

Progression of Disability Benefits

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Progression of Disability Benefits refers to the migration of workers with work-limiting disabilities as they move through a system of economic disability benefits resulting in their ultimate placement into the Social Security disability system. This article documents and describes this phenomenon by examining the phases of short term, long term, and social security disability compensation systems. Implications for disability policy, disability management programming, and future research directions are discussed.

INTRODUCTION

In the early 1980s, many leading employers were looking for ways to protect themselves against the rapidly rising costs of health care, worker compensation, and other disability-related expenses that had risen dramatically in the previous decade (Galvin, 1983). Voluntary, private sector initiatives followed stimulated by the need to reduce these costs while maintaining the health and productivity of valuable human resources. These motivations were broadened in the next decade by the need to comply with new legal requirements such as the employment provisions of the Americans with Disabilities Act (ADA).

The Washington Business Group on Health and other proponents of disability management (DM) stressed that coordinated management of all disability-related programs was desirable in order to realize the full potential of these initiatives. These programs included worker compensation, short and long-term disability, and medical care (Schwartz, 1984). In the absence of an integrated approach to health and disability, employers experienced cost shifting among internal benefit programs without a real reduction in overall costs. For example, Butler, Gardner and Gardner (1998) documented that, when moving claimants from health benefits or absenteeism to worker compensation, the “moral hazard” of unaccountable cost-shifting resulted in increased benefits use and reduced overall productivity for the organization.

In 1999, the Washington Business Group on Health and Watson Wyatt conducted a survey of DM practices involving 178 companies with 1,000 or more employees. Results indicated that some DM program components were in place among virtually all major employers. Furthermore, these initiatives are becoming more focused on the integrated administration of disability benefit plans. The need to optimize employee health and productivity for business survival has compelled both companies and insurers to adopt a more internally consistent approach to the management of work disability. In 1998, 46 percent of respondent employers reported having integrated DM programs in

one coordinated system, compared to 26 percent only three years earlier (Washington Business Group on Health and Watson Wyatt, 1999).

Despite these positive developments, less progress has been made with respect to the resolution of disability claims of long duration. In these instances, the strategy of choice in the private sector has been and continues to be to actively assist individuals in obtaining Social Security Disability Income (SSDI) benefits (Schwartz, 1984; Hunt, Habeck, Owens, & Vandergoot, 1996). Thus, when private sector employers fail to accommodate individuals and return them to work, the final solution is one of cost-shifting to public disability programs.

When the concepts of early intervention and worksite rehabilitation (critical components of DM) were first presented to the American rehabilitation community in 1980 by Finnish rehabilitation experts, their ultimate goal was described as the prevention of individuals passing from productive activity to social security rolls (Jarvikowski & Lahelma, 1980). Without question, the proliferation of DM and accommodation activities by employers has slowed the departure of individuals with disabilities from the workforce. It appears inevitable, however, that some portion of workers will continue to migrate to public sector disability systems (Burkhauser, Butler & Kim, 1995).

The U.S. General Accounting Office (GAO) has documented a significant increase in the number of public disability beneficiaries every year since 1982. Factors contributing to this problem include:

- Emergence of new types of participants;
- Structural changes in the labor market;
- Declining availability of employer-based insurance benefits;
- Extensions of the length of time over which benefits are continued; and
- The lack of an effective return-to-work focus (Ross, 1996).

With respect to this final point, in recent years only 1 in 500 SSDI beneficiaries has departed the disability rolls to return to work. The U.S. GAO estimated that nearly \$3 billion could be saved in lifetime cash benefits for every 1% of working-age beneficiaries who return-to-work. The U.S. GAO further identified successful return-to-work practices among private sector employers around the world that could help beneficiaries return to work (Ross, 1996). So, just as spiraling costs led to active coordination of health and disability programs in the private sector, similar motivations and dynamics are occurring in the public disability program.

The costs of disability and the growing rate of participation in disability benefit programs (particularly among younger, working-age applicants) are now widely recognized as threatening factors to both public and private sector budgets (Reno, Mashow, & Gradison, 1997). These trends have brought renewed attention to the need to reduce unnecessary work disability, provide more effective and more timely interventions, and design benefit policies to create stronger incentives to control costs and achieve employment outcomes whenever possible (Reno et al., 1997; Rupp & Stapleton, 1998).

In the last decade, it has become clear that the action and inaction of employers, insurers, and rehabilitation providers have important implications for the public disability program. There is a definite need to study interventions that promote work retention, and strategies that inhibit the transfer of individuals with enduring work disabilities to the Social Security (SS) system. Exploring the connection between the impacts of positive, private sector actions

such as DM and their effects on the costs and utilization of public disability benefits is the purpose of a research program undertaken by the Rehabilitation Research and Training Center (RRTC) on Workplace Supports at Virginia Commonwealth University. The present study attempts to document the migration of workers who develop work limiting disabilities. It describes their predictable and progressive movement through a system of economic disability benefits resulting in their ultimate placement into the SS disability system. This phenomenon is referred to as the Progression of Disability Benefits (PODB).

PURPOSE

The purpose of this study is to document, describe and measure the PODB phenomenon and its dynamics as they exist among the 4,285 employers who participated in this study. The specific objectives of this study are to:

1. Document and describe the PODB phenomenon. Specifically, is the movement between disability payment systems systematic?
2. Explore selected characteristics of claimants and employers, describe their relationship to the likelihood of progression. Specifically, is the movement between disability payment systems related to claimant age, gender, residence, disability, and/or employer industry classification?

PLANNING AND DATA COLLECTION

A series of planning meetings was conducted in 1998-1999 involving principals from collaborating organizations. These included the RRTC on Workplace Supports at Virginia Commonwealth University, the Washington Business Group on Health, and UNUM/Provident Life Insurance Company of America. The research questions, hypotheses, variables, accessibility of data, confidentiality issues, methods of data analysis, and timelines were deliberated, and a final research protocol was developed.

DESCRIPTION OF THE DATABASE

The database was extracted from the UNUM/Provident Life Insurance Company, a large disability insurer, in April 1999. It included 115,438 consecutive short-term disability (STD) claims filed from January 1, 1994 to December 31, 1996 (the filing period). Every case of STD filed with UNUM during that three-year period was in-

cluded in the extracted data set if the claimant was also insured for long term disability insurance (LTD) by UNUM. From this group, 35,996 cases involving pregnancy and/or complications from pregnancy were removed. Cases involving claimants who died were removed (N=1,187). Finally, 968 cases whose LTD status resulted from STD claims filed prior to the review period were eliminated. With these deletions, the final sample available for the study included 77,297 claims for STD, 285 (0.4%) of which involved missing data for one or more of the variables studied. When data were missing for a particular variable, that case was excluded from the sample only for the examination of that particular variable. For each complete case, the following data were available:

Claimant:

- Age (5 categories)
- Gender (male, female)
- ICD-9 disability code (11 categories)
- Region of residence (4 regions)
- Length of time in STD status (number of days, paid and unpaid)
- Representation in LTD status (number of yes/no)
- Length of time in LTD status (number of days, paid and unpaid)
- Representation in SSDI status (number of yes/no)

Employer:

- Standard Industry Classification code (5 categories)

The distribution of claimants by gender, age, geographic region, and the employer industry classification is given in Figures 1, 2, 3, and 4 respectively. Each figure includes benchmark data reflecting national averages for the summer of 1995, the midpoint of the claimant filing period.

FIGURE 1: Distribution by Gender, Workforce vs. Study Sample

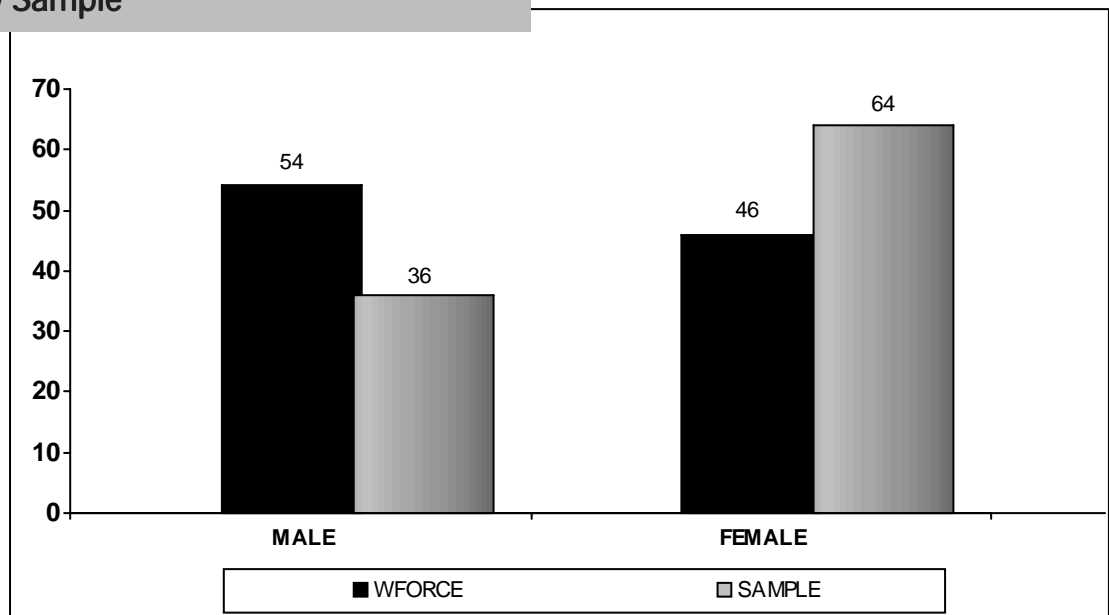
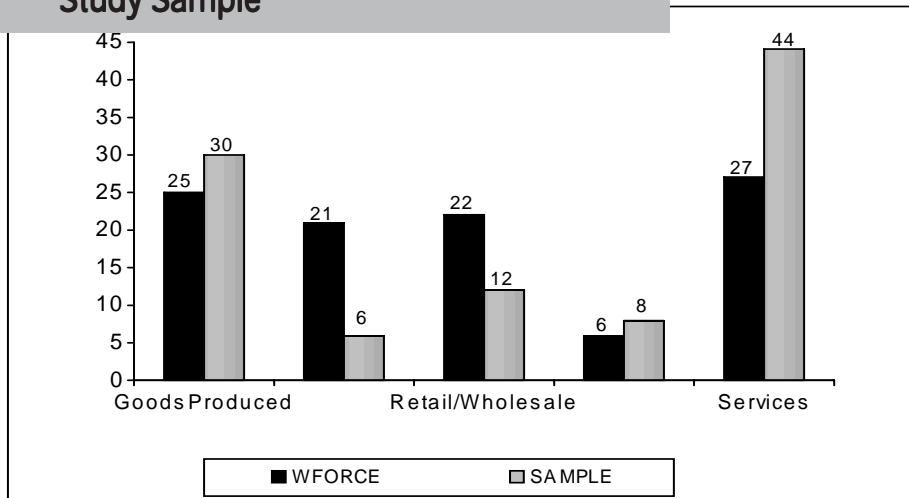
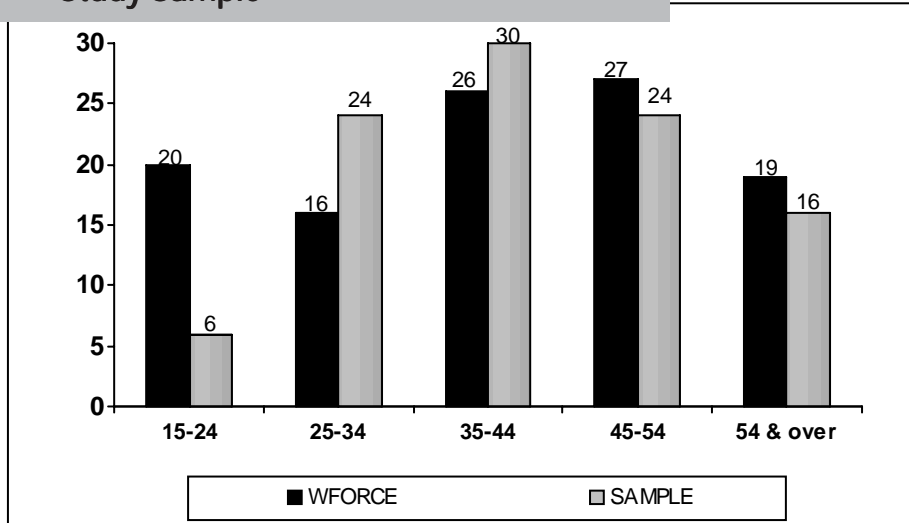
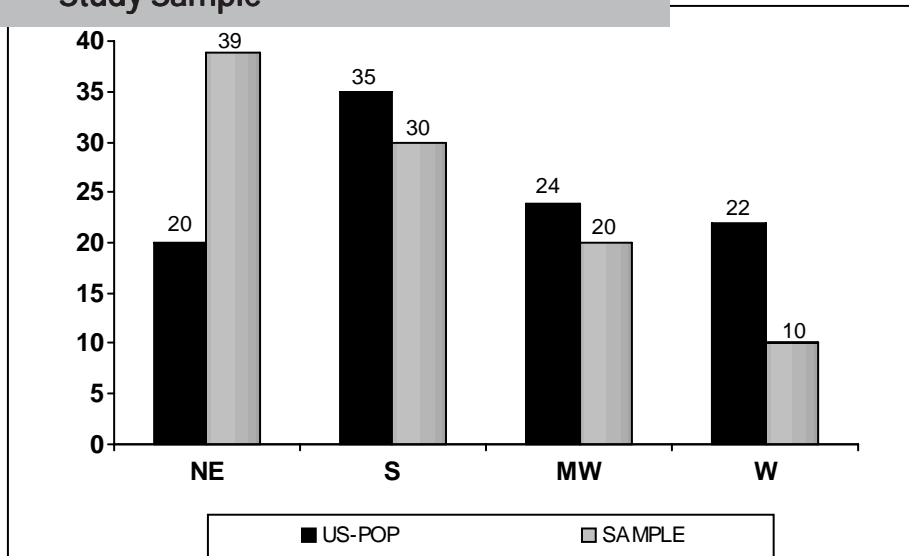


FIGURE 2: Distribution by Industry, Workforce vs. Study Sample**FIGURE 3: Distribution by Age, Workforce vs. Study Sample****FIGURE 4: Distribution by Region, Workforce vs. Study Sample**

These figures allow for examination regarding the relationship of this sample to the national population. For example, the UNUM sample has proportionately more females, more service workers, more workers 25-44 years old, and more workers from the Northeastern United States as compared to national averages at the time. Conversely, the UNUM sample had fewer workers in government, transportation, and wholesale/retail trades; fewer workers age 15-24; and fewer workers from the Western United States as compared to national averages at the time.

LIMITATIONS OF THE DATA

Several unique features of this data set may bear upon the interpretation or generalization of findings. First, in order to minimize variations in the data attributable to claims handling, the sample includes only claimants' insured for both STD and LTD by UNUM. In 1991, only 44% of American workers were insured for STD, and 25% were insured for LTD (National Academy of Social Insurance, 1996). Thus, the UNUM sample represents a minority of workers whose employers provided both forms of coverage in an integrated manner.

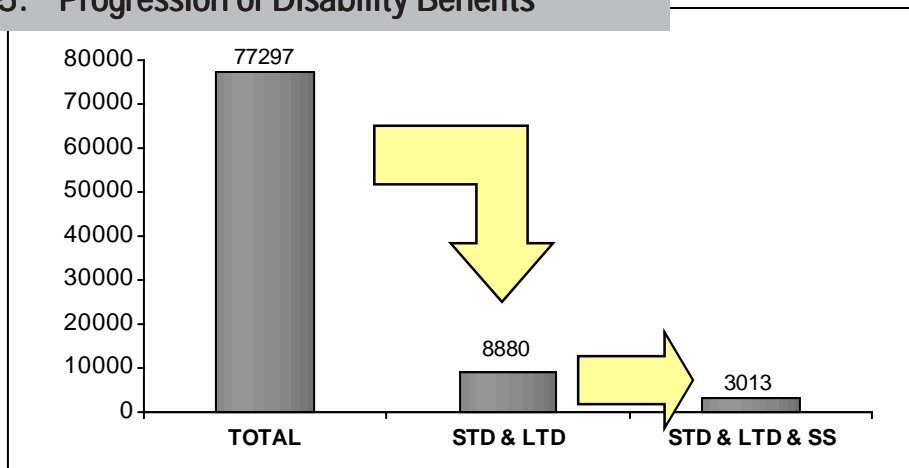
Second, claimants represent 4,285 employers, including 251 with 100 or more claims (85 of these were healthcare institutions) and 3,218 with 20 or fewer claims. The 100 employers with the most claimants in this sample accounted for 41,854 claims or 54.2 % of the total. Most claimants in this sample work for larger employers (500 or more workers) that appear to offer integrated benefit programs. These employers are likely to have higher levels of accommodation and DM activity than would be expected of employers in general. Finally, no work-related injuries were included in this study; those injuries are addressed through a different disability benefit system; i.e., worker compensation.

— DOCUMENTING AND DESCRIBING THE PROGRESSION OF DISABILITY BENEFITS —

The migration of claimants from STD (N=77,297) to LTD (N=8,880) to SSDI (N=3013) status was documented and is represented in Figure 5 on the following page. Of the 77,297 STD claimants who comprised the sample, 8,880 (11.5%) continued on to receive LTD benefits. From this group, 3,013 (33.9% of the LTD group; 3.95% of the STD group) progressed to SS disability benefits by the end of the study period. Approximately one in nine STD recipients progressed to LTD status; approximately one in three of these claimants progressed to SS status. The median length of time spent in STD status was 145 days (M = 254 days, SD = 293; median paid days = 39). The median length of time spent in LTD status was 190 days (M = 281 days, SD = 245; median paid days = 129).

MATURATION OF CLAIMS

Previous studies suggest that the average lag time from application for SSDI to final eligibility (including appeals) is approximately 500 days (Butler, Butler & Kim, 1995). It is reasonable to ask, then, whether all STD claimants had sufficient time to “mature” or progress all the way to SSDI status. To examine this issue, it was determined that the last subject could enter this study by filing a STD claim on 12/31/96, precisely 843 days before

FIGURE 5: Progression of Disability Benefits

the database was extracted (4/24/99). A series of analyses was conducted on separate cohorts of 1994, 1995, and 1996 claimants who ultimately reached SSDI status. The following was found: of all STD claimants who eventually reach SSDI status, 99.2% did so in less than 843 days. From these studies it was concluded that the overwhelming majority of claims had sufficient opportunity to “mature.” These participants reach SSDI more rapidly because this population is believed to receive aggressive assistance in expediting the SSDI review process; i.e., claimant representation.

HYPOTHESIS TESTING

Hypothesis #1: There exists systematic movement of disability claimants between disability payment systems. To test this hypothesis, a 2X2 Pearson chi-square Test was performed and the results are summarized in Table 1 below.

Table 1: Validation of Progression of Benefits

			SS Category (no, yes)		Total
			NO	YES	
<i>LTD Category (no, yes)</i>	NO	Count % within no LTD	68414 100.0%	3 .0%	68417 100.0%
	YES	Count % within yes LTD	5867 66.1%	3031 33.9%	8880 100.0%
TOTAL		Count % within overall LTD	74281 96.1%	3016 3.0%	77297 100.0%

$$\chi^2(1, N = 77297) = 24126.30, p < .0001$$

The resulting chi-squared value was 24,126 with one degree of freedom, which is statistically significant. The hypothesis is confirmed because observed frequencies differed substantially from expected frequencies. That migration occurred is not very meaningful

given the large sample size. Rather it is the pattern of migration that is meaningful. It can be accurately described as a progression because:

- the pattern of migration of claimants across disability benefit categories occurs in a manner that is statistically significant and systematic; i.e., the system operates as designed and migration is not a result of chance factors;
- when migration occurs, it does so only in one direction, from STD to LTD or from LTD to SSDI (no cases move backward); once again this is consistent with the design of the system;
- migration does not occur from STD to SS (i.e., there is virtually no “leapfrogging”) without first going through LTD status – with the exception of only 3 cases; and
- migration occurs according to specific, defined ratios.

These findings are largely corroborative in that they serve to confirm that the benefit system operates according to the manner in which it was designed. It is the nature and description of the PODB (the specific progression ratios themselves) that are of most interest. Nonetheless, for this large sample only, subject to the limitations previously described, the Progression of Disability Benefits is confirmed, documented, and described.

ADDITIONAL HYPOTHESIS

PODB becomes more predictable when additional information about the claimant is known. The researchers were interested in how patterns of movement were altered as a function of key variables.

CLAIMANT DEMOGRAPHIC CHARACTERISTICS

Three demographic characteristics (gender, age, and region of residence) and one disability characteristic (ICD-9 code) of the claimants were studied.

Gender -- Data were available for 77,013 claimants (99.6%) with respect to gender. A 2 X 3 Pearson chi-square test was performed and the results are summarized in Table 2 on the following page. The resulting chi-square value was 112.7 with two degrees of freedom. Systematic movement in the PODB is related to claimant gender (see Figure 6 on the following page). Specifically, although underrepresented in STD status, males make substantial increases in representation as the PODB ensues.

Age -- Data were available for 77,067 claimants (99.7%) with respect to age. A 3 X 5 Pearson chi-square test was performed and the results are summarized in Table 3 on the following page. The resulting chi-square value was 1253 with eight degrees of freedom. Systematic movement in the PODB is related to claimant age. Figure 7 on the following page illustrates that claimants under the age of 45 show decreasing levels of participation in LTD and SS as the PODB ensues, whereas claimants over age 45 show rapidly increasing levels of participation.

Table 2: Gender Category by Progression

			Progression			Total
			STD	LTD	SS	
Gender Category	Male	Count	23990	2244	1316	27550
		% within gender category	87.1%	8.1%	4.8%	100.0%
	Female	Count	44177	3601	1685	49463
		% within gender category	89.3%	7.3%	3.4%	100.0%
Total		Count	68167	5845	3001	77013
		% within gender category	88.5%	7.6%	3.9%	100.0%

$$\chi^2(2, N = 77013) = 112.68, p < .0001$$

FIGURE 6: Gender

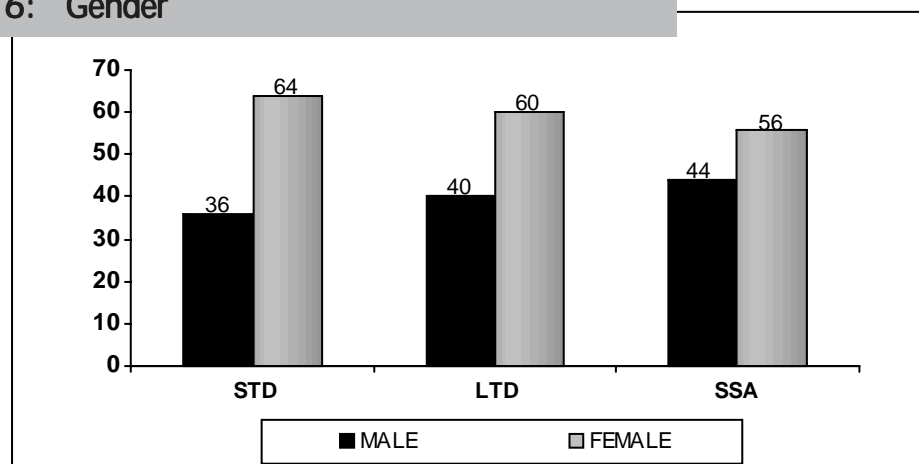
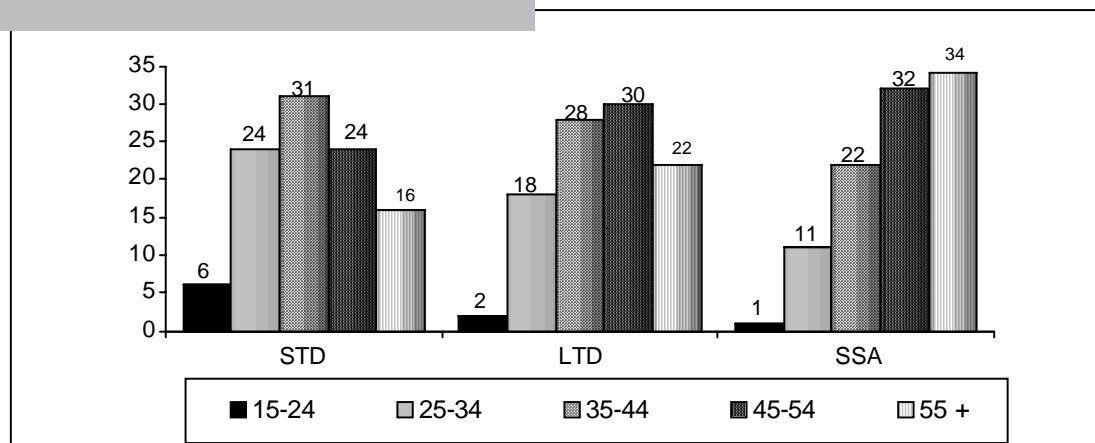


Table 3: Gender Category by Progression

			Progression			Total
			STD	LTD	SS	
Age Category	15-24	Count	4161	184	33	4378
		% within age category	95.0%	4.2%	.8%	100.0%
	25-34	Count	16685	1229	337	18251
		% within age category	91.4%	6.7%	1.8%	100.0%
	35-44	Count	21002	1804	669	23475
		% within age category	89.5%	7.7%	2.8%	100.0%
	45-54	Count	16049	1667	951	18667
		% within age category	86.0%	8.9%	5.1%	100.0%
	55 & over	Count	10311	971	1014	12296
		% within age category	83.9%	7.9%	8.2%	100.0%
Total		Count	68208	5855	3004	77067
		% within age category	88.5%	7.6%	3.9%	100.0%

$$\chi^2(8, N = 77067) = 1253.64, p < .0001$$

FIGURE 7: Age

Geographic Region -- Data were available for 77,297 claimants (100%) with respect to region of residence. A 3 X 4 Pearson Chi-square test was performed and the results are summarized in Table 4 below. The resulting Chi-square value was 442 with 6 degrees of freedom. Systematic movement in the PODB is related to the geographic region of the claimant. Figure 8 on the following page illustrates that claimants from the Northeast have a lower level of representation in LTD status, whereas claimants from the West have considerable increases in representation in both LTD and SSDI statuses.

Table 4: Region Category by Progression

Region Category		Progression			Total
		STD	LTD	SS	
Northeast	Count	27635	1729	965	30329
	% within region category	91.1%	5.7%	3.2%	100.0%
South	Count	20514	1984	953	23451
	% within region category	87.5%	8.5%	4.1%	100.0%
Midwest	Count	13638	1292	654	15584
	% within region category	87.5%	8.3%	4.2%	100.0%
West	Count	6627	862	444	7933
	% within region category	83.5%	10.9%	5.6%	100.0%
Total	Count	68414	5867	3016	77297
	% within region category	88.5%	7.6%	3.9%	100.0%

$$\chi^2(8, N = 77067) = 1253.64, p < .0001$$

Claimant Disability Code (ICD-9). Data were available for all 77,297 claimants (100%) with respect to type of disability (ICD-9 code). In the interest of parsimony, some major ICD-9 code categories were collapsed to create 11 classifications versus the original 16. An 11 X 4 Pearson chi-square test was performed and the results are summarized in Table 5 on the following page. The resulting chi-square value was 2038 with 20 degrees of freedom. Systematic movement in the PODB is related to the claimant's disability type. Figures 9A, 9B, and 9C illustrate that claimants with infectious, neurological, sensory and circulatory impairments are increasingly represented in the progression. Conversely, claimants with digestive or genitourinary illnesses or resulting from injury or poisoning are less involved in the progression. Disabilities involving cancer, respiratory, musculoskeletal, or other disorders are either stable or non-directional in terms of their representation in the progression.

FIGURE 8: PODB by Region

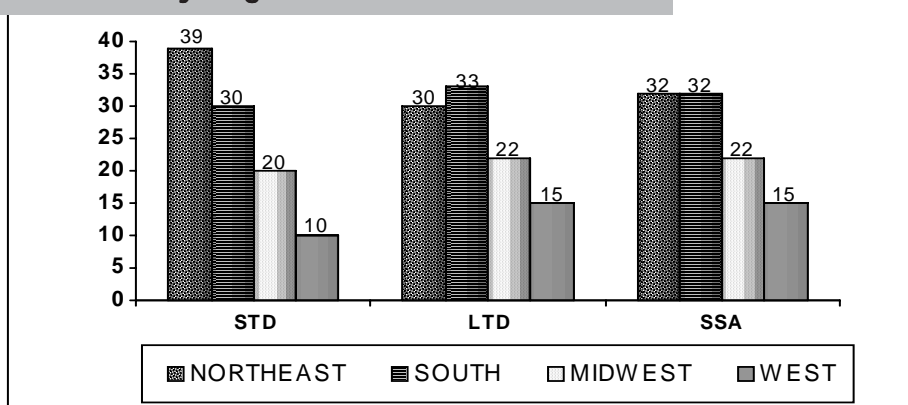


Table 5: ICD-9 Category by Progression

			Progression			Total
			STD	LTD	SS	
ICD-9 Category	Infectious, Endocrine, Blood	Count % within ICD-9	2467 84.0%	231 7.9%	240 8.2%	2938 100.0%
	Neoplasm	Count % within ICD-9	5120 86.8%	566 9.6%	215 3.6%	5901 100.0%
	Mental	Count % within ICD-9	5041 83.5%	655 10.9%	339 5.6%	6035 100.0%
	Nervous and Sensory	Count % within ICD-9	2950 83.5%	316 8.9%	265 7.5%	3531 100.0%
	Circulatory	Count % within ICD-9	4839 81.7%	539 9.1%	545 7.5%	5923 100.0%
	Respiratory	Count % within ICD-9	4887 93.1%	178 3.4%	182 3.5%	5247 100.0%
	Digestive	Count % within ICD-9	6944 93.9%	319 4.3%	133 1.8%	7396 100.0%
	Genitourinary	Count % within ICD-9	6411 95.6%	182 2.7%	111 1.7%	6704 100.0%
	Other - Skin, Congenital, Perinatal, other ill-defined	Count % within ICD-9	4548 89.5%	334 6.6%	202 4.0%	5084 100.0%
	Musculoskeletal	Count % within ICD-9	11703 85.3%	1465 10.7%	552 4.0%	13720 100.0%
	Injury and Poisoning	Count % within ICD-9	13504 91.1%	1082 7.3%	232 1.6%	14818 100.0%
Total		Count % within ICD-9	68414 88.5%	5867 7.6%	3016 3.9%	77297 100.0%

$$\chi^2(20, N = 77297) = 2038.14, p < .0001$$

FIGURE 9A: Disability by PODB

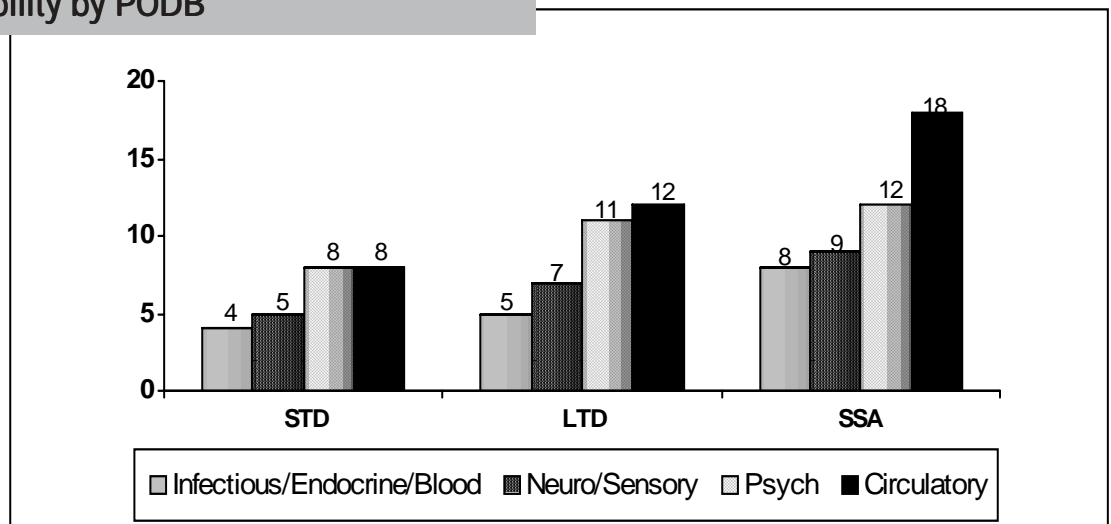


FIGURE 9B: Disability by PODB

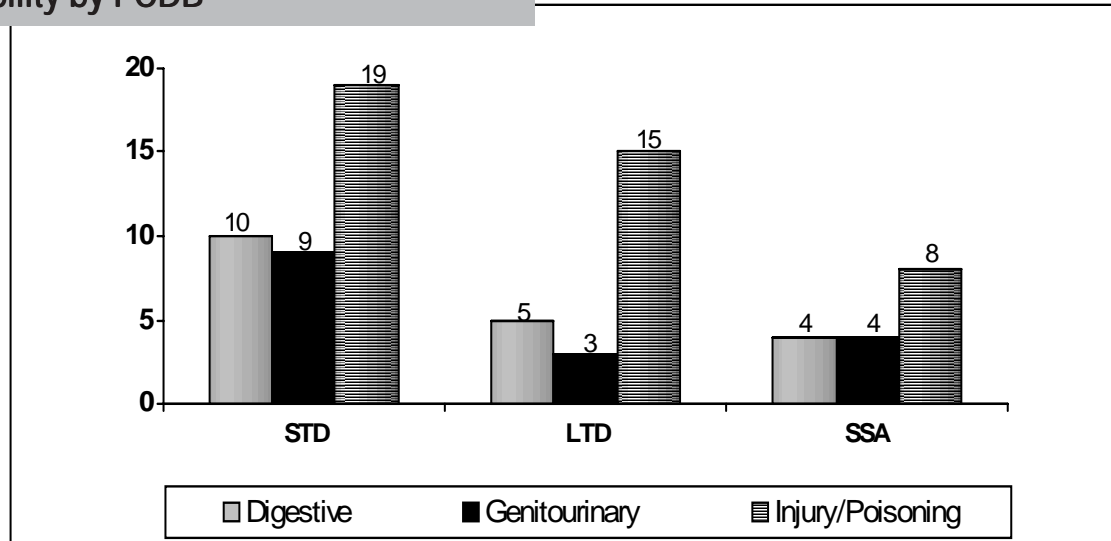
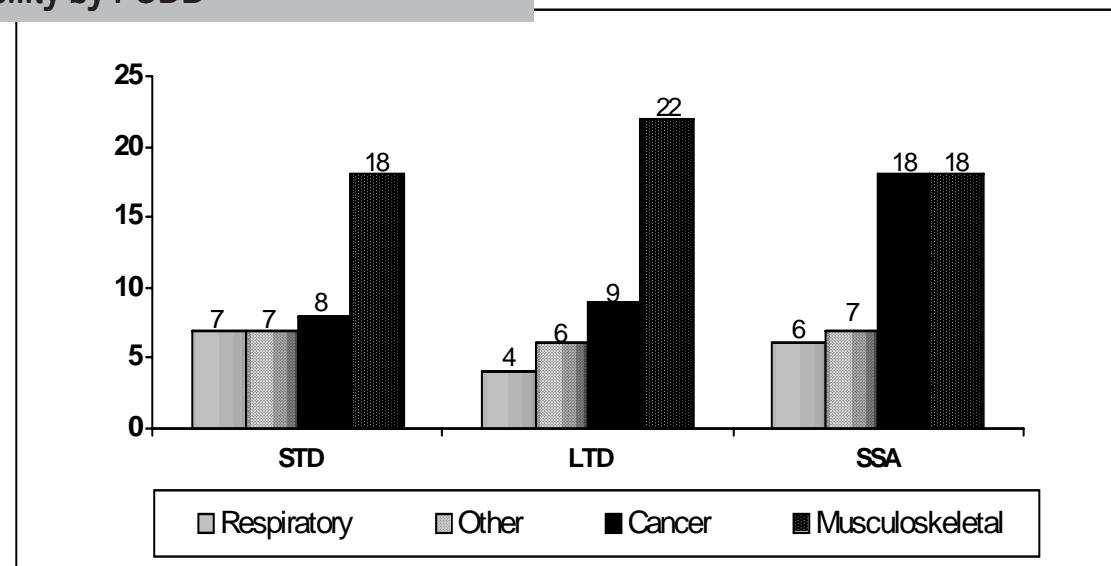


FIGURE 9C: Disability by PODB



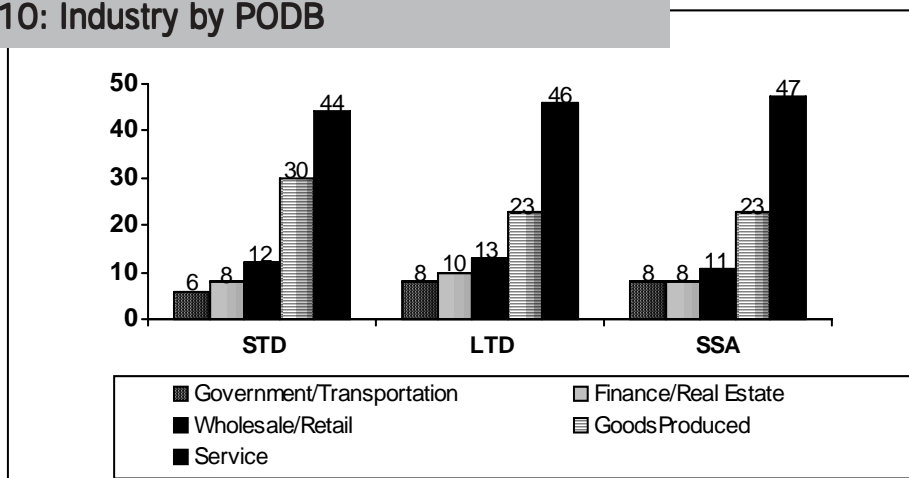
Employer Standard Industry Classification (SIC) Code -- Data were available for 77,264 claimants (99.9%) with respect to SIC code for each claimant's employer. In the interest of parsimony, some major SIC categories were collapsed to create 5 classifications versus the original 11. A 5 X 3 Pearson chi-square test was performed and the results are summarized in Table 6 below. The resulting chi-square value was 385 with 8 degrees of freedom. Systematic movement in the PODB is related to the industry classification of the employer. Figure 10 on the following page illustrates that claimants employed in government, transportation, financial, insurance and real estate industries experience increasing levels of participation in the progression. Conversely, claimants employed in goods producing industries (predominantly manufacturing) experience decreasing levels of involvement in the progression. As one would expect, the largest number of claimants is employed in service industries (particularly health care in this sample); their representation in the progression is accordingly high but stable.

Table 6: Progression by SIC Category

		Progression			Total
		STD	LTD	SS	
<i>Agriculture, Forestry, Mining, Construction, Manufacturing</i>	Count	21280	1303	702	23285
	% within SIC	91.4%	5.6%	3.0%	100%
<i>Transportation, Communication, Sanitary, Electric/Gas, Public Administration</i>	Count	3589	500	233	4322
	% within SIC	83.0%	11.6%	5.4%	100%
<i>Wholesale, Retail Trade</i>	Count	8109	791	343	9243
	% within SIC	87.7%	8.6%	3.7%	100%
<i>Finance, Insurance, Real Estate</i>	Count	5506	573	318	6397
	% within SIC	86.1%	9.0%	5.0%	100%
<i>Services</i>	Count	29901	2697	1419	34017
	% within SIC	87.9%	7.9%	4.2%	100%
<i>Total</i>	Count	68385	5864	3015	77264
	% within SIC	88.5%	7.6%	3.9%	100%

$$\chi^2(8, N = 77264) = 384.68, p < .0001$$

FIGURE 10: Industry by PODB



There exists a natural tendency by an insurer at each level of economic benefit to transfer responsibility for payment to another source. When this is possible, it represents the most financially expedient solution to the problem of ongoing exposure. This is symptomatic of a non-integrated approach in which potential cost savings and productivity gains associated with proactive DM practices are lost. Indeed, a cottage industry has emerged to expedite movement of the individual with disabilities through various levels of benefits and ultimately to the public (SS) disability payment system. “Claimant representation” firms utilize the “benefit offset” provisions of disability policies as a rationale for facilitating the PODB. As such, they provide examples of cost-shifting versus cost-aversion strategies for benefit planning. The verification of the PODB phenomenon as described in this article suggests that employers and insurers should screen LTD claimants even more carefully to ensure that all reasonable efforts at return to work are exhausted.

There are other stakeholders in the disability and employment equation who presume that the worker’s best interest lies in the realization of higher and more enduring levels of both disability compensation and inactivity. Stakeholders may include claimants, their attorneys, labor unions, and/or family members. All of this runs contrary to the spirit of the times as reflected in the Americans with Disabilities Act (ADA). Employers are increasingly receptive to reasonable accommodations and other ADA principles. Positive changes in their attitudes and behaviors are well-documented (National Council on Disability, 1999). Ultimately, retention in or return to employment for qualified persons with disabilities results in the best outcome for workers, employers, and society.

A number of factors may contribute to the PODB phenomenon. One example is what Shrey and Lacerte (1997) term a “lack of employer empowerment,” referring to the tendency by employers to abdicate the management of workplace disability issues to the insurer or third party administrator (TPA). Additionally, the management of disability plans in a “non-integrated” manner remains widespread. In this scenario, the employer, insurer, and/or TPA are managing sick leave, worker compensation, STD, and LTD plans separately and in an uncoordinated manner. The result is “siloeed” plan management and shortsighted cost management. A majority of even large employers persist in this practice, even while many of them have documented the move toward integrated DM programs (e.g., Washington Business Group on Health and Watson Wyatt, 1999). The employers involved in this study: 1) tend to be large or medium in size and have the resources suggested by this fact; 2) have integrated STD/LTD claims management programs; and 3) are likely to provide above average levels of return-to-work support. These considerations remind us that the PODB ratios reported here may represent “best case scenarios” compared to the average American employer, even in similar industries.

This study relates directly to the unnecessary inflation of SSDI rolls. Burkhauser and Daly (1996) argue that the most effective way to decrease SSDI rolls is to initiate programs that would reduce the flow of new persons onto these rolls. These authors proposed a Disabled Worker Tax Credit as the single best means of realizing this effect. The present article supports such innovative policy and furthermore suggests that the value of such incentives might be measured by their potential to interrupt PODB.

The Disability Policy Panel of the National Academy of Social Insurance (1996) called for research that explores “...the consequences of benefit design changes or service intervention that would facilitate return to work.” The same spirit is contained in the Presidential Executive Order (National Task Force on Employment of Adults

with Disabilities, 1998). This document provides a mission statement for the National Task Force on Employment of Adults with Disabilities: “(3) analyze...private disability systems and their effect upon federal programs and the employment of adults with disabilities.”

In this same context, one could certainly construe DM programming as one form of “service intervention.” Therefore, another application of the PO DB phenomenon is to determine its value as an evaluation tool for DM programs. Historically, such traditional indicators as employee return-to-work rates have measured the effectiveness of DM programs, incidence and duration of absence (i.e., time loss), productivity, employee satisfaction, and benefit cost reductions. Although these indicators have repeatedly demonstrated the value of DM programs, they are independent measures, lack weights, and have rarely been studied in a longitudinal manner. With PO DB, managers of DM Programs may now have a new tool with which to measure the effectiveness of DM strategies. Instead of relying solely upon traditional indicators, DM program managers could utilize meaningful PO DB indicators to measure:

- The potential for early identification of persons at high risk to advance through the PO DB.
- The ability of DM programs to interrupt the PO DB.
- The impact of DM programs upon each level and type of disability benefit program.
- The organization’s experience with disability in longitudinal, economic terms.
- The potential to prevent premature dependence of disability claimants upon public (SS) disability income replacement sources.
- The productivity gains associated with retention and/or re-employment of workers with disabilities.

Going forward, the RRTC research team intends to develop a simple algorithm that provides a PO DB experience rating for a particular employer. The rating can be adjusted for type of industry, geography, composition of the workforce, and other relevant factors. The intent is to provide weights to such factors as employee representation and duration of time spent in STD, LTD, and SSDI status. This will allow us to place employers along a PO DB continuum, and to compare the levels of DM activity in extreme groups (high PO DB rating vs. low PO DB rating). Accordingly, the model may provide a means for evaluating the ability of DM programs to change the PO DB experience rating for employers. Also in progress is a series of follow up studies on impairment-specific PO DB patterns, especially for pregnancy; psychiatric, cardiac and respiratory illnesses; and cancer.

Ideally, complete populations of employee groups across a variety of employment settings should be studied. This would allow for an improved understanding of how workers come to STD status and the factors associated with initial incidence as well as each stage of the progression. The concurrent examination of additional variables (such as worker occupation, work environment, and employer response to impairment) would provide for a deeper understanding of the factors associated with PODB.

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