8 million in savings on time loss for claims closed.¹¹⁵

Bridges of Excellence¹¹⁶ is a not-for-profit organization creating programs that reward physicians for prescribing under-utilized treatments and penalizes them for prescribing over-utilized and/or improper treatments to patients requiring diabetic, heart, or spinal care. While the benefits of such medical rehabilitation programs are not directly related to vocational rehabilitation, the program serves as an example of how performance incentives can be used to encourage efficient use of resources.

Veterans Affairs Canada includes a number of incentives for CF veterans participating in the Rehabilitation Program. Under the New Veterans Charter, CF veterans “who have a service-related or career ending disability” may be eligible for the financial benefits listed in Table V-1.¹¹⁷

Disincentives

Various aspects of VR programs may also serve as disincentives that impede a participant’s chances of completing the program.

Financial

A major disincentive to entering and completing a standard vocational rehabilitation program is the short-term opportunity cost of foregone earnings. An hour spent in rehabilitation is an hour a participant could potentially have been earning a wage elsewhere. Dean¹¹⁸ found that the financial benefits of VA’s VR&E program do not become positive until more than five years after completing the program.

¹¹⁵ New York Department of Labor. (2008). *Report of the commissioner on return to work in consultation with the return to work advisory council*. Retrieved March 14, 2008, from

http://www.labor.state.ny.us/agencyinfo/PDFs/ReturntoWorkReport_March_08.pdf

¹¹⁶ Bridges to Excellence. (2007). *Rewarding quality across the healthcare system*. Retrieved March 20, 2008, from <http://www.bridgestoexcellence.org>

¹¹⁷ Veterans Affairs Canada. (2006). *Financial benefits program*. Retrieved April 17, 2008, from <http://www.vac-acc.gc.ca/clients/sub.cfm?source=forces/nvc/programs/fb>

¹¹⁸ Dean, D.H., Dolan, R.C., & Schmidt, R.M. (1999). Evaluating the vocational rehabilitation program using longitudinal data: Evidence for a quasi-experimental research design. *Evaluation Review*, 23(2), 162-189.

Table V-1. Veterans Affairs Canada Rehabilitation Program Incentives

Financial Benefits	Requirements/Qualifications
<u>Earnings Loss Benefit</u> - to ensure that participant's income does not fall below 75% of his/her gross pre-release military salary while in the rehabilitation or vocational assistance program.	A CF veteran with a developed rehabilitation or vocational assistance plan. The survivor of a CF member or veteran who dies of a service-related injury/disease or a non-service-related injury/disease aggravated by service.
<u>Permanent Impairment Allowance (PAI)ⁱ</u> - to help a CF veteran suffering from lost job opportunities due to his or her permanent and severe impairments.	A CF veteran with an approved (by VAC) rehabilitation plan, a severe ⁱⁱ and permanent physical and/or mental impairment, and a disability award due to this impairment.
<u>Canadian Forces Income Support (CFIS)</u> - to provide a tax free support for an able-to-work CF veteran.	A CF veteran who no longer qualifies for Earnings Loss Benefit (due to age or ability to work) and has successfully completed the Rehabilitation Program, demonstrates financial need, is actively pursuing employment search but has not been successful, and lives in Canada. The survivor of a CF member or veteran who lives in Canada and meets income and other conditions.

Source: Veterans Affairs Canada (<http://www.vac-acc.gc.ca/clients/sub.cfm?source=forces/nvc/programs/fb>).

ⁱ The PIA is a taxable monthly benefit, payable for life, in addition to a disability award. The 2008 rates are: Grade I – \$1,562.12; Grade II – \$1,041.41; Grade III – \$520.71 (<http://www.vac-acc.gc.ca>).

ⁱⁱ Canadian disability severity scale for adults consists of the following categories: mild, moderate, severe, and very severe (http://www.mcass.gov.on.ca/NR/rdonlyres/92F72127-4EE4-46BE-A114-31ADD6415B33/1432/PALS_Disability_rates1.doc). According to www.vac-acc.gc.ca, the following criteria are used to define a severe impairment: an amputation at or above the elbow or the knee; the amputation of more than one upper or lower limb at any level; a total and permanent loss of the use of a limb; a total and permanent loss of vision, hearing, or speech; severe and permanent psychiatric condition; a permanent requirement for physical assistance of another person for most aspects of activities of daily living; or a permanent requirement for supervision.

In addition, the content analysis of the written comments from the 2002 Survey of Veterans Satisfaction with the VA's VR&E program indicates that 17.9 percent of surveyed VR&E participants complained about benefits levels.¹¹⁹ A common complaint was that the current rate of subsistence allowance paid monthly during training is not enough to cover living expenses of veterans and their families and that reimbursement for books and supplies is not prompt enough:

The subsistence allowance is very small to support my family during my rehabilitation. It is kind of difficult for me to buy my books and supplies from my own money and then get reimbursed at a later date, because reimbursement takes a long time, and I don't have enough money to advance for my supplies.¹²⁰

The monthly subsistence isn't enough to live off while going through training. [If the payment level were higher,] I think your completion rate [would] go up. [Another suggestion is to] combine going to school with part-time employment at a Federal agency.¹²¹

Comments made to the study team by the vocational rehabilitation counselor and case management staff at the Brooke Army Medical Center on May 1, 2008, also indicated that the amount of the subsistence allowance is not adequate to provide for the living expenses of veterans participating in vocational rehabilitation.

As of October 1, 2007, participants of full-time training are entitled to the following monthly subsistence allowance.¹²²

- \$520.74 – with no dependents
- \$645.94 – with one dependent
- \$761.18 – with two dependents
- \$55.49 – for each additional dependent

Psychological

A second type of disincentive is psychological. Bagenstos¹²³ illustrates this point in the context of applying for Medicare. Individuals applying for Medicare must first obtain SSDI, which requires them to prove they are unable to work. Then they must wait for two years for the Medicare benefits to commence and during this waiting period they become emotionally and psychologically invested in the idea that they cannot work.

¹¹⁹ U.S. Department of Veterans Affairs. (2004). *Report to the Secretary of Veterans Affairs: The Vocational Rehabilitation and Employment Program for the 21st Century Veteran*, pp. A-34. VA Vocational Rehabilitation and Employment Task Force.

¹²⁰ *Ibid.*, pp. A-35.

¹²¹ *Ibid.*

¹²² U.S. Department of Veterans Affairs. (2007). VR&E training programs subsistence allowance rate increase. Retrieved March 24, 2008, from http://www.vba.va.gov/bln/vre/sa/08/safy08_rates.pdf

¹²³ Bagenstos, S.R. (2004). The future of disability law. *The Yale Law Journal*, 114(1), 1-83.

Better and others¹²⁴ reported in 1979 that a disincentive effect existed by using Rehabilitation Services Administration (RSA) data showing that SSDI beneficiaries had a lower rehabilitation rate than participants not receiving SSDI benefits. There is certainly a potential for adverse selection to explain this finding, that is, SSDI beneficiaries' low rehabilitation rate may be caused by being more severely disabled than the comparison group. Better and others address this issue by isolating those non-SSDI vocational rehabilitation participants who are severely disabled. Seventy-one percent of severely disabled non-beneficiaries were rehabilitated, while only 58 percent of severely disabled SSDI beneficiaries were rehabilitated, which is consistent with a disincentive effect.

These examples illustrate the effect that being out of the workforce for a long period can have. However, it does not take years for this kind of behavior to exhibit itself. According to a study by the American College of Occupational and Environmental Medicine (ACOEM),¹²⁵ early identification and intervention are critical. This can be illustrated with an example from a major American manufacturer, where the return-to-work rate rapidly diminishes over a matter of weeks, not months or years, as depicted in Figure V-1.

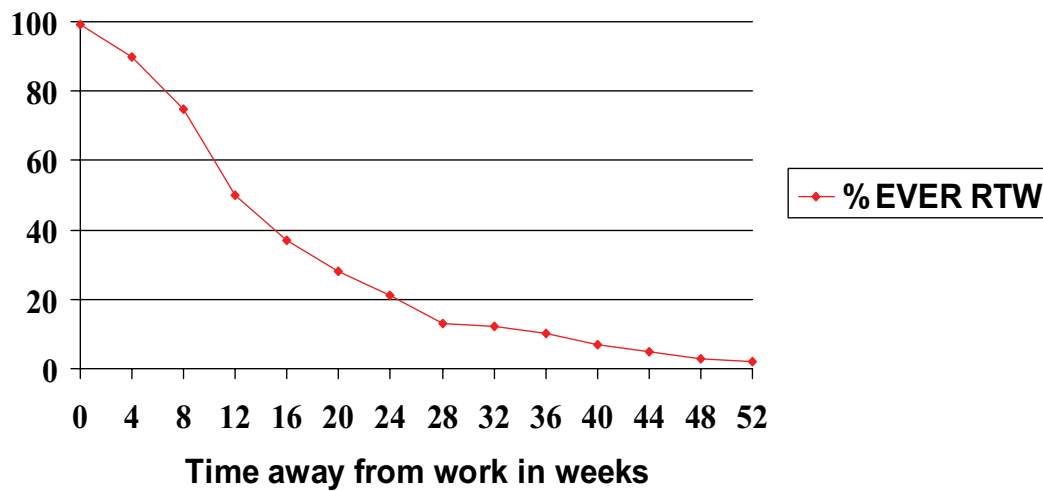
In addition to this anecdote, the ACOEM report cites a more robust finding:

An article by Harris in the *Journal of the American Medical Association*¹²⁶ [in 2005] reconfirmed that workers receiving disability benefits recover less quickly and have poorer clinical outcomes than individuals who don't receive disability benefits. The researchers reported that 175 of the 211 studies meeting their inclusion criteria reported worse surgical outcomes for patients on workers' compensation or involved in litigation. (Only one study reported better outcomes in compensated patients; 35 studies reported no difference). Of the 86 studies that excluded patients in litigation, the odds of an unsatisfactory outcome were nearly four times higher for the patients on workers' compensation than for those not receiving compensation. These findings are similar to those of other studies, including two previous meta-analyses of outcomes studies, one for workers with chronic pain and the other for closed-head injuries.

¹²⁴ Better, S.R., Fine, P.R., Simison, D., Doss, G.H., Walls, R.T., & McLaughlin, D.E. (1979). Disability benefits as disincentives to rehabilitation. *The Milbank Memorial Fund Quarterly/Health and Society*, 57(3), 412-427.

¹²⁵ American College of Occupational & Environmental Medicine. (2005). *Preventing needless work disability by helping people stay employed, stay-at-work & return-to-work committee*. Retrieved February 29, 2008, from <http://www.acoem.org/guidelines.aspx?id=566>

¹²⁶ Harris, I., Multford, J., Solomon, M., van Gelder, J.M., & Young, J. (2005). Association between compensation status and outcome after surgery. *JAMA*, 293(13), 1644-52.

Figure V-1. Longer Time Away from Work Reduces the Probability of Ever Returning to Work

Source: 2007 60 Summits Project, Inc., page 28.

ⁱ Christian, J. (2008). *A new paradigm for workers' compensation & disability benefits systems: The work disability prevention model*, p. 28. Retrieved July 7, 2008, from <http://erd.dli.mt.gov/wcstudyproject/Advisory%20Council%20Conference%20Calls/Christian-%20Montana%202007-11-13.pdf>

Limitations of Incentives

The incorporation of incentives often motivates individuals on a variety of levels. Incentives to increase completion rates of VR participants can have a perverse effect by getting individuals out of the system too quickly without proper treatment. Financial funding for entering a VR program that is not tied to attainment of rehabilitation goals can potentially reduce effort on the part of participants.

Moreover, incentives are of limited value to certain subgroups of vocational rehabilitation participants. Drebing and others¹²⁷ discuss how Veterans Health Administration's vocational rehabilitation participants with head trauma may not be able to contemplate the meaning or impact of incentives. More generally, demographic characteristics affecting return-to-work rates illustrate that participants bring different sets of skills, experiences, and motivations into a program. These inputs can have an impact on return-to-work potential. Incentives uniformly applied across the population do not result in the same return-to-work rates across all groups.

¹²⁷ Drebing, C.E., Van Ormer, E.A., Krebs, C., Rosenheck, R., Rounsaville, B., Herz, L., and others. (2005). The impact of enhanced incentives on vocational rehabilitation outcomes for dually diagnosed veterans. *Journal of Applied Behavior Analysis*, 38(3), 359-372.

Transition into Vocational Rehabilitation Programs

Many injured civilian workers requiring vocational rehabilitation recognize the need for it quickly and can enter the program soon after the injury occurs. Not all veterans have the same need for timely access to vocational rehabilitation services, but for those that do, it can take an extended period to proceed through the necessary steps to become eligible for enrollment in a vocational rehabilitation program.

Australia is an example of a coordinated program for transitioning from active duty to veteran life. The Australian Transition Management Service (TMS) was developed by the Australian Department of Veterans' Affairs (DVA). The vital component of TMS is its role of coordinator during the medical termination process. The service is free of charge and is administered regardless of whether or not an Australian Defence Force (ADF) member has submitted a disability compensation claim. To be eligible for TMS services, an ADF member should be in full-time military service and:

- Believe in the likelihood of being medically discharged,
- Receive a notification on being referred to a Medical Employment Classification Review Board (MECRB), or
- Have been notified of a formal decision on medical discharge.

Depending on the status of medical discharge notice, a TMS Coordinator is required to provide the services described in Table V-2 ensuring that all possible transitional issues are covered before medical discharge is completed.¹²⁸

Table V-2. Australian Transition Management Service Process

Possibility for Medical Discharge	Formal Decision Made on Medical Discharge
<ul style="list-style-type: none"> • Explain the discharge process and highlight the decision a member will need to make • Advise a member of his/her possible entitlements and how to claim them • Prepare a "Discharge Impact Statement" provided to the member's Career Manager for consideration by the MECRB • Refer the member to the relevant areas in Australian DVA to discuss compensation and rehabilitation issues • Refer the member to external or community providers for additional assistance • Encourage the member to attend an ADF Transition Seminar • Refer the member to the Transition Coordinator and Resettlement Officer 	Develop a "Personal Transition Action Plan" that includes: <ul style="list-style-type: none"> • Maximizing discharge entitlements • Possible future employment options • Post discharge medical matters • Superannuation • Housing • Financial planning • Insurance • Compensation • Help to obtain the assistance and services needed

Source: Australian Government. Department of Veterans' Affairs. (n.d.). DVA FACTS MRC06. Retrieved July 28, 2008, from <http://www.dva.gov.au/factsheets/default.htm>

¹²⁸ Australian Government. Department of Defence. Career Transition Assistance Scheme (CTAS). (2007). *Operating guidelines*. Retrieved July 27, 2008, from http://www.defence.gov.au/dsg/organisation/ctas/documents/CTAS_OG%27s_Oct_2007.pdf

Vocational Rehabilitation Experience within Workers' Compensation Programs

An overview of the vocational rehabilitation experience within workers' compensation (WC) programs in the U.S. must recognize its diversity. As with all other aspects of the workers' compensation "system," each state has its regulations pertaining to VR. The last nationwide survey of state VR and return-to-work programs for workers' compensation claimants, conducted by the Texas Workers' Compensation Research Center (TWCRC) in 1995,¹²⁹ highlights the disparate nature of this rehabilitation system. These differences start with the administrative placement of vocational rehabilitation within the worker's compensation agency. There are 30 states that have their own rehabilitation staff within their industrial accident commissions while seven others make no explicit mention of rehabilitation in their statutes.¹³⁰ The TWCRC survey results indicate differences with respect to the participatory status of VR programs (mandatory vs. voluntary), employer/employee responsibilities, referral time frames, VR service delivery systems, and return-to-work programs and outcomes.

A brief review of the findings indicates that in roughly two-thirds of the states' VR for injured workers was voluntary; VR was mandatory (meaning workers may forfeit their indemnity benefits should they refuse VR services) in 15 states. Subsequent to the TWCRC survey many of these states have switched from mandatory to voluntary VR, primarily because of concerns over escalating VR costs. For instance, starting in 2004, California provides workers unable to perform their usual job with a voucher to pay for retraining of up to \$10,000 depending on the severity of their permanent partial disability.¹³¹

The responsibility for paying for any VR services is spread among insurance carriers, self-insuring employers, or publicly-funded work-injury rehabilitation programs. The latter funds, which are found in more than one-third of the states, are financed by special assessments on employers. As costs have escalated, both insurance carriers and self-insuring employers have become active in managing disability in an effort to control costs.

There is large variation in the amount of time that is allowed to elapse between the onset of injury and referral for VR services. The intervals ranged from three weeks all the way up to the point of maximum medical improvement (MMI). For roughly one-third of the states the range was from two to four months; in more than 40 percent of the states there was no specific referral deadline.

VR/return-to-work services are provided by one of three separate delivery systems. Private-sector VR, which provides the gamut of services from initial assessment through

¹²⁹ King, C. T. & Hadley, S. J. (1995). *Return-to-work programs for Texas workers' compensation claimants: Suggested design parameters*, p. 9. Austin, TX: Texas Workers' Compensation Research Center.

¹³⁰ U.S. Chamber of Commerce. (1987). *Analysis of workers' compensation laws*. Washington, DC: Government Printing Office.

¹³¹ California Department of Industrial Relations. (2008). *Division of workers' compensation: Retraining and return to work unit*. Retrieved July 7, 2008, from www.dir.ca.gov/dwc/rehab.html

job placement, is used as a provider to varying degrees in more than 90 percent of the states. Public sector state VR agencies provide services to eligible persons with severe work injuries. Finally, state workers' compensation agencies themselves have in-house VR programs for those no longer working for their pre-injury employer. These programs can range from providing the full spectrum of VR services to merely serving as monitors of the services provided by private-sector rehabilitation vendors.

There are a variety of return-to-work programs being used by the states. Aggressive early intervention strategies are incorporated by many state workers' compensation agencies. Almost 40 percent of the state agencies use financial incentives such as subsidies to make up the difference between pre-injury and post-injury earnings. There are an increasing number of states which reimburse employers for job site accommodations and job re-training costs. For instance, in 2004 California enacted legislation allowing for reimbursement up to \$2,500 for workplace modifications that return an injured employee back to work.¹³²

There is an almost universal paucity of credible data on the efficacy of the various VR/return-to-work programs. One explanation is that the state agencies do not collect outcome data on private sector rehabilitation providers. Meanwhile, in the public sector, VR program outcomes are not distinguished between workers' compensation claimants and other VR clients. Furthermore, the workers' compensation/VR agencies often lack the resources to collect and analyze outcome data.

Several examinations of workers' compensation program outcomes have been conducted for selected states. During the mid-1980s there were four separate studies undertaken which examined outcomes in California, Florida, Michigan, and Minnesota. As noted by Gice (1989),¹³³ these independent studies had widely different study designs, sampling, and data collection methods. With appropriate cautions and adjustments for program non-completers, the study compared the return-to-work rates with program costs across these states. These return-to-work rates ranged from 40 to 77 percent and were achieved at costs which ranged from \$2,300 to \$4,500 (in nominal dollars for the given years).

There is only one nationwide data base available for examining outcomes of VR for certain workers' compensation claimants. RSA maintains a file on all persons referred to the public sector state VR agency. This file allows comparisons to be drawn between referrals to VR from workers' compensation agencies versus all other referral sources. Unfortunately, this file, though not typically used to analyze referrals from workers' compensation agencies, reveals some patterns discussed below. The existing analysis of workers' compensation claimants is dated.¹³⁴

¹³² Ibid.

¹³³ Gice, J. H. (1989). Rehabilitation: Is it working. *CPCU Journal*, 42(2), 121.

¹³⁴ Dean, D. & Berkowitz, M. (1997). *Effectiveness of Rehabilitation Services*. Report to the U.S. Department of Labor. Washington, DC. Unpublished report.

In 1980, there were some 5,460 workers' compensation referral cases "closed" from the state VR agencies, representing 1.3 percent of all public sector VR closures. Workers' compensation referrals differ from other referrals to public sector VR in important demographic and socioeconomic considerations. For instance, individuals referred by WC are more likely to be male than female (76.2 versus 54.7 percent) and Caucasian (83.0 versus 77.7 percent) than the general VR caseload. A starker contrast emerges when comparing the primary disabling condition of the two cohorts. Almost 90 percent of workers' compensation referrals to VR have musculo-skeletal impairments. This is the primary disabling condition for only one-fourth of the non-WC VR referrals; the conditions of mental illness and developmental disabilities comprise more than one-third of all non-WC cases.

Another important distinction emerges with respect to a key indicator: the outcome of the VR process. While less than 60 percent of all workers' compensation referrals to VR are "successfully" rehabilitated (that is, are employed for at least two months after leaving the program), almost two-thirds of all other referrals to public sector VR are rehabilitated. This statistically significant difference is because almost one of every six workers' compensation referrals to VR dropped out prior to receiving substantial VR services, while less than 10 percent of all other non-workers' compensation VR referrals dropped out. Unfortunately, little is known about long-term VR efficacy because earnings data are only available while the individual is involved in the VR process and then such earnings are only available if the person is successfully rehabilitated.

Most states' return-to-work programs are concerned with when and under what conditions a person receiving workers' compensation benefits should be referred to some vocational rehabilitation provider either a governmental program, or increasingly in recent years, to some private provider. The idea has been to return persons to work, but the emphasis has been on process rather than outcomes.

Contrasting Workers' Compensation's VR with VA's VR&E Chapter 31 Program

The primary distinction between VR provided through the workers' compensation system and VA's VR&E program pertains to the services provided for re-employment. In several U.S. jurisdictions, the legislation or the rules and regulations provide a hierarchy of preferences when it comes to return-to-work status. For example, in Montana the rankings in order of preference were:¹³⁵

- Return to the same position with the old employer,
- Return to another modified position with the old employer,
- Return to a related occupation based on the worker's education and marketable skills, and

¹³⁵ Blackwell, T.L., Leierer, S.J., Haupt, S., & Kampotsis, A. (2003). Predictors of vocational rehabilitation return-to-work outcomes in workers' compensation. *Rehabilitation Counseling Bulletin*, 46(2), 108-114.

- Return to different work with another employer through the provision of on-the-job training, short-term training (less than 24 months), or long-term training (48 months maximum).

Under this order of preference, retraining or reeducation of the worker is seen as a last resort to be undertaken only when it was not possible for the worker to return to the pre-injury job or at least to familiar surroundings. Once it is decided that the worker cannot return to the pre-injury job and some retraining is necessary, then training becomes the goal/purpose of training. When vocational rehabilitation is mandated by state law there may be a dispute about the appropriate type of training to be provided.

“This means a debate over whether the law that authorizes rehabilitation requires employers or carriers to offer schooling or training services in all cases and who -- the injured worker, the worker's attorney, the employer or carrier, a rehabilitation professional, or a hearing officer -- should have the final word on which services are administered in a specific case.”¹³⁶

There is no such debate in the provision of VA benefits to entitled veterans.

A second difference pertains to the differing objectives of public sector VR versus private sector VR in regard to return-to-work definitions typically mandated by a state workers' compensation agency. Even within the narrow statutory definitions established for the state workers' compensation agencies, there is still ambiguity as to whether one qualifies for retraining to return an injured person to any job, or, alternatively, to build on the injured worker's existing strengths to merely return the individual to “suitable gainful employment.” The public sector VR program is charged with the goal of maximizing the vocational potential of an individual applying for services. This can entail a regimen of formal training, retraining, or schooling. In contrast, the mission of private sector rehabilitation is often a much narrower objective of returning the injured person to work as expeditiously as possible. Oftentimes the “client” in private sector rehabilitation is the employer or insurance carrier whose interests are necessarily concerned with cost minimization. Consequently, private sector providers are more apt to prescribe job modification and/or placement than the remedy of more costly training and education that are the norm in the VA program.

Contrasting non-VA Public Sector VR with VA's VR&E Program

The public sector VR program is a state-federal partnership providing return-to-work services to persons with work disabilities. The program receives more than \$3 billion annually in federal and state funding and had a total caseload of some 1.5 million individuals in 2004, with over half-a-million applicants determined to be eligible for services during this year. As Gramlich¹³⁷ observed:

¹³⁶ Gardner, J.A. (1988). *Appropriateness and effectiveness of vocational rehabilitation in Florida: Costs, referrals, services, and outcomes*, p. 4. Boston, MA: Workers' Compensation Research Institute.

¹³⁷ Cohen, J., and Pelavin, D. (1989) *National Survey of Personnel Shortages and Training Needs*. Washington, DC: Pelavin Associates, Inc. Page 2.

“The VR ‘program’ is really a set of programs at the state level... And further, even within a state there are many separate sub-programs for separate clientele groups.”

This observation suggests that analysis of VR should be conducted at the state-level. Ideally, a contrast of the public sector VR program with VA’s VR&E program would examine cohorts at the same period of application for their respective programs. Data availability precludes such an exact match. Therefore because of data sufficiency issues, contrasts are drawn between the 40,000 applicants for VA’s VR&E benefits from the VR&E Service in 1992¹³⁸ and the 11,600 applicants for services from the Virginia Department of Rehabilitative Services (DRS) in 1988.¹³⁹

One of the biggest contrasts to be drawn between the federal/state public sector VR program and VA’s VR&E program pertains to the nature of the disabling conditions of the respective populations served. More than half of the applicants for VR&E Services reported a primary service-connected disability that was musculo-skeletal in nature. In the public sector VR program only slightly more than one-quarter had impairments attributable to a musculo-skeletal conditions. More than one in six VR applicants had a cognitive impairment and another one in five had a pre-existing mental impairment. These conditions would preclude them from being eligible for military service.

These cohorts also differ with respect to several important demographic and socio-economic considerations. At the point of application the VA applicant is older (38 versus 32 years of age), more likely to be male (90 versus 56 percent), and married (62 versus 48 percent). Most importantly is the much higher educational attainment of the VA applicant (an average of 12.6 versus 10.1 years of schooling completed at the time of application). Again, most public sector VR applicants would not be eligible for the military. Moreover, this difference in levels of education has dramatic implications for the types of VR services provided to the respective populations.

A second major distinction between the public sector VR and VA’s VR&E program is the nature and intensity of the services provided through each program. The VR&E program primarily provides college training to disabled veterans. Roughly seven-eighths of those VA applicants in 1992 who received VR&E services were provided with academic training; one-eighth received non-academic training. The total costs of this service provision over the period from 1992-2002 for these 14,115 veterans was estimated to be roughly \$316 million (in 2007 dollars). This is an average cost to VR&E of \$22,363 (in 2007 dollars) per “treated” veteran.¹⁴⁰

The value of VR services provided to those 11,596 applicants to the Virginia Department of Rehabilitative Services (DRS) in 1988 who ultimately received significant services is

¹³⁸ Dean, D. & Schmidt, R. (2005). *An outcomes-based assessment of the Chapter 31 Program*. Final report (delivery order: 101-Y27247). Washington, DC: Veterans Affairs, VBA Vocational Rehabilitation and Employment Services. Unpublished report.

¹³⁹ Dean, D. & Honeycutt, T. (2005). *Evaluating the long-term employment outcomes of vocational rehabilitation participants using survey and administrative data*. Champaign, IL: Disability Research Institute. Social Security Administration.

¹⁴⁰ Dean, D. & Schmidt, R. (2005). *An outcome-based assessment of the Chapter 31 program*, p. 41. Final report (delivery order: 101-Y27247). Washington, DC: Veterans Affairs, VBA Vocational Rehabilitation & Employment Service. Unpublished report.

markedly different. The value of these purchased services was tracked for these applicants from 1988 through 2001. The nominal dollar amount for these individuals' initial VR use was \$9.5 million (\$1,634 per person) while that for subsequent VR episodes was \$3.6 million (\$622 per person) for a total of \$13.1 million for all cases of applicants in 1988 who had closed through 2001 (\$2,256 per person). In 2007 dollars, total expenditures over the initial and subsequent cases totals about \$20 million, or \$3,340 per person over the 5,826 individuals receiving significant VR services. The service package is also much different in terms of the nature of the VR provided. The most prevalent service provided was "restorative" in nature (for example, prosthetic device and knee surgery). VA beneficiaries would have received such services through the Veterans Health Administration. Almost one-third of DRS clients received training services. However, much of this is "pre-vocational" in nature in the form of personal or work adjustment training where individuals with developmental disabilities learn about the "world of work." Only one in twelve VR recipients received some form of educational service provision. Moreover, this training component is usually for vocational school and rarely for college.

A final distinction between public sector VR and VA's VR&E program pertains to employability during both the pre-application and post-VR periods. Dramatic differences emerge with respect to both the employment rates and the level of earnings if the individual is employed.

The employment data reported to the Social Security Administration for 1991, the year prior to VA application, revealed an 88 percent employment rate for the nearly 40,000 applicants to the VR&E Service. The annual earnings for those employed in 1991 averaged \$27,600 (in 2007 dollars). By the year 2000, eight years after VR&E application, the employment rate had dipped to roughly two-thirds while earnings, if employed, averaged approximately \$40,700 (in 2007 dollars).¹⁴¹

DRS applicants in 1988 revealed significant differences from their counterparts applying for VR&E services in 1992. During the pre-VR application year of 1987 only two-thirds of the 10,694 DRS applicants reported earnings. The annual earnings in this period averaged only \$12,500 (in 2007 dollars), which was about 40 percent of what a VA applicant earned prior to applying to the VR&E program. Examining this employment data eight years after application to the DRS revealed an employment rate of only 40 percent. The average annual earnings of these employed individuals was only \$16,000 (in 2007 dollars) for this period eight years after application for public sector VR.¹⁴²

Vocational Rehabilitation and Reintegration in Foreign Countries

European VR programs including ones in Germany, the Netherlands, and Norway have strong programs with elements of potential interest to VA.

¹⁴¹ Ibid, p. 48.

¹⁴² Dean, D. & Schmidt, R. (2005). *Data on Employment of People with Disabilities*. Unpublished report.

Deliverable 3: Validating VEC Employment and Earnings Information using Aggregated Data from SSA Administrative Earnings Files," Virginia Department of Rehabilitative Services, Richmond, VA, p. 3.

VR and Reintegration in Germany

Return-to-work is a strong institutional feature in Germany. Indeed, Germany has a long history of applying the principle of “rehabilitation before pension” and incorporates this philosophy in the treatment of persons receiving temporary disability pensions. Disabled individuals requiring occupational rehabilitation (that is, moving to a different job following medical rehabilitation) are provided services under the auspices of the Statutory Pension Insurance system. Additionally, this agency provides rehabilitation services to any person who has contributed for at least 15 years to the pension fund. All other disabled persons seeking rehabilitation are referred by the Statutory Health Insurance Funds to the Federal Employment Service.¹⁴³

The Federal Employment Service determines based on medical and other information, whether a person can be re-integrated into the labor market through rehabilitation. Occupational rehabilitation benefits typically last for up to two years and include cash benefits for initial training or retraining and other supports (for example, expenses for study aids, working clothes and equipment, and domestic help). Cash benefits are made if work income has decreased. These payments represent 60 percent of the person’s most recent gross earnings for persons with children and 54 percent for persons without children.¹⁴⁴

Some research has shown that the principle of “rehabilitation before pension” is not always strictly implemented. As Sims (1999) summarizes, “a lot of persons receive pensions well before, or instead of, rehabilitation. The main reason for this problem seems to be inadequate availability of services available due to ‘fragmentation of authority across competing agencies’.”¹⁴⁵

VR and Reintegration in the Netherlands

Rehabilitation and disability management are prominent in the Netherlands’ short-term system, with employers required to involve Occupational Health Services (OHS) in the treatment and return to work of short-term beneficiaries.

Aarts and de Jong (2003) noted that the overall expenditure on vocational rehabilitation was quite low.¹⁴⁶ Indeed, they undertook a comparative analysis of the share of the disability payments dedicated to return-to-work programs in several European countries. While Germany allocated 4.2 percent and Belgium spent 1.4 percent of their disability payments on VR, the Dutch share was a mere 0.5 percent of the total disability budget.

¹⁴³ Dean, D. H. (1990). Vocational rehabilitation innovations for disabled persons within the Federal Republic of Germany. In M. Berkowitz. (Ed.), *Forging linkages: Modifying disability benefit programs to encourage employment*. New York, NY: Rehabilitation International.

¹⁴⁴ Viebrock, H. (2003). Disability pensions in Germany. In C. Prinz (Ed.), *European disability pension policies: 11 country trends 1970-2002*. Hampshire, UK: Ashgate Publishing, Ltd.

¹⁴⁵ Sims, J. (1999). Improving return-to-work strategies in the United States disability programs, with analysis of program practices in Germany and Sweden. *Social Security Bulletin*, 59(3), 41-50.

¹⁴⁶ Aarts, L., & de Jong, P. (2003). The Dutch disability experience. In C. Prinz (Ed.), *European disability pension policies, 11 country trends 1970-2002*. Hampshire, UK: Ashgate Publishing, Ltd.

The Dutch government enacted a set of reforms, implementing the Reintegration of Work Handicapped Persons Act (REA) in 1998. One of the major thrusts of this law was to provide wage subsidies to persons designated as “work-handicapped.” In 1998 these new subsidies provided firms with a subsidy of Netherlands Guilders (NLG) 8000 (US \$4,500 in 1998 dollars and \$5,770 in 2007 dollars) for placing workers unable to perform their previous job duties in a new commensurate job. Additionally, another one-third wage subsidy is available for workers who are found to have extraordinary readjustment costs.¹⁴⁷

Under the current legislation, there is a pronounced emphasis on early intervention with well-defined responsibilities for the three actors now involved in the process: the disabled employee, the employer, and the firm’s contracted occupational health service provider. Within six weeks of a sickness benefit claim, the OHS medical advisor visits with the person to ascertain the medical cause of the absence, the person’s functional capacities, and a prognosis for return-to-work status. A reintegration plan specifying various milestones is then drawn up between the employer and employee by the eighth week of absence. Employees who have not been reintegrated by the 35th week are only allowed to apply for a disability pension if he or she submits the original rehabilitation plan and an OHS assessment as to why there has not yet been a return to work.

On the basis of these data, employer and employee draft a VR program in which they specify an aim (resumption of current work) and the steps needed to reach that aim. They appoint a case manager and fix dates at which the program should be evaluated and modified if necessary. The rehabilitation program should be ready by the eighth week of sickness. It is binding for both parties, and one may summon the other when proven negligent. After 35 weeks of sickness, the Social Insurance Administration sends a Disability Insurance application form to the sick employee. Disability Insurance claims are only considered admissible if they are accompanied by a rehabilitation report containing the original rehabilitation plan and an assessment of why the plan has not (yet) resulted in work resumption.

VR and Reintegration in Norway

Norway has two rehabilitation programs. Medical rehabilitation benefits are offered through the National Insurance Agency, while vocational rehabilitation benefits are administered by the Directory of Labor. Both programs are funded through the social insurance scheme. To qualify for benefits, applicants must have a disability rating of at least 50% and the condition has to have lasted for at least one year (that is, the applicant has to have received sickness benefits for one year). The applicant also must be actively involved in rehabilitation. Cash benefits are paid at a rate of two-thirds of former earnings. These benefits are granted for a period of one year, and beneficiaries may apply for permanent disability benefits at the end of that year.

¹⁴⁷ Ibid.

The sickness benefit in Norway specifies that at 12 weeks the National Insurance Administration creates a rehabilitation plan for the employee. Privately run “enterprises” are involved in returning employees work. These organizations have relationships with both employers and the National Insurance Administration for funding and reintegration services.

The rehabilitation measures for disabled individuals in Norway consist of a complicated service delivery and cash benefit system that also serves as a temporary disability payments scheme. The general rule in the National Insurance Scheme is that after 12 months on sick leave, an individual can apply for either medical or vocational rehabilitation benefits or for a disability pension. These rehabilitation benefits are provided to insured persons who are not entitled to sickness benefits but who have been unemployed for a period of one year. However, prior to applying for a disability benefit, individuals must document that they have exhausted all the options available through medical and vocational rehabilitation. Certain individuals (for example, persons with an illness that is terminal or who has severe impacts on functional capacity) are exempted from the rehabilitation process and move directly to the disability pension program.

The VR cash benefit is granted to an insured person who is undergoing VR training. It is also granted during periods before rehabilitation training measures start and after medical rehabilitation has been provided. The amount of a medical or vocational rehabilitation cash benefit corresponds to that of a time-limited disability pension and provides roughly two-thirds of prior wage income with both minimum and maximum benefit thresholds. The minimum benefit is 1.8 times the basic amount; the maximum is two-thirds of prior earnings up to six basic amounts. A partial rehabilitation allowance may also be granted if the person’s work capacity has been reduced by 20 percent or more during continued medical treatment after the payment period for sickness benefit has expired. These cash benefits are generally only granted for a period of 52 consecutive weeks.

The VR sector has undergone rapid growth since the National Social Insurance Scheme was introduced in 1966. Aakvik and others study (2000) of the Norwegian Vocational Rehabilitation program in 1993 found daily participation in VR training programs totaled 35,000 persons.¹⁴⁸ This enrollment amounts to around 1.5 percent of the labor force; 0.64 percent of Norwegian Gross Domestic Product (GDP) is spent annually on these programs. The traditional regimen in Norway was to introduce VR measures between extended sickness benefits and disability pension benefits. In 1994, amendments to the National Insurance Act gave the Employment Service overall responsibility for VR training measures. The time limit on medical rehabilitation, which previously had no limitation, was reduced to one year. The intent of such legislation is increasingly

¹⁴⁸ Aakvik, A., Heckman, J., & Vytlačil, E. (2000). *Treatment effects for discrete outcomes when responses to treatment vary among observationally identical persons: An application to Norwegian vocational rehabilitation programs. Technical Paper Working Paper 262*. Cambridge, MA: National Bureau of Economic Research.

towards early intervention (for example, through vocationally oriented rehabilitation activity during sickness leave).

Aakvik and others (2000) evaluated the effect of VR training programs on return-to-work outcomes for women. The typical duration of such training was reported to be about six months. The study found that program participants have a 4.6 percent higher employment rate than non-participants. When the study controlled for the observable characteristics of applicants, the average treatment effect fell to 4.1 percent. When the study controlled for the unobservable characteristics of applicants, the average treatment effect fell to -1.4 percent and the effect of treatment on the treated measures to -11 percent. The study also found evidence of substantial heterogeneity in response to training.

Veterans' Employment and Training Service

The U.S. Department of Labor's Veterans' Employment and Training Service (DOL VETS) offers a number of programs designed to assist returning veterans and disabled veterans in obtaining employment. These programs are discussed in the section that follows.

Jobs for Veterans State Grants

DOL provides grants to states in proportion to the number of veterans seeking employment within the state. These grants support two staff positions within the State Employment Service:

- Disabled Veterans' Outreach Program specialists (DVOP)
- Local Veterans' Employment Representatives (LVER)

DVOP specialists provide intensive services for disabled veterans. Emphasis is placed on individuals who are educationally or economically disadvantaged including homeless veterans and those with the greatest barriers to employment. DVOP specialists provide outreach in VA's VR&E program offices, VA Medical Centers, and military installations. LVER representatives conduct outreach to employers to increase employment opportunities for veterans, particularly disabled veterans, and to help veterans obtain and retain employment. DVOP and LVER staff usually are located at State Workforce Agency One-Stop Career Centers (or the state's equivalent) and/or at VA's VR&E program locations.

Transition Assistance Program

The U.S. Department of Labor, Social Security Administration, and VA participate in the Transition Assistance Program (TAP) which provides job search assistance to service members within 180 days of separation or retirement from the military. The principal activity is a three-day workshop provided at military installations covering career decision-making, resume preparation, interview techniques, and job search skills. Separating service members with disabilities are offered TAP program services plus

additional assistance addressing special needs and job readiness preparation discussed in the next section.

Disabled Transition Assistance Program

Disabled Transition Assistance Program (DTAP) briefings are for service members who intend to file a claim for service-connected disability. The special benefits available for individuals with service-connected disabilities are described: specially adapted housing and vehicles, SSDI if severely disabled, and VR&E for individuals needing employment assistance or education and training to overcome employment handicaps related to their service-connected disabilities.

Homeless Veterans' Reintegration Program

The DOL VETS program offers competitive grants to state and local Workforce Investment Boards and other community-based organizations to provide case management services to assist homeless veterans find meaningful employment. Services include career counseling, supportive services such as medical and substance abuse treatment, assistance locating temporary or permanent housing, and transportation assistance. The purpose is to help homeless veterans achieve a stable lifestyle and employment.

DOL Veterans Workforce Investment Program

The DOL Veterans Workforce Investment Program (VWIP) offers competitive two-year grants to state and local governments and community organizations to provide services to veterans who have service-connected disabilities, who face significant employment barriers, and to other recently separated veterans. The grants provide employment and training services to eligible veterans to facilitate obtaining gainful employment.

Related Activities

The DOL VETS program also provides support with respect to related activities to encourage and improve employment prospects for veterans. DOL established and supports the National Veterans' Training Institute at the University of Colorado at Denver to provide specialized training and skills to State Employment Security Agency and other veterans' service provider staff.

The agency oversees the Federal Contractor Program, which requires that Federal contractors list jobs with State Employment Security Agencies and provide preference to disabled, recently-separated, and special category veterans (such as Vietnam era). DOLVETS also provides assistance to individuals who feel they have not been treated fairly under the federal government requirements for veterans' preference in employment in federal agencies.

Program Impacts

The DOLVETS programs are intended to provide employment services, preference in hiring, and improved placement and retention to military veterans. Table V-3 shows performance outcomes for the State Workforce Agencies providing employment services in local communities for veterans and disabled veterans for the most recent period.

Table V-3. Performance Outcomes by State, State Workforce Agency Career Centers, Quarter Ending December 31, 2007

Veteran Entered Employment Rate	60%
Veteran Employment Retention Rate	81%
Disabled Veteran Entered Employment Rate	55%
Disabled Veteran Employment Retention Rate	80%

Source: U.S. Department of Labor. Veterans Employment and Training Service. (n.d.). State level employment outcomes for veterans and disabled veterans. Retrieved April 21, 2008, from <http://www.dol.gov/vets/vetoutcomes/index.htm>

The *entered employment rate* is the proportion of participants who were employed in the quarter following the last quarter in which they received services from the State Workforce Agency. The *employment retention rate* is the proportion of individuals receiving services who are employed in the first and second quarter after the last quarter in which they received services. In addition, an evaluation of TAP found that separating service members provided with TAP services, on average, obtained their first civilian employment three weeks sooner than individuals who did not participate in TAP.

The most recent improvement in the provision of employment services for veterans is the Jobs for Veterans Act of 2002 (Public Law 107-288). Among other things, the legislation allowed greater flexibility in DVOP/LVER staffing such as creating part-time positions and permitting a different mix of DVOP specialists and LVER staff members. The Act also provided a national performance standard for veteran entered employment rates (EERS) and required that veterans receive priority service in all U.S. Department of Labor-funded training and employment programs.

Five states were selected by the study team for evaluation of their programs based upon changes in their DVOP and LVER staffing and procedures. Table V-4 compares their experience to the national averages for fiscal year 2005 based on the ETA 9002 D report.¹⁴⁹

¹⁴⁹ Description of the Veterans Employment and Training Service Form 9002 D can be found at: www.DOLETA.Gov/OMB/CN/LEAS/Attachment-A-Employment=Training=406-Handbook-071405.Pdf

Table V-4. Entered Employment Rates for Veterans, Disabled Veterans, Special Disabled Veterans, and for Veterans Receiving VETS-funded services, by Selected States: 2005

State	Overall Veteran EER (%)	Disabled Veteran EER (%)	Special Disabled Veteran EER (%)	Unemployment Rate (%)	Percentage of Veterans Receiving VETS Services
Colorado	59	55	55	5.2%	27%
Georgia	68	61	56	5.0%	64%
Illinois	63	59	53	5.8%	73%
Massachusetts	58	47	45	5.3%	63%
New Jersey	51	43	43	5.0%	81%
National Average	62	57	53	4.7%	61%

Source: Table 4 p. 8 and Table 5 p. 9, U.S. Department of Labor, Center for Planning and Results, Final Report, An Assessment of the Influence of the Jobs For Veterans Act and the Workforce Investment Act on the Employment Outcomes of Veterans, SRA International, Inc., August 31, 2007.

The results across the states included in the study were varied and mixed. For example, Georgia, which experienced a 31 percent increase in DVOP/LVER staff, had the highest entered employment rates for each category of veteran. New Jersey experienced a DVOP/LVER staff increase of 10 percent, while Illinois lost 25 percent.

Also mixed were the results relative to the proportion of veterans serviced by VETS staff apparently due to differences in program and staff organization among the states. For example, in New Jersey, 81 percent of veterans were served by DVOP/LVER staff with an overall entered employment rate of 51 percent; while in Illinois 73 percent of veterans were served by DVOP/LVER staff with an overall 63 percent entered employment rate. In contrast, Massachusetts only served 63 percent of veterans with DVOP/LVER staff, but experienced a 58 percent entered employment rate. In Massachusetts, the emphasis was on case management, a more intensive treatment method.

At the other extreme, in Colorado, only 27 percent of veterans were served by DVOP/LVER staff, but the entered employment rate (59 percent) is comparable to the rate in Massachusetts. The report notes that Colorado has a much more integrated Employment Service One-Stop system, with Wagner-Peyser Employment Service staff playing a larger role in service provision to veterans. The Wagner-Peyser Act funds the State Employment Service providing employment services to the general population of the State. The smaller recorded proportion of veterans served by DVOP/LVER staff probably means more intensive services are provided to fewer veterans. However, provision of services to veterans by ES staff implies an overall higher overall service rate and, hence, a higher employment outcome rate.

The 2002 Jobs for Veterans Act (JVA) specifies the integration of JVA into the 1998 Workforce Investment Act (WIA). Previously, the degree of integration had varied by States. The Jobs for Veterans Act includes requirements for incorporating a state program plan for implementing JVA, integrating DVOP and LVER staff into the WIA

delivery system, using WIA-consistent performance measures for veterans, and provision of priority of service to veterans in WIA employment and training programs. Past experience with providing for service to specific groups of unemployed workers (for example, dislocated workers) into the plan (and reporting and evaluation) for the Employment Service suggests that positive results will eventually emerge.

Summary

The goal of vocational rehabilitation and disability programs is generally to enable disabled individuals to return to work. Various approaches are used to encourage and provide incentives, from on-the-job training to education to job placement assistance. Early entry into vocational rehabilitation has been proven to enhance success, therefore early intervention is essential. Support for families and caregivers has also been found to be crucial to successful rehabilitation and to the quality of life of the individual and the families/caregivers. This family support has been especially helpful for individuals with PTSD. Some programs have used subsidies to employers who hire difficult-to-place employees. A major disincentive to rehabilitation is that time devoted to education and training represents foregone earnings; that is, income that could be earned from employment.

VI. FOREIGN GOVERNMENT DISABILITY PROGRAMS

In this chapter we review temporary and permanent disability benefit programs in foreign countries. Canada's provincial programs are examined in some detail, while we provide only a snapshot of programs in other countries. Vocational rehabilitation programs for three foreign countries are examined in the previous chapter of this volume.

Canada's programs are especially relevant to the current effort since many of its provincial/territorial workers' compensation programs are dual award programs, providing separate benefits for economic losses and non-economic/quality of life losses. The quality of life components of Canadian programs are discussed in greater detail in Chapter VIII.

Canadian Programs

Canada is a highly decentralized federation made up of ten provinces and three territories. Labor legislation is provincial level jurisdiction, consequently workers' compensation systems vary somewhat from province to province although there are many common features. Canadian workers' compensation systems are modeled on the Meredith principles dating back to 1913.¹⁵⁰ Both are essentially exclusive remedy systems (that is, there is no recourse to tort law). The models operate on the principle of no fault, providing collective liability for employers and compulsory insurance coverage for workers through publicly administered, not-for-profit, monopolistic insurance agencies.

The five Meredith Principles were defined in an Ontario Royal Commission Report by Judge Sir William Meredith in 1913:

- **No fault compensation:** Workplace injuries are compensated regardless of fault. The worker and employer waive the right to sue.
- **Collective liability:** The total cost of the compensation system is shared by all employers. All employers contribute to a common fund and financial liability becomes their collective responsibility.
- **Security of payment:** A fund is established to guarantee that compensation monies will be available. Injured workers are assured of prompt compensation and future benefits.
- **Exclusive jurisdiction:** All compensation claims are directed solely to the Compensation Board. The Board is the decision-maker and final authority for all

¹⁵⁰ Meredith, W.R. (1913). *Final report on laws relating to the liability of employers to make compensation to their employees for injuries received in the course of their employment which are in force in other countries, and as to how far such laws are found to work satisfactorily*. Toronto, Canada: Government Printer.

claims. The Board is not bound by legal precedent; it has the power and authority to judge each case on its individual merits.

- **Independent board:** The Compensation Board is both autonomous and non-political. The Board is financially independent of government or any special interest group.

Workers' compensation in Canada is a social insurance mechanism established to protect workers from the physical and financial impact of injury and disease sustained in the course of employment. It also provides employers with protection from costly litigation. Under the authority of their respective ministries of labor, workers' compensation boards function as administrators of the legislative act that binds them, the insurers, the adjudicating tribunals, and the providers (or at least the third-party payers) of medical and rehabilitative services.

While many programmatic variances exist regarding indemnity and other benefits, workers' compensation programs across the country cover the costs of health care and other treatment, vocational rehabilitation expenses, and lost earnings associated with occupational injury and disease. The four major types of benefits include: wage replacement on a temporary basis until return-to-work status (typically in the order of 70 percent of gross earnings or 90 percent of net earnings, subject to a maximum and minimum); permanent disability payments for workers with continuing residual impairment (typically for loss of earnings, and in some instances for non-economic losses and forgone retirement savings); fatality or survivor benefits in cases where a worker dies from the occupational injury or disease; and health care and other medical rehabilitation services purchased from the universal coverage health care plans within each jurisdiction. Workers are free to choose their own health care provider within the provincial program, and all services prescribed by the attending physician for the occupational injury or disease are paid for by workers' compensation insurance. Return-to-work and labor market re-entry programs are provided for injured workers and survivors where necessary.

In 2006 workers' compensation covered 83 percent of workers in Canada. Since workers' compensation is a provincial jurisdiction, there are variations in the types of injuries and illnesses that are covered by it, though provincial programs generally cover similar conditions. Not all injuries and illnesses are covered, even though they may be attributable to work exposures. For example, most mental health conditions such as stress and depression are generally not compensable, even if they are associated with work exposures. Some musculoskeletal injuries such as repetitive strain can also be difficult to attribute exclusively to work. There are requirements that exposure giving rise to a condition must be predominantly from work. Long latency conditions may also be difficult to associate with a particular work exposure. The compensation system is financed by payroll taxes levied on employers and averages about 3 percent of covered payroll, with some variation by industry, reflecting different risk and accident experiences. Virtually all jurisdictions have introduced financial incentives for firms

through experience rating, which links the firm's premium rate to the cost of its actual claims experience.

Work disability benefits are also available from other sources. A federally administered pension program called the Canada Pension Plan (CPP) provides disability, pension, and survivor benefits for all workers in nine of the ten provinces and the three territories. The province of Québec has its own parallel plan called the Québec Pension Plan (QPP) with similar provision for all workers in Québec. The CPP/QPP programs are financed 50/50 by workers and employers through payroll contributions determined by a set fraction of insurable earnings, the latter being determined by the average industrial wage. Self-employed individuals pay 100 percent of the insurance premium. To be eligible for disability benefits, a claimant must have made contributions for a minimum number of years and be wholly or substantially disabled (benefits are not provided for partial work disability). The work disability does not have to be caused by a work injury or disease. In most provinces, workers' compensation programs have a financial offset of benefits if CPP/QPP benefits are received concurrently with workers' compensation benefits for an occupational injury or disease.

Some employers also provide wage-replacement benefits for general sickness absences and short- and long-term disability that is not compensable through workers' compensation (that is, non-compensable injuries and diseases). These programs are not obligatory, consequently only some employers offer them. The formal burden of financing these disability benefits falls wholly or partially on the employer. Portions not falling on employers come from workers through payroll deductions. For some short- and long-term disability programs, employers purchase insurance through private insurance carriers. In principle, a worker is not eligible for wage-replacement benefits from a private insurer if the absence is attributable to a compensable occupational injury or disease. A workers' compensation claim must be made for such conditions.

The federally administered Employment Insurance Program is another source of short-term benefits for individuals not able to continue their employment due to injury or disease. This program is also formally financed by workers and employers (50/50) through payroll contributions determined by a set fraction of insurable earnings. To be eligible, a worker has to contribute for a minimum number of weeks.

Lastly, Social Security (a provincial level program) also offers means-tested benefits for individuals unable to work due to disability. These benefits are financed from general taxes and are treated as a last resort (that is, earnings and benefits received from other programs are subtracted from potential Social Security benefits).

Detailed Review of Canadian Workers' Compensation Programs

Short-term disability benefits in all provinces and territories are based on loss of earnings and are paid as a percentage of gross pre-tax or net after-tax labor market earnings. In most cases temporary total and temporary partial benefits are provided, the latter for claimants whose earnings loss is not 100 percent. Table VI-1, taken from data provided by the Association of Workers' Compensation Boards of Canada, provides

a summary of the basis for temporary benefits determination across the 10 provinces and 3 territories in Canada.

Long-term Disability Benefits

If after reaching maximum medical improvement (MMI) a claimant sustains a residual, permanent impairment, the claimant will be eligible for permanent impairment award and/or long-term disability compensation. Most workers' compensation programs in Canada are based on a dual award system that provides a loss of earnings capacity benefit and a non-economic loss award. (British Columbia and the Northwest and Nunavut Territories are not.) Generally, individuals receive a loss of earnings capacity benefit if they sustain a permanent impairment and are deemed unable to earn an income comparable to their pre-injury earnings. The loss of earnings capacity benefit is based on a formula that takes into consideration both pre-injury earnings and post-injury earnings potential, and is reassessed at several points in time post injury (the period varies by province).

A non-economic loss award is received as compensation for pain, suffering, and loss of quality of life by individuals sustaining permanent impairments as a result of work-related injuries and illnesses. The amount awarded is based on a formula that takes into consideration the percentage of impairment (using a guide such as the *AMA Guides to Evaluating Permanent Impairment*) and, in some jurisdictions, the age of the recipient, and is usually awarded as a lump-sum payment.

This dual award system of compensation is consistent with recent socio-medical concepts of disability such as that defined by the World Health Organization's International Classification of Functioning and Disability. These conceptualizations of disability make a distinction between impairment and work disability, characterizing work disability as a person-in-context phenomenon (that is, an impairment is a necessary but not a sufficient condition for work disability). Other factors such as an individual's skills and labor-market opportunities play an important role in earnings capacity. Table VI-1 shows the types and key features of programs across Canada.

Table VI-1. Weekly Benefits and Other Features of Canadian Temporary Disability Programs (2008)

Jurisdiction	Covered labor force, Number of new lost-time claims in 2007, Lost-time injury rate in 2007	Percent of earnings	Maximum compensable earnings	Maximum weekly payments	Minimum weekly payments
Alberta	1,743,866 37,577 2.15%	90% of net earnings	\$68,500	\$867.90	\$292.21 or 100% of net earning if less
British Columbia	2,109,925 63,042 2.99%	90% of net earnings	\$66,500	\$871.39	\$346.04 or 100% of net earnings if less
Manitoba	409,974 18,134 4.42%	90% of net average earnings 80% of net after 24 months of cumulative benefits	no maximum	\$925.39 based on earnings of \$77,000, though there is no maximum insurable earnings	\$311.30 or 100% of net earnings
New Brunswick	340,633 4,261 1.25%	85% of loss of net earnings	\$54,200	Single \$633.96 Married \$669.29	None
Newfoundland and Labrador	210,565 4,577 2.17%	80% of net earnings	\$49,295	Single \$553.90 Married \$577.10	None
Northwest Territories and Nunavut Territory	31,700 908 2.86%	90% of net earnings	\$70,600	\$1,061.41	\$420.75 or 100% of net earnings
Nova Scotia	321,735 8,339 2.56%	75% of net earnings for the first 26 weeks 85% of net earnings thereafter	\$48,400	\$531.87 (first 26 weeks) \$602.79	None
Ontario	4,822,705 83,179 1.72%	85% of net average earnings	\$73,300	\$944.45	\$315 or 100% of net earnings if less
Prince Edward Island	64,650 812 1.26%	80% of net for first 38 weeks 85% of net after 38 weeks	\$45,400	\$511.34 (first 38 weeks) \$543.29	None
Québec	3,593,636 93,866 2.61%	90% of weighted net income	\$60,500	\$804.92	\$252.04
Saskatchewan	367,017 14,148 3.85%	90% of net earnings	\$55,000	\$697.68	\$365.28 or 100% of gross if less
Yukon Territory	15,000 494 3.29%	75% of gross earnings	\$74,100	\$1,052.87	\$346.64 or 100% of gross if less

**Net earnings arrived at after deductions for employment insurance, Canada/Québec Pension Plan, and federal and provincial income tax from gross earnings. Conversion to U.S. dollars is not provided because as of July 24, 2008 1 Canadian dollar was equal to .99 U.S. dollars.

Source: Association of Workers' Compensation Boards of Canada. (2008). Retrieved June 18, 2008, from www.awcbc.org

Table VI-2. Features of Canadian Long-term Disability Programs (2008)

Jurisdiction	Type of program	Percent of earnings	Maximum and minimum monthly benefits	Retirement benefits
Alberta	Dual award program Economic loss payment (ELP): based on loss of earnings capacity Non-economic loss payment (NELP): based on percent permanent impairment	ELP: 90% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings capacity) NELP: lump-sum with maximum of \$78,414.53 and minimum of \$1,568.29	Max: \$3,771.24 Min: \$1,269.71	ELP benefits reviewed annually until age 65 and then adjusted according to the following formula: Average annual compensation (based on last five years) x number of years of compensable earnings loss (to max of 35 years) x 2%. Exception for 100% permanently disabled, for whom no adjustment made at age 65.
British Columbia	Bifurcated, single award program (one of two possibilities) Loss of function award (LOF): similar to impairment benefit Loss of earnings capacity (LOE) benefit: a small number of individuals may qualify for this award	LOF: 90% of net pre-injury earnings x percentage loss of function LOE: 90% of net loss of earnings capacity (that is, net pre-injury earnings less net post-injury earnings capacity)	Max: \$4,990 Min: \$1,464.75 or 100% of average earnings, if less	At age 65 a lump-sum received, representing the value of funds that have accumulated from an amount equal to 5% of the worker's monthly benefit set aside over the period of the long-term disability benefits.
Manitoba	Dual award program Loss of earnings capacity benefit (LOE) Non-economic loss award (NEL): based on percent permanent impairment	LOE: 90% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings capacity) for 24 months, thereafter 80% of net average earnings loss NEL: \$1,090 for each full percentage less than 30% and \$32,700 plus \$1,320 for each full percentage above 30%, base amount reduced by 2% for each year of age the worker is over 45, though the reduction cannot exceed 40%	Max: for first 24 cumulative months, \$4,009.71 for person with dependent spouse and two children (based on earnings of \$77,000, though there is no maximum insurable earnings) Min: \$1,348.86 (based on minimum earnings of \$17,200 for which benefits are 100% of net earnings if this amount or less	At age 65 an annuity received, representing the value of funds that have accumulated from an amount equal to 5% of the worker's wage loss set aside over the period of their long-term disability benefits. The 5% reduced by any amount contributed by employer to the worker's pension fund. Worker can elect to contribute a matched amount that the board sets aside for the pension.
New Brunswick	Dual award program Loss of earnings capacity benefit (LOE) Permanent physical impairment award (PPI): based on percent permanent impairment	LOE: 85% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings capacity) PPI: max \$54,200 and min \$500	Max: \$633.96 per week for single person, and \$669.29 per week for married person Min: none	At age 65 an annuity received, representing the value of funds that have accumulated from an amount equal to 5% of benefits set aside over the period of the long-term disability benefits.

Table VI-2. Features of Canadian Long-term Disability Programs (2008) (continued)

Jurisdiction	Type of program	Percent of earnings	Maximum and minimum monthly benefits	Retirement benefits
Newfoundland and Labrador	Dual award program Extended earnings loss benefit (EEL): based on loss of earnings capacity Permanent functional impairment award (PFI): based on % loss of bodily function	EEL: 80% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings) PFI: % PFI x statutory maximum earnings	Max: \$2,500.75 Min: some minimum rules apply	An amount equal to what the worker demonstrates is lost from Canada Pension Plan or employer sponsored pension is paid at age 65.
Northwest Territories and Nunavut Territory	Single award program Lifetime pension benefit (LP): based on % permanent impairment	LP: 90% of net earnings x % permanent impairment	Max: \$4,548.82 Min: none	Long-term disability pension received for life.
Nova Scotia	Dual award program Extended earnings replacement benefit (EERB): based on loss of earnings Permanent impairment benefit (PIB): based on % permanent impairment	EERB: 75/85% of net average earnings loss, if receiving benefits for more/less than 26 weeks (that is, net pre-injury earnings less net post-injury earnings) less PIB PIB: lifetime award based on % permanent impairment x 85% of net pre-injury earnings x 30%	Max: maximum insurable earnings of \$48,400 Min: none	At age 65 EERB is replaced with an annuity based on an amount set aside over the period of the long-term disability benefits.
Ontario	Dual award program Loss of earnings capacity benefit (LOE) Non-economic loss award (NEL): based on % permanent impairment	LOE: 85% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings capacity) NEL: % permanent impairment x \$55,124.53 + \$1,225.43 x (45-age)	Max: maximum insurable earnings of \$73,300	At age 65 an annuity or lump-sum received, representing the value of funds that have accumulated from an amount equal to 5% of benefits set aside over the period of their long-term disability benefits. As well, the worker may contribute 5% from the long-term disability benefits to enhance the pension fund.
Prince Edward Island	Dual award program Loss of earnings capacity benefit (LOE) Non-economic loss award (NEL): based on % permanent impairment	LOE: 80/85% of net average earnings loss, for less/more than 38 weeks (that is, net pre-injury earnings less net post-injury earnings capacity). NEL: begins with a set statutory amount for 1% impairment, with additional amount for each additional percentage to a set statutory maximum level.	Max: 1.5 times the provincial average weekly earnings industrial aggregate. Min: none	At age 65 the worker is paid an amount equal to the loss of benefits under an employer sponsored pension plan which is registered and certified or the Canada Pension Plan, if the worker can demonstrate a loss of pension benefits.

Table VI-2. Features of Canadian Long-term Disability Programs (2008) (continued)

Jurisdiction	Type of program	Percent of earnings	Maximum and minimum monthly benefits	Retirement benefits
Québec	Dual award program Loss of earning capacity benefit (LOE) Permanent impairment award (PI): based on % permanent impairment	LOE: 90% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings capacity). PI: max received at age 18 (\$92,262 for 100%), minimum at age 65 (\$46,134 for 100%)	Max: varies by marital status and number of dependents. Min: some minimum value applies	
Saskatchewan	Dual award program Loss of earnings capacity benefit (LOE) Permanent functional impairment (PFI) and Disfigurement awards: based on % impairment	LOE: 90% of net average earnings loss (that is, net pre-injury earnings less net post-injury earnings capacity) PFI: max \$45,200 and min \$2,200; Disfigurement: max \$15,000 and min \$500	Max: \$3,3023.28 for worker with dependent spouse and 2 children Min: \$1,582.85 or 100% of earnings if less	At age 65 an annuity received, representing the value of funds that have accumulated from an amount equal to 10% of benefits set aside over the period of the long-term disability benefits.
Yukon Territory	Dual award program Loss of earnings capacity benefit (LOE) Permanent impairment award (PI): based on % permanent impairment	LOE: 75% of gross earnings loss (that is, pre-injury earnings less net post-injury earnings capacity) PI: % permanent impairment x \$80,000 + 2% (45-age) up to max of 40%	Max: \$4,631.25 Min: threshold of \$16,000 per annum for earnings loss benefits based on 100% of earnings, rather than 75%	At age 65 an annuity received, representing the value of funds that have accumulated from an amount equal to 10% of benefits set aside over the period of the long-term disability benefits.

**Net earnings arrived at after deductions for employment insurance, Canada/Québec Pension Plan, and federal and provincial income tax from gross earnings.

Source: Association of Workers' Compensation Boards of Canada. (2008). Retrieved June 18, 2008 from www.awcbc.org

Following is a more detailed description of long-term disability benefits determination for each province and territory.¹⁵¹

Alberta

The Alberta Workers' Compensation Board implemented a dual award system in 1995. Individuals with a work-related permanent functional impairment and loss of earnings are eligible for both non-economic loss payments (NELP) and economic loss payments (ELP).

The non-economic loss benefit, an impairment award, is a lump-sum payment equal to the product of the percentage of impairment and an annually set dollar amount. The amount was \$78,414.53 for 100% impairment in 2008. Awards of less than 10 percent of

¹⁵¹ Many of the jurisdictions offset workers' compensation benefits by a fraction of the amount of Canada Pension Plan (CPP) disability benefits received by the injured worker. In most cases it is 50 percent of the amount received. The reasoning behind this is that employers pay 50 percent of the cost of CPP through payroll taxes. In some cases, consideration is also given to the proportion of the CPP benefit attributable to the disability arising from the work injury. Only individuals who are wholly or substantially disabled qualify for CPP disability benefits; there are no awards for partial disability. In the description of the workers' compensation long-term disability benefits provided by each jurisdiction, we do not describe the CPP offset since treatment of it has varied over time within and across jurisdictions.

the maximum dollar amount are paid in a lump-sum, while larger awards may be paid either as a lump-sum or as a monthly life-time pension. Because NELP benefits are not economic losses, they are not indexed even if paid as a monthly pension. Alberta's NELP benefit is discussed more fully in Chapter VII (of this volume), under Quality of Life.

The ELP benefit is equal to 90 percent of the difference between the worker's net pre-earnings and net post-injury earnings capacity (net earnings are based on gross earnings less CPP, Employment Insurance payments, and applicable federal and provincial income taxes). ELP is calculated at MMI, and reviewed three years later. It is then reviewed annually until age 65. The work-related disability benefit is augmented yearly by a factor equal to the Alberta Consumer Price Index minus 0.5 percent. When the worker reaches 65, monthly economic loss payments cease. The worker then receives a pension based on the following formula: average annual compensation (based on last five years) x number of years of compensable earnings loss (to a maximum of 35 years) x 2 percent. For workers rated 100% permanently disabled, no adjustment is made to the ELP at age 65.

British Columbia

The Workers' Compensation Board of British Columbia (WorkSafeBC) compensates permanent work-related disability using a bifurcated system. A worker receives a benefit based either on a permanent loss of function formula or loss of earnings capacity, whichever is greater (with the introduction of Bill 49 in 2002, eligibility for loss of earnings capacity benefits has been substantially restricted). The loss of function pension and the wage-loss benefits both use 90 percent of net pre-injury earnings as a reference point (net earnings are based on gross earnings less Canada Pension Plan, Employment Insurance payments, and applicable federal and provincial income taxes). Pre-injury earnings are calculated as the average (mean) of the worker's monthly earnings over the year preceding the injury.

The loss of function pension is calculated by multiplying the percentage of loss of function by net pre-injury earnings. Benefits are capped at a monthly maximum of \$4,990 as of 2008 ($\$66,500/12 \times 90\%$). If the worker's pre-injury earnings result in benefits below the minimum of \$1,464.75, the worker receives 100 percent of pre-injury earnings.

At the same time, adjudicators also estimate the worker's loss of earnings capacity given his or her occupation, impairment, work experience, age, and education under the earning capacity plan. The worker is then eligible for whichever benefit is higher (the loss of function benefit or loss of earnings capacity benefit). The resulting disability benefit is paid as a monthly pension and continues through to age 65; it is adjusted annually at a rate of 1 percent less than the consumer price index. At age 65 a lump-sum is provided, representing the value of funds that have accumulated from an amount equal to 5 percent of the worker's monthly benefit set aside over the period of the long-term disability benefits.

Manitoba

The Manitoba Workers Compensation Board's long-term disability program is a dual award program consisting of a permanent impairment award and a loss of earnings capacity benefit, both of which were revised and formalized in 1992. The dual award system compensates workers for both economic and non-economic loss.

The impairment or non-economic loss award is based on the percentage of permanent impairment. The amount is \$1,090 for each full percentage less than 30 percent, and \$32,700 plus \$1,320 for each full percentage over 30 percent. The base amount is reduced by 2 percent for each year of age the worker is over age 45, though the reduction cannot exceed 40 percent. Workers age 45 and under receive the full benefit amount.

Loss of earnings capacity benefits are 90 percent of net average earnings loss (that is, net pre-injury earnings less post-injury earnings capacity) for 24 cumulative months of benefits, thereafter 80 percent of net average earnings loss (net earnings are based on gross earnings less CPP, Employment Insurance payments, and applicable federal and provincial income taxes). Workers earning less than or equal to the minimum annual earnings receive loss of earnings capacity benefits based on 100 percent of net average earnings. Compensation is subject to a statutory maximum (set annually) based on marital status and the number of dependent children. For 2008, the maximum was \$4,009.71 monthly for a married person with dependent spouse and two children based on earnings of \$77,000, though there is no maximum insurable earnings. The minimum annual earnings of \$17,220 results in a monthly benefit of \$1,348.86 for a person with a dependent spouse and two children.

After 24 cumulative months of benefits, the plan begins to contribute 5 percent of the benefit towards a retirement annuity. The annuity is paid monthly after age 65.

Wage-loss benefits are adjusted regularly for changes in the cost of living. The adjustment factor is limited, however, to a maximum annual increase of six percent and is calculated by dividing the sum of the average industrial wage (AIW) for July to June of the previous year by the sum of the AIW from July to June of the year before the previous one. The Board may increase the indexing factor at its discretion.

New Brunswick

The Workplace Health, Safety and Compensation Commission of New Brunswick has used a dual award system since 1982. Like most of the other provinces and territories, this system has both a permanent impairment award and a loss of earnings capacity benefit.

The impairment award compensates for non-economic loss and is a lump-sum payment determined by the percentage of permanent physical impairment (PPI) multiplied by the maximum annual earnings for the year of injury. The minimum amount is set by statute, and the maximum is set at 150 percent of the provincial Industrial Aggregate Average Wage for 100% impairment. In 2008 the minimum was \$500 and the maximum was

\$54,200. The degree of impairment is measured as a percentage of total body impairment and depends on demonstrable loss of body parts or functions.

For injuries occurring after January 1, 1998, workers are entitled to a loss of earnings benefit of 85 percent of the difference between net pre-injury earnings and net post-injury earnings capacity. In 2008, the maximum benefit was \$633.96 weekly for a single person and \$669.29 weekly for a married person.

The plan also incorporates earnings loss reviews in order to gauge earnings losses attributable to the impairment more accurately. The first review occurs twelve weeks after the initial determination. The Commission can re-review the case again twelve and thirty-six months later or at any time if the earnings or the impairment changes significantly. These reviews are discretionary. Continuing wage-loss benefits are adjusted annually to compensate for increases in the cost of living.

At age 65 an annuity is received representing the value of funds that have accumulated from an amount equal to 5 percent of benefits set aside over the period of the long-term disability benefits.

Newfoundland and Labrador

The Workplace Health, Safety & Compensation Commission of Newfoundland and Labrador implemented a dual award system in 1984. An extended earnings loss benefit pays 80 percent of the difference between pre-injury net average earnings and net post-injury earning capacity (net earnings are based on gross earnings less Canada Pension Plan (CPP), Employment Insurance payments, and applicable federal and provincial income taxes). The maximum monthly amount was \$2,500.75 in 2008 for a worker with a dependent spouse. The wage-loss program continues until the age of 65, at which point the worker is entitled to benefits to offset reductions in his or her pension from either a registered employer or CPP.

The impairment award, payable in a lump-sum, has statutory minimums and maximums, and is based on percentage of permanent functional impairment multiplied by the statutory maximum earnings. In 2008 the minimum was \$1,000 and maximum \$49,295.

Northwest Territories and Nunavut

Unlike most of the other provinces and territories, the Workers' Safety & Compensation Commission of Northwest Territories (NWT) and Nunavut compensates for long-term disability solely through an impairment plan which pays a life-time pension, adjusted yearly for increases in the cost of living. If the impairment is less than 10%, the lifetime amount may be paid as an equivalent lump-sum. The benefit is calculated by multiplying the percentage of permanent impairment, as determined in accordance with the NWT Permanent Medical Impairment Guide, by 90 percent of the net pre-injury earnings (net earnings are based on gross earnings less CPP, Employment Insurance payments, and applicable federal and provincial income taxes) to a maximum monthly amount set by statute. In 2008 the monthly maximum was \$4,548.82. Each year the amount is reviewed for possible adjustment.

Nova Scotia

The Workers' Compensation Board of Nova Scotia implemented a dual award system in 1990, as a result of a Supreme Court of Nova Scotia decision. The dual award system has both an impairment benefit and loss of earning capacity benefit. The permanent impairment benefit (PIB) compensates for non-economic loss and pays a pension based on the percentage of physical impairment and the worker's pre-injury net average earning (net earnings are based on gross earnings less Canada Pension Plan, Employment Insurance payments, and applicable federal and provincial income taxes). The PIB is equal to 30 percent of the product of the degree of impairment and 85 percent of the pre-injury net average earnings ($PIB = .30 \times \text{degree of impairment} \times .85 \times \text{net average pre-injury earnings}$). The PIB is a life-time award meant to compensate the worker for the loss of enjoyment of life.

The worker is also entitled to an Extended Earnings Replacement Benefit (EERB) equal to 75 percent of the difference between pre-injury and post-injury net weekly earnings for the first 26 weeks of disability less the PIB. After this period the benefit is increased to 85 percent. The PIB is included in post-injury earnings benefits so that the EERB serves to bridge the gap between pre-injury earnings and the PIB award. This is payable until the age of 65, at which point regular benefits cease and the worker is entitled to an annuity of 5 percent of his/her EERB and PIB benefits. Both PIB and EERB are indexed to the cost of living at one half of the consumer price index. The maximum insurable earnings were \$48,400 in 2008 (based on 140.2 percent of the average industrial wage in Nova Scotia).

Ontario

Since 1990, the Ontario Workplace Safety & Insurance Board has used a dual awards program for individuals with permanent impairments. Under the current system disabled workers are provided with benefits to compensate for both non-economic loss (NEL) and loss of earnings capacity (LOE).

The NEL award compensates workers for non-economic losses associated with a permanent impairment (that is, for pain and suffering and loss of quality of life). The award is based on the percentage of permanent impairment multiplied by a base amount plus an age adjustment amount. In 2008 the formula was as follows: percentage of permanent impairment \times [$\$55,124.53 + \$1,225.43 \times (45 - \text{age})$]. The maximum is received at age 25 or younger and the minimum at age 65 or older.

Workers receive LOE benefits if they sustain a work disability (either temporary or long-term). The LOE benefit is based on 85 percent of the difference between the net pre-injury earnings and net post-injury earnings capacity (net earnings are based on gross earnings less CPP, Employment Insurance payments, and applicable federal and provincial income taxes), and is paid periodically as long as eligibility continues or until age 65. The maximum insurable earnings were \$73,300 in 2008 (based on 175 percent of the average industrial wage in Ontario).

At age 65 an annuity or lump-sum is provided, representing the value of funds that have accumulated from an amount equal to 5 percent of benefits set aside over the period of long-term disability benefits. As well, the worker may contribute 5 percent from the long-term disability benefits to enhance the pension fund.

Prince Edward Island

Since 1993, the Workers Compensation Board of Prince Edward Island has used a dual award system consisting of a permanent impairment award and a loss of earning capacity benefit. The impairment award compensates the worker for non-economic loss in a lump-sum payment based on the evaluation of a Board Medical Consultant in reference to the *AMA's Guides*. Beginning at a set statutory amount for 1 percent impairment, the worker receives an additional amount for each additional percentage of impairment to a set statutory maximum level. The maximum earnings ceiling is paid for 100% impairment and the minimum payment is \$500.

The Board introduced a new loss of earnings capacity program in 1995. The program compensates workers for 80 percent of the difference between pre-injury net average earnings and net post-injury earning capacity for the first 38 weeks (net earnings are based on gross earnings less CPP, Employment Insurance payments, and applicable federal and provincial income taxes) and then at 85 percent of the difference thereafter. The benefit is subject to a maximum equal to the maximum annual earnings and has no minimum. The maximum annual earnings are set annually equal to 1.5 times the provincial Average Weekly Earnings Industrial Aggregate as set by Statistics Canada. Benefits continue until the loss of earning capacity ceases or the worker turns 65. Benefits are adjusted annually at 75 percent of the consumer price index or 4 percent.

Upon reaching age 65, workers who demonstrate that their historic earnings losses have led to a reduction in their CPP or private registered retirement plan benefits are entitled to compensation equal to the loss in pension benefits.

Québec

The Québec Commission de la Santé et de la Sécurité du Travail (The Quebec Agency for Health and Safety at Work, Quebec's Workers' Compensation Board) compensates non-work-related disability and work-related disability through a combination of an impairment award and loss of earnings capacity benefit. The impairment award pays a lump-sum, the value of which depends on the percentage of permanent impairment and the age of the worker. There is a statutory maximum and minimum that is adjusted annually. The maximum is paid for workers who are 18, and the minimum is paid for workers who are 65 or older. The percentage of permanent physical impairment is determined using Québec's own rating schedule called the Table of Bodily Injuries. In 2008 the maximum lump-sum amount was \$92,262 for 100% impairment at age 18 and \$46,134 at age 65.

Québec's loss of earnings capacity benefit covers loss of earning capacity up to a maximum of 90 percent of pre-injury net average earnings to a statutory maximum.

Monthly earnings capacity benefits have minimum and maximum amounts that vary also by marital status and the number of dependents.

Saskatchewan

The Saskatchewan Workers' Compensation Board established a dual award system in 1980, which compensates workers for non-work disability and for work-related disability. The system comprises an impairment award and a loss of earnings capacity benefit. The impairment award is payable in a lump-sum and is calculated using a rating schedule. In 2008, the maximum award for an impairment of function was \$45,200 and the minimum was \$2,200. For disfigurement, the maximum was \$15,000 and the minimum was \$500.

The loss of earnings capacity benefit compensates workers based on 90 percent of the difference between net pre-injury and net post-injury earning (net earnings are based on gross earnings less Canada Pension Plan, Employment Insurance payments, and applicable federal and provincial income taxes). In 2008, the maximum monthly amount was \$3,023.28 for a worker with dependent spouse and two children and the minimum \$1,582.85 or 100 percent of earnings if less. Benefits are adjusted every year by the consumer price index.

At age 65 an annuity is provided, representing the value of funds that have accumulated from an amount equal to 10 percent of benefits set aside over the period of the long-term disability benefits.

Yukon Territory

In 1983 the Yukon Workers' Compensation Health & Safety Board's impairment plan was revised and supplemented with a wage-loss plan. The new dual award program provides a permanent impairment award and a loss of earnings capacity benefit. The impairment award is a lump-sum or annuity payment (subject to a statutory minimum and maximum) and depends on the percentage of permanent impairment. The formula is as follows: percent of permanent impairment x [$\$80,000 \times (\text{average industrial wage for year of impairment} / \text{average wage for 1993}) + 2\% \times (45 - \text{age})$], not to exceed 40 percent (that is, value of $2\% \times (45 - \text{age})$ is not to exceed 40 percent, which occurs at age 25 or younger)].

The loss of earnings capacity benefit is 75 percent of gross lost earnings. In 2008 the monthly maximum benefit was \$4,631.25 ($75\% \times \$74,100$) and the minimum threshold of \$16,000 per annum was used to calculate benefits based on 100 percent rather than 75 percent. The benefit amount is adjusted yearly by 2 percent to allow for promotion or advancement and the change in the average industrial wage rate. Increases cannot exceed the maximum wage rate for the year.

At age 65 an annuity is provided, representing the value of funds that have accumulated from an amount equal to 10 percent of benefits set aside over the period of the long-term disability benefits.

Other Foreign Government Programs

A study funded by the Social Security Administration, *Learning from Others: Temporary and Partial Disability Benefits in Nine Countries* (2005), employed disability benefit experts in each of eight countries to fill out a standardized survey instrument used to contrast their countries' disability-related benefit programs with those in U.S.¹⁵² These experts later co-authored chapters describing their countries' programs along several different rubrics: types of benefits offered, administrative structures, methods of financing, benefit amounts and replacement rates, disability definition and assessment, and rehabilitation and reintegration options. Thumbnail descriptions of each country's temporary disability program in 2005, unless otherwise stated, and its vocational rehabilitation component are provided below.

Australia

Workers' Compensation

There are ten state/territorial and federal level workers' compensation programs with considerable variation across the programs. All ten programs provide a system of no-fault statutory benefits underpinned by insurance with compulsory premiums paid by the employer. The original structure of Australian workers' compensation followed that of the United Kingdom and was essentially a copy of the English statutes of 1897 and 1906. The system provided relatively limited statutory benefits, access to common law, and underwriting by private insurance. Until the mid-1980s the only departure from private underwriting was in Queensland, which in 1916 created a monopoly state fund.

Major changes in workers' compensation structural arrangements occurred in the mid-1980s, largely in response to dramatic increases in insurance premium rates and trade unions' concerns about extended delays in dispute resolution. This led to three jurisdictions (Victoria in 1985, South Australia in 1986, and New South Wales in 1987) to move from private insurance to monopoly state insurance. Private insurance continues to exist in Western Australia, Tasmania, the Northern Territory, the Australian Capital Territory, and the federal Seacare scheme which covers interstate and international merchant shipping.

The changes in the mid-1980s of workers' compensation insurance involved significant restructuring. In particular, the duration of weekly benefits, which formerly was highly restricted, was extended in some jurisdictions to the standard age of retirement. Similar extensions were also applied to medical and related costs associated with occupational injury.

¹⁵² Mitra, S. & Honeycutt, T. (Eds.). (2005). *Learning from others: Temporary and partial disability programs in nine countries*. New Brunswick, NJ: Program for Disability Research.

Other Sources of Disability Compensation

Both workers' compensation and motor vehicle accident compensation are areas of state and territorial responsibility. There are two federal workers' compensation schemes. The first is the Safety, Rehabilitation and Compensation Act 1988 (Comcare) which deals with federal public sector employment. The second covers seafarers engaged in interstate and overseas trade and commerce under the Seafarers Rehabilitation and Compensation Act 1992. There is no federal motor vehicle accident compensation scheme.

Income security and attendant health care costs in relation to almost all areas of disability, other than that covered by workers' compensation, are the responsibility of the federal government. Income replacement is covered through social security arrangements, primarily the Disability Support Pension (for long-term disability) and Sickness Allowance (for short-term disability). There are other compensation systems such as the Newstart Allowance (Provisional), the Newstart Allowance (Incapacitated), the Youth Allowance (Incapacitated), and Mobility Allowance that may be accessed under certain circumstances. Each of these non-contributory programs are means tested and pay a flat rate of benefits that are set at one-fourth of the average weekly income for men. Any income and assets over maximum established limits result in reduced benefit payments. All claims are reviewed at regular intervals. Individuals who are deemed unlikely to return to work (or school) within a two-year interval are referred to the permanent Disability Pension program.

Occupational sick leave, paid for by the employer, deals with the short-term income loss resulting from injury or disease but is often governed by a complex interplay of state/territory and federal industrial relations provisions. It is not uncommon for high-income earners to seek to protect labor-market earnings from the effects of injury, disease, and disability through some form of private disability insurance.

Occupational superannuation is the retirement savings plan adopted by Australia in 2000. It requires employers to pay a proportion (currently 9 percent) of an employee's earnings into a superannuation fund to pay the employee's retirement. Employees may also contribute to the plan and the government matches contributions for lower income individuals. Formerly a measure largely restricted to limited areas of professional and white collar employment, it has become a universal program as a result of the federal government's concern about meeting the retirement income needs of an aging population through the federal age pension. While occupational superannuation is primarily a measure dealing with retirement income, many superannuation arrangements, particularly in the public sector, have a disability income component that provides income support if serious injury or disease occurs prior to retirement.

Germany

Wage-replacement benefits are paid directly by employers for the first six weeks and indirectly through an insurer thereafter. Coverage extends to all workers. Benefits and services provided include wage replacement benefits, health care services,

occupational/vocational services, disability pensions, and nursing care. In cases of permanent impairment and disability, the insurance program provides continued care as necessary and a disability pension.

As noted, the temporary sickness benefits are initially provided by the employer, who is mandated to pay 100 percent of wages for up to six weeks for any physician-certified illness.¹⁵³ When this benefit is exhausted, the Statutory Health Insurance program then provides benefits of 70 percent of the prior wage rate for illnesses lasting up to 78 weeks. Workers who are deemed unable to work less than three hours of work per day due to their disabling condition are eligible for a full disability pension. Those workers only able to work between three and six hours per day due to their disability are eligible for a partial disability pension.

In 2001 Germany revised its permanent disability program, administered by the Statutory Pension Insurance, so that it is a time-limited program of three years for all but the most severely disabled individuals. Disability pension recipients can reapply for benefits after the three years have expired. Recipients of three stints of temporary disability pension as well as persons older than 59 become permanent beneficiaries.

The United Kingdom

The Department for Work and Pensions (DWP), created in 2001, is responsible for the social security system including disability compensation, unemployment insurance, state pensions, and other benefit programs. There are several programs described below that provide compensation to individuals with disabilities.

Wage and salaried workers (but not the self-employed) qualify for Industrial Injuries Disablement Benefits (IIDB) if they experience disability associated with an occupational injury or disease. In order to claim IIDB a worker must have been employed at the time of accident or exposure to the disease agent. The severity of disability is assessed by a general practitioner, who estimates a percentage of total bodily impairment. This percentage is used to determine the level of benefit received.

Workers who experience an occupational injury or disease are also entitled to benefits under the state social security system. The Industrial Injuries Scheme (IIS) provides preferential social security benefits for disability arising from occupational injury or disease.

All employers are required by law to purchase Employers Liability Compulsory Insurance (ELCI) to cover their civil liabilities. This insurance is provided by private insurance carriers who also provide preventive services such as evaluating high-risk worksites. ELCI insures employers against the costs of compensation for workers who experience an occupational injury or disease for which the employer is at fault. The insurance provides compensation to injured workers of the at-fault employer. Most claims are paid only after claimants are successful at winning their case in court.

¹⁵³ Viebrock, H. (2003). Disability pensions in Germany. In C. Prinz (Ed.), *European disability pension policies: 11 country trends 1970-2002*. Aldershot, UK: Ashgate Publishing.

Individuals unable to work because of a disability (not necessarily caused by work) may also be eligible for Incapacity Benefits (IB). Claimants for IB require an assessment by a general practitioner, who may recommend further medical examination. Individuals receiving IIDB and IB may also be entitled to increases in other benefits such as child tax credits, depending on the family size and the value of other benefits and income received.

Individuals may also qualify for Disability Living Allowances (DLA) if they are under the age of 65 at the time of filing a claim and have such a serious physical or mental disability that they require assistance with self-care or have difficulty walking. Receipt of DLA is not dependent on an individual's working and is generally not means tested. The program has two parts: a care component and a mobility component. Each component is paid at different rate according to the impact of the disability on self-care and mobility.

Japan

Short-term disability benefits in Japan are provided through private-sector health insurance plans and therefore coverage is not universal. Large companies are mandated to offer health insurance plans that provide short-term disability benefits to employees; small firms and the self-employed are not. Short-term disability recipients are provided with 60 percent of lost wages for a period up to 18 months. The utilization for this short-term benefit, as with permanent disability benefits in Japan, is very low. Employees utilize this sickness and injury program only as a last resort; less than 3 percent of the covered population applied for such benefits in 2001.

The Netherlands

The Netherlands was confronted in the 1980s and 1990s with rapidly rising disability claims; the disability system was being used by employers and employees as an alternative to unemployment benefits or early retirement. Originally, the short-term program was a quasi-public system, administered by Industrial Associations (which were comprised of employer organizations and employee trade groups). Beginning in 1994, short-term disability benefits were privatized, thereby shifting the financial responsibility of the program and making employers responsible for 12 weeks of short-term wage replacement, which was increased to one year in 1996 and two years in 2004. To manage the program, employers may either self-insure and pay benefits themselves or involve private insurance firms. Benefits are paid at 70 percent of previous wages, though employers may supplement that amount up to 100 percent for the first year of benefits.

The Netherlands require that employers involve Occupational Health Services (OHS) at an early stage in the short-term disability process. OHS supervises the sickness and reintegration process including performing the initial medical assessment to receive benefits. Within the first six weeks of receiving benefits, OHS assesses the beneficiary's medical condition, functional capacity, and return-to-work prognosis. Based on this

assessment, the employer and employee agree to a reintegration and vocational rehabilitation plan, which is a legally binding contract, within eight weeks of receiving benefits.

Norway

Norway's Sickness Insurance program provides benefits to persons with disabling conditions. It pays 100 percent of wages for up to 52 weeks, and it also pays a partial benefit. Beneficiaries who are actively receiving medical or vocational rehabilitation and who have at least a 50 percent work capacity at the end of 52 weeks may turn to cash allowances specifically for rehabilitation rather than the permanent disability pension. These allowances also have a duration of up to 52 weeks. Alternatively, persons who apply for permanent disability benefits after Sickness Insurance benefits are exhausted may be given a time-limited benefit for one to four years in lieu of the permanent benefits. This benefit is given to individuals who are thought likely to be able to return to work.

With the most recent legislative changes in 2004, Norway now mandates a new time-limited permanent disability benefit. The eligibility criteria for the traditional disability pension and the new time-limited disability benefit are the same. The individual now applies for both benefits. The national insurance office makes the ultimate decision on the type of disability benefit. The time-limited benefit is granted if there is thought to be any possibility for improved work capacity in the future. If not, the disability pension is granted.

This new benefit is granted for a period of one to four years and can be a full or a partial benefit. The benefit is calculated as a daily cash benefit in a similar fashion to the rehabilitation benefit. The benefit payable is two-thirds of earned income before the disability occurred. This period consists of either income earned the year before disability onset or the average of the last three years' earnings, whichever is greater.

Sweden

Sweden has four temporary disability benefit programs, each targeted to a specific population. The public Sickness Program is nationally administered by the Swedish Social Security system. The employer is responsible for the first 21 days of payments. The short-term sickness program then pays benefits on the 22nd day of lost work with a replacement rate set at 77.6 percent of prior wages. While designed to be only temporary, there is no time limit on the receipt of benefits. After one year, the local social insurance office refers the case to the appropriate disability compensation system.

The second program, Activity Compensation, is directed at young adults aged 19 to 29 who are unable to work due to a medical condition. Benefits are capped at a three-year maximum.

A third program offers a time-limited benefit as a part the long-term disability benefit program, Sickness Compensation.

Finally, rehabilitation benefits, for those actively involved in medical or vocational rehabilitation, are available for persons moving from Sickness Compensation benefits. There are both pension-related and means-tested components to all four programs.

Denmark

All employers must purchase workers' compensation insurance covering accidents and short-term effects of exposure to hazardous substances. (The insurance does not cover accidents occurring while driving to and from work.) All employers must also contribute to the Labor Market Occupational Diseases Fund (AES) to cover occupational disease and back injury. The insurance also provides coverage for health care and rehabilitation expenses, wage-loss benefits, compensation for permanent impairment, and compensation to families in cases of fatality. Occupational injury and disease claims are reviewed by the National Board of Industrial Injuries, which makes decisions on the compensability of claims and the amount of compensation received.

A modest means-tested disability pension is also provided to adults from 18 to 64 years of age. To qualify, workers must have at least three years of residency in Denmark and their work capacity must be reduced by at least 50 percent. There are supplements for partial compensation of special expenditures related to physical or mental impairment. If a disability is caused by an occupational injury or disease, the worker and their dependants are entitled to compensation.

Summary

Countries reviewed in this chapter offer a range of programs to provide financial and other support for disabled workers. They have these features in common:

- Workers are not compensated for an impairment alone. They must establish that the impairment caused a work disability resulting in wage loss.
- Benefit funding is most often paid for by the employer. The incentive to the employer is avoidance of protracted lawsuits.
- Many programs are administrated by state or provincial government-sponsored workers' compensation boards, but some are administered by private insurance companies or directly by the national government.
- Benefit amounts are typically tied to the employee's pre-disability earnings and range from 65 percent to 90 percent of pre-disability earnings.
- Benefit amounts in some countries are adjusted to the age of the individual, with younger individuals receiving higher benefits.
- Canada is the only country reviewed that provides compensation for both earnings loss and non-economic quality of life loss in its workers' compensation

programs. Canadian quality of life payments are often made as a lump-sum payment and are tied to level of impairment separate from work disability.

- Most programs require the employer to either fund the benefits or to provide 100 percent of earnings sick leave for a specified period of time before lower government payments are made for the longer term.
- Foreign workers' compensation programs are typically offset by pensions or other income benefits received.
- Some foreign programs restrict the time period for benefits and require beneficiaries to reapply or to move to a lower-paying long-term payment program. Others provide benefits for life, with offsets or replacement by retirement income.

VII. U.S. PRIVATE DISABILITY PROGRAMS

The American Academy of Family Physicians reports that as many as one-third of American adults will experience a disability lasting longer than 90 days during their working life.¹⁵⁴ When disability interferes with wage earning, the financial effect can be profound because routine living expenses continue even while income is reduced. Workers' compensation is not a comprehensive solution to disability because, among other things, it does not cover off-the-job injuries and most benefits end at proscribed times regardless of workers' employment status.

Private employers provide a variety of benefits to protect workers from the loss of income that would otherwise result from a non-occupational disability. In addition, self-employed individuals and workers who do not have access to employer-sponsored disability benefits can buy individual disability income (IDI) policies. California, Hawaii, New Jersey, New York, Rhode Island, and Puerto Rico have programs mandating a minimum level of short-term disability protection for most workers.

The policy community has not given the same attention to disability benefits as they have other employee benefits such as health coverage. There is, however, substantial insurance industry and employer literature on the topic. In addition, some consulting firms maintain survey data on prevailing employer practices in this area.

Methodological Approach

The statistics presented in this section are from the 2007 edition of the Hay Benefits Prevalence Report (HBPR) unless otherwise noted. Hay Group has provided human resource consulting advice to private and public sector clients for more than 90 years. The HBPR survey has been conducted annually for more than 30 years, collecting detailed information on the benefit practices of more than 800 organizations representing a broad selection of industries and company sizes across the United States. Roughly a fifth (22 percent) of the survey participants are firms with 500 or fewer employees; almost a third (30 percent) are firms with more than 10,000 employees. The HBPR survey also collects information on health insurance, life insurance, retirement, and paid leave benefits.

In addition, the study team reviewed specific programs offered by three major private disability insurers:

- Northwestern Mutual was chosen as an example of a typical insurer offering IDI; although the insurance is not offered to high-risk professionals.
- Prudential was selected because it offers group disability policies to high-risk professions and is the seventh-largest disability insurer, and it offers both short-

¹⁵⁴ Barron, B.A. (2001). Disability certifications in adult workers: A practical approach. *American Family Physician*, 64(9), 1-2.

term and long-term disability insurance (unlike many companies that specialize in one or the other).

- Unum was selected because it offers group disability policies to high-risk professions; it is the second largest disability insurer (Hartford Insurance is the largest in U.S.) and acts as a disability reinsurer to many other companies. Unum offers both short-term and long-term disability insurance.

Except where otherwise footnoted, information about these insurers came from interviews with their sales and marketing professionals, websites, and sample contracts provided by the companies.

Overview of Private Disability Programs

Employer-sponsored sick leave and disability programs are intended to protect workers from the effects of lost income while they are unable to work because of injury or illness. From the point of view of the employer, there are additional goals for these programs such as attracting and retaining workers, minimizing business disruptions when employees are unable to work, and bringing experienced employees back to work. The primary goal of income replacement is illustrated by the way Northwestern Mutual, Prudential, and Unum describe the purpose of their benefits as shown in Table VII-1.

Table VII-1. Purpose of Three Private Disability Plans

Purpose of Private Disability Plans—As described by the disability insurer		
Northwestern Mutual— Individual Disability	Prudential—Group Disability	Unum—Group Disability
Offers “income protection mechanism” to replace a portion of lost income in order to provide a safety net. Does not attempt to “help an individual to maintain their high lifestyle,” but rather to provide enough income replacement to prevent economic upheaval.	Its disability insurance helps safeguard assets by partially replacing income when employees are unable to work.	Offers “income protection insurance” to help employees protect their incomes if they become injured or ill and unable to work, and provides extensive resources to help them get back to work.

Source: Hay Group. (2007). Benefits prevalence report: Prevalence of benefits practices and executive summary. Philadelphia, PA: Hay Group, Inc.

In general, HBPR finds that private employers use a variety of programs to provide income protection including sick leave, “paid-time off,” temporary (short-term) disability, and permanent (long-term) disability programs. In addition, some pension plans include disability provisions. In the event of a work-related injury, workers’ compensation programs provide benefits. The primary goal of income protection shapes all of these programs.

Table VII-2 summarizes programs commonly provided.

Table VII-2. Prevalence of Private Disability Programs

Type of Program	Percent of Employers Offering ⁱ	Percent of All Private Sector Employees with: ⁱⁱ	
		Access to	Participation
Sick Leave (Salary Continuation)	92% ⁱⁱⁱ	57%	N/A
Insured Short-term Disability Programs	45% ^{iv}	39%	38%
Long-term Disability Programs	98% ^v	31%	30%

Source: Hay Group and U.S. Department of Labor, Bureau of Labor Statistics

ⁱ Hay Group. (2007). *Benefits prevalence report: Prevalence of benefits practices and executive summary*. Philadelphia, PA: Hay Group, Inc.

ⁱⁱ U.S. Department of Labor. Bureau of Labor Statistics. (2007). *National compensation survey: Employee benefits in private industry in the United States*. Retrieved March 13, 2008, from <http://www.bls.gov/ncs/ebs/sp/ebsm0006.pdf>.

ⁱⁱⁱ 99.6% of employers had either a sick leave or a Short-Term Disability plan (or both).

^{iv} This only includes short-term disability plans that were fully insured. Self-insured short-term disability plans were not reported separately.

^v The Hay survey primarily covers mid-size and large employers. Other industry data indicate that small firms are much less likely to offer long-term disability (LTD) benefits.

In evaluating “disability,” private disability income programs focus on the presence or degree of occupational impairment rather than the presence or degree of physical or mental impairment. In other words, the fundamental question is “can you work?” rather than “do you have a physical limitation?”¹⁵⁵ Ultimately, these programs are insuring a worker’s earnings potential, not physical capacity or quality of life.

Because jobs vary in their physical and mental demands, a given physical impairment may prevent one employee from working but not another. For example, confinement to a wheelchair might prevent a construction worker from returning to his/her job, while an architect may be able to continue working with some accommodations. In other words, occupational disability does not depend solely on the severity of a physical impairment – the individual’s specific job duties are equally important.

It is typical for employers to use a combination of programs to address the needs of employees who are away from work because of illness or injury. The primary programs used are sick leave (or salary continuation), short-term disability (generally analogous to temporary disability), and long-term disability (generally analogous to permanent

¹⁵⁵ There is another form of private coverage, known as Accidental Death and Dismemberment (AD&D) insurance, that pays a lump-sum benefit for the loss of life, loss of the use of a limb, loss of sight or other specified “dismemberments” due to an accident. AD&D is more akin to life insurance than disability insurance and is not intended to replace lost income. AD&D benefits are discussed in more detail below.

disability) programs.¹⁵⁶ For private systems, the distinctions among the programs are based on the duration of a disability rather than its type or permanence. If an employer has all three programs, an individual who is disabled will use sick leave first, short-term disability benefits next, and then, if the disability continues, the long-term disability plan. A key tool in coordinating plans is the “waiting period” or “elimination period.” The elimination period for a disability plan may be thought of as a deductible that is measured in days rather than dollars.

A key difference between private and veterans’ programs is the view of permanent disability. In private systems, disability and benefits are seldom viewed as permanent. The system is always working towards an ultimate resolution of the disability, even in the case of long-term situations. In the VA Disability Compensation Program, in contrast, individuals receive permanent ratings, and the expectation is that benefits will continue throughout the veteran’s lifetime.

Conceptually, one can think of sick leave as primarily addressing the individual with an incidental disability who is away from work for a few days because of a short-term acute illness such as a cold or flu. Short-term disability primarily serves individuals who are unable to work for several weeks but who will ultimately return to the job. (Some employers use sick leave to address both incidental and short-term disabilities; this is not considered a best practice as sick-leave programs are not well suited to addressing the short-term disability risk.) Long-term disability addresses workers who are off the job long enough that the employer needs to begin thinking about a permanent replacement for the worker.

Two important design goals in sick leave programs are (a) ensuring an adequate level of income while (b) preserving appropriate incentives to return to work.¹⁵⁷ Ideally, all of the programs addressing time off from work would be coordinated to avoid duplication of benefits and ensure that there are no gaps in coverage.

Most private employers also provide some form of long-term disability benefits, often optional, requiring that employees pay additional premiums. The waiting period before long-term disability benefits become available typically is coordinated with the maximum benefit period for short-term disability benefits. The most common waiting periods are one month, three months, and six months.

The benefit, as a percentage of gross pre-disability pay, is generally higher for short-term disabilities and declines over time to encourage employees to return to work. Long-term disability benefits are chosen to provide a reasonable level of income protection for workers who are permanently disabled. The degree of medical documentation and review required generally increases for longer disabilities. The income replacement ratios discussed in this section are based on gross pre-disability pay

¹⁵⁶ California, Hawaii, New Jersey, New York, Rhode Island, and Puerto Rico have mandatory short-term disability programs for workers. These State Disability Insurance (SDI) programs are a minor factor in most employers’ disability strategies.

¹⁵⁷ The lost productivity resulting from an absence from work can far exceed the direct impact on payroll for an employer.

prior to any deductions for taxes, insurance, flexible spending accounts, 401(k) plans, or other employee benefit programs.

A typical program might provide for twelve days of sick leave in any given year. Full, unreduced pay would be available to workers out on sick leave (hence the term “salary continuation plan”). If an employee is away from work for more than seven days because of any one illness, short-term disability benefits would begin (some short-term disability plans have no waiting period for disabilities because of an accident). The short-term disability plan would pay 65 percent of pre-disability salary and would last for up to 13 weeks. At that point, if the disability continues, long-term disability benefits begin, paying 60 percent of pre-disability income, and continue until the normal retirement age under the employer’s pension program.

This is another key difference between private programs and VA’s program. Since the purpose of such programs in the private system is income replacement, long-term disability (LTD) benefits stop when pension payments begin. Under the current VA Disability Compensation Program, the commencement of Social Security or other retirement income programs does not affect the payment of disability benefits. (The fact that VA benefits are not offset against other income is sometimes offered as evidence of an implicit quality of life element in veterans’ disability benefits.)

Short-term disability benefits typically require a written statement from an attending physician. Long-term disability benefits typically involve a review of medical records and, in some cases, an examination by an independent physician.

Eligibility for benefits under any disability program depends on meeting the plan’s definition of disability. The definitions used in private disability programs are commonly categorized as either an *own-occupation* or *any-occupation* definition of disability. An own-occupation definition typically stipulates that an individual is disabled if he or she is unable, by reason of injury or illness, to perform the substantive duties of his/her own occupation. An any-occupation definition typically stipulates that an individual is disabled if he or she is unable to perform the substantive duties of any occupation for which he or she is reasonably suited by reason of education, training, or experience. Neither of these approaches is as restrictive as the definition of disability used under the Social Security Disability Insurance (SSDI) program, which requires a physical or mental impairment that prevents an individual from engaging in any substantial gainful employment and where the disability is expected to last for at least 12 months or end in death.

Short-term disability benefits typically are based on an own-occupation definition of disability. LTD benefits may be based on either own- or any-occupation but often combine the two. The typical approach would provide benefits based on an own-occupation definition for the first two or three years of a disability and then change to an any-occupation definition. This gives individuals who are permanently disabled time to adapt to their new limitations, retrain, and make any adjustments necessary to find a new occupation.

Another key difference between private and the VA Disability Compensation Program is that while veterans' programs provide assistance with occupational training and retraining this is separate from disability compensation itself. This separation of vocational services and disability compensation might be because of the military practice that assigns any service member to any duty while in service. Hence, the notion of a specific occupation may not be seen as applicable. In contrast, private disability plans do not assume that recovered workers will necessarily go back to the original employer. If disabled workers receiving LTD benefits recover, they will be expected to start looking for a new job even if the original ("old") employer who is providing the disability benefits does not have an opening. Regardless of the reason, veterans' benefits and the disability ratings are not contingent upon participation in vocational services or pursuit of employment.

LTD plans also commonly include benefits designed to assist claimants in returning to work. One method of supporting a return-to-work effort is to provide benefits for claimants who are no longer totally disabled but who are not yet fully recovered. There are several approaches to providing reduced benefits to workers with less than a full disability. The key differences among them are in the way the extent of disability is measured and the way the benefit amount is adjusted.

"Partial disability" benefits¹⁵⁸ are designed for situations where an individual is able to perform some of the duties of his/her own occupation but is unable to perform all of those duties on a full-time basis. In that case the plan may specify a reduced benefit, unrelated to actual earnings such as 50 percent of the full disability benefit.

"Residual disability" benefits represent another approach, which combines the inability of a claimant to perform some of the duties of his/her own occupation with a requirement that there be a resulting loss of income. The details vary, but generally there is a requirement that loss of earnings reach a threshold amount (for example, 20 percent) for residual disability benefits to be available.

Another approach is to provide a "loss of earnings" benefit. In this case, if a claimant returns to work but sustains a reduction in earnings in excess of a threshold amount (typically 20 to 25 percent), the policy pays a proportionate benefit. Administration of this type of program can be complicated because both the financial loss must be documented and the loss must be the result of disability rather than a layoff or other economic factors.

In most cases the benefits for partial disabilities are only available after an initial period of full disability. The length of time that reduced benefits are available may also be limited. These provisions are intended to avoid over insurance and to maintain an appropriate incentive for individuals to return to work. Plans without these provisions are available but are costly.

¹⁵⁸ The term "partial disability benefit" is used in two senses by disability insurers. The first, broader sense refers to any benefit payable to an individual who is able to return to work in some partial capacity. The second, narrower sense used here refers to a benefit (usually a fixed percentage of pre-disability income) that is payable when an individual is either unable to perform all of the regular duties of his own occupation, or is unable to perform them on a full-time basis.

A variety of rehabilitation benefits may also be provided such as payment for physical therapy, occupational therapy, retraining, and prostheses or other aids.

Since a key design rule is based on the need to maintain appropriate incentives to return to work, private plans typically are coordinated with other disability income benefits that may be available. For short-term disability programs this may include workers' compensation benefits and any temporary disability benefits that may be mandated by the state of residence. Because SSDI benefits have a five-month waiting period, SSDI integration is generally only necessary if short-term disability benefits are available for more than five months.¹⁵⁹ Long-term disability plans will typically coordinate with workers' compensation, state temporary disability benefits, SSDI, and earnings from any other employment.

Employer-sponsored disability programs do not usually coordinate with individually purchased IDI policies. However, insurers offering IDI policies generally limit the amount of coverage they are willing to issue to reflect any other disability benefits that are available to an applicant.

Some pension plans include disability provisions. The most common approach supplements LTD benefits by treating the disabled employee, for purposes of earning a pension, as if he or she were still actively at work. Because pension benefits are earned during the course of a career, and the amount paid is generally directly tied to length of service, any extended break in service can seriously reduce the adequacy of pension benefits. Allowing disabled workers receiving LTD benefits to continue to accrue pension benefits addresses this problem directly. Other plans allow for "disability retirement," paying pension benefits to workers who are disabled before they would otherwise be eligible for retirement. There is typically a minimum period of service such as 10 years required before disability benefits are available. Table VII-3 shows how different disability programs relate to one another.

While private disability programs are designed to replace lost income, there is one common employee benefit that is based on the loss of physical capacity without direct reference to the ability to work—accidental death and dismemberment benefits (AD&D). AD&D benefits generally are offered as an adjunct to group life insurance. There is a specified "face amount" that is paid in the event of accidental death. A percentage of the face amount, often half, is paid for the loss (or loss of use) of a hand, foot, or eye. If more than one member is lost, the full face amount is generally paid. A specialized form of AD&D provides coverage while an employee is traveling on behalf of the employer (business travel accident insurance) and is almost always completely employer-paid.

¹⁵⁹ SSDI benefits cannot begin until an individual has been disabled for at least 5 months. A worker is eligible to begin receiving SSDI benefits in the sixth month of disability, but only if he or she meets the program's definition of disability, which requires that the disability be expected to last at least 12 months or end in death. Thus, short-term disability programs that provide benefits for a term shorter than the 5-month waiting period for SSDI do not need to consider coordinating with SSDI, because no SSDI benefits will be earned during the period of short-term disability coverage. While final adjudication of an SSDI claim may take many months, benefits can be earned beginning in month six, triggering retroactive payments. The longer any short-term benefits extend beyond five months, the more significant the issue of coordinating with SSDI is likely to become.

Table VII-3. How Disability Programs Relate to One Another

Optional Employer-Sponsored	
Sick Leave	Primarily incidental disabilities
Short-Term Disability	Primarily short-term or temporary disabilities
Long-Term Disability	Long-term or permanent disabilities
Disability Pensions	Long-term or permanent disabilities for long-service employees
Required Employer-Sponsored	
Workers' Compensation	Job-related disabilities
State Disability Insurance (SDI)	Primarily short-term or temporary disabilities
Individually Purchased	
Individual Disability Income (IDI) Insurance	Long-term disabilities for the self-employed or other workers without access to employer-sponsored coverage; supplement to long-term disability for high-wage workers
Public	
Social Security Disability Insurance (SSDI), federal program	Individuals with work history of paying Social Security taxes who have severe, total disabilities lasting at least 12 months or ending in death
Supplemental Security Income (SSI), federal/State financial assistance	Low-income individuals with severe, total disabilities lasting at least 12 months or ending in death; work history is not a factor for qualification

Source: EconSys Study Team.

AD&D is generally low-cost coverage; it is not, however, an effective replacement for disability income benefits. Many disabilities are caused by illness rather than injury. In addition, a lump-sum benefit is not as well suited to replace lost income as a series of monthly disability payments. A lump-sum payment places the responsibility for managing the funds, with the attendant investment risk, on the claimant. Because the length of a disability is not certain, the payment may be inadequate in some cases and excessive in others. A lump-sum payment may eliminate any incentive to return to work early but provide inadequate income protection later as the funds run out. One attractive feature of a lump-sum payment that has the potential of increasing the incentive to return to work is that there is no benefit reduction or offset for subsequent earnings. A worker may keep 100 percent of any wages earned after receiving a lump sum.

Some IDI policies include a "presumptive disability" provision. Under a presumptive disability provision the policyholder is considered to be fully disabled if certain specified conditions are met such as the loss of sight, speech, or use of his or her limbs.

Most private employers place much more emphasis on income replacement protection than on compensation for a loss of physical functioning or quality of life. Private disability income programs provide benefits for disabilities that are not work related and for which the employer has no legal or moral responsibility (workers' compensation addresses most work-related disabilities).

Employers view disability income protection as important regardless of the cause of a disability because it is necessary to maintain a minimum standard of living. But many employers feel less obligated to provide additional "quality of life" benefits for injuries that happen off the job. Private employers generally provide business travel accident

coverage automatically without requiring an employee contribution. In contrast, AD&D coverage, which pays for any accidental death or dismemberment, is often voluntary and dependent on an employee contribution. The employer's responsibility is perceived to be higher when an employee dies or is seriously injured while traveling on business.

Short-Term Disability Programs

Short-term disability programs are designed to deal with worker disabilities that do not meet the threshold for other disability programs but for which employees need pay protection. These include sick leave programs as well as specific short-term disability programs.

Sick Leave Programs

Sick leave programs are provided by virtually all private employers and are typically intended to provide employees with protection against income loss in the event of a short-term illness or injury. For example, an employee with a cold or the flu would use sick leave to take time away from work to recover. For most employers, it is desirable to provide this benefit to allow employees to recover from an illness at home rather than come to work and potentially cause other employees to become sick.

A key feature of virtually all sick leave programs is that the illnesses or injuries need not be work related. That is, it does not matter where or how the illness or injury occurred, but simply that its existence prevents the employee from working. Note that this is different from most workers' compensation programs in which a given injury or illness must be shown to have been caused by some aspect of the job.

At the outset, the distinction between sickness and short-term disability can be blurred. There usually is some period of time after which a sickness moves to short-term disability. Hence, the onset of a short-term disability is most often determined retrospectively. If a short-term disability exists, there would then be the further question of whether or not it is work related. In some cases, if work related, such disabilities would be covered by workers' compensation programs. In other cases, if not work related, such disabilities would fall under a short-term disability policy of some kind. In still other cases, there is no short-term disability coverage at all, and time lost from work that exceeds allowable sick leave would either have to be taken out of annual leave or taken as unpaid leave. Employees in that situation also face the risk of being terminated.

Design Goals

Sick leave programs are intended to handle unexpected, short-term absences because of illness or injury in an orderly fashion while providing employees with income protection. Design goals include providing adequate protection to workers who are truly unable to work and ensuring that workers who are contagious are able to stay away from the workplace, while discouraging unnecessary absences.

Key Features

Sick leave programs typically allow employees to earn a specified amount of sick leave based on a specific schedule. There are a variety of methods that employers use to allocate sick leave. Some employers allocate a uniform number of days, some provide an accumulation of days, and others provide an allotment that varies based on service.

Eligibility. Generally, sick leave benefits are available to full-time, salaried employees. Some employers provide sick leave benefits on a pro-rated basis for part-time employees. Roughly half of all private employers have no waiting period after being hired for employees to become eligible for sick leave. Of those with a waiting period, the most common waiting periods are one month and three months.

Definition of disability. For sick leave absences, the definition of “disability” is an inability to report to work and perform one’s regular job duties because of injury or illness. Employees are typically required to notify their supervisor that they are unable to report to work. The documentation required under the sick leave program is typically minimal unless the absence extends beyond three days. After three days, employer sick leave plans typically have a policy requiring that an employee provide a doctor’s note verifying illness or injury.

Typical Employer Practice

Sick leave benefits pay 100 percent of an employee’s pay up to the specified number of days allowed. One-half of employers provide between 10 and 12 days of sick leave per year. One percent of employers provide less than five days of sick leave, and 16 percent provide more than 12. The remaining employers provide 5 to 9 days of sick leave per year. The method of accrual varies and can be a uniform amount based on service or an accumulation of days.

Approximately one-third of employers allow employees to accumulate unused sick leave days over a period of years. Thirty-five percent of employers who allow an accumulation of sick leave do not restrict the amount of sick leave employees can accumulate. For those that place a limit on the amount of sick leave that can be accrued, most allow employees to accumulate at least 30 days.

Limitations When Used as Short-term Disability Plan

Sick leave programs are intended to protect employees from income loss because of illnesses that are very short in duration. Utilization of a sick leave accumulation plan as a short-term disability plan can be effective for long-term employees who are able to accumulate a bank of sick days. However, these types of programs leave short tenure employees unprotected should they become disabled.

Sick leave plans are typically less closely integrated with the rest of a firm’s benefit program than are short-term disability and long-term disability plans. While this may be appropriate for incidental absences, it limits the ability of an employer to manage more serious disabilities when sick leave is used as a substitute for a short-term disability plan.

Paid Time-Off

In recent years, employers have begun to embrace the concept of paid time-off (PTO) programs. Instead of designating certain paid leave as vacation, sick, and personal time, all leave is combined in one paid-time-off bank. Some employers also include holidays in their PTO programs. Currently, approximately one-quarter of employers use this type of program.

Short-term Disability Programs

Short-term disability programs are designed to provide income protection for employees who will be away from work for several weeks because of injury or illness. These programs also provide a bridge to long-term disability benefits for employees who have more serious illnesses or injuries.

Design Goals

Short-term disability programs are designed with several goals in mind. The primary purpose is to provide adequate income protection during disabilities lasting one or more weeks, which for most workers would otherwise mean a significant loss of income. In addition, the programs are designed to help retain experienced employees who are expected to recover and to encourage a prompt return-to-work status and minimize inappropriate absence from work for all employees. Another useful goal is to identify disabilities that have the potential of becoming long-term and begin providing appropriate rehabilitation, training, and supportive services to improve the likelihood the employee will be able to successfully return to work.

Key Features

Eligibility. Generally short-term disability benefits are available to full-time, salaried employees. Some employers provide benefits to part-time salaried employees as well.

Definition of disability. Short-term disability plans are almost always based on an “own-occupation” definition of disability. In other words, as with a sick leave plan, the question is whether the employee is able to perform the duties of his/her current job.

Benefit level. Almost all short-term disability plans (99 percent) define the benefit as a percentage of pre-disability salary. Most (85 percent) of these also have a dollar amount cap on the weekly benefit that may be paid; a small number provide a flat dollar amount benefit. During most short-term disabilities, workers are generally able to make only limited adjustments to their routine living expenses.

Typical Employer Practice

Sixty-eight percent of insured short-term disability plans are employer-paid, 29 percent are employee-paid, and 3 percent utilize a cost sharing arrangement.

Often employers will have different exclusion periods depending on whether the disability is the result of an illness or an injury. Thirty-eight percent of employers have a

non-occupational illness elimination period of seven days before plan benefits become payable, 43 percent have an elimination period of 12 days or more. Only three percent of employers have no elimination period for non-occupational illness.

Thirty-one percent of employers have a non-occupational accident elimination period of seven days, 43 percent have an elimination period of 12 days or more. Nine percent of employers have no elimination period for a non-occupational accident.

Benefits are typically paid as a percentage of salary. One-half of employers pay a benefit that ranges between 60 and 65 percent of pre-disability pay. In addition to the percentage limit, there is typically a weekly maximum benefit. The maximum weekly benefit varies from less than \$500 to more than \$2,000. Seventy percent of employers provide a maximum benefit of \$1,000 per week or more. Table VII-4 shows an example of the benefits that would be payable to two employees at different salary levels under a short-term disability plan that pays a benefit of 60 percent of pre-disability pay up to a \$1,000 weekly maximum.

Table VII-4. Example of Short-term Disability Payments to Employees at Different Salary Levels

	Employee A	Employee B
Annual Pre-Disability Salary	\$52,000	\$104,000
Weekly Pay	\$1,000	\$2,000
Weekly Short-term disability Benefit (\$)	\$600	\$1,000
Benefit as a % of Pre-disability Income	60%	50%

Source: Illustrative example by the EconSys Study Team.

Benefits are payable for a limited amount of time under short-term disability programs. The maximum duration of payments for 54 percent of employers is less than 26 weeks. Forty percent of employers limit benefits to a period of 26 weeks. Only five percent of employers extend benefits beyond 26 weeks.

Short-term disability plans are generally non-contributory; survey data suggest that employee contributions tend to depress enrollment.¹⁶⁰ There does appear to be some movement towards requiring employee contributions for short-term disability and LTD plans between small and mid-size employers as a response to rising health plan costs.

Other Potential Sources of Benefits

Generally, to be compensated under a private plan, the disability must occur away from the worksite; disabilities originating in the workplace are covered by workers' compensation.

¹⁶⁰ Fosbre, L. & Milillo, N. (n.d.). *What's happening with disability plans?* International Society of Certified Employee Benefit Specialists. Retrieved March 13, 2008, from <http://www.iscebs.org/PDF/std06survey.pdf>

Integration with Sick Leave and Long-term Disability Plans

When employers offer sick leave, short-term disability, and long-term disability benefits, the typical practice is to coordinate benefits to avoid an overlap of coverage. For example, an employer may offer 10 days of sick leave, a short-term disability program with a 7-calendar day elimination period, and benefits that continue for 90 days. The long-term disability benefits would begin following the completion of the 90-day short-term disability period, assuming the employee remains disabled.

Short-term disability plans typically are more tightly linked than sick leave to an employer's long-term disability, group medical, and workers' compensation plans. This linkage may include use of the same internal management, claim administrator, disability guidelines, and rehabilitation programs. It is particularly important to integrate the claim administration and rehabilitation efforts between short-term disability and LTD programs. This allows conditions that have the potential to become long-term or permanent disabilities to be identified during the short-term disability benefit period so that medical and occupational rehabilitation can be started.

Rehabilitation and Return-to-Work Programs

While disability management and return-to-work programs are less common among short-term disability plans than other disability programs, the potential savings are significant. A survey conducted by Watson Wyatt Worldwide and the Washington Business Group on Health (WBGH) found that short-term disability management reduces costs by 18 to 19 percent.¹⁶¹ The types of disability management programs used included case management, independent medical exams, behavioral health interventions, and transitional return-to-work programs.

Mandated State Disability Insurance Programs

Five states and one territory have mandatory short-term disability programs for workers: California, Hawaii, New Jersey, New York, Rhode Island, and Puerto Rico.¹⁶² In

¹⁶¹ Watson Wyatt & Washington Business Group on Health. (2000). *Staying @ work: Improving workforce productivity through integrated disability management – 5th annual survey report for 1999/2000*. Toronto: Canada: Watson Wyatt Worldwide.

¹⁶² California Education Department. (2008). *About the DI program*. Retrieved July 27, 2008, from <http://www.edd.ca.gov/Disability>

Hawaii Department of Labor and Industrial Relations. (2007). *About temporary disability insurance*. Retrieved July 7, 2008, from <http://hawaii.gov/labor/dcd/abouttdi.shtml>

New Jersey Department of Labor and Workforce Development. (2007). *Temporary disability*. Retrieved July 7, 2008, from <http://lwd.dol.state.nj.us/labor/tdi/tdiindex.html>

New York Workers' Compensation Board. (2007). *Introduction to the disability benefits law*. Retrieved July 7, 2008, from <http://www.wcb.state.ny.us/content/main/DisabilityBenefits/Employer/introToLaw.jsp>

Rhode Island Department of Labor and Training. (2007). *Temporary disability insurance*. Retrieved July 7, 2008, from <http://www.dlt.ri.gov/tdi/>

U.S. Social Security Administration. Office of Policy. (2006). Temporary disability insurance program description and legislative history. *Annual Statistical Supplement*. Retrieved July 7, 2008 from <http://www.ssa.gov/policy/docs/statcomps/supplement/2006/tempdisability.html>

most jurisdictions with a State Disability Insurance program, employers can choose to provide the benefits directly, rather than through the state program.

LTD Programs

Long-term disability programs, which correspond to the permanent disability programs of workers' compensation, are intended to provide ongoing income protection to workers with extended or permanent disabilities. Roughly one out of every nine individuals receiving short-term disability benefits proceeds on to receive LTD benefits.¹⁶³

Design Goals

The primary design goals of a LTD plan are to maintain an adequate level of income while providing appropriate incentives and support for workers who are able to re-enter the work force through recovery, rehabilitation, or retraining.

Key Features

Eligibility. Most employers offering long-term disability plans extend eligibility to all full-time employees. Some limit eligibility to exempt (salaried) employees or non-bargaining employees.

Definition of disability. A typical LTD plan will combine an "own-occupation" definition of disability with the requirement that the disability result in at least a 20 percent loss of income.¹⁶⁴ It is common to limit benefits based on an "own-occupation" definition of disability to two or three years and base continued benefits on an "any-occupation" definition of disability. In the case of veterans, the illness or injury must be shown to have been service-connected, or must be one of a number of conditions for which there is a presumption of service connection.

Benefit level. Almost all employer-sponsored LTD plans (97 percent) base benefits on a percentage of pre-disability pay; the most common benefit level is 60 percent. Many plans also have a maximum monthly benefit; of those that do, over half have a maximum monthly benefit of at least \$10,000. Benefit levels are chosen to strike a balance between ensuring an adequate level of income protection while maintaining an incentive to return to work. Full replacement of pre-disability income should be avoided because it severely reduces the return-to-work incentive. Factors that should be considered in evaluating benefit levels include any work-related expenses that may be eliminated for employees who do not report to work because of a disability (for example, uniforms or special clothing, commuting expenses, and so on) and the tax status of benefits under the plan. The general rule is that either the premiums or the benefits are taxable income to the employee – but not both. If a plan is structured so

¹⁶³ McMahon, B.T., Danczyk-Hawley, C.E., Reid, C., Flynn, B.S., Habeck, R., Kregel, J., and others. (2000). The progression of disability benefits. *Journal of Vocational Rehabilitation*, 15, 3-15.

¹⁶⁴ Bluhm, W.F. (Ed.). (2003). *Group insurance* (4th ed.). Winsted, CT: Actex Publications.

that the benefits are non-taxable, then a lower replacement ratio is appropriate. Long-term disability as a percentage of pay is shown in Table VII-5. The range of maximum monthly benefits is shown in Table VII-6.

Table VII-5. LTD Benefit Level as Percentage of Pay

Benefits as a Percentage of Pay	Percentage of Firms
< 50%	3%
50%	10%
60%	69%
61 - 65%	1%
66 - 67%	15%
70% +	2%

Source: Hay Group, Inc. (2007). 2007 benefits prevalence report: Prevalence of benefits practices and executive summary. Philadelphia, PA: Hay Group, Inc.

Table VII-6. Maximum Monthly Benefit Amount

Maximum Monthly Payment	Percentage of Firms
< \$5,000	7%
\$5,000	11%
\$5,001 - \$7,500	13%
\$7,501 - \$9,999	6%
\$10,000	30%
\$10,001 - \$12,500	6%
> \$12,000	27%

Source: Hay Group, Inc. (2007). 2007 benefits prevalence report: Prevalence of benefits practices and executive summary. Philadelphia, PA: Hay Group, Inc.

Elimination Period. The elimination period for a LTD plan may be thought of as a deductible that is described in days rather than dollars. In other words, the employee must be disabled for a certain number of days in order to qualify for LTD benefits. Typically, this elimination period coincides with the length of any available short-term disability benefits. The range of waiting periods is shown in Table VII-7.

Table VII-7. Waiting Periods for LTD Benefits

Months	Percentage of Firms
1	29%
2	6%
3	26%
4 - 5	1%
6	17%
7 - 11	0%
12	18%
More than 12	3%

Source: Hay Group, Inc. (2007). 2007 benefits prevalence report: Prevalence of benefits practices and executive summary. Philadelphia, PA: Hay Group, Inc.

Benefit Period. Benefits may be available for a fixed number of years, to age 65, or until the worker reaches his or her Social Security Full Retirement Age.¹⁶⁵

Cost of Living Adjustment Feature. Inflation protection is sometimes provided through periodic cost of living adjustments (COLA). The timing of any COLA will be specified by the plan, and the amount of the adjustment can be either a fixed percentage or indexed to a specific measure of inflation.

Limitations and Exclusions. Long-term disability plans commonly exclude disabilities that are the result of an intentionally self-inflicted injury, an act of war, or that is the result of an attempt to commit a felony. Preexisting conditions may be excluded, especially for smaller groups. Many companies limit the benefit period for mental health conditions and substance abuse to the first two years of disability.

Typical Employer Practice

Nearly three-quarters (73 percent) of employers pay the full cost of the LTD insurance premiums. Fifteen percent of employers offer LTD benefits as a fully employee paid benefit. The remaining 12 percent of employers share the cost of the program with employees.

When offered on an optional or “voluntary” basis, LTD coverage is generally guaranteed-issue (that is, an employee will not be refused coverage based on health status). To protect the financial viability of the program against adverse selection, where only those workers most likely to face a disabling condition choose to enroll, insurers typically require that a minimum percentage of a firm’s employees participate before they will issue coverage. Also, guaranteed issue of coverage is generally only available when the plan is first implemented (or when an employee first becomes eligible); workers who initially decline coverage and then want to enroll later are subject to underwriting. An enrollment rate between 21 and 40 percent is typical for a voluntary plan.¹⁶⁶

As described above, most employers determine benefits as a flat percentage of pre-disability pay with a monthly benefit cap. Eighty-six percent of employers determine the benefit amount based on base salary excluding bonus payments. The monthly benefit cap ranges from under \$5,000 per month to more than \$12,500 per month. Sixty-three percent of employers provide a maximum benefit of \$10,000 per month or more.

For most employees, the percentage of pre-disability pay is more significant than the monthly maximum benefit. Only the most highly paid employees will reach the maximum benefit.

¹⁶⁵ Older LTD policies commonly provided benefits till age 65. The 1983 Social Security Amendments raised the Full Retirement Age for individuals born in 1938 or later. In response, most employers who provided benefits to age 65 have now amended their plans to coordinate with the new rules by specifying that benefits will continue until an individual’s full retirement age.

¹⁶⁶ Neyer, R.R. Jr. (2007). A voluntary long-term disability snapshot. *LIMRA’s MarketFacts Quarterly*, 32.

Some employers provide workers with the option of purchasing additional supplemental LTD coverage. This can be used either to allow employees to choose a higher benefit percentage (for example, the employer provides coverage for 60 percent of pre-disability income with the option for employees to buy up to a 70 percent benefit) or to allow higher-income employees to buy coverage for income above the monthly limit (for example, the employer provides coverage for 60 percent of pre-disability income up to a maximum monthly benefit of \$5,000 with the option for employees with annual salaries over \$100,000 to buy coverage above the \$5,000 benefit maximum to reach a 60 percent of pre-disability benefit level). In no case, however, are the combined benefits paid allowed reach or exceed 100 percent of pre-disability income.

Other Sources of Benefits and Coordination of Benefits

Benefit offsets typically include Social Security benefits, workers' compensation, state cash sickness programs, and other disability plans sponsored by the employer. Roughly one-third of all individuals receiving private LTD benefits will eventually apply for and receive SSDI benefits.¹⁶⁷ Nearly all employer-sponsored LTD plans (97 percent) offset plan payments by SSDI benefits. Thirty percent of employers offset benefits by the primary Social Security Benefit only. Fifty-three percent offset benefits by the family Social Security Benefit amount. Only three percent of employers do not offset benefits.

Partial Disability and Rehabilitation

Several benefit features can be used to help workers return to work. Reduced benefits may be paid for disabilities that are less than total but still restrict an individual's ability to work. "Partial" and "residual" disability benefits are designed for injuries or illnesses that prevent workers from performing only *some* of their primary duties. The degree of disability will be expressed as a percentage, with a minimum level of disability (for example, 40%) required to receive benefits. The degree of disability is determined in reference to the claimant's own ability to work based on the plan's particular definition of disability. Those benefits can be provided on a pro-rata basis or as a fixed percentage (for example, 50 percent).

It is common for plans to require an initial "qualification period" for individuals fully disabled to qualify for reduced benefits. "Recurring disability" provisions clarify when a disability is considered a continuation of a prior disability. This might be if it is related to the cause of the prior disability and occurs within 12 months of the end of the prior disability. Residual and recurring disability provisions allow workers to attempt returning to work without worrying about losing their disability benefits as a result. Rehabilitation benefits have become more common in recent decades and can provide payment for a wide variety of rehabilitation services such as physical therapy, occupational training, and adaptive aids. In many cases insurers will pay for rehabilitation even if no formal rehabilitation benefit is provided.

¹⁶⁷ McMahon, B.T., Danczyk-Hawley, C.E., Reid, C., Flynn, B.S., Habeck, R., Kregel, J., and others. (2000). The progression of disability benefits. *Journal of Vocational Rehabilitation*, 15, 3-15.

Disability Benefits in Private Pension Programs

Forty-three percent of employers provide a defined benefit pension program. Over the last two decades, the popularity of these programs has been declining. Of those employers with a defined benefit pension program, 80 percent provide some form of disability benefits as part of the pension plan.

Typical Features

The most common form of benefit (offered by 40 percent of employers offering a defined benefit pension plan) is a continuation of service credit while an employee is disabled. Under this type of program, a disabled employee would earn service credit during the period of disability and when he or she reached retirement age would begin receiving benefits. Twenty percent of employers provide for immediate, unreduced retirement benefits should an employee become disabled. Typically, the employee is required to meet a service requirement. These service requirements typically range from 5 to 10 years.

Disadvantages

Because defined benefit pension plan programs are becoming less prevalent,¹⁶⁸ a large portion of the U.S. workforce does not have this type of disability coverage.

More generally, the primary purpose of pension plans is to provide retirement income at the end of the normal working lifetime; they are not designed to provide disability income protection to active employees. As a result, such plan features as the service requirements and benefit formulas typically reflect the needs of retirees. For instance, typical service requirements leave short-tenure employees without disability protection. Short-service employees may not have earned sufficient retirement credits to provide adequate disability income.

It is common for employer-sponsored long-term disability benefits to terminate at the normal retirement age for the firm's pension plan (if there is a pension plan). The rationale is that the LTD plan is intended to replace wages lost because of disability and, in the absence of a disability, those wages would have ended at retirement. When this approach is taken, continuing to credit service towards the retirement plan while an employee is disabled constitutes an important role by ensuring that the pension benefit will be adequate when normal retirement age is reached. The rationale for providing the credit is that, in the absence of a disability, the worker would have been earning the retirement credits.

¹⁶⁸ In 1997, defined benefit pension plans were offered by 67 percent of participants in the Hay Benefits Report. In 2007, this had declined to 43 percent.

Individually-Purchased Disability Income Insurance

Individually-purchased Disability Income insurance (IDI) is intended to provide ongoing income protection to workers with extended or permanent disabilities.

Design Goals

Similar to a LTD plan, the primary design goals of an IDI policy are to maintain an adequate level of income while providing appropriate incentives and support for workers who are able to re-enter the work force through recovery, rehabilitation, or retraining.

Key Features

Eligibility. As with individual life insurance, applicants for IDI coverage are subject to underwriting.¹⁶⁹ Because an IDI policy insures the earnings ability of a worker, the underwriting process will include a financial aspect designed to confirm the applicant's earned income and verify the stability of that income.

Definition of disability. The definition of income used depends on the policy chosen. Both "own occupation" and "any occupation" policies are available as well as policies with an initial "own occupation" benefit period followed by an "any occupation" benefit period.

Benefit level. A typical IDI policy will replace 50 to 60 percent of pre-disability income. During the underwriting process, a disability insurer will consider other sources of disability income that may be available to an applicant. To avoid over-insurance, insurers will generally not issue an IDI policy that would result in an applicant having combined disability benefits from all sources that total more than 70 to 80 percent of pre-disability income.

Waiting Period. IDI policies are available with waiting periods ranging from 31 days to over 180 days. The longer the waiting period, the lower the cost of the policy.

Benefit period. Policies are available with a one, two, five, or ten-year benefit period; benefits continue until the Social Security full retirement age; or policies may provide lifetime benefits.¹⁷⁰

Renewal provisions. Most IDI policies have one of two types of renewal provisions. With a "guaranteed renewable" policy the policyholder has the right to renew the policy each year as long as he or she is willing to pay the required premium – those premiums may increase over time, however. With a "non-cancellable" policy the insurer does not have the right to increase premiums at renewal.

¹⁶⁹ Underwriting is the process an insurance company uses to evaluate an individual's application for insurance and decide whether to offer insurance, the amount of insurance to offer, and the premium for the coverage.

¹⁷⁰ Older IDI policies commonly provided benefits to age 65. The 1983 Social Security Amendments raised the full retirement age for individuals born in 1938 or later. In response, newer policies coordinate with Social Security by specifying that benefits will continue until an individual's full retirement age.

Cost of Living Allowance Feature. Inflation protection is sometimes provided through periodic Cost of Living Allowance (COLA) increases. The timing of any COLA will be specified by the plan, and the amount of the adjustment can be either a fixed percentage or indexed to a specific measure of inflation.

Future Income Option. The benefits provided under an IDI policy are based on a specified “face amount,” much as with a life insurance policy. Without some ability to increase the face amount over time, the percentage of pre-disability income protected by an IDI policy will decrease as the policyholder’s income grows. A future income or guaranteed insurability option allows the policyholder to periodically increase the value of the policy without additional evidence of insurability. This is not necessary under employer-sponsored short-term disability or LTD plans because those plans base benefits on an employee’s compensation level at the time of disability.

Typical Use

In most cases an IDI policy is purchased directly by the insured worker and is not part of a formal employer-sponsored employee benefit program. (IDI policies can be used by an employer to supplement a more traditional LTD plan.) Typical purchasers are the self-employed and workers who do not have access to an employer-sponsored LTD plan. Specialty forms of IDI are available to meet the needs of business owners. These include business overhead expense (BOE) policies, disability buyout policies, and key person policies. BOE coverage allows a disabled small business owner to continue to pay the overhead expenses necessary to keep his/her business viable until he/she recovers (for example, rent, salaries, and so on). BOE policies typically have a one- or two-year benefit period. Disability buyout coverage is designed to allow one partner to buy out another should one become disabled. Disability buyout policies typically have fairly long waiting periods (for example, one year or more). Key person coverage protects a business against the financial loss that would occur if a senior partner or other key employee were disabled.

Disability Management in Private Employer-Sponsored Plans

Active disability management programs are less common between short-term disability and LTD plans than among workers’ compensation plans. The potential improvement in outcomes is significant, however. Sun Life Financial reported in 2000 that early case management for non-maternity short-term disability claims increased the number of workers returning to the job during the short-term disability period by 47 percent and reduced the number of LTD claims by almost 35 percent.¹⁷¹ Another study found that employers with the best disability management practices cut the progression rate from

¹⁷¹ Intracorp. (2004). *Clinical case management: A common platform for managing health and productivity*. Retrieved March 13, 2008, from <http://www.intracorp.com/IntracorpHome/tools/pdf/Clinical%20Case%20Management.pdf>

short-term disability to LTD benefits in half compared to employers who make the least use of disability management.¹⁷²

Three key strategies for managing disabilities are early intervention, providing effective support to assist workers in returning to work, and structuring benefits to provide appropriate incentives. To be effective, disability management requires consistent, ongoing efforts rather than a single, one-time intervention. Current best practice is to use multiple approaches to support a disabled employee's return to work. The particular mix of interventions used should be based on the needs of each specific individual.

While the disability benefits provided by private employers are structured around the length of disability, with a progression through sick leave, short-term disability, and LTD benefits, early identification of serious disabilities is still critical for effective disability management. Incidental illnesses that make up the majority of sick leave usage do not require active management unless there is evidence of abuse. Disabilities that are planned in advance (such as surgeries) or that can be identified immediately as long-term (such as serious trauma) should be flagged for management. Other potentially serious disabilities requiring intervention should be identified as early in the short-term disability benefit period as possible. Early intervention is important because the longer an employee is away from work the less likely he or she is ever to return.

Communication is a key factor in any disability program. Workers need to understand ahead of time what to do when a disabling injury or illness occurs; understanding the system ahead of time can reduce anxiety and improve workers' satisfaction with the entire process. Workers who are satisfied with the way they are treated return to work significantly faster than workers who are not satisfied. A case manager is particularly important in providing information to employers on a worker's medical condition, how to speed up recovery, and the options available for returning to work. This is a particularly important aspect of the communication with the employer. By providing modified duties, simple accommodations, schedule adjustments or other forms of assistance an employer can help a recovering worker get back on the job – if the employer knows what to do. Coordinating these issues between the worker and the employer is one critical role for the case manager. All the information is, of course, subject to Health Insurance Portability and Accountability Act (HIPAA), the Americans with Disabilities Act (ADA), and all the other laws that guard personal health information.

In many cases, employees may be able to return to work despite certain activity limitations if they are given light or modified duties. This can be in the same work unit, or the employer may maintain a pool of "light duty" jobs that are available on a temporary basis for employees transitioning back to work after a disability. Appropriate management incentives should be in place to ensure that staff will be motivated to make a modified position work. Internal staff are an important resource in developing effective work accommodations. Formal modified or transitional return-to-work

¹⁷² Danczyk-Hawley, C.E. McMahon, B.T., & Flynn, B.G. (2002). *Progression of disability benefits as a measure of disability management program effectiveness: Implications for future research*. Retrieved March 13, 2008, from <http://www.worksupport.com/Main/downloads/pod/chapter%205.pdf>

programs are more common among large employers and for occupational disabilities than they are for smaller employers and non-occupational disabilities.

The term “integrated disability management” is used to describe the active coordination of a firm’s various disability programs.¹⁷³ The simplest and most common form of integrated disability management coordinates the management of occupational and non-occupational disability benefits. While workers’ compensation plans have different administrative requirements than short-term disability and long-term disability plans because of the job related nature of workers’ compensation claims and the legal requirements of the program, the same basic disability management processes may be used. More sophisticated approaches may also coordinate sick leave, employee-assistance programs, behavioral health care, disease management, and medical case management programs in order to identify disabled workers as quickly as possible and provide them with the support they need to return to work. Sometimes the concept of disability management is used more broadly to include all of an employer’s programs for preventing injuries and keeping workers healthy. In this wider view, disability management includes safety and accident prevention programs, on-site health clinics, and wellness programs.

¹⁷³ By “active coordination” we mean operational and administrative coordination rather than simple design coordination such as choosing the LTD elimination period to coordinate with the STD maximum benefit period.

VIII. QOL ELEMENTS IN DISABILITY PROGRAMS

Workers' Compensation Programs

Dual Benefits Approach in U.S. Workers' Compensation Programs

An effort has been made in the past to establish a dual benefits system in one workers' compensation programs in the United States. In a dual system, workers' compensation provides two discrete payments that compensate for two distinct purposes. The first and most commonly recognized benefit is to compensate for loss of earnings due to *work disability*; this is payment for lost wages and/or loss of earnings capacity. The second and less commonly recognized benefit is to compensate for *non-work disability* (sometimes referred to as non-economic loss, impairment benefits, or loss of quality of life).

The dual benefits approach is relatively rare in U.S. workers' compensation programs. In general, U.S. policy considers the only purpose of workers' compensation is to compensate for work disability. Internationally, the dual benefits approach has been more common.

One reason for limited experience with dual benefits in the U.S. is an abandoned attempt to implement it in Florida. Following the 1972 *Report of the National Commission on State Workmen's Compensation Laws*, which recommended a dual benefits system based on two distinct purposes for benefit payments, Florida implemented a dual benefits system. Relevant to this part of the study, the compensation Commission's report talks about *impairment benefits*, which it says are "justified because of losses an impaired worker experiences that are unrelated to lost remuneration." Impairment benefits were contrasted with *disability benefits*, which are "based on actual wage loss or loss in wage earning capacity."

Making clear that they were essentially talking about Quality of Life (QOL) and contrasting with lost wages, the Commission report further states:¹⁷⁴

The impairment may, for example, have lifetime effects on the personality and normal activities of the worker. Since impairment benefits have no relationship to wage loss, there would be no necessity to link the value of the weekly benefits to the worker's own weekly wage; the weekly benefit could be the same amount for all workers in the state.

In contrast, the disability benefits could be based on actual wage loss or loss in wage earning capacity. In most states, permanent partial benefit awards are based on estimates of the future loss in wages caused by the impairment.

¹⁷⁴ National Commission on State Workmen's Compensation Laws. (1972). *Report of the National Commission on State Workmen's Compensation Laws*, p. 69.

Florida’s Approach to Compensating Loss of Quality of Life

Florida adopted the dual benefits approach in 1979. Its workers’ compensation law established one payment track for “wage-loss benefits” based on actual loss of wages for individuals and another payment track for “impairment benefits” based on workers’ permanent impairments.

The design of the wage-loss benefits in Florida’s 1979 legislation was problematic, however, and after a number of attempts to fix the problems, the dual system was abandoned in 1993. The failure of the Florida attempt—ironically, due to problems with the wage-loss track rather than problems with the impairment track—meant that a prospective model that other states might follow failed to emerge.

Nonetheless, we can still learn from Florida’s experience. Florida’s dual compensation program ran for 14 years. In addition to wage-loss benefits, the program paid impairment benefits to workers with certain types of permanent impairments including amputations, loss of vision, and serious head or facial disfigurements. The impairment benefits were paid to compensate the worker for non-work disability. The benefits were based only on the level of the permanent impairment rating and not on worker-specific factors.

Because the kinds of disabilities deemed to affect QOL were limited, there are limited applications of the Florida experience to this study, which seeks to determine the effects of disability across a broad range of types of disabilities. Even so, the kinds of assessments they used are worth considering.

QOL in Five State Workers’ Compensation Programs

The study team examined the workers’ compensation programs in five states: California, Florida, Massachusetts, Montana, and New York. The states were selected to represent a variety of approaches to work disability compensation. The existence of dual benefits—defined as payment for both work disability and non-work disability—was found in only one of the state workers’ compensation programs that were reviewed. Some states pay for wage loss, some pay for loss of earnings capacity, and, in a few instances, states pay for both. However, only Massachusetts of the reviewed states, pays for non-work disability. Other state workers’ compensation programs are silent on QOL.

The general lack of non-work disability benefits is not surprising given that state programs were established primarily to provide medical, rehabilitation, and basic wage benefits quickly without regard to fault and at a reasonable cost to the employer. For states, getting a majority of employers¹⁷⁵ to contribute to the workers’ compensation

¹⁷⁵ Depending on the state, certain jobs may be excluded from mandatory participation. Typically, these are farm workers, domestic workers, and workers at very small businesses. The National Academy of Social Insurance estimates that about 96 percent of all wage and salary workers nationally are covered by workers’ compensation statutes. *Source:* Sengupta, I., Reno, V., & Burton, J.F. Jr. (2007). *Workers’ compensation: Benefits, coverage, and costs, 2005*. Washington, DC: National Academy of Social Insurance.

programs has meant limiting benefits and injury lawsuits to keep the program affordable.¹⁷⁶

Workers' compensation permanent disability payments are operationally based on some combination of impairment assessments such as schedule awards¹⁷⁷ and/or disfigurement awards, actual loss of wages, and loss of earning capacity assessments as highlighted below.

- California assesses percentage of whole body impairment which is adjusted for various employment-related modifiers (such as age and occupation) to derive a rating. Ratings correspond to a fixed number of weeks of compensation. Compensation is considered wage loss, although it takes into account loss of earnings capacity.
- New York offers schedule ratings for about a dozen injuries. For non-schedule injuries, a percentage of whole body impairment is calculated, using New York's 1996 Medical Guidelines. This percentage is multiplied by a proscribed number of weeks. Both of these impairment ratings are loss of earnings capacity benefit. Disfigurement can be paid in addition to work disability compensation up to \$20,000. Disfigurements benefits are not referred to as quality of life loss payments in New York.
- Montana, like California, assesses percentage of whole body impairment which is adjusted for various employment-related modifiers such as age, occupation, and wage losses. This is multiplied by a set number of weeks to reach a wage-loss benefit. In addition, Montana uses the same whole body impairment percentage to calculate a separate "impairment award," which functions as loss of capacity benefit.
- Florida assesses percentage of whole body impairment using its own 1996 Florida Impairment Rating Guide. This percentage is multiplied by three weeks at 50 percent of average weekly wage (AWW) for each percentage point of permanent disability assessed, a wage-loss benefit.
- Massachusetts pays for 60 percent of the difference between the employee's average weekly wage before the injury and the weekly wage earning capacity after the injury up to a maximum of 75 percent of the state's AWW, which is a wage-loss benefit. The state also provides payments for "specific injuries" that are set out in legislation such as loss of hearing, and which are paid by multiplying the state AWW by a number of weeks that varies by injury. The distinctive feature of the Massachusetts workers' compensation approach is that a worker can receive both the wage-loss benefit and the benefit for specific injuries. This is the distinctive feature of the dual benefits approach, which

¹⁷⁶ Burton, J.F. Jr. (2007). An overview of workers' compensation. *Workers' Compensation Policy Review*, 7(3), 3–17.

¹⁷⁷ Schedule awards are serious injuries or impairments to a member or function of the body that are listed in state statutes for a specific amount of compensation. Typically, a specific number of weeks is assigned to each type of injury – for example 50 weeks for the hand that is then paid at some percentage of the worker's salary with certain limits set.

indicates that the purpose of the benefits for specific injuries is intended to compensate for non-work disability. Massachusetts also compensates for bodily and facial disfigurement up to \$15,000, excluding disfigurement that is purely scar-based and is not on the face, neck, or hands.

Inconsistencies in Schedule Awards

There is vast inconsistency of economic loss benefits paid for similar injuries across state and federal programs that make schedule awards. In general, federal disability programs, of which Federal Employees' Compensation Act (FECA) is one, are much more generous than state programs. The various payment amounts are shown in Table VIII-1.

The range of variation seen in this table illustrates the truly subjective and policy-based nature of disability compensation for loss of earnings *capacity*. For example, one state pays \$4,140 for the loss of a great toe while another pays \$73,413. The range of scheduled benefits for the loss of a hand is from \$37,400 to \$229,778. Are such differences reflective of the economy in a state, the culture, or the value placed on the loss of QOL? Perhaps unspoken QOL is represented in earnings capacity in compensation programs mandated to only compensate for loss of earnings. However, these payments in all states except Massachusetts are in lieu of other permanent partial disability benefits, which means that workers receive no other compensation for the losses of earnings during the permanent disability period.

QOL in Federal Programs

The study team reviewed the following four federal programs to determine whether QOL payments are made:

- Social Security Disability Insurance (SSDI)¹⁷⁸
- Federal Employees' Compensation Act (FECA)¹⁷⁹
- Longshore and Harbor Workers Compensation Act (LHWCA)¹⁸⁰
- Energy Employee Occupational Illness Compensation Program (EEOICP)¹⁸¹

Federal programs reviewed are silent on QOL payments and do not compensate beyond loss of earnings.

¹⁷⁸ U.S. Social Security Administration. (2008). *Disability planner: Social Security protection if you become disabled*. Retrieved June 6, 2008, from www.socialsecurity.gov/dibplan/index.htm

¹⁷⁹ U.S. Department of Labor. Office of Workers' Compensation Programs. (2008). *Summary of compensation benefits for employees under the Federal Employees' Compensation Act*. Retrieved April 3, 2008, from www.dol.gov/esa/regs/compliance/owcp/ca_feca.htm

¹⁸⁰ Department of Labor. Office of Workers' Compensation Programs. (2008). *Division of longshore & harbor workers compensation*. Retrieved June 13, 2008, from www.dol.gov/esa/owcp/dlhwc/lstable.htm

¹⁸¹ U.S. Department of Labor. Office of Workers' Compensation Programs. (2008). *Energy employees occupational illness compensation program*. Retrieved June 13, 2008, from www.dol.gov/esa/regs/compliance/owcp/eeoicp/main.htm

Table VIII-1. Maximum Disability Payments for Selected Schedule Injuries: States and FECA in 2006 and 2007ⁱ

	California	Florida	Massachusetts	Montana	New York	Highest State	Lowest State	FECA* Note: Schedule awards paid only after wage loss has ended
Loss of hearing in both ears	\$60,720	\$66,027	\$77,033 award plus wage loss of 60% AWW	\$35,766 award plus wage loss of adjusted 66.7% AWW	\$60,000	\$240,987 Illinois	\$31,486 Colorado	200 wks * \$1,715.72= \$343,144 plus wage loss of adjusted 66.7% AWW*
Loss of arm	\$142,898	\$134,330	\$43,018 award plus wage loss of 60% AWW	\$61,313 award plus wage loss of adjusted 66.7% AWW	\$124,800	\$211,000 Hawaii	\$48,840 Alabama	312 wks * \$1715.72= \$535,305 plus wage loss of adjusted 66.7% AWW*
Loss of great toe	\$4,140	\$4,554	QOL not specified. ⁱⁱ Wage loss of 60% AWW	\$5,109 award plus wage loss of adjusted 66.7% AWW	\$15,200	\$73,413 Oregon	\$4,140 California	36 wks * \$1,715.72= \$61,766 plus wage loss of adjusted 66.7% AWW*
Loss of hand	\$78,948	\$117,937	\$34,015 award plus wage loss of 60% AWW	\$55,181 award plus wage loss of adjusted 66.7% AWW	\$97,600	\$229,778 Illinois	\$37,400 Alabama	244 wks * \$1,715.72= \$418,636 plus wage loss of adjusted 66.7% AWW*
Disfigurement ⁱⁱⁱ	No set figure ^{iv}	\$0	\$15,000 award plus wage loss of 60% AWW	\$2,500 award plus wage loss of adjusted 66.7% AWW	\$20,000 plus wage loss of 66.7% AWW	\$30,000 Hawaii	\$0 Florida	\$3,500 plus wage loss of adjusted 66.7% AWW*
Quadraplegia	66.7% of AWW up to \$882/week	66.7% of AWW up to \$683/week	66.7% of AWW up to \$1000/wk plus benefits awarded under "specific injuries" and permanent functional loss	66.7% of AWW up to \$545/wk	66.7% of AWW up to \$500/wk	80% of AWW up to \$1,264/wk	66.7% of AWW up to \$374/wk Arizona	Benefits paid at 66.7% AWW (or 75% of AWW if there are dependents) with caps set for page grade

* FECA wage-loss payments rise to 75 percent if injured worker has dependents. (All) FECA wage-loss payments may not be paid concurrently with schedule loss awards; they are usually paid first.

Source: EconSys Study Team compilation from referenced sources and interviews.

ⁱ U.S. Chamber of Commerce. (2007). *Analysis of Workers' Compensation Laws 2007*. Chamber of Commerce Research and Analysis Center. All chapters. Additional source for FL calculation: WorkersCompensation.com. (1996). *Florida Impairment Rating Schedule*. Retrieved April 24, 2008, from <http://www.workerscompensation.com/florida/flimpair/index.php>; Additional source for MA calculation: Massachusetts State Legal Code. (n.d.). *Chapter 152, Section 36: Specific injuries*. Retrieved April 24, 2008, from www.mass.gov/legis/laws/mgl/152-35e.htm. Additional source for MT calculation: Montana State Legislature. (2001). *An act revising eligibility for temporary total disability benefits*. Retrieved April 15, 2008, from <http://data.opi.state.mt.us/BILLS/2001/BillPDF/SB0157.pdf>

ⁱⁱ State statute says only that: "For each loss of bodily function or sense, other than those specified in preceding paragraphs of this section, the amount which, according to the determination of the member or reviewing board, is a proper and equitable compensation, not to exceed the average weekly wage in the commonwealth at the date of injury multiplied by thirty-two." *Source*: Massachusetts State Legal Code. (n.d.). *Chapter 152, Section 36: Specific injuries*. Retrieved April 24, 2008, from www.mass.gov/legis/laws/mgl/152-35e.htm

ⁱⁱⁱ U.S. Department of Labor. (2006). *Table 11: Jurisdictions providing disfigurement benefits*. Retrieved April 8, 2008, from <http://www.dol.gov/esa/owcp/regs/statutes/stwclaw/table11.pdf>. Disfigurement numbers across programs were "in effect as of January 1, 2006."

^{iv} *Ibid*. "No set figure, but the nature and the impact on activities of daily living and future earning capacity shall be taken into account," according to the Department of Labor, 2007.

Canadian Workers' Compensation Programs

As noted earlier, most Canadian programs are dual award programs that provide for a non-economic loss award as well as a loss of earnings capacity benefits. Individuals receive a loss of earnings capacity benefit if they sustain a permanent impairment and are deemed unable to earn an income comparable to their pre-injury/illness earnings. The loss of earnings benefit is based on a formula that takes into consideration both pre-injury earnings and post-injury earnings potential. In most jurisdictions, loss of earnings capacity is reassessed at several points over the years following injury.

A non-economic loss award is received as compensation for pain and suffering and loss of QOL by individuals sustaining permanent impairments as a result of work-related injuries and illnesses. The amount is usually awarded as a lump-sum payment but can also be paid as an annuity. It is based on a formula that takes into consideration the percent of impairment (using the *AMA's Guides* or a similar rating system) and, in some jurisdictions, the age of the worker.

The dual award approach to compensation is more consistent than single award programs with recent socio-medical concepts of disability such as that defined by the World Health Organization's International Classification of Functioning and Disability. The dual approach makes a distinction between non-work disability and work disability and characterizes disability as a person-in-context phenomenon. Impairment is a necessary but not sufficient criterion for work disability.

Analytical Approach

The study team reviewed the workers' compensation programs in the Canadian provinces, closely examining specific programs in Alberta,¹⁸² Ontario,¹⁸³ and

¹⁸² Workers' Compensation Board Alberta. (2008). *Summary of benefits for workers permanently disabled*. Retrieved April 8, 2008, from www.wcb.ab.ca/workers/benefits_permanent.asp.

Saskatchewan.¹⁸⁴ The programs in these three provinces are representative of the dual award approach outlined earlier.

A comparative analytical approach was used to review these three Canadian programs. The first level of analysis provides an overview of Canadian programs on several defined areas of analysis as follows: definitions of QOL, program consideration of QOL and loss of earnings (LOE); and methods of calculation of QOL payment (including amount, duration, and frequency). Matrices were developed to compare Canadian programs side-by-side within each area. The second level of analysis includes administrative lessons and best practices for decisionmakers to consider.

QOL as a Concept

Quality of Life as a component of these programs varies slightly from province to province. This variation is based on (1) the vocabulary/terminology used to identify the QOL concept and (2) the conceptual meaning of QOL in each program. Alberta and Ontario both explicitly use “non-economic loss” as part of their QOL terminology: Non-economic Loss Payment (NELP) and Non-Economic Loss (NEL), respectively. Alternatively, in Saskatchewan, there is an implicit association of QOL through references to lump-sum payments for “permanent impairment” and “disfigurement” that are awarded in addition to wage-loss compensation.

In the Ontario program, the meaning behind the term non-economic loss addresses the “physical, functional, or psychological loss” caused by a work-related injury or illness. Alberta considers non-economic loss as recognition of the impact that the impairment may have on a worker outside the workplace.

As noted, the Saskatchewan program uses implicit references to QOL; however, its Functional Impairment Rating Schedule¹⁸⁵ guidelines explicitly state that “no award will be given, specifically, for pain and suffering.” This is particularly interesting given that pain and suffering are commonly cited in the literature as key characteristics of loss quality of life.

Definitions of QOL

Regardless of province, the QOL definitions have one major aspect in common, that of permanent impairment as the primary operational basis for QOL-related compensation. It should be noted that under the disfigurement award in the Saskatchewan program, scarring on the stated body parts is also characterized as permanent. The repeated use

¹⁸³ Workplace Safety and Insurance Board Ontario. (2008). *Home page: Welcome*. Retrieved April 12, 2008, from www.wsib.on.ca.

¹⁸⁴ Saskatchewan Workers’ Compensation Board . (2006). *Employer services, worker services, care provider services*. Retrieved April 14, 2008, from www.wcbsask.com

¹⁸⁵ Saskatchewan Workers’ Compensation Board . (2006). *Permanent functional impairment rating schedule for workers*. Retrieved April 14, 2008, from www.wcbsask.com/WCBPortal/ShowProperty/WCBRepository/pdfs/PFI_Rating_Schedule.pdf

and categorization of injury or illness as permanent serves as a defining or guiding principle for QOL compensation in the provinces reviewed.

Ontario and Saskatchewan specifically require that the injury or illness be work related.¹⁸⁶ Alberta, to some degree, provides an exception in that its definition of QOL does not explicitly state the term “work-related.” Its definition seems to focus more on recognizing the impact of injury or illness on the worker’s life outside of work. In doing so, Alberta shifts the emphasis from a work-related criterion to a *non-work* focus that targets aspects of the individual’s life other than work that may be impacted. Alternatively, Ontario provides a seemingly more clinical approach to defining QOL, using broad categories such as physical, functional, or psychological to assess the impact of impairment on a person’s loss of quality of life. Table VIII-2 summarizes how QOL is defined in the three Canadian provinces studied.

Table VIII-2. QOL Definitions: Canadian Provinces

Province:	Canadian Provinces		
	Alberta	Ontario	Saskatchewan
Program	Workers’ Compensation Board	Workplace Safety Insurance Board	Workers’ Compensation Board
QOL Term	Non-Economic Loss Payment ⁱ (NELP)	Non-Economic Loss (NEL) Benefit ⁱⁱ	Permanent Functional Impairment Award & Disfigurement Award ⁱⁱⁱ
QOL Definition	Recognize impact of permanent clinical impairment on worker’s life outside the workplace.	Permanent impairment from a work-related injury or illness. Compensate for the physical, functional, or psychological loss the impairment causes.	Work injury resulting in a permanent functional impairment; for example, loss of a limb and related functioning. Permanent scarring on face, neck, hands, arms, torso, legs, or feet as a result of a work injury.

Source: EconSys Study Team compilation from referenced sources and interviews.

ⁱ Workers’ Compensation Board Alberta. (2008). *Summary of benefits for workers permanently disabled*. Retrieved April 8, 2008, from www.wcb.ab.ca/workers/benefits_permanent.asp

ⁱⁱ Workplace Safety and Insurance Board Ontario. (2008). *Summary of non-economic compensation benefits for workers*. Retrieved April 12, 2008, from www.wsib.on.ca/wsib/wsibsite.nsf/public/BenefitsNEL

ⁱⁱⁱ Saskatchewan Workers’ Compensation Board. (2006). *Permanent functional impairment rating schedule for workers*. Retrieved April 14, 2008, from www.wcbask.com/WCBPortal/ShowProperty/WCBRepository/pdfs/PFI_Rating_Schedule

¹⁸⁶ Work related here does not mean that the incident happened while the worker was on-the-job. Rather, it means that the condition arose from exposures at work.

How QOL and Loss of Earnings Are Taken into Account

Two characteristics that play an important role in QOL compensation in the Canadian provinces are: (1) a definition and description that clearly state the purpose or intention of the QOL benefit and (2) a lump-sum payment.

In each of the provinces, consideration is given to how QOL is defined and conceptualized. There is also an effort to distinguish the QOL element from the loss of earnings component in programs. An example of this can be seen under the non-economic loss program in the Alberta province where the payment is “not intended to compensate the worker for lost earnings.” Similarly, the Ontario program uses physical, functional, and psychological loss to distinguish itself from the loss of earnings aspect. Saskatchewan presents a somewhat new approach to differentiate from loss of earnings. More specifically, the program seemingly categorizes disabilities, for example disfigurement, and how they affect quality of life.

Furthermore, Saskatchewan distinguishes between impairments of function and disfigurement (structural impairments without loss of function). A separate assessment is undertaken for each. For both functional impairments and disfigurements, the Saskatchewan Board has its own rating schedule. Two sets of benefit maximums and minimums are identified for these two categories of impairments. In contrast, Ontario relies on one rating schedule for all permanent impairments. It uses the *AMA Guides* and has only one set of minimum and maximum payments. Alberta also relies on one rating schedule for permanent impairments but uses its own schedule known as the Alberta Permanent Clinical Impairment Guides. If, in the board's opinion, the Alberta Guides are silent as to the impairment, the consulted physician may rely on the most current edition of the *AMA's Guides*. Again, only one minimum and maximum payment is identified.

The lump-sum payment is another characteristic of QOL compensation. Most Canadian provinces reviewed use this form of payment though some provide an option of monthly installments for life or a lump-sum payment. Some programs effectively articulate the QOL lump-sum payment as a form of public recognition for a person being injured.

Age is also a factor taken into consideration in QOL benefits assessment in some Canadian provinces. Consideration of age suggests that length of time with a condition bears on the total amount of loss. For example, Ontario provides a smaller payment for older claimants. Specifically, the maximum payment is given to claimants 25 years of age or younger at time of injury. Age adjusted maximum payments decrease from age 25 through age 65. No age adjustment is made for the QOL benefits provided by Saskatchewan and Alberta. Table VIII-3 summarizes how QOL is taken into account.

Table VIII-3. How QOL is Independently Taken into Account in Three Canadian Provinces

Quality of Life	Alberta	Ontario	Saskatchewan
Program	Workers' Compensation Board (NELP)	Workplace Safety Insurance Board (NEL)	Workers' Compensation Board
Purpose of QOL payment	Non-Economic Loss Payment (NELP) is intended to compensate the worker for effect of impairment on life outside of work. The payment base is the same for all workers regardless of earnings.	Non-Economic Loss (NEL) benefit is paid to compensate for the physical, functional, or psychological loss the impairment causes. The payment base is the same for all workers regardless of earnings.	Permanent Functional Impairment award: Work injury results in a permanent impairment such as the loss of a limb and related functioning. Disfigurement award: Permanent scarring on the face, neck, hands, arms, torso, legs, or feet. For both payments bases are the same for all workers regardless of earnings.
Qualifying Condition	Permanent Impairment	Permanent Impairment	Permanent Functional Impairment. Impairment ratings are never based on the type of injury or surgery performed; based on functional loss (in all provinces). No award is given for pain and suffering. Functional impairment resulting from injury to internal organs is dealt with on an individual basis. No award is given unless the injury is sufficient to cause the worker to modify her/his activities in some fashion; awards given for disfigurement.
Method of Assessment	Medical Assessment using the Alberta Permanent Clinical Impairment Guides.	Impairment is expressed as a percentage of physical, l or psychological functional loss based on the examining doctor's report and the American Medical Association Guides to the Evaluation of Permanent Impairment.	Permanent Impairment: Evaluation of functional impairment is done by physicians and qualified consultants as determined by the Board. The impairment is expressed as a percentage of functional loss and is based on Saskatchewan's own guides. A separate assessment is done of psychological impairments and is added to the functional impairment percentage. Disfigurement Award: To allow for maximum healing, an assessment is made no sooner than 2 years after the injury or final surgery. The rating schedule is based on Saskatchewan's own scale, which allocates percentages for disfigurement of different parts of he body and adds up to 100% for disfigurement across the entire body.

Source: EconSys Study Team compilation from referenced sources and interviews.

The three programs are similar in how they take loss of earnings into account. Each program clearly states that the injury or illness must be both work-related and impact the person's ability to earn wages. The programs differ primarily on how to determine the wage-replacement benefit amount. In Alberta the amount is based on earnings of worker at the time of injury whereas in Ontario the determining factor for the amount of payment is the date of injury. In terms of benefit amount, another variation can be seen in Saskatchewan where the determination is cited as probable take home pay. The use of the word "probable" suggests that a range of factors are considered in determining the actual benefit amount. Table VIII-4 summarizes how earnings loss is taken into account.

Overall, both the non-economic and economic aspects of the programs rely on medical examinations as the basis for assessing the level of impairment. Similarly, permanent impairment is stated both in the QOL and LOE as a qualifying condition.

Table VIII-4. How Loss of Earnings Is Independently Taken into Account

Province	Alberta	Ontario	Saskatchewan
Program:	Economic Loss Payment (ELP)	Loss of Earnings (LOE)	Wage-loss Benefits
Purpose of earnings loss payment	ELP ⁱ received due to impact of permanent impairment on a worker's capacity to earn wages.	LOE ⁱⁱ benefit received after first day missed from work because of a work-related injury or illness.	Wage-loss ⁱⁱⁱ benefits (non taxable in all provinces) received after first day missed from work because of a work-related injury or illness.
Condition that qualifies applicant for earning loss payment	If after maximum medical recovery there remains a permanent impairment, a worker is assessed for loss of earnings capacity, described as a decreased capacity or ability to sustain the demands of the job. ELP benefits are received till age 65.	No distinction is made between temporary and permanent wage-loss benefits. If after maximum medical recovery there remains a permanent impairment, worker will continue to be considered for LOE benefit till age 65.	No distinction is made between temporary and permanent wage-loss benefits. If after maximum medical recovery there remains a permanent impairment, worker will continue to be considered for wage-loss benefits till age 65.
Determination of benefit amount	ELP based on the 90% of difference between net earning potential when injured and net earning potential after injury.	LOE is 85% of the difference between net pre-injury earnings and net post-injury earnings capacity.	Wage-loss benefits equal to 90% of net earnings loss. Benefit takes into consideration dependents.

Source: EconSys Study Team compilation from referenced sources and interviews.

ⁱ Workers' Compensation Board Alberta. (2008). *Summary of benefits for workers permanently disabled*. Retrieved April 8, 2008, from www.wcb.ab.ca/workers/benefits_permanent.asp

ⁱⁱ Workplace Safety and Insurance Board Ontario. (2008). *Summary of non-economic compensation benefits for workers*. Retrieved April 12, 2008, from www.wsib.on.ca/wsib/wsbsite.nsf/public/BenefitsNEL

ⁱⁱⁱ Saskatchewan Workers' Compensation Board. (2008). *Compensation benefits for workers*. Retrieved April 15, 2008, from http://www.wcsask.com/WCBPortal/appmanager/WCBPortal/WCB2?_nfpb=true&_pageLabel=page_worker_your_benefits

Calculation, Duration, and Frequency of QOL payments

One consistent element is that each program abides by a legislated minimum and maximum lump-sum payment amount. For Saskatchewan a lump-sum payment for disfigurement ranges from \$500 to \$15,000 and for impairment from \$2,200 to \$45,200 in 2008. For Ontario the amount for permanent impairment is \$30,616 to \$79,663 for 100% impairment depending on age (maximum at age 25 or younger and minimum at age 65 or older) in 2008. The age calculation is rather straightforward and is designed to compensate for the number of years that the condition potentially affects the worker. In Alberta the award is as follows: clinical impairment percentage *times* maximum payment amount. The maximum amount, in 2008 is \$78,414 (for 100% impairment) and the minimum is \$1,568 (which is 2 percent of the maximum). The minimum qualifying clinical impairment is 0.4%. Under each program maximum and minimum amounts are legislated and revised annually for cost of living increases. Table VIII-5 summarizes the method of calculation, frequency and duration of QOL payments.

Administrative Lessons and Best Practices for Decisionmakers to Consider

Before and After Effect on Payment Calculations. Alberta, Ontario, Saskatchewan, and several other jurisdictions have an interesting approach to calculating LOE that decisionmakers might consider for QOL payments. The LOE calculation for monthly payments considers the difference between pre-injury earnings and post-injury earnings capacity. Interestingly, one jurisdiction in Canada, Yukon Territory, makes adjustment to pre-injury earnings for promotion or advancement in its calculation of earnings losses in addition to adjustment for inflation seemingly in recognition that earnings would have increased over one's career due to increases in skills and seniority if no work injury had occurred. The key is to consider real-life variables in the earnings capacity calculation, for example, age, education, skills, and lifetime earnings trajectory. Doing so not only ensures that individuals can meet their needs of the moment but also anticipates that their earnings capacity will change over a lifetime.

A Separate QOL Payment. A key administrative point is the separation of the QOL payment from loss of earnings. Factors to be considered are (1) stating clearly the difference between loss of QOL and LOE and (2) viewing the lump-sum payment as recognition for an injury or illness that occurred during the course of work. Decisionmakers may also want to consider how Ontario incorporates age into their QOL payment calculation.

Table VIII-5. Method of Calculation, Frequency, and Duration of QOL Payments

Province:	Alberta	Ontario	Saskatchewan
Program:	Alberta Workers' Compensation Board (NELP)	Workers' Safety Insurance Board (NEL)	Workers Compensation Board
Method of QOL Calculation, Duration, and Frequency of QOL Payment	Maximum NELP payment ⁱ to worker who suffers 100% permanent clinical impairment was \$78,415 in 2008. Payment is derived by multiplying the clinical impairment percentage times the maximum payment amount. Clinical impairment percentage based on Alberta Permanent Clinical Impairment Guides. Payment made as a lump-sum.	NEL benefit is calculated by expressing the impairment as a percentage of total bodily impairment using the <i>AMA Guides</i> . Percentage is then multiplied by a base amount, ⁱⁱ which was \$55,125 in 2008. Benefit is also adjusted for age. The amount is increased by \$1,225 for every year under 45 years age, to a maximum benefit of \$79,624 for someone aged 25 or younger with a 100% impairment. The amount is decreased by \$1,225 for every year over 45 years of age, to a minimum of \$30,625 for someone aged 65 or older with a 100% impairment. The amount is paid in a lump-sum or monthly annuity for life. Note: All dollar amounts are from 2008.	Permanent Functional Impairment: Lump-sum payment for permanent functional impairment (PFI) ⁱⁱⁱ rating between 0-100%, and based on Saskatchewan's own guides. A separate assessment is done of psychological impairments and is added to the functional impairment percentage. Minimum payment of \$2,200 and maximum of \$45,200 in 2008. Disfigurement Award: Lump-sum payment for disfigurement bases on Saskatchewan's own scale, which allocates percentages for disfigurement of different parts of the body and adds up to 100%. Minimum is \$500 and maximum is \$15,000 in 2008.

Source: EconSys Study Team compilation from referenced sources and interviews.

ⁱ Workers' Compensation Board Alberta. (2008). *Policies and information manual*. Retrieved May 1, 2008, from <http://www.wcb.ab.ca/policy/manual/0404p2aa.asp>

ⁱⁱ Workplace Safety and Insurance Board Ontario. (2008). *OPM: Law*. Retrieved May 1, 2008, from <http://www.wsib.on.ca/wsib/wopm.nsf/Public/180102>

ⁱⁱⁱ Saskatchewan Workers' Compensation Board. (2008). *Compensation benefits for workers*. Retrieved April 15, 2008, from http://www.wcsask.com/WCBPortal/appmanager/WCBPortal/WCB2?_nfpb=true&_pageLabel=page_worker_your_benefits

Foreign Government Veterans' Programs

Background

The study team examined the veterans' disability programs in Australia, Canada, Germany, Israel, and the United Kingdom to review the approaches to disability assessment and compensation used. The selected countries reflect a similar standard of living, a sizable population of veterans to consider, experience dealing with wounded veterans, and a comprehensive disability program when compared to U.S. programs. Four of the selected countries are participating by providing either on-the-ground support or humanitarian assistance in Operation Enduring Freedom and therefore face

the same challenges in caring for veterans of this conflict. Israel was selected because of its history of conflicts involving both military service members and civilians.

Foreign Program Administrative Structure

Australia and Canada have established agencies specifically for serving veterans: the Department of Veterans' Affairs (DVA) in Australia and Veterans Affairs Canada (VAC). In Germany, the War Pensions offices are responsible for determining a person's disability, degree of disability, and compensation benefits. However, the assistance (including medical rehabilitation, occupational integration, and social integration assistance) provided to veterans is the same as that provided to the general disabled population by Germany's social service agencies. The entity serving the Israeli Defense Forces is the Israeli Ministry of Defense. In the United Kingdom, the Service Personnel and Veterans' Agency (SPVA) is a part of the Ministry of Defense and serves veterans through that organization.

Each agency has specific programs under which benefits and compensation are administered for disabled veterans. They are: Australia, *Military Rehabilitation and Compensation Scheme*¹⁸⁷ also referred to as the *Military Rehabilitation and Compensation Act (MRCA)*; Canada, *New Veterans Charter (NVC)*;¹⁸⁸ Germany, *War Pensions Offices* in coordination with the *Social Security Administration*;¹⁸⁹ Israel, *Department of Rehabilitation*,¹⁹⁰ and the United Kingdom, *Armed Forces Compensation Scheme (AFCS)*.¹⁹¹ Generally speaking, the purpose of these programs is to provide benefits to veterans and their dependents in the event of a service member's injury, illness, or death that occurred during the course of military service.

Programs reviewed in four countries (Australia, Canada, The United Kingdom, and Israel) were established or substantially revised in the last four years. Revisions to existing programs were attributed to current military actions, routine or needed updates, and legislative initiatives. The date of injury or illness demarcates whether the veteran is served by the old or new program; in some instances there is overlap. The establishment of these new programs likely is in response to increased war activity and subsequent military involvement. In making a disability assessment, programs in Canada and the United Kingdom consider whether the illness or injury occurred during a peacekeeping mission or as a result of war-related activity. The following example from

¹⁸⁷ Military Rehabilitation and Compensation Scheme Australia. (2006). *Plain guide to Military Rehabilitation and Compensation Act 2004*. Retrieved April 12, 2008, from www.mrcs.gov.au/plain_english/plain_english.htm

¹⁸⁸ Veterans Affairs Canada. (2008). *Veterans Affairs disability pension program*. Retrieved April 2, 2008, from www.vac-acc.gc.ca/clients/sub.cfm?source=dispen

¹⁸⁹ Germany Federal Ministry of Labour and Social Affairs. (2007). *Social Security at a Glance: Article 20 (1) of the German Basic Law*. Retrieved April 10, 2008, from www.bmas.de/coremedia/generator/10120/property=pdf/social_security_at_a_glance_total_summary.pdf

¹⁹⁰ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation, May 2008.

¹⁹¹ United Kingdom Ministry of Defence. (2005). *Your compensation scheme explained*. Retrieved April 18, 2008, from <http://www.veterans-uk.info/pdfs/afcs/tariff.pdf>

the Australian program illuminates the distinction between an injury or illness occurring during peacetime service versus war service and the different assessment processes:

If you're injured in Iraq you would have your disability liability determined under what we call the "reverse criminal standard of proof." What that means is that we have to prove beyond reasonable doubt that the injury or disease WAS NOT caused by war service. The obligation is on us to prove conclusively that it is NOT whereas in peacetime, we determine on the balance of probabilities.¹⁹²

Additionally, under Australian law (The Military Rehabilitation and Compensation Act, MRCA) a higher dollar amount is applied to individuals who sustain injury as a result of war-related service as opposed to peacetime service. The assessment of impairment is the same for both types of service; however the dollar amount differs. The higher dollar amount for injuries during war service was a key issue for the veteran community in Australia: "The war veterans really wanted to see war service more highly valued than peace time."¹⁹³

Alternatively, in the Canadian program, a distinction is made between active force and regular force members. An active force member is categorized as war-related service and is covered 24 hours. Alternatively, regular force members including reserves, peacekeeping forces, and Royal Canadian Mounted Police (RCMP) are covered 8 hours per day while on duty/work.¹⁹⁴ Although Canada and Australia apply the same impairment assessment process regardless of the type of service, Canada differentiates the level of coverage established for force members considered under peacekeeping vs. war-related service.

Israel, in contrast, now takes an approach similar to that of the U.S. Initially, the Department of Rehabilitation service was established in 1949 to assist and provide aid to disabled veterans for "those injured as a result of active duty or during active duty." However, due to public pressure, legislation was enacted to ensure a more expansive and inclusive service. The current legislation mandates "All army service personnel (and other members of security related bodies like the police, prison service, and so on) who were injured, hurt, and/or became sick *during* their service, whether compulsory active duty or reserve active duty, long or short, combat or non combat."¹⁹⁵

Analytical Approach

In approaching foreign disability programs, the study team reviewed foreign veterans' programs and foreign government websites and scanned the literature for notations of international disability programs of interest that should be investigated. The programs in Australia and Canada include separate compensation for economic loss and QOL impact. The United Kingdom specifically compensates for "pain and suffering" for an

¹⁹² Phone interview with Department of Veterans' Affairs Australia Representative; April 17, 2008.

¹⁹³ Phone interview with Department of Veterans' Affairs Australia Representative; April 17, 2008.

¹⁹⁴ Phone interview with Veterans Affairs Canada Representative; April 17, 2008.

¹⁹⁵ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

injury or illness as a result of service. Although the United Kingdom considers pain and suffering to be subsumed under earnings capacity not quality of life, according to the literature, pain and suffering can impact a person's quality of life. Therefore, the pain and suffering payment is considered to be QOL in this report. The team identified the basis for the amount of QOL payments established by each of the countries and the criteria used to assign ratings. Additional information, in terms of monetary calculations for QOL payments were obtained through direct contact with representatives of the designated foreign programs.

A comparative analytical approach was used in reviewing foreign programs. The first level of analysis provides an overview of foreign veterans' programs on each of the defined areas for analysis as follows: definitions of QOL program consideration of QOL and loss of earnings, underlying basis for QOL payments, and methods of calculation of QOL payment (including, amount, duration, and frequency). Matrices were developed to compare foreign programs, side-by-side, for each area of analysis. The second level of analysis includes administrative lessons and best practices for decisionmakers to consider.

QOL as a Concept

QOL as a component of foreign veterans programs exists in different forms. The language used to identify the QOL concept in programs differs from country to country. In Australia QOL is referred to as lifestyle effect. Canada and Israel use the term quality of life; however, the details (for example, benefits and compensation) are embedded within Canada's disability award program and Israel's focus on rehabilitation and social integration. The concept of QOL in the United Kingdom's program is broadly characterized as a lump-sum payment, whereas Germany describes it as social integration assistance.

At the surface, the meanings behind these words and characterizations reveal two distinct types of QOL—health-related quality of life (HRQOL) and non-health-related QOL. In brief, HRQOL focuses on the impact of an injury or illness on a person's mental and physical health and the consequences to their daily functioning.¹⁹⁶ In contrast, non-health-related QOL focuses more on the more external facets of a person's life, for example, social support systems, housing, and income.¹⁹⁷ A fuller discussion of the differences between HRQOL and non-health related QOL can be found in Volume III of this study.

Given the above conceptual distinction, HRQOL can be found in programs in Australia, Canada, and the United Kingdom whereby an injury or illness causes pain and suffering that impacts the personal relationships or recreational activities of a veteran. Germany appears to be the exception in that social exclusion and hardship and protection from poverty implies a non-health-related impact on QOL. Israel's approach seems to

¹⁹⁶ Institute of Medicine. (2007). *A 21st century system for evaluating veterans for disability benefits*. Washington, DC: National Academies Press.

¹⁹⁷ Mooney, A. (2006). Quality of life: Questionnaires and questions. *Journal of Health Communication*, (11) 327–341.

combine elements of both HRQOL and non-health-related QOL. A stated goal of Israel is to ensure that a disabled veteran achieves functioning as best as possible (physical and mental), gainful employment, family stability, wellbeing, and social involvement.¹⁹⁸

At a deeper level, the programs' conceptualization and subsequent approach to QOL reflect a response to the changing needs of their respective disabled veteran populations. The following examples from Canada, Israel, and the United Kingdom demonstrate this point:

The New Veterans' Charter represents the most sweeping change to veterans' benefits and services in the past 60 years. The new Charter's programs and services can be summed up in one word: "wellness." When a Canadian Forces veteran has a disability, it can cause pain and suffering, change the way the body or mind functions, and make it hard for one to enjoy life. The disability award is meant to recognize and compensate for the non-economic impacts of a service-related disability.¹⁹⁹

In 2006, the employees of the Israeli Ministry of Defense, Department of Rehabilitation defined their goal as helping the disabled veteran in the process of rehabilitation and achievement of social integration.²⁰⁰

The AFCS (Armed Forces Compensation Scheme) is designed to provide compensation, irrespective of fault, across the full range of circumstances in which illness, injury, or death may arise as a result of service. For the first time it will make a lump-sum payments for pain and suffering, even where an injury or illness does not lead to medical retirement. It will provide compensation where an injury can be expected to affect significantly earnings capacity.²⁰¹

Definitions of QOL

The Australian and Canadian veterans' programs are most similar in how they define QOL in that they both focus on how impairment affects the veteran's ability to participate in activities of independent living, personal relationships, and community and recreational activities. Australia and Canada specifically state in their definitions how the impact of the disability would negatively affect the normal role of a veteran of the same age without the condition. Germany, through its Social Integration Assistance program, targets the disabled population as a whole including veterans, who may be at risk of hardship and social exclusion. Israel, consistent with its focus on rehabilitation, defines QOL as improving the functioning of the disabled in aspects of employment, family relations, and social involvement. The United Kingdom does not define QOL per

¹⁹⁸ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

¹⁹⁹ Veterans Affairs Canada. (2008). *Veterans Affairs disability pension program*. Retrieved April 2, 2008, from www.vac-acc.gc.ca/clients

²⁰⁰ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

²⁰¹ Ministry of Defence, United Kingdom. (2005). *The Armed Forces compensation scheme for injury, illness and death due to service*. Retrieved April 5, 2008, from www.mod.uk/NR/rdonlyres/361040A7-DF84-4E43-BD48-CC384F58760C/0/JSP765.pdf

se; however, the description of its lump-sum payment attributes pain and suffering caused by injury or illness; both are elements of health-related aspects of QOL (see Table VIII-6).

Table VIII-6. QOL Definitions: Selected Foreign Veterans Disability Programs

	Australia Department of Veterans' Affairs	Canada Veterans Affairs/New Veterans' Charter	Germany Social Security Administration & War Pensions Office	Israel Israeli Ministry of Defense	UK Service Personnel and Veterans' Agency (Ministry of Defence)
Program	Military Compensation & Rehabilitation Service (MCRS)	Disability Award	Integration Assistance	Department of Rehabilitation	Armed Forces Compensation Scheme (AFCS)
QOL Definition	Lifestyle Effect ⁱ is a disadvantage, resulting from an accepted condition that limits or prevents the fulfillment of a role that is normal for a veteran of the same age without the accepted condition.	QOL ⁱⁱ is the ability to perform activities of independent living; participate and maintain appropriate customary personal relationships, and take part in recreational and community activities. The effects of an entitled condition may limit or prevent the fulfillment of a role in the above-mentioned QOL components that would be normal for a veteran of the same age without a disability.	Social Integration Assistance ⁱⁱⁱ provides a last safety net to protect individuals from poverty, social exclusion, and hardship. Helps individuals and households who are unable to meet their own needs and who lack sufficient entitlement under other insurance and welfare systems.	QOL ^{iv} is improving the function of the disabled in aspects of housing, employment, family relations and social involvement.	The lump-sum ^v is compensation for pain and suffering for significant qualifying injuries and illnesses caused mainly by service.

Source: EconSys Study Team.

ⁱ Department of Veterans' Affairs Australia. (2008). *Guide to the assessment of rates of veterans' pensions*. Retrieved May 13, 2008, from www.dva.gov.au/pensions/policy/garp/garp5.pdf

ⁱⁱ Veterans' Affairs Canada. (2008). *Quality of life rating chapter*. Retrieved May 9, 2008, from www.vac-acc.gc.ca/content/dispen/2006tod/pdf_files/ch_02_2006.pdf

ⁱⁱⁱ Germany Federal Ministry of Labour and Social Affairs. (2007). *Social Security at a glance: Article 20 (1) of the German Basic Law*. Retrieved April 10, 2008, from www.bmas.de/coremedia/generator/10120/property=pdf/social_security_at_a_glance_total_summary.pdf

^{iv} Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

^v United Kingdom Ministry of Defence. (2005). *The Armed Forces compensation scheme for injury, illness and death due to service*. Retrieved April 5, 2008, from www.mod.uk/NR/rdonlyres/361040A7-DF84-4E43-BD48-CC384F58760C/0/JSP765.pdf

In defining QOL, Australia, Canada, and Germany use language that is comprehensive; words such as fulfillment, perform, and participation provide a holistic concept of QOL that goes beyond the injury or illness. On the other hand, embedded within most of these definitions are qualifying conditions for compensation, for example, Australia—accepted; Canada—entitled; Germany—last safety net; Israel—eligible; and the United Kingdom—significant qualifying. Language use is important particularly when it comes to communicating and defining QOL to the disabled veteran population.

Another factor to consider is the social, cultural, political, and historical context of each country and how such factors implicitly shape their definitions of QOL. In Australia, the cultural context plays a role in how QOL is defined: “Australians like to think of themselves as an equitable society where everybody has a fair go.”²⁰² Through this statement, one gets a sense of Australian values: that of fairness and inclusiveness. In Canada, the size of the veteran population — in comparison to U.S. — is another contextual variable that may shape their definition of QOL. Given Canada’s relatively smaller veteran population, a VAC representative reports that Canadians rely on community and provincial organizations to serve their citizens of which veterans are a part.²⁰³ This statement suggests Canada’s need for a more comprehensive and integrated approach to QOL.

In Israel, unemployment and war are some of the contextual factors that contribute to how QOL is conceptualized and defined. The high rate of unemployment affects the ability to implement vocational programs, thus more emphasis is given to social engagement such as day care centers, community involvement, and voluntary work. The rehabilitation program in Israel is changing the focus of rehabilitation in general to emphasize QOL rather than gainful employment. There also appears to be a philosophical shift toward serving disabled veterans in Israel. The shift entails moving from a paternalistic approach to an approach that gives the disabled person the right to decide what is best for him/her. The circumstance of ongoing wars and the growing number of injured veterans and fallen soldiers’ families has also influenced how QOL is conceptualized, defined, and approached in the Israeli program.²⁰⁴

Alternatively, Germany’s historical context is important to note in relation to its definition of quality of life. Since it is primarily a socialist country, its focus is on integration and outreach to veterans as well as the general population. The United Kingdom’s veteran program is currently housed within the Ministry of Defense which is associated with a more politically-charged atmosphere for determining how veterans are served, in general, and how quality of life is defined, specifically. The following quotation from an AFCS representative further clarifies this point:

²⁰² Phone interview with Department of Veterans’ Affairs Australia representative; April 17, 2008.

²⁰³ Phone interview with Veterans Affairs Canada representative; April 8, 2008.

²⁰⁴ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

Debate on policy in the UK over whether veterans are special or unique to warrant special treatment or should our job as an agency within MOD simply be to pay them what they are entitled to and refer them to other organizations to help them with their needs. Two-sided coin. Side one: Why reinvent the wheel when there are other organizations already out there? Side Two: Veterans coming back from Iraq expect the MOD to be organization that looks after them and expect it (MOD) to be the one to coordinate the activity that's needed to look after veterans; to ensure they have a decent quality of life considering the injuries and the sacrifices they've made.²⁰⁵

This approach differs from that of Australia and Canada which each have a separate organization that specifically serves and addresses the needs of veterans.

How QOL and Loss of Earnings Are Taken into Account

Earnings loss and quality of life loss are both considered by the countries reviewed, but approaches are varied. Table VIII-7 summarizes how QOL is taken into account and

Table VIII-8 summarizes how earnings loss is taken into account. Each country is discussed below.

The following quotation explains how QOL is considered in the calculation for compensation:

There are two components of the (QOL) compensation outcome: (1) the whole of person impairment which is essentially a medical determination that accounts for about 85% of the determination, it's a points thing, 100 points/percentage 85 of which are available for the whole of person assessment and (2) and 15 percent or 15 points are contributed for the assessment of a person's quality of life or lifestyle effect.²⁰⁶

A monthly pension of \$268²⁰⁷ (\$254 U.S.) per week or (up to \$1,071; \$1,021 U.S.) per month), is paid for life and is tax free. This may be converted to an age-based lump-sum. For example, in the case of a 30-year old male the weekly amount would convert to a lump-sum of up to \$350,964 (\$334,819 U.S.). This final amount would be less in the case of an older person.²⁰⁸

²⁰⁵ Phone interview with United Kingdom Ministry of Defence, Service Personnel Veterans' Agency, Armed Forces Compensation Scheme representative; April 17, 2008.

²⁰⁶ Phone interview with Department of Veterans' Affairs Australia representative; April 17, 2008.

²⁰⁷ All currency conversions in this section from Oanda.com. (2008). *FXConverter - currency converter for 164 currencies*. Retrieved July 25, 2008, from www.oanda.com/convert/classic

²⁰⁸ Schematic Comparison of Benefits, (In reference to current or previous members of the Australian Defense Force - on the assumption that they have eligibility under these Acts): Veterans' Entitlement Act 1986 (VEA) and Safety, Rehabilitation and Compensation Act 1988 (SRCA) and The Military Rehabilitation and Compensation Act 2004 (MRCA); March 2008.

Table VIII-7. How QOL is Independently Taken into Account by Foreign Veterans' Programs and Service Providers

Quality of Life	Australia	Canada	Germany	Israel	United Kingdom
Program or Service Providers	Military Compensation and Rehabilitation Service (MCRS)	Disability Award	Integration Assistance	Rehabilitative Services	Armed Forces Compensation Scheme (AFCS)
Overview	Lifestyle effect ⁱ is assessed by determining the effects of impairment on lifestyle that are specific to a veteran. Four components of that veteran's life are considered: personal relationships, mobility, recreational and community activities, and employment and domestic activities. All are of equal weight.	The QOL ⁱⁱ assessment process measures the effects of the entitled conditions on activities of independent living; recreational and community activities and personal relationships. The usual or accustomed activities that the veteran was engaged in prior to the disability or worsening of the disability should be the major consideration in determining the QOL effects from the entitled condition.	Persons with disabilities, regardless of cause, are entitled to integration assistance ⁱⁱⁱ as follows: medical rehabilitation assistance; occupational integration assistance; and social integration assistance.	QOL. ^{iv} Money is not an [the] issue. The benefits are rendered according to advances known in each aspect – everything that can make life easier for the disabled veteran.	Lump-sum ^v payment for pain and suffering and based on a tariff, for injuries and illnesses caused mainly by service. The tariff (rating schedule) lists the injuries for which compensation may be paid.
Qualifying Condition	Permanent Impairment	Permanent Impairment	Risk of a physical, mental or psychological disability; regardless of the cause of disability.	The injury or illness are related and caused by service in the army.	Illness or injury caused mainly by service for both service and ex-service personnel.
Method of Assessment	Self-assessment	Self-assessment	Needs-based	Qualitative assessment by Ministry Specialists	Assessment Officer
Determination of Benefit Amount	Lump-sum payment; or Monthly Pension of \$267.83AUS /\$254US per week (up to \$1,071.32 AUS/\$1,021US per month), tax free for life. The rate depends on the degree of impairment. Impairment is weighted at 85% and lifestyle effect at 15%.	Lump-sum payment of \$654; \$645US to \$250,000; \$246,000US.	In place of the various non-cash benefits individuals with disabilities and in need of care can receive regular or once-only payments for services needed. Actual amount of services not stated.	Benefits are decided according to need and average cost of the service purchased.	Lump-sum payment of £1,050GBP; \$2,065US up to £285,000; \$560,000US.

Source: EconSys Study Team.

ⁱ Commonwealth of Australia. Department of Veterans' Affairs. (2008). Guide to the assessment of rates of veterans' pensions. Retrieved May 13, 2008 from www.dva.gov.au/pensions/policy/garp/garp5.pdf

ⁱⁱ Veterans Affairs Canada. (2006). Table of disabilities, quality of life rating: Chapter 2. Retrieved April 2, 2008 from http://www.vac-acc.gc.ca/content/dispen/2006tod/pdf_files/ch_02_2006.pdf

ⁱⁱⁱ Germany Federal Ministry of Labour and Social Affairs. (2007). Social Security at a glance: Article 20 (1) of the German Basic Law. Retrieved April 10, 2008 from www.bmas.de/coremedia/generator/10120/property=pdf/social_security_at_a_glance_total_summary.pdf

^{iv} Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

^v Ministry of Defence, United Kingdom. (2005). The Armed Forces compensation scheme for injury, illness and death due to service. Retrieved April 5, 2008 from www.mod.uk/NR/rdonlyres/361040A7-DF84-4E43-BD48-CC384F58760C/0/JSP765.pdf.

Table VIII-8. How Loss of Earnings is Independently Taken into Account in Foreign Veterans' Programs

Loss of Earnings	Australia	Canada	Germany	Israel	United Kingdom
Program	MRCA	Financial Assistance	Injury Pension	Department of Rehabilitation	AFCS
Overview	Weekly, taxable, incapacity payments for loss of earnings ⁱ paid at 100% of normal earnings. Reduced to 75% after 45 weeks after discharge, ceases at age 65.	Loss of earnings ⁱⁱ calculated separately based on at 75% of pre-injury earnings and the veteran's level of impairment in legacy program. In NVC earnings loss paid during rehabilitation, impairment.	The amount of injury pension ⁱⁱⁱ received is scaled according to the degree by which earning capacity has been reduced. Basic Pension Level of disability ranges from: 30% (118 Euro per month) to 100% (621 Euro per month).	The disabled who are permanently unable to be employed or continue their employment are paid monthly allowances. ^{iv} The level (%) of impairment and payment for physical or mental capacity resulting from service-connected injury or disease ranges from: 10%-39% (3,942 NIS; \$1,210) to 100% (9,954 NIS; \$3,056).	Guaranteed Income Payment (GIP), ^v paid monthly, for serious illness and injuries (Tariff levels 1–11) where a loss of earnings capacity may be expected. GIP is based on severity of injury from the Tariff (rating schedule), the pre-injury earnings and age. The tariff ^{vi} levels are grouped into "Bands A–D," with Band A, Tariff level 1–4, 100% of GIP; Band B, Tariff levels 5–6 at 75% of GIP; Band C, Tariff level 7–8 at 40% of GIP; and Band D, Tariff level 9–11 at 30% of GIP. The GIP is not awarded to Levels 12–15.
Qualifying Condition	Incapacity for service or work	Permanent impairment of a serious nature that affects work (NVC)	Severe or extremely severe	Permanent inability to work	Serious injury or illness where a loss of earnings capacity may be expected.
Method of Assessment	Medical examination	Medical examination	Medical examination	Medical Rating Board	Medical examination
Payment Frequency	Lump-sum or monthly	Monthly	Monthly	Monthly	Monthly

Source: EconSys Study Team.

ⁱ Schematic Comparison of Benefits, (In reference to current or previous members of the Australian Defence Force - on the assumption that they have eligibility under these Acts): Veterans' Entitlement Act 1986 (VEA) and Safety, Rehabilitation and Compensation Act 1988 (SRCA) and The Military Rehabilitation and Compensation Act 2004 (MRCA); March 2008.

ⁱⁱ Veterans' Affairs Canada. (2008). *Monthly rates of pensions for disabilities*. Based on Schedule "1" and Section 75 of the Pension Act.

ⁱⁱⁱ Germany Federal Ministry of Labour and Social Affairs. (2007). *Social Security at a glance: Social assistance, financial benefits for war victims* p. 132. Retrieved April 10, 2008, from www.bmas.de/coremedia/generator/10120/property=pdf/social__security__at__a__glance__total__summary.pdf

^{iv} Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008

^v United Kingdom Ministry of Defence. (2005). *Your compensation scheme explained*. Retrieved April 18, 2008, from <http://www.veterans-uk.info/pdfs/afcs/tariff.pdf>. pp 5-10

^{vi} United Kingdom Ministry of Defence. (2005). *The Armed Forces compensation scheme for injury, illness and death due to service*. Retrieved April 5, 2008, from www.mod.uk/NR/rdonlyres/361040A7-DF84-4E43-BD48-CC384F58760C/0/JSP765.pdf

Australia—Quality Of Life

In Australia, QOL is referred to as lifestyle effects and non-economic loss payment for individuals assessed with permanent impairment. The reference source for the information presented here is the Department of Veterans' Affairs Australia, *Guide to the Assessment of Rates of Veterans' Pensions*.²⁰⁹

Lifestyle effects are taken into account by assessing the effect of an accepted condition on a veteran's lifestyle. The process for assessing the effects is specific to each veteran and includes these components of that veteran's life: personal relationships; mobility; recreational and community activities; employment; and domestic activities.

Each of these components is weighted equally and provides the basis for a lifestyle rating. There are three optional methods of assessing lifestyle effects.

- Option 1 allows a veteran to self assess the effects of the accepted conditions on his or her lifestyle by completing the *Lifestyle Rating Self Assessment Form*. The form covers the five key components listed above. It is expected that the self-assessed lifestyle rating would be broadly consistent with the level of impairment.
- Option 2 is used if the veteran chooses not to self assess or to complete a *Lifestyle Questionnaire*. Under this option the determining authority allocates a lifestyle rating based on the level of impairment.
- Option 3 is used if the veteran completes a *Lifestyle Questionnaire* and a determining authority rejects a self-assessment of lifestyle rating because it overestimates or underestimates the level of rating that is broadly consistent with the level of impairment from accepted conditions.. The determining authority uses the information in the completed questionnaire as well as all other relevant information available to allocate the rating.

Australia—Earnings Loss

Loss of Earnings, under DVA Australia's MRCA program is referred to as incapacity for service or work.²¹⁰ In addition to the payment for non-economic lifestyle effects, loss of earnings payments are as follows:

- Weekly, taxable, incapacity payments for loss of earnings paid at 100 percent of normal earnings for a period of 45 weeks. After 45 weeks payment is reduced to 75 percent and ceases at age 65 (unlike QOL payments, which continue for life).

²⁰⁹ Australia Department of Veterans' Affairs (2008). *Guide to the assessment of rates of veterans' pensions*. Retrieved May 13, 2008, from www.dva.gov.au/pensions/policy/garp/garp5.pdf

²¹⁰ Australia Department of Veterans' Affairs. (2008). Schematic comparison of benefits: Veterans' Entitlement Act 1986 (VEA) and Safety, Rehabilitation and Compensation Act 1988 (SRCA) and The Military Rehabilitation and Compensation Act 2004 (MRCA).

Canada—Quality Of Life

QOL in Canada's program is independently taken into account through the Disability Award payment. Similar to Australia, the award considers how a veteran's impairment may affect his or her activities of independent living, recreational, and community activities, and personal relationships.

The assessment process first measures the effects of the entitled conditions by comparing the existing quality of life with what might have been expected in the absence of the entitled conditions. This is a major consideration in determining the effects from a disability on loss quality of life. Within this process there appears to be a subtle comparison between how — or on what level — the veteran was able to fulfill the above-stated QOL components before and after the disability. This is not always an easy task for VAC. The following is an excerpt from a conversation with a VAC representative who explained the rationale and process for a loss of QOL comparison:²¹¹

We try to do that; it's not an easy task. Just because somebody has a disability doesn't mean that (his/her) quality of life will change. For most people there will be impact on QOL. For example: A client diagnosed with lumbar disc disease is retired. He wasn't involved in social programs; he didn't get too involved in outside activities. His children are grown. This client is not going to experience a major QOL impact. Compare that with a younger client with same disease, 24 years old, can't sit in long meetings, has 3 children, can't stay in shape; can't continue to coach softball. (His QOL is) quite impacted by the lack of range of motion in his back.

Additionally, VAC takes into consideration the self assessment questionnaire and other information on file that may give insight into what the client was like prior to the disability. VAC will consult its internal system for any background information such as the number and age of the veteran's children. All evidence will be considered in assessing his or her loss of quality of life.

Finally, once the QOL level (mild, moderate, and extreme) has been established, the score is then converted to an incremental percentage based on the level of impairment using a Quality of Life Conversion Table. The incremental percentage is then added to the medical impairment rating to determine the disability assessment. The maximum benefit in 2008 is \$260,843.84 CAN (\$255,691.18 U.S.). This is the same amount as the death benefit for military service.

Canada—Earnings Loss

Loss of earnings under Canada's New Veterans Charter (NVC) is calculated separately based on 75 percent of the veteran's salary at the time of release and indexed in accordance with the Consumer Price Index (CPI). Generally speaking, payment for earnings loss and rehabilitative services are categorized as part of the financial assistance package offered under the NVC.

²¹¹ Phone interview with Veterans Affairs Canada representative, April 17, 2008.

Under the legacy program²¹² compensation for loss of earnings is primarily eligibility-driven and focuses on the client's limitations and disablements. In 2008 pensions²¹³ in the range of 1 percent (\$731; \$715 U.S.) to 4 percent (\$2,926; \$2,862 U.S.) are paid as a one-time lump-sum payment, not a monthly payment.²¹⁴ Pensions ranging from 5 percent (\$113; \$111 U.S.) to 100 percent (2,266; \$2,216 U.S.) for a single pensioner are paid monthly. Additional calculations for spouses and children of a disabled veteran are also incorporated into the scale of pensions. The appropriate monthly payments are made until the veteran reaches age 65, after which a lump-sum is awarded. The basis for the dollar amounts determined and awarded are in accordance with Canadian law and statutes in the Veterans' Entitlement Act.

Pensions can be reassessed at any time. The disability is a gateway to other programs and services such as clothing allowance and attendant allowance.

The following example²¹⁵ clarifies the differences between the New Veterans Charter and the legacy program vis-à-vis loss of earnings:

Example: Veteran with an assessed level of impairment of 50%

- Under the legacy program: \$1,100 (\$1,085 U.S.) each month based on Entitlement Eligibility Rating Schedule (based on 1/5, 2/5, 3/5, 4/5) for an entitled condition.
- Under New Veterans Charter: (1) \$130,000 (\$128,281 U.S.) Disability Award (non-economic/QOL component viewed as recognition of service) is a lump-sum payment and (2) 75 percent of basic pay (economic) until 65 years of age, after which a lump-sum payment is provided.

As this example shows, there is a noticeable difference in how loss of earnings is calculated and compensated by VAC. More directly, the legacy program was entitlement-driven and based on a client's limitations whereas the NVC program focuses on the wellness of the veteran as well as his or her family. Payment for earnings loss and rehabilitative services are categorized as part of the financial assistance package offered under the NVC. It is important to note that there are some stipulations in terms of whether a disabled veteran can work and still continue to collect an economic payment. The following provides a brief overview of what factors may be taken into consideration when determining a veteran's ability to work and still receive economic payment.

²¹² Ibid.

²¹³ Veterans Affairs Canada. (2008). *Monthly Rates of Pensions for Disabilities Based on Schedule "I"* and Section 75 of the Pension Act.

²¹⁴ Veterans Affairs Canada. (2008). *Veterans' Affairs Disability Pension Program*. Retrieved April 2, 2008 from www.vac-acc.gc.ca/clients/sub.cfm?source=dispen#a03a

²¹⁵ Phone interview with Veterans Affairs Canada representative; April 8, 2008.

If they are getting an earnings loss benefit while they are participating in the rehabilitation program and they are working, there are some provisions which offset some of the benefit at a 50% rate; there are specific mechanisms by which we determine how much we take; whether or not the work that the client is doing is actually in collaboration with their rehabilitation program. But by and large, if it is an earnings loss replacement that we're paying them, earnings would be offset.²¹⁶

A further distinction worth noting between the legacy program and the New Veterans Charter is the assessment and payment process. The example below helps to clarify the differences between the old and new programs:

Take the example of two clients with lumbar disease. One client came in under the disability award (NVC) and another came in under the Pension Act (legacy program). We would find them both entitled, each under a different act. To assess the award, we would look at the loss of function based on each client's disability. We would go to the Table of Disabilities and apply the appropriate table to determine the medical impairment rating for that loss of function. One client gets the disability award paid as a lump-sum; the disability pension will get paid as a monthly payment. Under the legacy program either the 1995 table or the 2006 table is applied. If you applied on or after the first of April 2006, the 2006 table would be applied and the quality of life benefit would apply. If your effective date is prior to that and the 1995 table is used, the quality of life is not applied.²¹⁷

Germany—Quality Of Life

Germany presents a slightly different approach to QOL and loss of earnings given that the War Pensions Offices are responsible for determining a person's disability, the degree of disability, and any further health conditions that are a requirement for claiming handicap benefits. The War Pensions' offices are linked with other social services agencies including the Social Security Administration and the Ministry of Labor and Social Affairs. Persons with disabilities, regardless of cause, are entitled to integration assistance.²¹⁸ Integration assistance provides the following disability benefits for everyone including individuals disabled as a result of war:

- medical rehabilitation assistance
- occupational integration assistance
- social integration assistance

The underlying factors and subsequent measurement for social assistance include promoting independent living and taking part in social and cultural life.

²¹⁶ Phone interview with Veterans Affairs Canada representative; April 17, 2008.

²¹⁷ Phone interview with Veterans Affairs Canada representative; April 17, 2008.

²¹⁸ Germany Federal Ministry of Labour and Social Affairs. (2007). Social Security at a glance: Article 20 (1) of the German Basic Law. Retrieved April 10, 2008, from www.bmas.de/coremedia/generator/10120/property=pdf/social_security_at_a_glance_total_summary.pdf

In the review of literature and websites on Germany, there is no specific mention of the word “veteran” or the term “disabled veteran.” Broadly speaking, the German social welfare system uses the term “war victims” to categorize individuals who have been victims of violent crime, individuals whose health has been damaged through inoculation-related complications, individuals who were imprisoned on political grounds after May 8, 1945 as well as individuals injured in the course of military or civilian service.²¹⁹ The last categorization most aptly relates to this discussion of disability compensation and benefits for veterans. In order to highlight this conceptual and contextual difference, the following discussion uses the term war victim where appropriate.

Germany—Earnings Loss

In terms of loss of earnings, a war victim (veteran) will receive benefits to compensate for damage to health and financial losses arising from an injury suffered as a result of military or equivalent service and/or an accident that occurred in the performance of such service.²²⁰

For persons with severe disabilities, the amount of the injury pension granted is scaled according to the degree by which earning capacity has been reduced. To qualify for an injury pension, the invalidity (disability) must be at least 25%. Below is a list of the monetary benefits and compensation rates attributed to loss of earnings: (1) basic pension scaled according to loss in earning capacity, (2) supplementary scaled allowance for extremely severe injuries, (3) compensation for loss of income arising from a partial or total inability to pursue former or intended occupation as a result of injury, and (4) compensatory pension and a married dependent’s supplement for severely injured persons to ensure living expenses are covered.

A basic pension is scaled according to individual’s loss in earning capacity. The basic pension paid in 2007 to severely injured persons increases at age 65:

<u>Level of Disability (%)</u>	<u>Euro (per month)²²¹</u>	<u>Equivalent U.S. Dollars²²²</u>
30%	118	183
50%	218	339
80%	461	717
100%	621	966

²¹⁹ Germany Federal Ministry of Labour and Social Affairs. (2007). *Social Security at-a-glance: Social Assistance*, p.127. Retrieved April 10, 2008, from http://www.bmas.de/coremedia/generator/10120/property=pdf/social__security__at__a__glance__total__summary.pdf

²²⁰ Ibid. p.127.

²²¹ Ibid. p.132. Pension rates as of January 2007

http://www.bmas.de/coremedia/generator/10120/property=pdf/social__security__at__a__glance__total__summary.pdfmh

²²² x-rates.com. (2008) *Currency calculator*. Retrieved June 25, 2008, from <http://www.x-rates.com/calculator.html>. U.S. Dollar equivalents throughout this section are as of June 25, 2008.

A supplementary allowance for extremely severe injuries, scaled in six grades:

<u>Level of Disability (%)</u>	<u>Euro (per month)</u> ²²³	<u>Equivalent U.S. Dollars</u>
Level I	71	110
Level II	147	228
Level III	221	344
Level IV	294	457
Level V	367	571
Level VI	442	688

Compensation for loss of income arising from a partial or total inability to pursue your former or intended occupation as a result of injury:

<u>Level of Disability (%)</u>	<u>Euro (per month)</u> ²²⁴	<u>Equivalent U.S. Dollars</u>
50%, 60%	381	593
70%, 80%	461	717
90%	553	861
100%	621	966

Compensatory pension and a married dependent's supplement for severely injured persons to ensure that living expenses are covered. The injured person's income – minus certain deductions – is taken into account when setting the amount of the pension and supplement:

<u>Level of Disability (%)</u>	<u>Euro (per month)</u> ²²⁵	<u>Equivalent U.S. Dollars</u>
Level I	262	407
Level II	448	697
Level III	635	988
Level IV	816	1,270
Level V	1,060	1,650
Level VI	1,304	2,030

Additionally, if earning capacity has been reduced by 50 percent or more as a result of injury covered by compensation law, a war victim with severe injuries will also receive medical treatment provided that it is not covered from another funding source. A war victim with severe disabilities is not entitled to treatment of subsequent illnesses when earnings exceed the income limit for statutory health insurance (Euro 3,975 a month throughout Germany in 2007).²²⁶

²²³ Germany Federal Ministry of Labour and Social Affairs. (2003). *Social Security at-a-glance: Financial benefits for war victims*, p.132. Retrieved April 10, 2008, from http://www.bmas.de/coremedia/generator/10120/property=pdf/social__security__at__a__glance__total__summary.pdf

²²⁴ Ibid. p.132.

²²⁵ Ibid. p.132.

²²⁶ Germany Federal Ministry of Labour and Social Affairs. (2007). *Social Assistance*, p.128. Retrieved April 10, 2008, from

The legislation guiding how QOL and loss of earnings are taken into account includes: German Social Code, Federal War Victims Relief Act, and the Federal Social Assistance Act.

Israel—Quality Of Life

In Israel the approach toward QOL can be characterized as assistive and facilitative. The program refers to the QOL-related elements as benefits. Medical accessories, housing modifications, disability-adjusted vehicles, nursing aids, and tutoring aids are just some of the benefits offered to a disabled veteran as a way to help him or her maintain quality of life. The assessment process for QOL benefits is determined by a multi-disciplinary committee that includes social workers, physicians, benefits officers, and vocational workers; this is often referred to as a case-management approach in the U.S. Implied in this assessment process is that the qualifying condition is based on an injury of illness that was caused by service. Israel's QOL assessment is primarily qualitative.

Every social worker and physician, in intake and follow up meetings, inquires about the disabled veteran and his family's QOL. If necessary a program to aid the problem presented will be laid out. The program may include family counseling, volunteers and/or daycare assistance for the children, therapy, different housing as well as participation in day care centers for the disabled veteran. It is a normal, professional intervention. . . The assessment of QOL is qualitative – the expression of satisfaction or dissatisfaction about one's life is typical during a meeting with the social worker.

More attention and initiation of intervention will happen in the case of PTSD, TBI, combat fatigue, and mental disorders. It is obvious these populations of disabled veterans are more likely to have problems in functioning and a loss of QOL.²²⁷

The determination of the benefit amount is based on need and the average cost of the service purchased. For example, if a disabled veteran warrants personal assistance at home, the calculation for payment is based on the average pay per hour for household help in Israel. That said, the Department of Rehabilitation does not provide a direct QOL cash payment to the veteran; instead the Rehabilitation Department pays for the services that will enable the veteran to have a better quality of life.

Israel—Earnings Loss

Loss of earnings, within the Israeli Department of Rehabilitation, is defined as the permanent inability to work because of medical condition(s) attributed to disability. The amount of the monthly award is based on the percentage of mental or physical impairment that resulted from a service-connected injury. The injury or illness is assessed by a Medical Rating Board consisting of one to three members; at least one

http://www.bmas.de/coremedia/generator/10120/property=pdf/social__security__at__a__glance__total__summary.pdf

²²⁷ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

member is a specialist from the relevant branch of medicine. The disability rating and accorded payment is reflected in Table VIII-9:²²⁸

Monthly payment amounts do not include supplements (for example, monthly compensation to cover mobility expenses and caretaker services that a disabled veteran may also receive). The payment process accounts for the level of disability to be in accordance with the number of supplements awarded. There is some debate as to whether, even with the supplements, a disabled veteran with a family can live comfortably. (A point of reference: the average monthly salary is 7,381 NIS (\$2,267 US)). Another perceived problem with the level of compensation is that it does not increase based on the number of dependent children. Efforts are being made address these concerns and to ensure that disabled veterans and their families receive the necessary benefit increases.

Table VIII-9. Israeli Veterans' Disability Payment Schedule for Permanentⁱ Inability to Work (2008)

Disability Rate	Family Circumstance	New Israeli Shekel (NIS)	Equivalent U.S. Dollars
10%-39%	Single	3,942.28	1,166.72
	without children	4,367.61	1,292.60
	with children	5,465.22	1,617.44
40%-49% ⁱⁱ	Single	5,100.00	1,509.38
	without children	5,465.00	1,617.41
	with children	6,600.00	1,953.32
50%-59%	without children	6,746.00	1,996.49
	with children	7,495.82	2,218.40
60%-100%	without children	7,104.00 – 7,445.00	2,203.36
	with children	7,599.00 – 8,195.43	2,425.45
100%+	without children	8,704.68	2,576.16
	with children	9,954.72	2,946.12

Source: Israeli Ministry of Defense, Department of Rehabilitation, May 2008.

ⁱ According to a representative of the Israeli Ministry of Defense, Department of Rehabilitation, May 2008, temporary inability to work status occurs when the disabled veteran is unable to study or be employed. In that situation the veteran is awarded a monthly payment of about 40 percent higher than the minimum salary, which is a government rule for all employees in Israel.

ⁱⁱ The payment goes up to 100% if mental.

²²⁸ Data collected through in-person interviews with representatives from the Israeli Ministry of Defense, Department of Rehabilitation; May 2008.

Veterans with partial disabilities are expected to work, and the disability payments are for earnings loss as well as for the pain and discomfort of the disability. The Israeli philosophy is that work is essential to quality of life and work is encouraged among disabled veterans. Despite Israel's involvement in conflicts, 43 percent of their veterans have disability ratings below 20%, which is the minimum required for partial disability monthly compensation.

United Kingdom—Quality of Life

In the United Kingdom (UK), QOL is considered separately as a lump-sum payment. The veteran is compensated for pain and suffering (UK does not call it quality of life) due to significant qualifying injuries and illnesses caused mainly by service. The determination of the lump-sum payment is based on a 15-level tariff system. A Level 1 rating gives the highest payment covering the most severe conditions (for example, loss of sight and hearing), and a Level 15 rating covers the less severe injuries such as minor burns or a dislocated knee. The levels are based on a level of impairment percentage; a Level 1 rating is paid at £285,000 (\$560,651 U.S.) and a Level 15 rating is paid at £1,050 (\$2,066 U.S.). Table VIII-10 illustrates the lump-sum payment schedule for pain and suffering, and its link to the earnings loss payment, which is called the Guaranteed Income Payment, explained in the next section.

Table VIII-10: United Kingdom Disability Payment Schedule

Earnings Loss Payment: Percent of Guaranteed Income Payment (GIP)	Tariff/Band	Lump-sum Payment for Pain and Suffering in British Pounds (£)	Equivalent in U.S. Dollars ⁱ (\$)
100%	Tariff 1-4 (B and A)	£285,000 - £86,250	\$560,651 - \$169,670
75%	Tariff 5-6 (B and B)	£57,000 - £46,000	\$112,130 - \$90,491
40%	Tariff 7-8 (B and C)	£34,500 - £28,750	\$67,868 - \$56,566
30%	Tariff 9-11 (B and D)	£22,000 - £11,000	\$43,278 - \$21,639
Less than 30% (GIP not awarded)	Tariff 12-15	£8,250 - £1,050	\$16,489 - \$2,093

Source: Service Personnel & Veterans Agency – United Kingdom. (u.d.). *Tariff for Armed Forces Compensation Scheme*. Retrieved June 25, 2008, from <http://www.veterans-uk.info/pdfs/afcs/tariff.pdf>

ⁱ x-rates.com. (2008) *Currency Calculator*. Retrieved June 25, 2008, from <http://www.x-rates.com/calculator.html>. U.S. Dollar equivalents throughout this section are as of June 25, 2008.

United Kingdom - Earnings Loss

Loss of Earnings under the United Kingdom's Armed Forces Compensation Scheme (AFCS) program is also calculated on the tariff system through the Guaranteed Income Payment (GIP). GIP is payment for individuals with more serious illnesses and injuries caused by service and where loss of earnings capacity may be expected. The following

response from a Service Personnel and Veterans Agency/AFCS program representative clarifies the calculation of GIP payment:

The guaranteed income payment (GIP) is calculated using the salary of the member of the forces on the day on which his service ends. In the case of a former member of the forces, his salary on the day he leaves is increased for inflation to the date of the claim. The salary is then used to calculate a base figure. This is achieved by multiplying the salary by a relevant factor. The relevant factor is based on the age of the individual on the day his service ends, or in the case of a former member of the forces, the date of the claim.

For example, a serviceman who is medically discharged at age 16 - factor 0.905. Someone medically discharged at age 55 or over, the factor would be 0.500. Any base figure calculated is then reduced by any pensions paid under either AFPS 1975 or 2005 or any payment under the Armed Forces Early Departure Payments Scheme order 2005. The reduction results in either 75% or 100% of the amount payable. 100% is reduced in those cases where AFCS and an invaliding or ill health pension is paid for the same injury.²²⁹

The sum arrived at is the maximum level of GIP and is paid on a monthly basis for the most serious conditions. The less serious injuries are awarded a portion of the full GIP. A specific provision of GIP is that it is not payable immediately if personnel are able to remain in service since they will continue to receive their military salary.

The Underlying Basis of QOL Payments

A review of foreign programs, especially Australia, Canada, and the United Kingdom reveals that the rationale for determining the appropriate amount of QOL payments was based on one or more of the following:

- Benchmarking other country programs that may already compensate for economic and non-economic loss
- Benchmarking injury claims and compensation standards within the court or judicial system in country
- Using impairment assessment process within workers' compensation programs
- Benchmarking insurance plans for accidental death or dismemberment.

Germany and Israel utilize a more individual and needs-based approach for determining QOL support. A key component of their QOL approach is the addition of supplements to provide specific assistive services.

²²⁹ Service Personnel & Veterans Agency-United Kingdom, Armed Forces Compensation Scheme representative. (2008). Email response, March 14, 2008.

The Method of Calculation, Duration, and Frequency of QOL payments

QOL payments are based primarily on the level of impairment and the subsequent impact the impairment has on a veteran's life. The programs in Australia and Canada recognize and compensate for the non-work-related aspects of a veteran's life. The QOL assessment questionnaires completed by each veteran applying for benefits, focus on the following domains:

- personal relationships
- mobility
- community and recreational activities (with some slight variation)

Each domain (for example, personal relationships under the lifestyle effect program) is assessed and rated on a graduated point (numeric) scale, with the lowest number indicating a negligible effect (for example, relationships are satisfying, with full participation in accustomed social and personal activities) to a higher number (for example, unable to relate to anyone) indicating an extreme effect on the veteran's QOL. After an overall QOL rating is determined, that rating is combined with the medical impairment rating and multiplied by a percentage to determine the amount of the lump-sum payment. After the initial assessment and payment, a veteran may later be assessed for additional service-connected injury or illness up to the maximum amount of the award.

Alternatively, in the UK, QOL is not assessed by specific domains as in the programs of Australia and Canada. Instead, the lump-sum payment is based solely on the level of pain and suffering that is caused by a service-related injury and the inferred impact on the veteran's QOL. The rating schedule referred to as the tariff, is based on Levels 1–15, with Level 1 giving the highest payment for the most severe conditions and a Level 15 used for less severe injuries. The perceived benefit of this type of QOL assessment is that all service-connected injuries or illnesses are compensated.

Germany's integrated approach provides a framework to address the needs of all disabled individuals including veterans. As noted earlier, the War Pensions offices are responsible for determining the disability, the level of disability, and the subsequent benefit to which the veteran is entitled. The assessment and rating process for compensation benefits including social integration assistance, is based primarily on disabilities suffered during the course of military service. Social integration assistance is determined on an as-needed and individual basis. As stated earlier, Israel calculates its QOL benefits based on need and the average cost of the service purchased.

See Table VIII-11 for a summary of how QOL is calculated and paid in the five countries discussed in this chapter.

Table VIII-11. Calculation, Frequency & Duration of Veterans' QOL Payments by Foreign Governments

Country	Program Title	QOL Calculation Method, and Payment Frequency and Duration
Australia (1998)	Military Compensation and Rehabilitation Service (MCRS)	<p>Impairment is expressed as a rating on a scale of 0 to 100. Note that this differs from “incapacity to work” which is the basis for earnings loss compensation.</p> <p>The impairment rating is combined with a lifestyle ratingⁱ (Zero to seven: Zero rating indicates lifestyle is only negligibly affected; rating of 7 indicates the utmost severity) to give a compensation factor on a scale from 0 to 1.</p> <p>This is then applied to the maximum amount of financial compensation for permanent impairment to determine how much a person is entitled to in the form of a pension or a lump-sum up to \$267.83 per week (up to \$1071.32 per month), tax free for life. The rate depends on the degree of impairment.</p> <p>Up to 50 impairment points, taking a weighted average of impairment and lifestyle assessments, determine the compensation factor. Impairment is weighted at 85% and lifestyle effect at 15%.</p>
Canada (2006)	Disability Award	<p>Under the New Veterans Charter, the assessment process first measures the effects of the entitled conditions by comparing the existing quality of life with what might have been expected in the absence of the entitled conditions. This is a major consideration in determining the effects from a disability on loss quality of life. Additionally, VAC takes into consideration the self assessment questionnaire and other information on the file that may give insight into what the client was like prior to the disability. VAC will consult their internal system for any background information (for example, the number and age of the veteran’s children) all of which will be considered in the assessing loss quality of life. The amount of the awardⁱⁱ (\$731 to \$260,844 in 2008) is not linked in any way to other payments received under the New Veterans Charter.</p>
Germany (2007)	Integration Assistance ⁱⁱⁱ	<p>A last safety net to protect individuals from poverty, social exclusion, and hardship.</p> <p>Helps individuals and households who are unable to meet their own needs and lack sufficient entitlement under other insurance and welfare systems.</p> <p>Calculated on an as-needed and individual basis.</p>
Israel (1949); Program Modification (2006)	Department of Rehabilitation	<p>The benefits are calculated and awarded according to need and average cost of the service purchased and paid monthly.</p>
United Kingdom (2005)	Armed Forces Compensation Scheme (AFCS)	<p>The lump-sum payment is determined by a tariff,^{iv} awards dependent on the severity of the condition) which has 15 levels. Paid in addition to GIP for earnings loss.</p> <p>Level 1 gives the highest payment, covering the most severe conditions, at 285,000 (GBP).</p> <p>Level 15 covers the least severe injuries for which compensation is paid, at 1,050 (GBP).</p>

Source: EconSys Study Team, compiled from the Internet and interviews with country representatives.

ⁱ Australia Department of Veterans' Affairs. (1998). *Guide to the assessment ratings of veterans' pensions (GARP)*.

ⁱⁱ Veterans Affairs Canada (2006). *Disability award program*. Retrieved July 25, 2008, from <http://www.vac-acc.gc.ca/clients/sub.cfm?source=forces/nvc/programs/da>

ⁱⁱⁱ Germany Federal Ministry of Labour and Social Affairs. (2007). *Social Security at-a-glance: Rehabilitation and integration of people with disabilities*. http://www.bmas.de/coremedia/generator/10120/property=pdf/social__security__at__a__glance__total__summary.pdf

^{iv} Ibid.

Administrative Best Practices

QOL Payments are Explicit

All five foreign programs reviewed *explicitly* recognize quality of life (pain and suffering in the United Kingdom) in their veterans' disability programs. Four of the foreign countries studied modernized their programs in the past four years.

QOL Payments based on Benchmark Research. To determine the amounts of QOL payments foreign programs conducted an internal review of their workers' compensation programs and injury claims within their judicial system. Additional research was culled from other foreign countries that use a dual benefits (economic and non-economic) approach. The internal and external review process was instructive in establishing a new program that includes QOL.

Context for Service-Connected Disabilities. Two factors provide context for understanding how service-connected disabilities are perceived within some foreign programs. The first is that the type of coverage for a veteran is directly related to the type of service. In some programs, the benefit and level of coverage for a service-connected disability varies based on whether the veteran is serving as a part of a peacekeeping mission or a combat-related effort. In others it depends on whether the service member is engaged in service (as opposed to personal recreation). Second, there is a range for what is covered under the rubric of service-connected disabilities. If, for example, a veteran develops hemorrhoids or acne and either of those conditions is determined as be directly linked to their service, appropriate compensation will be made.

Impetus for Program Change. The operational tempo and the increased disabled veteran population as a result of the war on terrorism, served as an impetus for program change. Additionally, there was increased reporting of chronic pain and depression by some veterans. Programs had to change in order to be responsive to the needs of a modern veteran population and military. The use of the term modern suggests that old management systems and practices were not fulfilling the needs of today's veterans; some programs have employed a modern disability management model to better serve veterans. More directly, instead of entitlement-based programming, administrators had to make a culture shift to an individual and needs-based approach. The basis for such change is a theoretical shift in how veterans are managed.

Rehabilitation is a Must. All foreign veterans' programs reviewed emphasize rehabilitation, both mental and physical, as a part of their administrative structure. Rehabilitation is built into each of the programs as a support mechanism as well as a vehicle for regaining economic stability, that is, employment.

Separate but Equal? A difference has been noted between established veterans' agencies and social service agencies in their approach toward disabled veterans. Generally speaking, veterans' agencies provide a separate support system designed to

service the specific needs of disabled veterans. In contrast, social service agencies include disabled veterans as part of the larger disabled community for whom they provide services. The overall goal is to fully integrate disabled individuals into mainstream society. Both systems have merit and reveal the distinctive social, political, and economic contexts under which the individual programs are operated. For example, VAC acknowledges that the political systems of Canada and the United States are different. Canada has one military hospital in the country; Australia, Germany, Israel, and the United Kingdom have none. Instead, they must rely on community and provincial services entities to serve their citizens, of which the disabled veteran population is a part. VAC employs a capacity-building approach through its social and safety networks within Canada.

Navigating the Assessment Rating System. In reviewing foreign programs, the assessment process for QOL appears to be straightforward and accessible. In some programs veterans self-assess their QOL, allowing them to be a part of the process. Specific precautions have been put in place to ensure that the veteran does not underrate or overrate his or her level of impairment vis-à-vis his or her quality of life; that is, outlier self-ratings are reviewed and adjusted. If the veteran chooses not to self-assess, a rating automatically is assigned relative to level of medical impairment. It is important to highlight those programs that have independent measures (for example, QOL questionnaires) to assess the loss of quality of life. Doing so acknowledges QOL as a separate component of a veteran's life.

Acknowledgment vs. Payment for QOL. In some of the programs it was difficult to determine how a QOL was calculated and whether QOL and earnings loss payments are made separately. However, a consistent theme throughout the majority of the programs was the need to acknowledge QOL. In acknowledging QOL, many felt that this was ensuring that the needs of their veterans, outside of work, were addressed. Loss of earnings in most programs is a separate calculation that provides a balance to QOL considerations and earnings loss; when paid, earnings loss is most often paid as a percent of pre-injury wages.

Sell the Lump-Sum Payment as Part of a Package. The Veterans Affairs Canada program experienced some challenges in changing from a pension-based program to that of a lump-sum payment. Veterans were initially uncomfortable with the change, thinking that they would be disadvantaged by a one-time payment for an injury or illness rather than payment over a period of time. The VAC approach was to sell the change, specifically the lump-sum payment, as part of a package or suite of services (rehabilitation services, soft-landing assistance, and job placement) targeted to the needs of the veteran and his or her family.

Reversing standards. DVA Australia uses the “reverse criminal standard of proof” for Iraq war veterans. Instead of the veteran having to prove that the injury or illness was in fact service-related, the burden of proof is on the program administrators to find that injury or illness was NOT caused by service.

Summary of QOL in Non-VA Programs

The Massachusetts Workers' Compensation Program has dual benefits for permanent disabilities, with one track of benefits providing compensation for loss of wages (work disability) and the other track providing compensation for "specific injuries" (non-work disability). All other disability programs reviewed in U.S., public and private, are silent on quality of life. None make explicit payments for quality of life. Work disability programs provided in both the public and private sector in the U.S. emphasize return-to-work efforts and either offer rehabilitative services or allowances for rehabilitative services to facilitate return-to-work efforts. All other U.S. programs reviewed pay less than 100 percent of actual wage loss as an incentive to work. Inability to work at all or a reduction in employment capacity due to a work injury must be established by the claimant before receiving benefits. Mental conditions such as post-traumatic stress disorder (PTSD) are not typical in civilian occupations and state disability compensation. Private disability insurance offered to first responders does cover mental conditions, but the claimant must establish that the condition resulted from work.

While other U.S. programs are silent on quality of life, the purpose of disability benefits is work disability paid as either actual loss of earnings or loss of earnings *capacity*. Payments made for work disability are often paid by using an operational approach that assesses the extent of permanent impairment such as workers' compensation schedule awards for serious physical injuries such as amputations. U.S. programs vary widely in the amount they compensate for the same condition. This variation accentuates the subjective nature of these payments and raises the question as to whether quality of life is indeed a consideration that goes into the determination of the amount of payment, even though it is intended as payment for loss in earnings *capacity*.

The five foreign veterans' programs reviewed recognize and acknowledge a quality of life aspect in their respective disability programs. The United Kingdom, Australia, and Canada modernized their veterans' disability programs in the past four years, and each provides cash compensation for loss of quality of life (pain and suffering in the UK). Level of impairment is a major factor in determining the amount of the QOL payment. Germany and Israel provide services to support QOL but do not provide separate cash payments specifically for QOL compensation. Canada and the UK provide a lump-sum QOL payment; Australia provides the QOL benefit in conjunction with monthly earnings compensation and offers a lump-sum option. Canada's maximum lump-sum payment is equivalent to \$258,187 in U.S. currency, and United Kingdom's payment is equivalent to \$560,651 in U.S. currency.²³⁰ There are three important distinctions that relate to QOL payments for disabled veterans in Australia, Canada and the United Kingdom:

- QOL is paid in addition to earnings loss. However, earnings loss payments are based on work limitations and are set at a percent of the disabled veteran's pre-

²³⁰ All currency conversions in this section from Oanda.com. (2008). *FXConverter - currency converter for 164 currencies*. Retrieved July 25, 2008, from www.oanda.com/convert/classic

injury earnings or pensionable wages, not 100 percent²³¹ of individual's prior wages or the average country wage.

- For less serious injuries in the United Kingdom and Canada, a lump-sum QOL payment may be the only payment made.
- Earnings loss payments cease or are offset by earnings and/or pensions from other sources including retirement pensions.

Israel and Germany, on the other hand, provide services intended to improve QOL but provide no separate cash benefits based on loss of QOL. All countries reviewed emphasize rehabilitation and supportive services as a part of their QOL concept and these services are provided through the country's social service programs and/or through the veterans' agencies. The goal is to integrate the disabled veteran into society as much as possible, which includes services to support disabled veterans in securing and maintaining employment. Integration into society is viewed as integral to quality of life and it is typical for disabled veterans to be served in the same manner as other disabled individuals in the country.

Disabled veterans in Canada and Australia assess their QOL through self-administered instruments or interviews. Outliers—disabled veterans who assess their QOL as much higher or much lower than others under similar circumstances—are reviewed and adjusted to provide a balanced assessment.

²³¹ Except in Australia, which pays 100 percent of loss of earnings for the first 45 weeks, and reduces it thereafter. The United Kingdom's earnings loss payment is based on age and pensionable earnings.

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ABBREVIATIONS

ABBREVIATION	WORD	ORIGIN
ACOEM	American College of Occupational and Environmental Medicine	U.S.
ADA	Americans with Disability Act	U.S.
AD&D	Accidental Death and Dismemberment	U.S.
ADF	Australian Defence Force	Australia
AFCS	Armed Forces Compensation Scheme	United Kingdom
AIW	Average Industrial Wage	Canada
AMA	American Medical Association	U.S.
ASB	Annual Statistical Bulletin	U.S.
AWW	Average Weekly Wage	U.S.
BOE	Business Overhead Expense	General
CF	Canadian Force	Canada
CFIS	Canadian Forces Income Support	Canada
CFR	Code of Federal Regulations	U.S.
CMP	Canadian Mounted Police	Canada
COLA	Cost-of-Living Adjustments	U.S.
CPI	Consumer Price Index	U.S.
CPP	Canadian Pension Plan	Canada
CPS	Current Population Survey	U.S.
CWT	Compensated Work Therapy	U.S.
DI	Disability Insurance	General
DLA	Disability Living Allowances	United Kingdom
DOD	Department of Defense	U.S.
DOL	Department of Labor	U.S.
DOL VETS	Department of Labor's Veterans' Employment and Training Service	U.S.
DRS	Department of Rehabilitative Services	U.S.
DTAP	Disabled Transition Assistance Program	U.S.
DWP	Department for Work and Pensions	United Kingdom
DVA	Department of Veterans' Affairs	Australia
DVOP	Disabled Veterans' Outreach Program	U.S.
EAIP	Employer At Injury Program	U.S.
EEOICP	Energy Employee Occupational Illness Compensation	U.S.
EEL	Extended Earnings Loss	Canada
EER	Entered Employment Rates	U.S.
EERB	Extended Earnings Replacement Benefit	Canada
ELCI	Employers Liability Compulsory Insurance	United Kingdom
ELP	Economic Loss Payment	Canada, general
EMC	Extended Medical Coverage	General

ABBREVIATION	WORD	ORIGIN
ENs	Employment Networks	U.S.
ESA	Employment Standards Administration	U.S.
FECA	Federal Employees' Compensation Act	U.S.
GAO	General Accountability Office	U.S.
GARP	Guide to the Assessment Ratings of Veterans' Pensions	Australia
GDP	Gross Domestic Product	General
GIP	Guaranteed Income Payment	United Kingdom
HBPR	Hay Benefits Prevalence Report	U.S.
HIPAA	Health Insurance Portability and Accountability ACT	U.S.
HRQOL	Health-Related Quality of Life	General
IB	Incapacity Benefits	United Kingdom
IDI	Individual Disability Income	General
IIDB	Industrial Injuries Disablement Benefits	United Kingdom
IIS	Industrial Injuries Scheme	United Kingdom
IOM	Institute of Medicine	U.S.
IU	Individual Unemployability	General
JVA	Jobs for Veterans Act	U.S.
LEC	Loss of Earning Capacity	General
LHWCA	Longshore and Harbor Workers' Compensation Act	U.S.
LOE	Loss of Earnings	Canada, general
LOF	Loss of Function Award	United Kingdom
LP	Lifetime Pension	Canada
LTD	Long-term Disability	General
LVER	Local Veterans' Employment Representatives	U.S.
MCRS	Military Compensation and Rehabilitation Service	Australia
MECRB	Medical Employment Classification Review Board	U.S.
MMI	Maximum Medical Improvement	General
MOD	Ministry of Defense	United Kingdom
MRCA	Military Rehabilitation and Compensation Act	Australia
NASI	National Academy of Social Insurance	U.S.
NAWW	National Average Weekly Wage	U.S.
NCCI	National Council on Compensation Insurance	U.S.
NEL	Non-Economic Loss	Canada, general
NELP	Non-Economic Loss Payment	Canada
NLG	Netherlands Guilders	Netherlands
NVC	New Veterans Charter	Canada
NWT	Northwest Territories	U.S.
OA	Old Age	General
OHS	Occupational Health Services	Netherlands
OWCP	Office of Workers Compensation Program	U.S.
PAI	Permanent Impairment Allowance	Canada

ABBREVIATION	WORD	ORIGIN
PFI	Permanent Functional Impairment	Canada
PI	Permanent Impairment	General
PIB	Permanent Impairment Benefit	Canada
PPI	Permanent Physical Impairment	Canada
PPD	Permanent Partial Disability	General
PRM	Periodic Roll Management	U.S.
PTD	Permanent Total Disability	General
PTSD	Post Traumatic Stress Disorder	General
PTO	Paid Time Off	U.S.
QOL	Quality of Life	General
QPP	Quebec Pension Plan	Canada
RCMP	Royal Canadian Mounted Police	Canada
REA	Reintegration of Work Handicapped Person Act	Netherlands
RECA	Radiation Exposure Compensation Act	U.S.
RSA	Rehabilitation Services Administration	U.S.
RTW	Return to Work programs	U.S.
SAWW	State's Average Weekly Wage	U.S.
SCI	Spinal Cord Injuries	General
SDI	State Disability Insurance	U.S.
SMC	Special Monthly Compensation	U.S.
SPVA	Service Personnel and Veterans' Agency	United Kingdom
SRCA	Safety, Rehabilitation and Compensation Act	Australia
SSA	Social Security Administration	U.S.
SSDI	Social Security Disability Insurance	U.S.
SSI	Supplemental Security Income	U.S.
SWLS	Satisfaction With Life Scale	U.S.
TAP	Transition Assistance Program	U.S.
TBI	Traumatic Brain Injury	U.S., general
TMS	Transition Management Service	Australia
TPD	Temporary Partial Disability	General
TTD	Temporary Total Disability	General
TTW	Ticket to Work Program	U.S.
TWCRC	Texas Workers' Compensation Research Center	U.S.
TWP	Trial Work Period	General
UK	United Kingdom	U.K.
VA	Department of Veterans Affairs	U.S.
VAC	Veterans Affairs Canada	Canada
VASRD	VA Schedule for Rating Disability	U.S.
VBA	Veterans Benefits Administration	U.S.
VEA	Veterans' Entitlement Act	Australia
VR	Vocational Rehabilitation	General

ABBREVIATION	WORD	ORIGIN
VR&E	Vocational Rehabilitation and Employment	U.S.
VWIP	Veteran Workforce Investment Program	U.S.
WBGH	Washington Business Group on Health	U.S.
WC	Workers' Compensation	General
WIA	Workforce Investment Act	U.S.
WIPA	Work Incentives Planning and Assistance	U.S.

