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DISABILITY BENEFICIARY RECOVERY

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Disability Beneficiary Recovery

ABSTRACT

In recent years, the number of workers awarded disability insurance benefits has rapidly increased, while there has been no corresponding increase in the numbers leaving the rolls for recovery. Concern has been expressed that cash benefit payments may be leading to disincentives to beneficiaries to return to work after medical improvement.

To examine this question, a comparative analysis was made of the demographic, disability, and benefit characteristics of a sample of disabled workers who left the benefit rolls for recovery in contrast to the characteristics of those who remained on the rolls after award of disability benefits in 1972.

A substantial proportion of those who were allowed benefits were older middle aged workers with chronic progressive diseases. About 70 percent were aged 50 or over at allowance. One-fifth had died by the end of 1975. For most disabled beneficiaries, recovery appeared unlikely.

Characteristics related to greater recovery included younger age, higher education, disability due to traumatic injury, residence in western States.

Those with higher disability benefit levels had greater recovery, but this appeared due to their being younger workers. In general, there was little difference in the proportion recovered between disabled beneficiaries with higher earnings replacement and those with lower replacement of earnings by benefits.

However, among a small group of disabled workers who appeared to have conditions most subject to medical improvement, those with higher benefit replacement had a smaller involvement in benefit termination for recovery than did working-age survivors with lower earnings replacement.

Disability Beneficiary Recovery*

Since monthly cash benefits became payable in 1957 under the disability insurance program for loss of earnings capacity due to a medical impairment, only a small proportion of the disabled workers who became beneficiaries have left the rolls for recovery of the ability to work. Almost all disabled beneficiaries have remained on the rolls until death or conversion at age 65 to retirement benefits. Essentially, the program has functioned as a total and permanent disability program for middle-aged workers with progressive diseases related to aging.

In the past 10 years, the number of claimants coming on the rolls has increased rapidly from about 300,000 to over 600,000 a year. At the same time, however, the number leaving the rolls for recovery has remained at about 40,000 a year. The increase in new entrants with no corresponding increase in recoveries has raised concern about whether economic disincentives may not be operating to inhibit recently disabled workers from making efforts to return to work once they begin drawing disability benefits. 1/

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*By Ralph Treitel, Division of Disability Studies, Office of Research and Statistics. Data collection and presentation were managed by Barry Bye, Audrey Coe, and Bernard Trieber. Estimation of sampling variability was done by Robert Finch and Beatrice Matsui. Logit data were prepared by Mike Bostron.

1/ Subcommittee on Social Security, Committee on Ways and Means, U. S. Congress, "Disability Insurance Program," hearings, May-June 1976, U. S. Government Printing Office, Washington, D. C., p. 23, and following; also Mordechai E. Lando and Aaron Krute, "Disability Insurance: Program Issues and Research," Social Security Bulletin, October 1976.

This study presents comparative information on the demographic, economic and disability characteristics related to recovery and continuing dependency. For a sample of the 400,000 disabled workers who were entitled in 1972, later benefit and earnings data through 1975 were obtained. The characteristics of those who recovered by 1975 are compared with those who remained on the rolls to see if the amount of benefits played a major part in benefit dependency.

The data source is the Continuous Disability History File, which is based on program records. For a description of this data file and discussion of the data limitations and sampling variance, see the technical note at the end of this report.

In this report, "recovery " refers to the administrative decision that the disabled beneficiary has regained capacity to return to competitive employment and is,therefore, not entitled to further disability benefits. This recovery may be the result of evidence of medical improvement or of demonstrated capacity to work through return to employment for substantial earnings over an extended period of time.

Administrative Procedures for Identification of Recovery

The major administrative devices to identify persons who improve are these: (a) voluntary reports of future recovery or return to work by the disabled persons are requested of them when they are allowed benefits; (b) a medical diary procedure in which the cases of beneficiaries with medical conditions most likely to improve have a follow-up review of current medical status,

including, if deemed necessary, a special consultative medical examination; 2/ (3) notices of later earnings after allowance from employer reports of wages for tax purposes; and (d) reports from State vocational rehabilitation agencies when beneficiaries have been rehabilitated.3/

In addition to detection of medical improvement, there are a number of administrative devices designed to act as incentives to beneficiaries to make efforts to return to competitive employment. A transitional benefit is paid to all who recover for 3 months after the month recovery is determined to have occurred. A trial work period without loss of benefits for 9 months of work in addition to the 3 month transitional period is provided those beneficiaries whose medical condition does not substantially improve but who attempt to go back to work with a continuing severe medical impairment. 4/ All who have potential for rehabilitation are referred to a vocational rehabilitation agency and for a select number the cost of such

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2/ Ralph Treitel, "Identifying Disabled Workers Who May return to Work," Research and Statistics Note No. 5, Social Security Administration, April 27, 1973.

3/ Most cessations result from medical reexaminations, voluntary reports of improvement, or earnings reports. Only a few hundred occur as a result of rehabilitation reports. Beginning in 1978, social security will receive annual earnings reports instead of quarterly reports from employers. This will substantially reduce the effectiveness of earnings reports for continuing disability investigations.

4/ Paula Franklin, "The Impact of Substantial Gainful Activity Level on Disabled Beneficiary Work Patterns," Social Security Bulletin, August 1976.

services to the rehabilitation agency may be reimbursed from social security funds if it appears the services may lead the person to return to competitive work capacity. 5/ Persons deemed able to benefit from services provided by rehabilitation agencies may have their benefits stopped if they refuse to take part in a rehabilitation program. For disabled beneficiaries who recover but become disabled again, no waiting period after the new onset is necessary before benefits may be received.

Not all administrative decisions which conclude that the disabled person has regained the ability to work necessarily result in the termination of benefits. A substantial proportion of beneficiaries, notified of an administration decision to stop benefits because of recovery, contest the decision and win continuance of the benefit payment. In the past over one-fifth of all cessations have been contested and over one-third of these review requests have resulted in a continuance of benefits. 6/.

History of Disability Recovery Experience, 1956-1977

Initially under the disability insurance program, eligibility requirements made it unlikely that many would ever be able to regain the ability to

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5/ R. Treitel, "Effect of Financing on Disabled Beneficiary Rehabilitation." Social Security Bulletin, November 1976; R. Treitel, "Identifying Disabled Workers Who May Return to Work," op. cit.

6/ "Disability Insurance Program," op. cit., p. 30-31; R. Treitel, "Appeal by Denied Disability Claimants," p. 34.

return to sustained, competitive work. Disability benefits were only payable to workers aged 50 and over. The disabling condition had to have kept the claimant from working for more than 6 months in the past and be expected to continue indefinitely or result in death. Less than 1 percent of those awarded benefits later recovered and left the rolls in the first few years of the program (table 1).

Later legislative amendments extended benefits to workers who might be more likely to recover. 7/ In 1960, the restriction to age 50 and over was removed, allowing younger workers to receive cash benefits. In 1965, the definition of disability was extended to include persons whose conditions might improve after a year's disability rather than be expected to be permanent. In 1967, legislation reduced the number of labor force credits needed for younger workers under age 31 to be insured. In 1972, the initial waiting period was reduced from 6 months to 5 months.

The overall program may be expected to continue to provide benefits mainly to older, permanently disabled workers, based on eligibility requirements that the disabled worker have a severe medical impairment preventing any work for a year or longer. The legislative changes, however, increased the proportion of less permanently disabled entitled to benefits. As a result, the proportions dying or attaining retirement age each year have dropped, and the recovery rate per 1,000 beneficiaries increased from under 10 to over 30 per 1,000 by 1967.

7/ "History of the Provisions of Old-Age, Survivors, Disability and Health Insurance," Social Security Bulletin: Annual Statistical Supplement, 1975.

However, there has been a substantial decrease in the recovery ratio in later years, going down from about 30 per 1,000 beneficiaries on the rolls in 1967-1971 to 15.5 per 1,000 in 1976.

While the proportion recovering has remained small and even dropped sharply, the number of persons coming on the disability rolls has continued to rise. New awards have amounted to an annual increase by a quarter or more of those on the rolls in the previous year.

This has meant an overall increase in the disability rolls of about 10 percent a year after adjustment for both accretions and for terminations for recovery, death and age 65 retirement conversion to old age benefits. The lack of a increase in recoveries corresponding to the rise in awards is puzzling inasmuch as the rise in awards often has been attributed to entitlement of large numbers of people who are less severely disabled than those allowed in the past. Cited as reasons for the less severely disabled becoming entitled are these factors: liberalizations through legislation; constriction in labor market work opportunities and filing of more disability claims because of unemployment problems, particularly among older workers; outreach effects of the 1972 supplemental security income program for the indigent disabled and aged; greater administrative leniency in making the initial award; more lenient standards in review; and more claims filed because of the attractiveness of rising benefit levels. 8/

8/ Francisco Bayo, Stephen Goss, Samuel Weissman, "Experience of Disabled-Worker Benefits Under OASDI, 1972-76," Actuarial Study No. 75, Pub. No. (SSA) 78-11525, June 1978; Charles M. Croner and Lawrence D. Haber, "Declining Mortality Among Disabled Worker Beneficiaries," Research and Statistics Note No. 13, DHEW Pub. No. (SSA) 74-1170, May 14, 1974; Lando and Krute, op. cit.

If substantially greater numbers of less severely disabled and less permanently disabled are coming on the rolls as a result of these factors, one would expect substantially greater numbers recovering and leaving the rolls than ever before. This has not been happening according to program data on recovery terminations, except for estimates of a substantial increase in recoveries in 1977. 9/

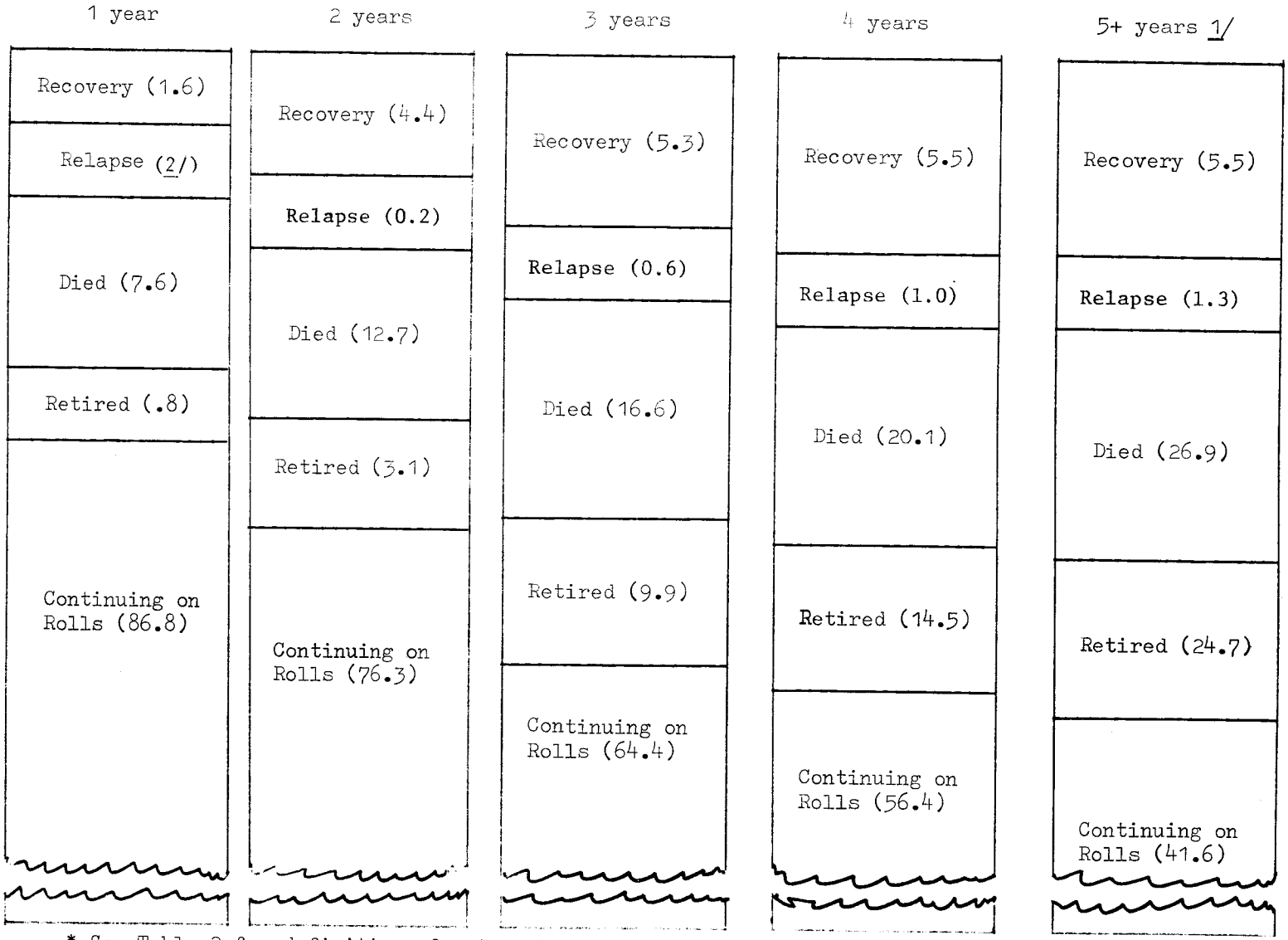
Extent of Recovery of Beneficiaries Allowed in 1972

Few of the 412,000 disabled workers who were allowed benefits in 1972 left the benefits rolls because of recovery. Five years later only about 7 percent had left the rolls for recovery and approximately 42 percent remained. The main reason for termination was death or attainment of retirement age. About 27 percent had died and 25 percent had begun to receive retirement benefits by March 1978. The severity of the definition of disability requiring evidence of a medical condition expected to prevent all work may explain why so many were dead within a few years of their disability award. In addition, as the following section on demographic data shows, the large majority of disabled workers awarded benefits are of advanced middle age, which helps to explain the large proportion on the retirement rolls or dead within a few years of award.

Some of those on the rolls at the end of 1977 recovered after entitlement but returned to the rolls with a recurrence of their disability.

9/ Data problems because of changed termination codes on the beneficiary records due to program changes in recent years has made the identification of accurate recovery numbers tentative in years after 1973. Caseload totals for recoveries in 1974-1977 are estimated. See Bayo, Coss, Weissman, op. cit., table 5.

CHART 1.--Subsequent benefit status after disability award in 1972: Percent of cases*



* See Table 2 for definition of categories and frequency distributions.

1/ As of March 1978.

2/ Less than 0.05 percent.

While those with relapses after recovery represent a small proportion, about 1 percent 5 years after award, they constitute a substantial proportion of all those who recover. At the end of 3 years, about 10 percent of all who recovered had returned to the disability rolls; at the end of 4 years, about 15 percent had returned to the rolls; five years later, about 18 percent had returned to the rolls.

The data on recidivism only show those returned to the rolls after periods of recovery. A small number, not identified by these data, may have had recovery, periods of recidivism, and then another benefit change for recovery, death or attainment of age 65 at the later points in time.

The recovery proportion of 6-7 percent for the study population of persons first allowed benefits in 1972 is substantially higher than the recovery proportion of 2 percent for all beneficiaries on the rolls at the beginning of the year, as shown in table 1. This is because a substantial proportion of the total beneficiary population on the rolls consist of older workers who have been disabled for many years. A greater proportion with recovery may be expected from those recently allowed than for those disabled for many years. Thus about 5 percent had recovered by the end of 2 years after benefit entitlement and only 2 percent more after 5 years.

Characteristics Related to Recovery

To examine what demographic, disability and benefit characteristics distinguished those who left the rolls from those who stayed, comparative recovery statistics by these characteristics were obtained, as shown in tables 3-5. 10/

In addition to the statistics showing the proportion recovered of the entire study population of all 412,000 disabled workers allowed in 1972, a recovery statistic called "survivors' recovery" has also been calculated showing the proportion recovered among the 259,000 surviving working-age adults who neither died nor reached age 65 by the end of a particular period. Whereas 6.0 percent recovered among the total disabled worker population by the end of 1975, the survivors' recovery proportion is 8.4 percent when the workers who died or attained 65 by the end of 1975 are excluded from the base (last column, tables 3-6)..

10/ The characteristics described are limited to those available in the program records of the CDHS file. One study with additional information on the nature of the later work by recovered disability beneficiries, including how many returned to former employers, is by Barbara Levenson and Jerome Green, "Return to Work After Severe Disability," Journal of Chronic Diseases," 1965, Vol. 18, pp 167-180. For information on the demographic characteristics of these recovered beneficiaries with relapses, see Jack Schmulowitz, "Recovery and Benefit Termination," Social Security Bulletin, June 1973.

While the cross tabulations in tables 3-5 present the overall relationship of the various classifications on recovery, a special logit analysis was performed on a sub-sample of records of the surviving workers in order to determine the independent effects on recovery of the various demographic, disability and benefit characteristics. Essentially, this analysis shows the existence of a statistical relationship between each independent variable and/dependent variable (recovery) when all other variables are held constant. The results for each variable are summarized in chart 2 and presented in detail in the technical note.

Demographic Characteristics

The demographic characteristics of the disabled workers at the time they were allowed benefits help to explain why few recover (table 3). A substantial proportion were older middle-aged workers at the time they were awarded benefits; 70 percent were aged 50 and over.

Nearly three-quarters of the disabled workers were male. Most were men because of/greater labor force involvement. To be eligible for benefits, earnings from work in employment covered by social security is required in 5 out of the previous 10 years, as a general rule.

Many of the disabled had limited education and little skilled work experience. Approximately 40 percent had no more than elementary education. About 85 percent had done clerical, sales or blue collar work prior to onset of disability.

The demographic characteristics that most distinguished those who left the rolls from those who stayed on were younger age, male sex, higher education, dependent children, higher predisability earnings and residence in the West (chart 2 and table 3). Each of these variables

was independently associated with greater recovery according to the logit analysis.

Age appeared to have one of the most important effects on recovery among all the demographic factors considered. About 20 percent recovered in 1975 among those who were under age 40 when allowed benefits, compared to 3 percent or less of those age 50 and over, who comprised the vast majority of allowed beneficiaries. Older workers may be expected to have more progressive chronic conditions related to aging, while the younger disabled would have conditions more subject to medical improvement, as will be discussed later in respect to diagnostic characteristics. Age is considered a debilitating factor in the disability determination process, so that many older workers allowed disability benefits could have provided evidence of less severe medical conditions than the younger allowed. However, the data show that very few of the older middle-aged workers left the rolls for recovery of the ability to work in gainful employment. Essentially, the program appears to function as an early retirement program for older middle-aged persons with severe medical impairments.

About 20 percent of the older workers aged 50 and over left the disability rolls because of death in the next 3 years in comparison to about 10 percent of the younger workers age 40. However, when these deaths are excluded from the examination of recovery experience along with those who reached retirement age, the same striking difference between the survivors' recovery experience by younger age is apparent. About 23 percent recovered among working age survivors under age 40 in comparison to under 5 percent of working age survivors age 50 and over.

Thus, it appears that when even the most serious cases are excluded, older working age results in almost permanent disability status.

There was not a great deal of difference between the recovery proportions of all disabled men (6 percent) and women (4 percent). However, a greater proportion of men died within the next 3 years than women. When the recovery experience only of the surviving men and women of working age in 1975 is examined, a somewhat greater recovery proportion occurred for men (10 percent) than women (6 percent). Men may find more reemployment opportunities available. There may also be more social incentives for older men to return to work than older women.

Chart 2--Variables related to disabled beneficiary recovery of survivors within 3 years after award in 1972*

Characteristic	Survivor status 1/		Independent statistical effect on recovery according to logit analysis. (t ratio in parentheses) 2/
	Greater recovery	Lesser recovery	
Variables with differences by recovery			
Age	Younger age. (Of all workers under age 40, 23 percent recovered.)	Older age. (If aged 50 or over, 4 percent or less recovered.)	Significant difference (t=17.37)
Sex	Male. (Among survivors, 10 percent recovered.)	Female. (Among survivors, 6 percent recovered.)	Significant difference (t=4.20)
Dependent children	More dependents. (About 14 percent recovered of disabled workers with three or more dependent children. However, those were younger workers. No difference by marital status.)	Less dependents. (About 6 percent recovered among survivors with no dependents. But many were the oldest workers.)	Significant difference (t=3.62)
Diagnosis	Accidents, infectious diseases, and mental illness. (Fractures, 33 percent; discs, 16 percent; tuberculosis 34 percent; schizophrenia, 8 percent; statutory blind, 10 percent.)	Chronic diseases related to aging. (Of those with heart disease and osteoarthritis, 3 percent recovered; emphysema, less than 1 percent recovered; neoplasms, 1 percent recovered.)	Significant difference (t=11.57)
Education	Greater education. (Above high school, 9 percent recovered.)	Lesser education. (Under 9 years of school, 4 percent recovered.)	Significant difference (t=4.86)
Mobility	In treatment facility at application. (In hospital or institution, about 9 percent recovered.)	No limitation on ambulation. (About 5 percent recovered.)	Significant difference (t=3.35)
Region	Western States, (San Francisco and Seattle SSA regions, 8 percent; including California, 8 percent; and Oregon, 9 percent recovered.)	Southern and Eastern States (Atlanta, New York, and Philadelphia regions, 5 percent, including Puerto Rico, 2 percent, and Florida, Arkansas, Virginia and West Virginia, 4 percent recovered.)	Significant difference (t=3.88)

Chart 2--Variables related to disabled beneficiary recovery of survivors within 3 years after award in 1972*--Continued

Characteristic	Survivor status 1/		Independent statistical effect on recovery according to logit analysis. (t ratio in parentheses 2/
	Greater recovery	Less recovery	
Variables with differences by recovery			
Predisability earnings	Higher earnings. (About 10 percent recovered among those with higher annual earnings of $6,000 or more.)	Little or low earnings. (About 6 percent received among workers with little predisablilty earnings.)	Significant difference (t=7.36)
Benefit levels	Higher amount. (If benefits $300 or more, about 10 percent recovered.) However, when other variables were controlled in logit analysis, higher benefits led to less recovery.	Lower amount. (If benefits under $250, about 5 percent recovered.)	Significant difference (t-3.48)
Earnings replacement	Higher replacement. (About 10 percent recovered if receiving 100 percent or more replacement.) However, when other variables were controlled in logit analysis, greater replacement of earnings by benefits led to less recovery.	Lesser replacement. (About 7 percent recovered if receiving 25-74 percent replacement of earnings by benefits.)	Significant difference (t=4.94)

Chart 2--Factors related to Disabled Beneficiary Recovery with 3 years of entitlement* --Continued

	Characteristics not related to large differences in recovery proportion	Independent statistical effect on recovery according to logit analysis. (t ratio in parentheses) 2/
Marital status	Little difference. (If married or single, about 8 percent recovered.)	Not significant (t= .10)
Race	Little difference. (If white or black, about 8 percent recovered.)	Not significant (t= .14)
Occupation	The small group of workers with white collar positions (professional, technical and managerial) had a greater recovery proportion (12 percent) than blue collar workers (6-9 percent). However, little difference among most occupational categories and no statistically significant difference by occupation in logit analysis.	Not significant (t=1.09)

1/ Differences in recovery proportion of surviving workers according to cross tabulations in tables 3-6.

2/ Independent effect of each variable according to t ratios in logit analysis. See discussion and table B in technical note for derivation of these measures.

Those with high school and college education seemed to return to work and leave the rolls more often (7-9 percent) than those with only elementary school education (4 percent). Similarly, those with professional, technical or administrative positions before disability had a higher recovery proportion (10 percent) than those with blue collar jobs. Presumably, the better educated could engage in less physically demanding work after disability than those with more limited work qualifications. However, when all other variables were held constant, the logit analyses revealed no independent relationship of occupation and recovery. While there did appear to be an independent relationship of higher predisability earnings to recovery, few of the workers with higher earnings recovered. Whether one had higher or lower predisability earnings in terms of gross average earnings in the 5 years before allowance, the recovery proportion was about the same: about 6 percent recovered whether earnings were under $7,000 a year or $7,000 and over.

It is rather surprising that there were not greater differences between those with more valued socio-economic and demographic characteristics in terms of the general labor market, such as males, whites, and those with highest predisability earnings. Workers with these characteristics who became involved in rehabilitation efforts generally have easier access to employment opportunities. 11/ It is possible that those with highest status positions came on the rolls for more severe impairments, and those who had been employed in more physically arduous work came on the rolls with less severe medical impairments.

11/ Ralph Treitel, "Effect of Financing Disabled Beneficiary Rehabilitation," Social Security Bulletin, November 1975.

The logit analyses shows a greater involvement in recovery of workers with more dependent children. The cross tabular data present a substantial difference in recovery between the small group with several dependent children (10-11 percent) and those with no dependent children (4 percent). However, this appears largely due to the fact that the small number with children under age 18 are younger workers, rather than due to some incentive effect of family composition on recovery. As shown in text table A, when only the recovery experience of younger workers under age 45 is examined, there is no longer such a markedly greater recovery proportion among those with many dependents. There also appears to be little difference in the recovery experience between married and single workers under age 45, as shown both in table A and chart 2.

Table A--Recovery experience by family status of younger workers under age 45

	Number under age 45 allowed in 1972	Percent recovered in 1975
Total.....	80,685	17.3
Dependent children		
None.....	27,373	17.3
One.....	10,705	16.6
Two.....	12,170	16.4
Three.....	8,540	16.1
Four.....	5,185	17.2
Five or more.....	5,140	16.3
Unknown dependent status	11,672	20.6
Marital status		
Married.....	45,708	16.7
Single.....	24,775	16.8
Unknown marital status..	10,202	21.5

Disability Characteristics

The large majority of workers appear to be allowed for chronic conditions related to aging (table 4). About 30 percent had circulatory diseases, such as heart conditions. Many others had musculoskeletal disorders such as rheumatoid arthritis. Few recovered among those with progressive conditions related to aging: only about 1-4 percent recovered among those with arthritis, ischemic heart disease, emphysema, or diabetes. Many of those allowed for these chronic progressive diseases related to aging had died within 3 years, including the marjority of those with lung cancer.

Among the working age survivors in 1975, the disabling conditions related to higher recovery were those more subject to medical improvement, such as infectious and parasitic diseases, mainly including tuberculosis (42 percent recovered); traumatic injuries, such as fractures (38 percent); and back disorders due to disc displacement (18 percent). While those workers who had been allowed for mental disorder, such as schizophrenia, had a higher rate of recovery (7 percent) than those allowed for many other chronic diseases of aging, mental illness was not a category of disability involved in a substantially higher rate of recovery than all other conditions.

The effects of older age in leading to the occurrence of progressive chronic conditions where medical improvement is not likely is highlighted by text table B, which contrasts recovery experience for surviving disabled workers who were under age 45 when allowed with the recovery experience of workers aged 45 and over. Excluded from the tabled data are records of disabled workers who died or attained age 65 by the end of 1975.

In terms of the occurrence of progressive diseases, about a third of the older workers aged 45 and over had circulatory conditions such as heart disease; another 20 percent had musculoskeletal conditions, including 10 percent with rheumatoid arthritis or osteoarthritis; and another 8 percent had respiratory conditions such as emphysema. In contrast, the younger disabled under age 45 included about one-quarter with mental disorders such as schizophrenia; and one-fifth with injuries due to accidents such as fractures. These are conditions subject to medical

improvement. Only 13 percent of the younger disabled had circulatory disorders; and only 2 percent had arthritis and osteoarthritis as primary disabling conditions.

In terms of later recovery experience by 1975, there was a substantially greater proportion recovering among almost all diagnostic categories of the younger workers than among similar diagnostic categories of the older workers. This included greater recovery proportions even among younger workers with progressive chronic conditions such as osteoarthritis (18 percent) and heart disease (7 percent). Among those workers who were both younger (under age 45) and had disabling conditions most subject to medical improvement, about 50 percent or more left the rolls for recovery when tuberculosis or fractures were the primary disabling conditions, and about 35 percent of those with back impairments due to disc problems recovered.

Table B.--Recovery in 1975 by age and diagnostic group of disabled workers allowed in 1972.

Diagnostic group and selected primary disabling conditions	Percent distribution		Percent recovery	
	Under age 45	Age 45 and over	Under age 45	Age 45 and over
Number 1/	69,713	222,968	20.1	4.8
Percent	100.0	100.0	--	--
Infectious and Parasitic	3.1	7.1	43.0	16.9
Pulmonary tuberculosis	1.7	.8	62.8	29.0
Neoplasms	3.1	4.3	9.4	4.3
Endocrine	2.3	4.0	6.2	2.3
Mental disorders	25.7	8.6	10.0	4.1
Schizophrenia	14.7	2.4	11.0	4.9
Nervous system	7.9	3.7	7.0	2.7
Eye and Ear	1.0	1.4	10.8	2.6
Circulatory	12.5	35.8	7.9	3.3
Heart	6.5	23.6	7.2	3.6
Respiratory	1.8	8.1	4.0	.9
Emphysema	.5	4.1	1.3	.6
Digestive	2.3	2.8	18.6	7.6
Genito urinary	1.3	.7	12.6	7.3
Musculoskeletal	17.4	20.5	29.4	4.7
Arthritis	1.9	3.0	6.4	1.9
Osteoarthritis	.9	7.0	18.0	2.8
Disc	7.5	4.6	35.8	8.2
Accidents	18.3	6.2	41.5	17.6
Fractures	10.9	3.6	53.4	23.4
Other	2.5	1.5	20.7	5.1

1/ Number allowed disability claims in 1972 who recovered or remained on rolls at end of 1975. Excluded are those who left disability benefit rolls for death or attainment of retirement age.

Those who were in institutions or hospitals at the time they applied had a somewhat higher rate of recovery than the ambulatory. Almost all of the disabled are ambulatory at the time of application as most tend to have chronic systemic diseases rather than injuries to particular organs of movement. The few in institutions with a somewhat higher rate of recovery presumably include some who were being treated for expected improvement of their condition, such as those with tuberculosis, but who were allowed on the basis that they were expected to be unable to work for a year or more before recovering the ability to work.

At the time of allowance, a review is made of the prognosis for recovery and the tendency for certain conditions to be followed by medical improvement. As a program device for identifying possible recovery, a medical review is scheduled for workers whose condition might be subject to recovery within the next year or so. As table 3, shows, a far higher proportion of those scheduled for this follow-up actually did recover(19 percent). This suggests that the screening for the follow-up procedure was a useful predictive device. However, the data file only identifies those scheduled for review, and does not show how many were actually screened through an administrative review and had their benefits terminated as a result of this procedure.

Level of Benefit Payments

A major policy concern about the disability program is whether benefit payments may be serving as a disincentive for some beneficiaries with recovery potential to make efforts to return to work. 12 /

12/ Subcommittee on Social Security of the Committee of Ways andMeans, U. S. House of Representatives, HR 15630, Disability Insurance Amendments of 1976, GPO; Lando and Krute, October 1976, op. cit.; Bayo et al., 1978, op. cit.

The median benefit paid to these workers was a little over $200 a month (table 5). About three-quarters were receiving between $100 and $300 a month. A substantial number of records--about 10 percent--contained no benefit amount. These included records of some persons who may have died before entitlement to benefits. This is discussed in the technical note.)

These benefits included both payments for the disabled worker and additional payments for dependents, mainly for children in the family under age 18. Higher benefits are paid to the workers with the highest predisability earnings and social security taxes paid on covered earnings, but with adjustments to provide a somewhat higher replacement rate and a minimum benefit to the lower earners.

If there were a simple disincentive effect in high benefit levels leading to greater benefit dependency, one might expect to see those with highest benefit levels having the lowest recovery experience. However, the opposite result occurred.

The data in this study on the recovery experience of 1972 disability allowances show a higher recovery proportion for those with the highest benefits. About 10 percent of all disabled workers, with family benefits of $300 or more recovered, compared to only about 5 percent recovering of those with benefits of under $250 a month.

To examine more closely why persons with higher benefits have higher recovery rates than other beneficiaries, data were obtained on the characteristics of those with higher benefits ($300 or more) among survivors of working age in 1975 in comparison to those with lesser benefits (table 5).

As a consequence of the benefit formula providing higher benefits to those with highest predisability earnings, and the provision of supplementary

benefits for dependents, almost all of the disabled workers with higher benefits of $300 or more were men (94 percent), almost all had dependent children (about 90 percent of those with known dependent status) and many were much younger than workers with lower benefit amounts (56 percent of workers with higher benefits were under age 50 compared to about 30 percent under age 50 among those with lower benefits). About 50 percent had predisability earnings of $6,000 or more, compared to about 30 percent of those with lower benefits under $300 a month.

Thus, it appears clear that many of those with the highest benefit levels had a higher recovery potential in terms of younger age and higher occupational status prior to onset of disability. There was little difference in the recovery experience of those with higher and lower benefit levels by comparable ages or among those with comparable numbers of dependent children.

Among those with greater predisability earnings, higher benefit levels was related to greater recovery experience, with 14 percent recovering among those with highest predisability earnings of $7,000 or more when benefits were $300 or more, in comparison to about 7 percent recovering when benefits were under $300 a month.

The descriptive data in this study on benefit levels do not reveal an effect of benefit disencintives leading to dependency, at least in terms of the simple contrast between higher and lower benefit levels.

However, such an effect may be masked because of the benefit formula provisions leading to higher benefits to the younger workers with greater potential for recovery. For many of the workers with the highest predisability

earnings, the highest benefits may be far below the earnings they had before onset of disability. Thus, the disincentives of benefit levels may only be apparent among those with highest earnings replacement by benefits.

Some of the concern about high benefit replacement of earnings has to do with the effect of the provision of auxiliary benefits for dependents in families of the younger disabled worker. 13/ The sum of primary and dependent benefits may sometimes lead to benefit replacement levels approaching and exceeding the level of past wages of the worker. These high benefit levels are believed to act as an incentive to continuing dependency when they replace a high proportion of predisability earnings. 14/

13/ Office of Research and Statistics, "Trends in Earnings Replacement for the Disabled Under Social Security, 1969-1973," (forthcoming).

14/ An actuarial consultant to the subcommittee on social security said that excessive benefits may encourage malingering and discourage recovery. Subcommittee on Social Security, op. cit., p. 8.

On the other hand, the determination of what constitutes excessive levels of benefits is problematic. A substantial proportion of disabled beneficiaries have income below poverty measures. Michael Hooker and Aaron Krute, "A Comparison of Severely Disabled Public Assistance Recipients with Social Security Disability Insurance Beneficiaries," Social Security Bulletin, August 1977.

The replacement rate in this study is based on total family benefits related to average prior earnings. The benefits described were those initially awarded to disabled workers and their entitled dependents in 1972 or 1973./ Average earnings were those in covered employment for social security tax purposes in the 5 years between 1967-1971, subject to the social security taxable limit. No adjustment was made for changes in the real value of money amounts in the years under consideration, or for earnings in excess of the taxable maximums so the replacement rate may exaggerate the actual real replacement of earnings income by benefits. The median replacement of those with known benefit amounts, according to the study records, was under 50 percent of prior covered earnings, as shown in table 5, column 2.

By and large, there was very little difference in the recovery proportions among subgroups of disabled workers by the varying levels of earnings replacement, as shown in the classification in table 5, column 9. About 7-10 percent of surviving adults recovered whether benefit replacement was under 75 percent or greater.

However, among the small group of surviving adults with lowest replacement under 25 percent, a far higher recovery proportion occurred (20 percent). Among the group with the highest benefit replacement, a somewhat smaller proportion recovered (6 percent). For some in these groups, it appears possible that a disincentive effect of benefits may have influenced recovery. An independent effect of earnings replacement on recovery was also found in the logit analysis (chart 2 and table B in technical note). Thus, when the effect of other variables were statistically controlled, those/with persons greater replacement had a lesser recovery, as shown by the negative coefficient.

To examine more closely whether those with higher replacement rates had special characteristics inhibiting recovery, data were obtained comparing the

characteristics of those with higher and less replacement, as shown in table 5.

As might be expected, those with highest replacement ratios tended to be drawn from those who had lower predisability earnings (about three in four had average earnings under $4,000 in the previous 5 years, compared to about two in four of all allowed workers). They also include many with the highest benefits (with about 15 percent having $450 and over a month). They were more likely to be younger and to have dependents (60 percent) and thus have auxiliary benefits than other workers with lesser replacement.

Among the younger workers, there does appear to be a relationship of benefits to recovery, according to the level of replacement. Whereas 20 percent of survivors recovered among those under age 40 with higher replacement, about 32 percent recovered when replacement was under 32 percent. A similar effect appears for those with dependent children, injuries due to trauma such as fractures and disc displacement, as with that of the younger disabled with lower benefit replacement.

Thus, while the overall recovery proportions seem alike between those with high and low benefit replacement, there does appear to be an effect of benefits on some of the subgroups.

Variable Interaction

For most disabled workers who are allowed disability benefits because of an inability to work for many months, based on clinical evidence of severe medical impairments, recovery is not possible and program incentives to foster recovery are likely to have little effect. As the cross-tabular data reviewed suggest,

few may have the physiological capacity to improve or return to work because of older age, the chronic nature of diseases related to aging, and high mortality. Benefit amounts appeared to play a small part in distinguishing those who left the rolls from those who did not.

In order to see more clearly what factors were related to recovery among sub-groups of the workers with greater and less involvement in recovery, and to see more clearly the magnitude of any observable disencentive effect due to level of benefits, a variable interaction technique was employed.

The technique used was the Automatic Interaction Detection program devised by the Institute for Social Research of the University of Michigan. This exploratory technique is essentially a repeated analysis of variance, in which the importance of variables in accounting for the greatest variance (between sum of squares (BSS) to total sum of squares (TSS) is distinguished. (See discussion in technical note for a more detailed explanation.) This procedure makes possible the construction of a profile of characteristics most affecting the recovery decision in the past, including interactions of variables among sub-groups that may be masked by simple cross-classifications of the entire sample.

It should be made clear that this is a statistical technique that is here employed in the analysis of historical and descriptive data. The gross demographic and disability and benefit characteristics are used to describe the population in terms of actual previous recovery experience. A complex interview or experimental study would be needed to differentiate the motivation and behavior among beneficiaries in order to distinguish

whether any group stayed mainly on the rolls because of the effect of benefit incentives apart from medical limitation. In lieu of any such complex detailed survey or experimental study, the statistical analysis used here was employed to see if there are apparent differences between those who recovered and those who stayed on the rolls in terms of the level of benefit amounts and earnings replacement. The direct effect of a benefit alone on incentives to remain on the rolls is not possible from this data.

From the original sample of allowed beneficiaries in 1972, a smaller sample was obtained for processing convenience. This consisted of all who were in recovery status in 1975 and an equivalent number randomly drawn from those who remained on the disability rolls. Not included were those who left the rolls for death or retirement.

A comparison of the explanatory power of the demographic, disability and benefit variables was made for various sub-groups. As previously described, these variables included the demographic characteristics of sex, race, marital status, number of dependent children, education, occupation, prior earnings level, region; the disability characteristics of diagnostic group of the primary disabling condition, and mobility at application; and benefit characteristics of level of total worker and dependent amounts and extent of earnings replacement by benefits.

These variables were basically classified as shown in general tables 2-4. As the focus of the analysis was on the effect of benefits, those with unknown benefit amount were necessarily excluded from the analysis.

The measure of earnings replacement selected was the ratio of the total annual benefit amount that was initially awarded (in the numerator) to the highest year of earnings in the 5-year period, 1967-71, before the year of allowance (in the denominator).

As shown in text table C and displayed in chart 3, all variables were compared for their part in explaining total varience according to the greatest Between Sum of Squares (BSS) of the the best dichotomous classification of each variable. The sample is split into two sub-groups by the single variable that produced the greatest BSS. For both sub-groups, all variables are again compared, and the variable that produces the greatest BSS is selected to provide further splits into further sub-groups. The splitting continues until limits are reached in terms of minimum effects in explaining variance (at least one-half of one percent of the Total Sum of Squares) for further splits.

As shown in row 1 of table C, primary diagnosis explained more of the variance (5.4 percent of 17,681 TSS) than any other single variable for the total study population of 259,435 beneficiaries in recovery or benefit status at the end of 1975. The age variable explained the next highest proportion (4.6 percent). The remaining variables each explained far less (about 1 percent or less).

Since age had such a striking and consistent effect on recovery experience and appeared to underlie many other variable differences such as differences by dependent family benefits and various disabling conditions, the program was instructed to select age as the classification determining the first

split. The sample was subdivided into the younger disabled under age 50 (of whom 15 percent recovered) and older workers age 50 and over (of whom only 3 percent recovered.)

Chart 3.--Characteristics related to Disability Beneficiary Recovery*

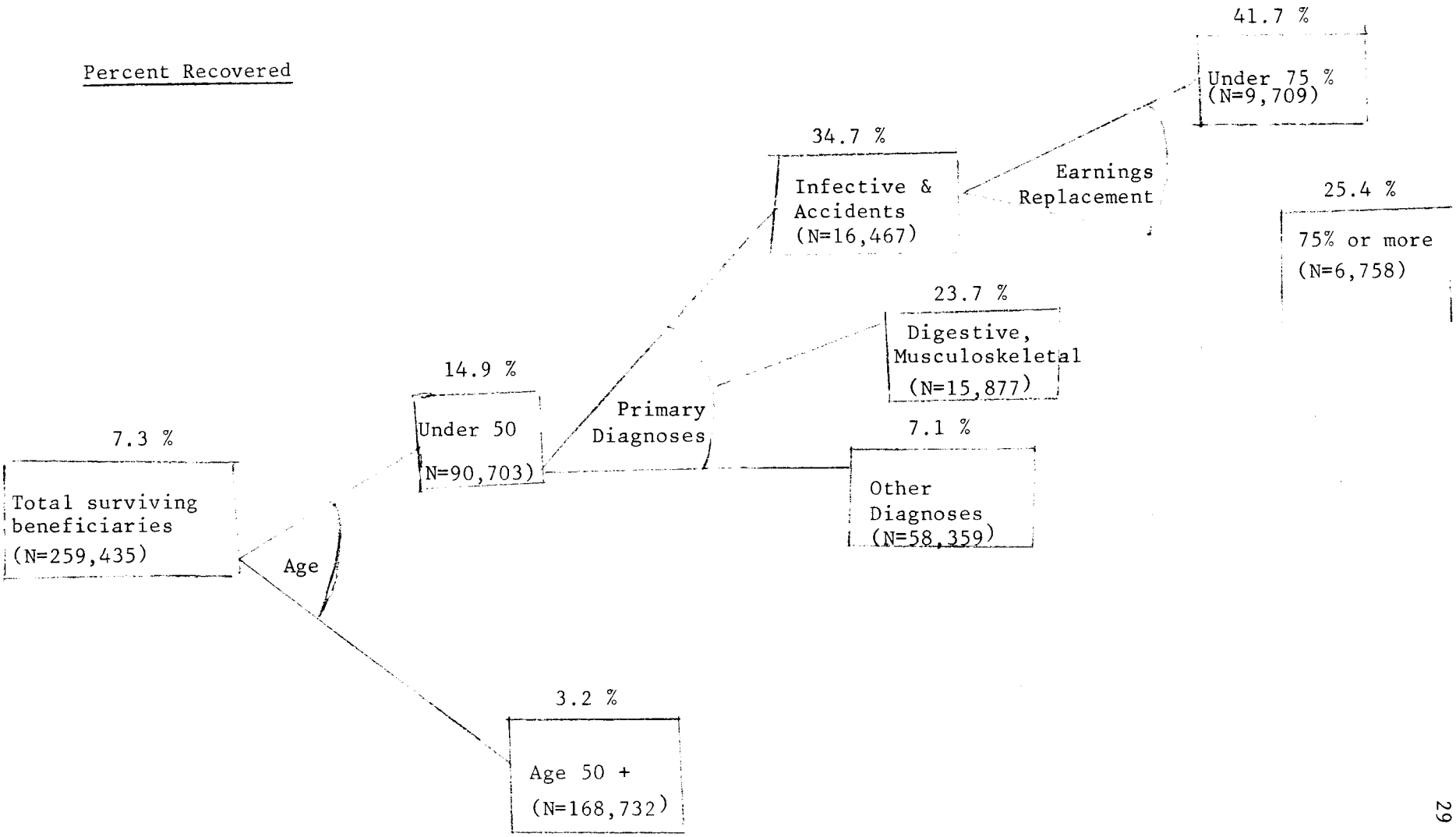


*Chart shows total number of surviving adults allowed in 1972 who either remained on rolls or left for recovery by the end of 1975, grouped by demographic disability and employment characteristics that most explained variation by recovery, according to Automatic Interaction Detector analysis of variance. See table C and technical note for explanation of statistical technique.

Among both the younger and older workers as shown in rows 2 and 8, table 6, their primary disabling condition accounted for more of the variance than any other variables considered. The first split selected among younger workers was for disabling conditions, with a high recovery group including injuries, musculoskeletal diseases,infective and parasitic diseases, and digestive disorders (of whom over 20 percent recovered) in comparison to a lower recovery group of younger workers with all other diagnoses (of whom only 7 percent recovered). This grouping of diagnostic disorders seems to distinguish conditions most subject to medical improvement, such as fractures and disc disorders, from those that are more progressive conditions related to aging, such as arthritis and arteriosclerosis. This split by these diagnostic groups accounted for 5.6 percent of the total variance (BSS/TSS) in comparison to about 1 percent or less by the best split of any other variable, including benefit amount or earnings replacement.

The high recovery diagnostic group was split again by diagnosis into those with the highest variance in recovery explained: One, the highest recovery group with injuries and infective and parasitic disorders (34.6 percent recovered); and two, a remaining group with conditions with not so high recovery experience (23.7 percent), the musculoskeletal and digestive disorders. This subsequent diagnostic split accounted for an additional 0.6 percent of the variance. For simplicity of presentation, we show the three remaining diagnostic groups in the table and chart, rather than a split into two diagnostic groups and then a further split by diagnosis again. As a result, there are three diagnostic groupings left (rows 3,6,7). At this point, when the effect of the benefit variables on recovery are compared among these subgroups of younger workers with greatest medical improvement

Table C.--Percent of total variance in recovery explained by demographic, disability and benefit characteristics of disabled workers allowed in 1972*

	Number	Percent recovered	Percent of variance in recovery explained by characteristics (BSS/TSS)												
			Age	Sex	Race	Marital status	Number dependents	Education	Occupation	Prior earnings	Region	Diagnostic group	Mobility	Benefit level	Earnings replacement
Total workers 1/....	259,435	7.3	4.6 2/	.4	.0	.0	.5	.9	.6	.4	.2	5.4 2/	1.)	.7	.3
Age split															
Under age 50...	90,703	14.9	--	.3	.1	.1	.1	.5	.5	.8	.3	5.6	.5	.3	.6
Diagnoses split 3/															
Infective & parasitic disorders, injuries	16,467	34.7	--	.0	.1	.1	.1	.0	.6	.4	.3	.0	.1	.1	.6
Earnings replacement split															
Under 75 %	9,709	41.2	--	.0		.1	.0	.2	.5 4/	.2	.4	.0	.1	.1	.0
75 % and over	6,758	25.4	--	.0	.0	.0	.0	.0	.1	.2	.1	.0	.1	.1	.2
Digestive, musculoskeletal....	15,877	23.7	--	.2	.0	.0	.0	.1	.1	.2	.2	.0	.2	.1	.3
Other diagnoses.....	58,359	7.1	--	.0	.0	.1	.1	.2	.1	.1	.1	.1	.1	.1	.1
Age 50 and over.....	168,732	3.2	--	.0	.0	.0	.0	.1	.1	.1	.0	.4	.2	.1	.0

*Proportion of total sum of squares (TSS) of recovery outcome explained by between sum of squares (BSS) of best dichotomons split of classification of each variable, according to the Automatic Interaction Detector program. See technical note for for explatation.

Total sum of squares.....	17,651
Total percent.....	100.0
Between sum of squares of best splits of characteristics examined.....	11.9
Age split.....	4.6
First diagnosis split 3/.	5.6
Second diagnosis split 3/	.6
Earnings replacement split	.6
Other (occupation) 4/....	.5
Other sources of variation..	88.2

1/ Workers allowed in 1972 who recovered or remained on rolls at end of 1975. Excluded are allowed workers who died, or reached retirement age. Also excluded were those with unknown benefit amount.

2/ While diagnostic conditions produced the greatest variation of recovery for total population, the first split was forced by age, which had the second greatest BSS.

3/ There were two successive splits among diagnostic combinations. Displayed are the final three. The group of younger workers first split into two groups: One, injuries and infectious, parasitic, musculoskeletal and digestive disorders; the other, all other disorders. The BSS/TSS of this split was 5.4 percent as shown. Then the first group split into two again by diagnosis: one of injuries and infectious and parasitic disorders; and the other of musculoskeletal and digestive disorders. This accounted for BSS/TSS of 0.6 percent

4/ A break by occupation of the 9,709 with under 75 percent replacement would produce another 0.5 percent BSS/TSS.

capacity based on diagnostic conditions, the effects of the benefit amount as a potential disencentive to recovery may be more apparent.

As shown in row 3 of table C, the earnings replacement variable accounts for more of the remaining variance in recovery than any other variable (.6 percent of the Total Sum of Squares). This occurs when we compare those 16,000 workers with infective and parasitic diseases or injuries. About 40 percent recovered among those with earnings replacement of under 75 percent or more replacement. Thus, it appears some workers with highest benefit replacement among those with greatest potential for medical improvement may have controlled the consequences of their medical history to remain on the rolls.

A similar effect appears to take place for those with conditions with the next closest recovery potential, the group of 15,877 younger workers with digestive and musculoskeletal disorders. About 25 percent recovered among those 10,896 with under 75 percent replacement, in comparison to 17 percent of the close to 5,000 workers with digestive and musculosketal disorders. However, the difference in recovery proportions is not so pronounced as with the group with injuries and parasitic and infectious disorders. As a consequence, although earnings replacement accounted for more of the variance than any other variable, it did not explain a great deal of the overall variance in recovery (at least 0.5 percent), as shown in row 6.

Among the remaining diagnostic disorders of younger workers, none of the variables examined produced substantial variation in the low recovery proportion (7 percent), as shown in row 7.

Similarly, when the older group of workers aged 50 and over is examined with the low recovery proportion of 3 percent, none of the demographic and disability variables resulted in marked interactions leading to sizeable increases in recovery, as shown in row 8.

The effect of benefits as a disencentive to recovery may be greater among those with least resources and opportunities to return to substantial employment. 15/ Thus, apart from capacity for medical improvement as indicated by the classification of age and diagnostic condition, prior education explained more of the variance in recovery than any of the other demographic and benefit characteristics, as shown in table D, row 1. The greater recovery experience of the highest educated, as shown in table 2, may reflect both their greater capacity to perform less physically demanding types of work and the availability or more high paying jobs upon recovery than the less educated could find. 16/

To see whether the effects of benefit levels were not more pronounced among the less educated, an interaction analysis was made of the effects of the demographic and disability characteristics on the recovery experience of workers with less than 12 years of education, as shown in table D and summarized in chart 4.

15/ Sydney H. Croog and Sol Levine, The Heart Patient Recovers: Social and Psychological Factors. New York: Human Sciences Press, 1977.

Chart 4.--Characteristics related to disability beneficiary recovery of less educated workers*

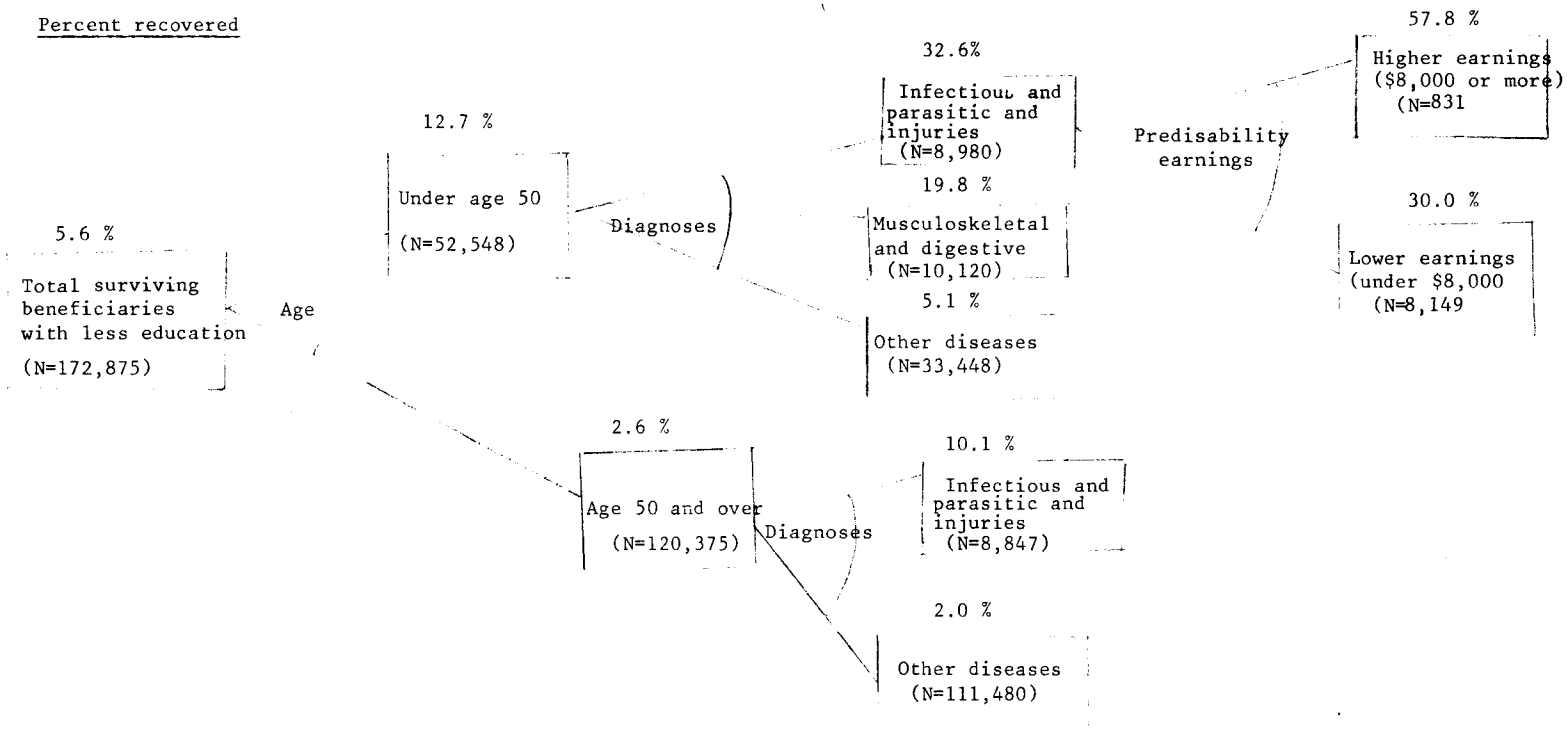


*Chart shows total number of surviving adults allowed in 1972 with less than 12 years of education who either remained on rolls or left for recovery by the end of 1975, grouped by demographic, disability and employment characteristics that most explained recovery, according to Automatic Interaction Detector analysis of variance. See table D and technical note for explanation of statistucal technique.

Among the 172,000 workers with less education, as with the total population of surviving workers, the characteristics of age and type of disabling condition were related to far greater variance in recovery than any of the other demographic and disability characteristics, including benefits and earnings replacement, as shown in table D, row 1. Among the younger workers under age 50, the diagnostic groupings by recovery variation again resulted in combinations of infective and parastic disorders and injuries which had the greatest recovery proportion (32.6%); a grouping of musculo-skeletal and digestive disorders with the next highest proportion (19.8 %); and all other types of primary diagnoses, which had a small proportion with recovery (5.1 %). Among the oldest workers age 50 and over, the small group of 8,847 workers who had infective and parasitic disorders and injuries also showed a distinctively higher recovery proportion of (10 %) in comparison to all other diagnoses (2 %), as with the younger workers.

No substantial interaction effect of benefits and earnings replacement was apparent among the small groups of less educated workers who were under 50 and had conditions most often leading to medical improvement, as shown in rows 3, 6, and 7. Among the group of about 9,000 workers with infective and parasitic diseases or injuries due to trauma, prior earnings and region accounted for the most variance in recovery among the demographic and disability characteristics examined. Thus, a small group of 800 workers with the highest predisability earnings (of $8,000 or more in at least one year between 1967-1971) had a higher recovery proportion (57.8 %). This would seem to be another group with higher socioeconomic status prior to disability, and ensuing higher recovery similar to those workers

with higher education, who were excluded from this particular analysis, who also had greater recovery experience.

While not substantial in terms of total variance, the classification of earnings replacement was related to variation in recovery experience for the younger workers under age 50 with less than 12 years of education, as shown in table D, row 2, and expanded into frequency distributions in table E, according to type of diagnostic condition:

Table D.--Percent of total variance in recovery explained by demographic, disability and benefit characteristics of lesser educated disabled workers allowed in 1972*

	Number	Percent recovered	Percent of variance in recovery explained by characteristics: Age	Sex	Race	Marital status	Dependents	Education	Occupation	Prior earnings	Region	Disabling Condition	Mobility	Benefit amounts	Earnings replacement
Total workers with lesser education (under 12 years)1/	172,875	5.6	4.0	.3	.0	.0	.0	.5	.4	.3	.1	5.3	.8	.5	.4
Age split															
Under age 50.....	52,548	12.7	--	.3	.1	.3	.2	.4	.1	.8	.3	5.6	.4	.3	.5
Diagnoses split 2/															
Infective and parasetic, injuries.....	8,980	32.6	--	.0	.1	.0	.0	.1	.0	.6	.5	.1	.2	.3	.2
Prior earnings															
Higher earnings 3/	831	57.8	--	.0	.1	.1	.1	.1	.1	.1	1.0	.0	.1	.4	.0
Lower earnings	8,149	30.0	--	.0	.0	.1	.1	.1	.0	.1	.7	.1	.3	.1	.1
Musculoskeletal, digestive	1,012	19.8	--	.4	.0	.1	.1	.2	.0	.3	.2	.0	.1	.3	.5
Other disorders	33,448	5.1	--	.0	.0	.1	.1	.1	.0	.1	.1	.1	.1	.1	.1
Age 50 and over	120,327	2.6	--	.0	.0	.0	.0	0	.1	.1	.0	.6	.2	.0	.0
Diagnoses split															
Infective and parasitic, injuries.....	8,847	10.1	--	.0	.0	.0	.0	.0	.1	.1	.1	.0	.2	.1	.0
Other diagnoses	111,480	2.0	--	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0

*Proportion of total sum of squares (TSS) of recovery outcome explained by between sum of squares (BSS) of best dichotomous split of classification of each variable, according to the Automatic Interaction Detector program. See technical note for further explanation.

Total of sum of squares of recovery.	9,266
Total percent.....	100.0
Between sum of squares of best splits of characteristics examined.....	13.9
Age split.....	4.0
First split of young by diagnosis 4/	5.6
Second split of young by diagnosis 4/	0.8
Split of older workers by diagnosis	0.6
Prior earnings split 3/.....	.6
Other of .5 percent of TSS (region, mobility) 5/.....	2.3
Other sources of variation	86.1

1/ Workers allowed in 1972 who recovered or remained on rolls at end of 1975. Excluded are allowed workers who died or attained retirement age by 1975. Also excluded are all those who had a high school education (12 years or more), and those with unknown benefit amounts.

2/ First split forced by age, although diagnostic grouping produced the greatest variation in recovery among the total population.

3/ Highest year of earnings in covered employment in 1967-1971 of $8,000 or more.

4/ There were two successive splits among diagnostic combinations. Displayed are the final three groups. First, the group of younger workers split into two. One, injuries and infectious and parasitic, musculoskeletal and digestive disorders; the other, all other conditions. The BSS/TSS of this split was 5.6 percent as shown in the table. Then the first group split into two again by diagnosis, producing the grouping of injuries and infectious and parasitic disorders in one, and musculoskeletal and digestive in another. The BSS/TSS was .8 percent.

5/ Further splits of at least .05 percent of the TSS were possible by region and mobility.

Table E.--Effect of earnings replacement on recovery experience for younger surviving workers with less education *

	Earnings Replacement by Benefits			
	Under 75 percent		75 percent and over	
	Number	Percent recovered	Number	Percent recovered
Total workers under age 50	55,353	17.4	35,350	11.0
Lesser educated (less than 12 years of education	31,653	15.0	20,875	9.1
Injuries, and infectious and parasitic diseases	5,631	36.0	3,349	26.8
Musculoskeletal and digestive disorders	6,849	22.7	3,271	13.7
Other types of diseases	19,173	6.1	14,275	3.8
Higher educated (12 or more years)	23,700	20.6	14,455	13.7

*Based on weighted subsample of workers with recovery at end of 1975 and comparable subsample of workers remaining on the rolls. See table A 2 in appendix for sampling variability of percentages.

Thus it appears that younger workers with lower replacement of earnings by benefits had a somewhat higher proportion leave the benefits rolls (17 percent) than those with higher replacement (11 percent), but the difference was not more marked for the lesser educated than higher educated, as indicated by the data in table E showing that about 6 percent more recovered when there was lower replacement for both those with high school education and those with less than 12 years of education.

In summary, for the large majority of workers allowed benefits for disabling conditions expected to last a year or more, benefit termination for regained ability to work is unlikely, based on severity often leading to death and on the debilitating effects of chronic conditions related to age. For those workers with the greatest potential for medical improvement, that is, the younger workers and those with medical conditions such as fractures and tuberculosis where medical improvement may occur, a higher level of benefits in replacement of previous earnings seemed to result in a disencentive to recovery.

Technical Note

The Continuous Disability History Sample was developed in order to study factors related to award and denial of disability applicants, and to study factors related to recovery after award. The sample was also designed to permit analysis of earnings loss due to disability and of employment before and after disability.

The Continuous Disability History Sample file is based on the disability determination record, which presents the State agency decision to allow or deny a claim. Selected statistical information from the determination form such as age, sex, race, education, diagnosis and predisability occupation of the applicant are coded from the determination, based on information in the application and supporting documents.

The file from the determination sample is matched with the Social Security Master Beneficiary Record for longitudinal information on subsequent benefit status, and with the Summary Earnings Record file for information on previous and subsequent earnings and quarters of coverage.

The study population for this recovery analysis consists of a sample of disabled worker decisions of allowance in 1972. The sampling rate for the disabled-worker allowances was stratified by State. Only ten percent of the large States in terms of population were sampled, including California, Illinois, Michigan, New York, Pennsylvania, and Texas. Larger samples from 20 percent to 100 percent were taken of the

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1/ Office of Research and Statistics, Social Security Administration, Continuous Disability History Sample Restricted Use Data File: Description and Documentation. ORS Pub. No. 024 (1-78).

remaining States. The entire sample is about one-fifth of worker allowance in 1972.

Estimation Procedure

Since much of the data in the tables were obtained from a sample of the records, it was necessary to inflate the sample figures to produce estimates of the totals. The first step of the estimation procedure involved inflating the sample results by the reciprocals of the probabilities of selection. The next step was the use of a ratio estimate for all sample cases (including the 100 percent strata), to make the estimated totals agree with previously published award totals. The ratio estimates for awards were done separately for each State.

Sampling Variability

Due to sampling variability, estimates based on samples can be expected to differ from figures that would have been obtained if the entire population of the data had been used for tabulations. The particular sample selected for this study of disability applicants is one of a large number of similar probability samples of the same size that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results. The deviation of a sample estimate from the average of all possible samples is called the sampling error. The standard error of an estimate is a measure of the variation among the estimates from the possible samples and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples.

The standard error may be used to define confidence intervals or ranges that would have a specified probability of including the average result of all possible samples.

1. Approximately 68 percent of the intervals from one standard error below to one standard error above the derived estimate would include the average value of all possible samples.
2. Approximately 95 percent of the intervals from two standard errors below to two standard errors above the derived estimate would include the average value of all possible samples.
3. Approximately 99 percent of the intervals from 2 1/2 standard errors below to 2 1/2 standard errors above the derived estimate would include the average value of all possible samples.

For example, suppose that the estimated number of workers disabled by ischemic heart disease is 69,100 and the standard error is 550. Then the 68 percent confidence interval for the estimated number of workers disabled by ischemic heart disease is from 68,550 to 69,650; the 95 percent confidence interval for the estimated number of workers disabled by ischemic heart disease is from 68,000 to 70,200; and the 99 percent confidence interval is from 67,725 to 70,475

The sampling variability for this report was calculated on the basis of a stratified random sample and does not incorporate the effects of ratio estimates which would usually reduce the sampling variability. However, these estimates provide an indication of the general order of magnitude of the sampling variability.

TABLE A 1.--Approximate standard error for estimated numbers for estimated percentages by characteristics of allowed workers.

Estimated number or base of percentage	Standard error of number	Standard error of selected percentages											
		1 or 99	2 or 98	5 or 95	8 or 92	10 or 90	15 or 85	20 or 80	25 or 75	30 or 70	35 or 65	40 or 60	50
50	5	1.2	1.8	2.7	3.4	3.8	4.5	5.0	5.4	5.7	6.0	6.1	6.3
1,000	25	.3	.4	.6	.8	.8	1.0	1.1	1.2	1.3	1.3	1.4	1.4
2,500	45	.2	.2	.4	.5	.5	.6	.7	.8	.8	.8	.9	.9
5,000	60	.1	.2	.3	.3	.4	.4	.5	.5	.6	.6	.6	.6
7,500	75	.1	.1	.2	.3	.3	.4	.4	.4	.5	.5	.5	.5
10,000	85	.1	.1	.2	.2	.2	.2	.4	.4	.4	.4	.4	.4
25,000	135	.1	.1	.1	.2	.2	.2	.2	.2	.3	.3	.3	.3
50,000	190	*	.1	.1	.1	.1	.1	.2	.2	.2	.2	.2	.2
75,000	220	*	.1	.1	.1	.1	.1	.1	.1	.2	.2	.2	.2
100,000	250	*	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
250,000	300	*	*	*	.1	.1	.1	.1	.1	.1	.1	.1	.1

*Less than .05

Table A2.--Proximate Standard error for estimated numbers and percentages of weighted subsample drawn for multivariate analysis

Estimated number, or base of percentage in weighted data drawn for multivarial analysis	Standard error of number	Standard error of selected percentages											
		1 or 99	2 or 98	5 or 95	8 or 92	10 or 90	15 or 85	20 or 80	25 or 75	30 or 70	35 or 65	40 or 60	50
50	16.25	3.9	5.8	8.8	11.0	12.4	14.6	16.2	17.6	18.5	19.5	19.8	20.5
1,000	81.25	1.0	1.3	2.0	2.6	2.6	3.2	3.6	3.9	4.2	4.2	4.6	4.6
2,500	146.25	.6	.6	1.3	1.6	1.6	2.0	2.3	2.6	2.6	2.6	2.9	2.9
5,000	195.00	.3	.6	1.0	1.0	1.3	1.3	1.6	1.6	2.0	2.0	2.0	2.0
7,500	243.75	.3	.3	.6	1.0	1.0	1.3	1.3	1.3	1.6	1.6	1.6	1.6
10,000	276.25	.3	.3	.6	.6	.6	.6	1.3	1.3	1.3	1.3	1.3	1.3
25,000	438.75	.3	.3	.3	.6	.6	.6	.6	.6	1.0	1.0	1.0	1.0
50,000	617.50	(*)	.3	.3	.3	.3	.3	.6	.6	.6	.6	.6	.6
75,000	715.00	(*)	.3	.3	.3	.3	.3	.3	.3	.6	.6	.6	.6
100,000	812.50	(*)	(*)	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
250,000	975.00	(*)	(*)	(*)	.3	.3	.3	.3	.3	.3	.3	.3	.3

* Less than .05

Nonsampling Variability

In addition to sampling errors, the estimates are subject to various operational errors of collection, coding, transcription, etc. Collection errors include problems in linkages of large separate data files. These errors would also occur if a complete study were to be conducted under the same conditions. Explicit measures of their effects generally are not available. However, many of the operational errors were detected and corrected in the edits of the data for reasonableness and consistency.

Since the benefit data is based on administrative payment records, the information is not always complete on historical benefit status. Ten percent of the records showed no benefit amounts and were excluded from the logit analysis of the effect of wage replacement.

These records of unknown benefit amount included many cases of workers not receiving benefits or dying after the disability decision. Of the weighted total of 41,365 case decisions with no record of benefit amount, 6 percent recovered by 1975, 35 percent were continuing on the rolls, 2 percent had retired, and 19 percent never received benefits or had unknown benefit status in 1975. Those with no benefit amounts were quite like the majority of case decisions with benefit amounts, according to demographic characteristics, but those with no recorded benefits included a high proportion of persons whose primary diagnoses were neoplasms (43 percent). In comparison, those with benefit amounts who had neoplasms constituted a small proportion of all cases (6 percent).

It may be that those with no benefit amount shown are persons with conditions so severe or so volatile as to result in their recovering or dying before

benefit payment began, or within a year of benefit entitlement, in which case no regular monthly benefit payable at the end of the year would be recorded.

The classification of later benefit status is based on the disability benefit determination code, which showed the reason for last termination or showed continuing benefit status. Thus, the later status presented in tables 3-6 is status at the end of 1975, rather than intervening statuses between 1972 and 1975. Those persons who recovered but had a relapse and returned to the rolls are not distinguished in these tables, but are included among those continuing in disability status in 1975. Those who left the rolls for recovery but subsequently died or obtained retirement benefits are included as recoveries. Those who left the disability rolls for retirement benefits and subsequently died are not distinguished, but are included among those retired.

Not included in these files are records of older persons age 62-64 who filed for disability and requested early retirement benefits if the disability claim was to be denied. There were 24,800 of these older workers filing concurrent disability-retirement claims and allowed disability benefits. Almost none of these left the rolls for recovery.

The Automatic Interaction Detector (AID) Program

This multivariate statistical technique is essentially a repeated one-way analysis of variance by components. The objective is to select sequentially the characteristics most correlated with the dependent variable. 2/ To do this sequential selection, the classifications of each characteristic are combined into the two subgroups associated with the greatest differences in the dependent variable, which in this study is percent recovered. Then, the single characteristic whose binary groups are associated with the greatest variance is selected as a major explanatory variable. The results of this procedure are presented in chart 2 and table 6. For example, when the age classifications are grouped into (1) workers under age 50 and (2) workers aged 50 or older, age accounts for more of the variation in the dependent variable (percent recovered) than almost any other variable or combination of variable

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2/ John A. Sonquist, Elisabeth Baker and James N. Morgan, Searching for Structure, AID III. Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 1971.

categories. We chose to split the sample first into two age groups. All other characteristics were then associated with each of the two subgroups and these two were then further divided into the mutually exclusive subgroups which account for additional variation. These comparisons are continued under a sequential branching procedure that is much like a decision tree. Branching ceases when various limiting conditions are met. The major limiting condition is that the overall variance must be significantly reduced by the split. In this case, the "between-group sum of squares" of subgroups (k) which are considered for further splits must not be less than 0.5 percent of the original "total sum of squares" of deviations of observations in the entire group (T) about the mean: that is, $BSS_k \geq .005\ TSS_T$.

Primary diagnosis showed the highest percent of total variance explained both for the group under age 50 (5.6 percent) and for the group age 50 and over (0.4 percent). This resulted in a further split of the group under age 50 by disabling condition, but no further split of the group age 50 and over because of the constraint that the split had to explain at least 0.5 percent of the total variance, as shown in table C, rows 2 and 8.

The Logistic Model

A logit analysis was used to determine the independent effect of each variable when the other variables were statistically held constant on the qualitative dependent variable of proportion with recovery. 3/

3/ For a general description of logistic analyses, see Marc Nerlove and S. James Press, Univariate and Multivariate Log-linear and Logistic Models, Rand Corporation, Santa Monica, California, December 1973, R-1306-EDA/NIH.

The functional form of the logistic model is

$$P = \frac{e^{X'\beta}}{1+e^{X'\beta}}$$

where: P is the probability of recovery given X.

X is a vector of independent variables, the first of which is the constant 1.

β is a vector of coefficients to be estimated.

The coefficients for this model, as shown in Table B2, were estimated from a subsample of the 1972 CDHS by a maximum likelihood procedure. The subsample was chosen by taking all recoveries and an equal number of the non-recovered who remained on the rolls. These non-recovered are a simple random subsample. Because the subsample is stratified on the dependent variables, a weighted maximum likelihood estimator was used. 4/

4/ See Charles Manski and Daniel McFadden, Alternative Estimation and Sample Designs for Discrete Choice Analysis, University of California at Berkeley, paper prepared under NSF grant SOC72-0551A02, January 1977.

TABLE B.--Coefficients of logit analysis 1/

Variable definitions	Coefficient	Standard errors	"t" ratio 2/	Projections or mean values of variable categories	
				Recovered	Nonrecovered
Constant.....	.7427	----	----	------	----
Sex: Male (1), Female (0).....	.4332	.1029	4.20*	.80	.70
Race: White and other (1), Black (0).....	.0195	.1310	.14	.88	.87
Children: Number.....	.0964	.0266	3.62*	1.10	.69
Marital status: Married and unknown (1), Single (0).....	.0113	.1035	.10	.73	.77
Age: Mean age in 1972.....	-.0643	.0037	17.37*	41.71	51.81
Diagnoses: Traumatic (accidents, digestive, musculoskeletal, infective, and parasitic) (1), Other (0).....	1.2131	.1048	11.57*	.63	.31
Chronic (circulatory, respiratory) (1), Other (0).....	.0826	.1364	.60	.15	.38
Mobility: Limited (1), Not limited (0).....	.2943	.0877	3.35*	.43	.25
Region: East (Boston, New York, Philadelphia regions) (1), Other (0).....	-.3242	.1233	2.62*	.26	.29
Midwest (Chicago. Kansas City, Denver regions) (1), Other (0).....	-.1482	.1210	1.22	.29	.26
South (Atlanta, Dallas regions (1), Other (0).....	-.4927	.1269	3.88*	.24	.29
Education: Under 9 years or special (1), Other (0).....	-.6932	.1425	4.86*	.27	.44
High school (9-12 years) (1), Other (0).....	-.3577	.1283	2.78*	.57	.46

TABLE B.--Coefficients of logit analysis 1/ (continued)

Variable definitions	Coefficient	Standard errors	"t" ratio 2/	Projections or mean values of variable categories	
				Recovered	Nonrecovered
Occupation: Professional, managerial, technical (1), Other (0).....	.1272	.1157	1.09	.17	.15
Wage replacement: Proportion of annual benefits to predisability earnings 3/.....	-.6591	.1333	4.94*	.62	.84

1/ Sample for logit analysis drawn from 9,646 disabled workers allowed in 1972, including 4,823 of total recovered by 1975 and equivalent number of those continuing in disability benefit status at the end of 1975. Excluded from this sample of total disabled worker allowances in 1972 are those who left the disability benefit rolls by the end of 1975 for death, retirement, or whose later benefit status was unknown. Excluded from computations were those with unknown benefit amount whose initial benefit amount was unknown or 0 earnings.

2/ The "t" ratio is the result of the coefficient in column one divided by the standard error in column two. The asterisk shows that the "t" score is statistically significant at the 5 percent level when equal or greater than 2.

3/ Earnings were defined as the first year of earnings in 5 years prior to year of decision (1972). The logit program was rerun with the variable of "earnings replacement' by benefits removed, and "benefits" and "predisability earnings" were introduced as independent variables. The effect and direction of the other independent variables were essentially the same as shown in this table. The scores of the variables of "predisability earnings" and "benefits" were:

	Coefficient	Standard error	"t" score
Benefit levels	-.00015	.000043	3.48*
Prior earnings	.00014	.000019	7.36*

Table 1.--Enrollment and terminations of disabled worker beneficiaries, 1960-1977

Year	Number (in thousands) 1/					Recovery rate per 1,000 beneficiaries on rolls 3/	Percent change by reason					Overall annual change in rolls
	In force beginning of year	Awards	Terminations 2/				In force beginning of year	Awards	Terminations			
			Recovery	Death	Age 65				Recovery	Death	Age 65	
1960	334	208	3	43	42	7.6	100.0	+62.3	- .9	-13.2	-12.6	+35.6
1961	455	280	3	61	51	5.6	100.0	+61.5	- .7	-13.4	-11.2	+36.2
1962	618	251	10	67	51	14.7	100.0	+40.6	-1.6	-10.8	- 8.3	+19.9
1963	741	224	13	73	51	16.6	100.0	+30.2	-1.8	- 9.9	- 6.9	+11.6
1964	827	208	15	76	45	17.4	100.0	+25.2	-1.9	- 9.2	- 5.4	+ 8.7
1965	894	253	18	80	57	19.1	100.0	+28.3	-2.0	- 8.9	- 6.4	+11.0
1966	988	278	23	84	60	22.1	100.0	+28.1	-2.3	- 8.5	- 6.1	+11.2
1967	1,097	301	37	92	77	32.3	100.0	+27.4	-3.4	- 8.4	- 7.0	+ 8.6
1968	1,193	323	38	100	80	30.5	100.0	+27.1	-3.2	- 8.4	- 6.7	+ 8.8
1969	1,295	345	38	100	80	28.3	100.0	+26.6	-2.9	- 8.4	- 7.2	+ 8.1
1970	1,394	350	41	106	103	28.4	100.0	+25.1	-2.9	- 7.6	- 7.4	+ 7.2
1971	1,493	416	43	110	107	27.4	100.0	+27.9	-2.9	- 7.4	- 7.2	+10.4
1972	1,648	455	39	109	106	22.4	100.0	+27.6	-2.4	- 6.6	- 6.4	+12.2
1973	1,833	492	37	126	135	19.2	100.0	+26.8	-2.0	- 6.9	- 7.4	+10.5
1974	2,017	536	38 4/	135	143	17.9	100.0	+26.6	-1.9	- 6.7	- 7.1	+10.9
1975	2,237	592	39 4/	139	158	16.5	100.0	+26.5	-1.7	- 6.2	- 7.1	+11.5
1976	2,489	552	40 4/	137	173	15.5	100.0	+22.2	-1.6	- 5.5	- 7.0	+ 8.1
1977	2,670	569	60 4/	139	183	21.8	100.0	+21.3	-2.2	- 5.2	- 6.9	+ 7.0

1/ The benefit program began in 1957. In 1957, there were 179,000 awards and 52 recoveries. There were 131,000 awards and 1,397 recoveries in 1958, and there were 178,000 awards and 3,000 recoveries in 1959.

2/ Does not include small number of terminations for other reasons. Less than 8,000 a year.

3/ Percent of those with recovery to average of those on rolls at beginning and end of year.

4/ Estimated figures from actuary.

Source: Annual Statistical Supplements to the Social Security Bulletin, 1959-1974, and Actuarial Study Number 75, June 1978.

Table 2--Change in benefit status of disabled workers allowed in 1972 through 1977

Reason for change in benefit status 2/	Months after entitlement to disability benefits 1/				
	12	24	36	48	60 + (as of March 78)
Total number	412,661	412,661	412,661	412,661	412,661
Total percent	100.0	100.0	100.0	100.0	100.0
Ever recovered 3/	1.6	4.7	6.0	6.5	7.2
Still recovered	1.6	4.4	5.3	5.5	5.5
Later relapse 4/	*	.2	.6	1.0	1.3
Later death	*	*	*	*	.1
Later retired	*	*	*	*	.2
Retired 5/	.8	3.1	9.9	14.5	24.7
Still retired	.7	2.8	9.4	13.2	20.8
Later death	*	.2	.5	1.3	3.9
Dead 6/	7.6	12.7	16.6	20.1	26.9
While on disability rolls	7.6	12.5	16.1	18.8	22.9
After recovery 7/	*	*	*	*	.1
After retirement 8/	*	.2	.5	.5	3.9
Continuing on disability rolls	86.8	76.3	64.4	65.4	41.6
Other, unknown	--	--	--	--	.9

1/ Months after month of entitlement to benefits, which is 5 months after established month of onset of disability. The last point in column five represents benefit status in March 1978 when the data was obtained from Master Beneficiary Records. For persons with multiple benefit periods, the entitlement date selected was that closest to the award decision in 1972.

2/ Based on change in benefit status according to Master Beneficiary Record.

3/ Administrative decision to end disability benefits because of medical improvement or return to work.

4/ Prior recovery and current disability benefit status. Not distinguished here are relapses followed by recovery, death, or retirement.

5/ Attaiment age 65.

6/ Based on suvivors claims.

7/ Same as row 6.

8/ Same as row 9.

* Less than 0.05 percent.

TABLE 3--Recovery and later benefit experience of disabled workers allowed in 1972 by demographic and employment characteristics

Demographic and employment characteristics	Number	Percent	Percentage distribution by benefit status at end of 1975 1/						Percent recovery of working age survivors in 1975 2/
			Total percent	Recovery 2/	Continuing disability	Dead	Retired	Other 3/	
Total	412,662	100.0	100.0	6.0	64.9	17.4	9.1	2.5	8.4
Sex									
Male	297,770	72.1	100.0	6.6	62.6	18.4	9.4	2.8	9.6
Female	114,892	27.8	100.0	4.2	70.8	14.7	8.4	1.7	5.6
Age in 1972									
Under 40	54,290	13.1	100.0	20.2	67.8	9.0	.0	2.9	22.7
40-49	69,651	16.8	100.0	9.8	71.0	16.2	.0	2.8	12.1
50-59	179,143	43.4	100.0	3.2	74.4	19.6	.1	2.5	4.1
60-61	56,719	13.7	100.0	1.4	74.9	20.6	.7	2.2	1.8
62-64	52,859	12.8	100.0	.8	0.0	16.4	80.6	1.9	7/
Race									
White	352,233	85.3	100.0	6.0	64.4	17.4	9.5	2.6	8.5
Black	56,112	13.5	100.0	5.5	68.0	17.5	6.8	1.8	7.5
Other	4,317	1.0	100.0	7.7	66.4	14.5	8.6	2.6	10.4
Dependent children									
None	248,286	60.1	100.0	4.1	61.7	18.6	13.0	2.4	6.2
One	48,997	11.8	100.0	6.7	65.5	19.6	4.0	3.0	9.1
Two	30,057	7.2	100.0	9.7	66.1	18.0	2.0	4.0	12.7
Three	17,123	4.1	100.0	11.0	68.1	16.2	1.8	2.7	13.9
Four	9,880	2.3	100.0	11.3	70.4	13.6	1.4	3.1	13.8
Five or more	9,681	2.3	100.0	11.0	69.0	14.6	.9	4.1	13.8
Unknown	48,638	11.7	100.0	8.6	75.6	10.0	4.7	.8	10.2
Marital status									
Married	277,914	67.3	100.0	5.4	63.2	18.5	9.8	2.9	7.8
Single	92,905	22.5	100.0	6.3	64.9	17.6	9.0	2.0	8.8
Unknown	41,843	10.1	100.0	9.1	75.9	9.7	4.4	.7	10.7
Education years									
None	5,111	1.2	100.0	2.3	71.8	14.3	10.5	.9	3.2
1-8	162,537	39.3	100.0	3.5	66.4	16.3	11.4	2.1	5.1
9-12	194,414	47.1	100.0	7.4	64.3	18.1	7.3	2.7	10.3
13 and over	36,823	8.9	100.0	9.4	58.8	19.7	8.9	3.0	13.8
Other	13,777	3.3	100.0	6.1	68.5	15.2	7.6	2.3	8.2
SSA region 4/									
Boston	21,804	5.2	100.0	6.7	61.8	18.6	9.9	2.7	9.8
New York	56,059	13.5	100.0	5.3	66.6	17.0	8.7	2.2	7.4
Philadelphia	45,202	10.9	100.0	5.0	63.6	19.2	9.8	2.2	7.3
Atlanta	75,095	18.1	100.0	4.6	68.0	17.1	7.3	2.8	6.3
Chicago	80,343	19.4	100.0	6.1	62.9	18.4	9.8	2.6	8.8
Dallas	39,895	9.6	100.0	6.0	67.1	16.2	8.0	2.5	8.2
Kansas	19,703	4.7	100.0	5.9	63.6	17.8	10.1	2.3	8.5
Denver	8,487	2.0	100.0	7.4	63.1	16.6	10.0	2.7	10.5
San Francisco	51,540	12.4	100.0	8.3	63.6	15.7	10.2	2.1	11.5
Seattle	13,760	3.3	100.0	7.9	62.6	15.9	10.7	2.7	11.2
Other	774	.1	100.0	2.4	76.3	19.6	.9	.6	3.1

See footnotes at end of table

TABLE 3--Recovery and later benefit experience of disabled workers allowed in 1972 by demographic and employment characteristics--Continued

Demographic and employment characteristics	Number	Percent	Percentage distribution by benefit status at end of 1975 1/						Percent recovery of working age survivors in 1975 2/
			Total percent	Recovery 2/	Continuing disability	Dead	Retired	Other 3/	
Occupation 5/									
Professional	40,852	9.8	100.0	9.6	63.0	16.9	7.7	2.9	13.2
Managerial	19,491	4.7	100.0	4.8	57.8	21.5	13.2	2.4	7.7
Clerical	31,483	7.6	100.0	5.1	66.5	17.6	8.5	2.0	7.1
Sales	19,774	4.7	100.0	4.8	63.9	18.9	9.9	2.4	7.0
Service	59,570	14.4	100.0	3.8	68.0	16.5	9.8	1.7	5.4
Farming	18,615	4.5	100.0	4.5	64.2	16.4	12.5	2.1	6.6
Processing	12,948	3.1	100.0	4.5	66.4	16.9	9.9	2.1	6.3
Machine	37,486	9.0	100.0	6.0	64.4	17.3	9.4	2.6	8.6
Bench	24,365	5.9	100.0	5.1	70.5	14.2	7.9	2.1	6.8
Structural	52,306	12.6	100.0	6.7	63.0	17.3	10.1	2.7	9.6
Other	66,337	16.0	100.0	5.9	66.0	17.3	8.2	2.4	8.2
Unknown	29,435	7.1	100.0	8.7	61.4	19.6	5.4	4.6	12.5
Predisability earnings 6/ (1967-71)									
None	11,871	2.8	100.0	1.1	81.6	10.3	6.7	.1	1.3
Under $1,000	42,273	10.2	100.0	4.6	74.6	13.9	5.8	1.0	5.8
$1,000-$1,999	51,686	12.5	100.0	5.8	70.7	14.7	7.3	1.3	7.5
$2,000-$2,999	52,092	12.6	100.0	6.4	68.7	15.1	7.9	1.7	8.6
$3,000-$3,999	50,714	12.2	100.0	6.3	65.1	17.2	8.8	2.3	8.9
$4,000-$4,999	45,202	10.9	100.0	6.6	63.1	18.4	9.0	2.7	9.4
$5,000-$5,999	41,827	10.1	100.0	6.1	61.3	19.1	10.1	3.1	9.0
$6,000-$6,999	44,026	10.6	100.0	6.8	59.6	10.2	11.0	3.3	10.3
$7,000 and over	72,971	17.6	100.0	6.1	55.9	12.1	12.1	4.2	9.9

1/ Benefit status in 1975 is based on reason for termination from disability benefit rolls.

2/ Benefit termination for medical improvement or return to work.

3/ Termination for other and unknown reasons, such as residence no longer known, or allowance with no record of later benefit payment.

4/ The Social Security Administration regions are based on these States: The Boston region includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont, the New York region includes New Jersey, New York, Puerto Rico and the Virgin Islands; the Philadelphia regions includes Delaware, District of Columbia, Maryland Pennsylvania, Virginia, West Virginia; The Atlanta region includes Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee; Chicago region includes Illinois, India, Michigan, Minnesota, Ohio, Wisconsin; Dallas region includes Arkansas, Louisiana, New Mexico, Oklahoma and Texas; Kansas City region includes Iowa, Kansas, Missouri, and Nebraska; Denver region includes Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming; San Francisco region includes Arizona, California, Guam, Hawaii, Nevada; Seattle region includes Alaska, Idaho, Oregon, Washington.

5/ Based on classifications according to the Dictionary of Occupational Titles, 1965, third edition, Manpower Administration, U.S. Department of Labor. The classification of professional workers includes technical workers, teachers, administrative managers (codes 00-16), the classification of managers hwere refers mainly to line managers (18-19); clerical (20-29); service (30-39); farming includes some fishery and forestry and related occupations (40-46); processing (50-59); machine trades (60-69); bench work (70-79); structural (80-89); and miscellaneous includes transportation, mining, utilities, and recreation (90-97).

6/ Average annual earnings in the 5-year period 1967-1971. Earnings recorded are those subject to social security taxes. Thus, earnings above the taxable maximum or in employment not covered by social security taxes are not included.

7/ By definition, all older workers age 62-64 in 1972 had either retired, died or recovered by the end of 1975.

TABLE 4--Recovery and later benefit experience of disabled workers allowed in 1972

Disability Characteristics	ICDA Code 4/	Number	Percent	Percent distribution by benefit status at end of 1975 1/						Percent recovery of working age survivors in 1975 2/
				Total percent	Recovery 2/	Continuing disability	Dead	Retired	Other 3/	
Total		412,661	100.0	100.0	6.0	64.9	17.4	9.1	2.5	8.4
Diagnostic groups										
Infective and Parasitic	001-136	7,709	1.8	100.0	21.0	58.5	11.5	6.0	2.8	26.4
Neoplasms	140-239	43,705	10.5	100.0	1.4	25.6	57.3	3.9	11.6	5.2
Endocrine and Metabolic	240-279	14,931	3.6	100.0	2.1	69.4	17.9	9.9	.6	2.9
Mental Disorders	290-315	41,959	10.1	100.0	6.2	82.6	6.7	3.6	.6	7.0
Nervous System	330-389	16,920	4.1	100.0	3.6	78.5	9.6	6.7	1.4	4.4
Eye/Ear	370-398	5,113	1.2	100.0	3.3	76.5	4.9	14.3	.8	4.1
Circulatory	390-468	130,057	31.5	100.0	2.6	65.6	17.5	12.2	1.9	3.8
Respiratory	470-529	28,753	6.9	100.0	.8	66.5	17.8	14.0	.8	1.1
Digestive	530-587	12,124	2.9	100.0	6.5	59.4	24.9	7.2	1.8	9.9
Genito-urinary	590-637	4,015	.9	100.0	6.0	58.6	24.9	7.7	2.7	9.2
Musculoskeletal	720-749	69,839	16.9	100.0	8.2	74.7	5.8	10.2	.8	9.9
Traumatic injuries	800-999	30,913	7.4	100.0	25.2	61.5	5.2	6.3	1.6	29.0
All other		6,533	1.5	100.0	8.3	71.3	12.9	5.5	1.7	10.5
Unknown		81	*	100.0	25.9	46.9	3.7	14.8	8.6	35.5
Selected primary diagnoses										
Pulmonary tuberculosis	011	3,937	.9	100.0	33.6	46.2	12.6	4.4	3.0	42.1
Lung cancer	162	9,414	2.2	100.0	.6	17.1	62.0	2.2	18.0	3.5
Diabetes	250	10,152	2.4	100.0	1.5	66.9	20.5	10.3	.6	2.2
Schizophrenia	295	16,510	4.0	100.0	8.4	3.6	1.1	1.1	.4	8.9
Neuroses	300	7,934	1.9	100.0	6.1	83.4	4.4	5.2	.7	6.8
Retardation	315	2,588	.6	100.0	3.2	90.8	3.9	.9	.9	3.4
Multiple Sclerosis	340	2,755	.6	100.0	1.4	90.8	4.9	1.3	1.4	1.5
Ischemic heart disease	412	94,121	20.3	100.0	2.6	65.4	17.8	11.9	2.0	3.9
Acute cerebrovascular	436	8,433	2.0	100.0	1.1	65.2	16.4	15.9	1.2	1.7
Arteriosclerosis	440	4,140	1.0	100.0	1.3	62.2	18.9	15.6	1.7	2.1
Emphysema	492	14,710	3.5	100.0	.4	65.4	18.3	15.0	.7	.6
Arthritis	712	10,014	2.4	100.0	2.2	80.2	8.4	8.4	.7	2.6
Osteoarthritis	713	21,686	5.2	100.0	2.6	73.2	5.9	17.5	.5	3.5
Disc displacement	725	17,260	4.1	100.0	15.8	74.4	3.4	5.1	1.1	17.5
Fractures	823-829	18,086	4.3	100.0	33.1	54.4	3.9	6.6	1.8	37.8
Statutory Blind 5/	--	249	*	100.0	9.6	72.6	11.6	6.0	.0	11.7
Other	--	176,788	42.8	100.0	4.9	61.9	21.8	8.1	3.0	7.3
Unknown	--	3,869	.9	100.0	10.9	73.8	8.7	4.7	1.6	12.9
Mobility at application										
Institutionalized		17,170	4.1	100.0	10.7	62.8	19.1	3.4	3.8	14.5
Hospitalized		16,207	3.9	100.0	7.3	43.2	31.6	4.8	8.1	13.2
Bed		8,326	2.0	100.0	5.2	4.2	35.5	6.7	10.1	11.0
Chairbound		3,647	.8	100.0	5.2	62.9	19.8	8.4	3.4	7.7
Housebound		7,507	1.8	100.0	5.6	51.2	28.9	8.7	5.4	9.9
Needs help		62,617	15.1	100.0	6.4	64.2	16.0	8.6	2.6	11.6
No limitations		286,784	69.4	100.0	5.1	66.8	16.1	10.0	1.7	7.1
Other (Unknown)		10,404	2.5	100.0	5.4	74.3	12.9	5.1	2.1	6.8
Medical reexamination 6/										
Not diaried		337,958	81.8	100.0	3.0	63.6	19.5	11.0	2.6	4.6
Diaried		74,704	18.1	100.0	19.1	70.5	7.8	.7	1.8	21.3

1/ Benefit status in 1975 is based on last reason for termination or continuance from disability benefit rolls. Many who left for recovery or for retirement may have subsequently died--but these deaths are not distinguised in the data files. Many shown as continuing as disabled may have recovered and returned to the disability rolls subsequently. These also are not distinguised in the data files.

2/ Benefit termination for medical improvement or return to work.

3/ Termination for other and unknown reasons, such as residence no longer known, or allowance with no record of benefit payment.

4/ Based on International Classification of Diseases, Adapted, 8th revision, Public Health Service Publication No. 1693, 1967.

5/ Based on social security definition of statutory blindness.

6/ Administrative decision to follow-up on medical status based on prognosis and disabling condition at time of allowance. See ORS Note No. 5, April 27, 1973, for description of this diary procedure.

*Less than 1 percent

TABLE 5--Recovery and later benefit experience of disabled workers allowed in 1972 by benefits and later earnings levels

Benefits and later earnings	Number	Percent	Percentage distribution by benefit status at end of 1975 1/						Percent recovery of working age survivors 2/
			Total percent	Recovery 2/	Continuing disability	Dead	Retired	Other 3/	
Total....	412,661	100.0	100.0	6.0	64.9	17.4	9.1	2.9	8.4
Monthly benefits 4/									
Under $100.....	22,891	5.5	100.0	5.7	73.7	12.1	7.6	.6	7.2
$100-$149.....	58,285	14.1	100.0	4.0	71.3	14.4	9.9	.3	5.3
$150-$199.....	73,498	17.8	100.0	5.0	67.9	15.6	10.9	.3	6.9
$200-$249.....	85,057	20.6	100.0	4.7	65.6	16.2	12.8	.4	6.7
$250-$299.....	57,312	13.8	100.0	5.9	66.7	15.4	11.3	.5	8.2
$300-$349.....	16,420	3.9	100.0	9.7	67.4	14.5	7.5	.7	12.6
$350-$399.....	19,738	4.7	100.0	8.4	66.8	16.2	7.7	.7	11.1
$400-$449.....	10,274	2.4	100.0	10.6	70.6	13.7	3.1	1.8	13.0
$450 and over.....	27,821	6.7	100.0	11.1	70.6	13.9	2.5	1.7	13.5
Unknown.....	41,366	10.0	100.0	5.8	34.6	37.8	2.2	19.4	14.5
Earnings replacement 5/									
Less than 25 percent....	3,526	.8	100.0	16.8	68.4	9.5	1.9	3.2	19.7
25-49.....	93,132	22.5	100.0	4.8	60.9	17.5	16.0	.6	7.4
50-74.....	98,473	23.8	100.0	5.2	66.5	16.2	11.3	.5	7.3
75-99.....	66,509	16.1	100.0	7.3	70.7	14.6	6.5	.7	9.4
100-124.....	29,506	7.1	100.0	8.3	71.0	13.3	6.5	.7	10.5
125-149.....	17,041	4.1	100.0	8.4	74.5	11.6	4.8	.6	10.1
150-174.....	11,471	2.7	100.0	7.2	76.2	11.4	4.5	.4	8.6
175-199.....	7,986	1.9	100.0	7.7	74.4	11.8	5.3	.5	9.4
200 and over.....	35,461	8.5	100.0	4.4	76.8	12.9	5.2	.4	5.5
Unknown or no benefits or earnings.....	49,557	12.0	100.0	5.1	41.5	33.7	3.3	16.2	10.9
Recent earnings (1974)									
None.....	362,604	87.8	100.0	1.3	67.3	19.3	9.6	2.2	1.9
Under $1,000.....	17,143	4.1	100.0	10.2	74.4	5.8	8.2	1.2	12.0
$1,000-$1,999.....	6,054	1.4	100.0	20.3	63.5	3.6	10.2	2.2	24.2
$2,000-$2,999.....	4,001	.9	100.0	37.0	48.1	2.4	7.7	4.6	43.5
$3,000-$3,999.....	2,667	.6	100.0	51.8	38.0	2.3	2.5	5.1	57.6
$4,000-$4,999.....	2,687	.6	100.0	59.8	32.1	1.5	1.6	4.8	65.0
$5,000-$5,999.....	2,392	.5	100.0	69.0	22.8	.7	1.9	5.3	75.1
$6,000-$6,999.....	2,271	.5	100.0	64.1	23.0	.7	3.0	8.9	73.5
$7,000-$7,999.....	2,015	.4	100.0	70.0	18.6	1.4	1.0	8.7	78.9
$8,000-$8,999.....	1,650	.3	100.0	79.0	12.6	.8	.6	6.7	86.2
$9,000-$9,999.....	1,481	.3	100.0	71.5	15.4	1.0	.1	11.8	82.2
$10,000-$10,999.....	1,485	.3	100.0	74.2	16.2	.0	1.3	8.1	82.0
$11,000 and over.....	6,212	1.5	100.0	71.8	18.4	1.0	1.4	7.1	79.5

1/ Benefit status in 1975 is based on last reason for termination or continuance from disability benefit rolls. Many who left for recovery or for retirement may have subsequently died--but these deaths are not distinguised in the data files. Many shown as continuing as disabled may have recovered and returned to the disability rolls subsequently. These also are not distinguised in the data files.

2/ Benefit termination for medical improvement or return to work.

3/ Termination for other and unknown reasons, such as residence no longer known, or allowance with no record of benefit payment.

4/ This is the total paid to the family. Benefits paid at end of 1972. For 74,331, including 25 percent of the recovered and 12 percent of the continued disabled, benefit amount in 1972 was not available, and benefits paid at the end of 1971, 1973, or 1974 were substituted. As shown, 41,366 records remain unknown--over one-third had died. The sum of the worker's benefits and dependents' benefits is the amount classified.

5/ Ratio of annual benefits to predisability average earnings in 1967-71 (Data in classification of "Monthly benefits" times 12 to "Predisability earnings.") The actual earnings and benefits amount are used, without discounting to render values equivalent in real money terms at one point in time.

TABLE 6.--Percent recovered of surviving working-age adults allowed disability benefits in 1972 by demographic and disability characteristics

Demographic, employment, disability and benefit characteristics	Percent distribution by characteristic					Percent recovered 2/				
	Total working-age adults 1/	Benefit amount 3/		Earnings replacement 4/		Total working-age adults	Benefit amount		Earnings replacement	
		$300 or more	Under $300	75% or more	Under 75%		$300 or more	Under $300	75% or more	Under 75%
Total number	292,696	58,622	234,074	134,476	158,220	8.4	12.6	7.3	8.8	8.1
Total percent	100.0	100.0	100.0	100.0	100.0	---	---	---	---	---
DEMOGRAPHIC AND EMPLOYMENT										
Sex										
Male	70.5	93.5	64.7	70.7	70.3	9.6	12.5	8.5	10.0	9.3
Female	29.4	6.4	35.2	29.2	29.6	5.6	14.3	5.2	5.9	5.4
Age in 1972 10/										
Under 40	16.3	27.0	13.6	27.1	7.1	22.7	24.5	21.9	19.8	32.4
40-49	18.2	29.2	16.7	22.1	16.7	12.1	13.6	11.5	9.4	15.3
50-59	47.5	35.5	50.5	39.4	54.4	4.1	4.9	3.9	3.0	4.8
60-61	14.8	7.5	16.8	10.4	18.4	1.8	2.2	1.8	1.0	2.2
62 and over										
Race										
White	84.7	87.9	83.9	81.6	87.4	8.5	12.8	7.4	9.0	8.1
Black	14.1	11.0	14.8	17.0	11.6	7.5	11.4	6.8	7.5	7.5
Other	1.0	1.0	1.1	1.3	.9	10.4	10.8	10.3	9.5	11.6
Dependent children										
None	55.8	9.6	67.4	40.2	69.1	6.2	11.2	6.0	7.3	5.7
One	12.2	27.6	8.4	15.5	9.4	9.1	10.2	8.3	8.2	10.4
Two	7.7	22.0	4.2	12.2	4.0	12.7	13.1	12.3	11.1	17.0
Three	4.6	12.9	2.5	7.3	2.3	13.9	13.7	14.3	11.2	21.2
Four	2.7	7.6	1.5	4.3	1.3	13.8	14.7	12.8	10.0	24.2
Five or more	2.6	6.4	1.7	4.1	1.3	13.8	15.5	12.2	11.9	18.8
Unknown	14.0	13.7	14.0	16.0	12.2	10.2	14.5	9.6	9.3	12.4

TABLE 6.--Percent recovered of surviving working-age adults allowed disability benefits in 1972 by demographic and disability characteristics--Continued

Demographic, employment, disability and benefit characteristics	Percent distribution by characteristic					Percent recovered 2/				
	Total working-age adults 1/	Benefit amount 3/		Benefit replacement 4/		Total working-age adults	Benefit amount		Benefit replacement	
		$300 or more	Under $300	75% or more	Under 75%		$300 or more	Under $300	75% or more	Under 75%
Marital status										
Married	65.2	79.4	61.6	60.6	69.1	7.8	12.0	6.5	7.9	7.8
Single	22.6	7.8	26.3	25.0	20.5	3.8	15.2	8.3	10.5	7.1
Unknown	12.1	12.6	12.0	14.3	10.3	10.7	15.0	9.6	9.3	12.4
Education years										
None	1.3	.5	1.4	1.5	1.1	3.2	3.0	3.2	1.4	5.2
1-8	38.9	33.0	40.3	39.0	38.7	5.1	7.5	4.5	4.6	5.5
9-12	47.7	53.2	46.3	47.4	47.9	10.3	14.7	9.1	11.1	9.7
13 and over	8.5	11.1	7.9	8.2	8.8	13.8	18.0	12.3	16.9	11.3
Other (special)	3.5	2.1	3.8	3.7	3.3	8.2	16.4	7.0	8.2	8.1
Occupation 5/										
Professional, technical	10.1	10.3	10.0	11.2	9.1	13.2	18.6	11.8	15.6	10.7
Managerial	4.1	5.3	3.8	3.4	4.8	7.7	11.2	6.5	8.8	7.1
Clerical	7.7	4.8	8.4	6.7	8.5	7.1	10.1	6.6	8.1	6.3
Sales	4.6	4.5	4.6	4.3	4.8	7.0	11.9	5.8	6.1	7.7
Service	14.6	7.6	16.3	17.1	12.5	5.4	11.0	4.7	5.6	5.1
Farming	4.3	1.8	5.0	5.9	3.0	6.6	13.4	6.0	5.0	9.3
Processing	3.1	4.0	2.9	2.7	3.4	6.3	9.6	5.2	7.3	5.6
Machine	9.0	11.6	8.3	7.4	10.3	8.6	12.1	7.3	9.0	8.3
Bench	6.3	4.4	6.7	6.2	6.3	6.8	8.5	6.5	6.7	6.8
Structural	12.4	18.7	10.9	11.2	13.5	9.6	14.1	7.6	9.3	9.7
Other	16.3	19.3	15.5	15.9	16.6	8.2	10.8	7.4	7.2	9.0
Unknown	7.0	7.1	7.0	7.5	6.6	12.5	15.6	11.7	15.3	9.7
SSA region 6/										
Boston	5.1	4.8	5.1	4.8	5.3	9.8	12.0	9.2	10.5	9.2
New York	13.7	12.4	14.1	13.2	14.2	7.4	13.7	6.0	8.0	7.0
Philadelphia	10.6	11.2	10.4	9.9	11.1	7.3	11.2	6.3	8.3	6.7
Atlanta	18.6	15.4	19.4	20.0	17.4	6.3	9.8	5.6	7.0	5.6
Chicago	18.9	22.0	18.1	17.7	19.9	8.8	12.7	7.6	9.4	8.3
Dallas	9.9	10.4	9.8	10.8	9.1	8.2	12.2	7.1	7.8	8.6
Kansas	4.6	4.3	4.7	4.8	4.5	8.5	14.1	7.2	9.4	7.7
Denver	2.0	2.2	2.0	2.3	1.8	10.5	13.7	9.6	10.3	10.7
San Francisco	12.6	13.2	12.5	12.4	12.8	11.5	14.2	10.8	11.0	11.9
Seattle	3.3	3.4	3.2	3.3	3.2	11.2	19.7	9.0	11.4	11.1
Other	.2	.2	.2	.2	.1	3.1	7.8	2.0	2.7	3.5

TABLE 6.--Percent recovered of surviving working-age adults allowed disability benefits in 1972 by demographic and disability characteristics--Continued

Demographic, employment, disability and benefit characteristics	Percent distribution by characteristic					Percent recovered 2/				
	Total working-age adults 1/	Benefit amount 3/		Benefit replacement 4/		Total working-age adults 1/	Benefit amount		Benefit replacement	
		$300 or more	Under $300	75% or more	Under 75		$300 or more	Under $300	75% or more	Under 75%
Predisability earnings (1967-71)										
Less than $1,000	11.4	1.4	13.9	23.2	1.4	5.8	5.8	5.8	5.2	13.3
$1,000-$1,999	13.5	3.0	16.1	25.6	3.2	7.5	9.2	7.5	7.0	11.2
$2,000-$2,999	13.3	6.0	15.2	17.4	9.9	8.6	11.1	8.3	9.1	7.8
$3,000-$3,999	12.4	9.4	13.1	9.9	14.4	8.9	13.6	8.0	12.0	7.0
$4,000-$4,999	10.7	13.5	10.0	6.6	14.2	9.4	13.8	8.0	13.5	7.8
$5,000-$5,999	9.6	16.2	8.0	5.6	13.0	9.0	11.6	7.7	11.7	8.0
$6,000-$6,999	10.0	18.9	7.7	5.2	14.0	10.3	12.2	9.1	11.1	10.0
$7,000 and over	15.4	30.8	11.6	6.1	23.4	9.9	13.8	7.2	13.7	9.0
Unknown	3.3	.5	4.0	---	6.2	1.3	4.0	1.2	---	1.3
DISABILITY										
Diagnostic Group 7/										
Infective and parasitic	2.1	2.0	2.1	2.0	2.7	28.4	32.0	25.1	25.9	30.9
Neoplasms	4.0	2.9	4.3	2.9	17.2	5.2	10.5	4.3	7.3	1.3
Endocrine and metabolic	3.6	3.2	3.7	3.6	3.1	2.9	5.5	2.3	2.9	3.0
Mental disorders	12.7	10.4	13.3	12.4	15.6	7.0	8.7	6.6	6.9	8.0
Nervous system	4.7	5.6	4.5	4.7	4.4	4.4	3.4	4.7	4 4	4.8
Eye/ear	1.4	1.2	1.4	1.3	1.3	4.1	7.6	3.3	3.9	6.0
Circulatory	30.3	31.1	30.1	31.0	21.7	3.8	6.1	3.2	3.7	4.9
Respiratory	6.6	6.1	6.7	6.7	4.7	1.1	1.3	1.1	1.0	3.3
Digestive	2.7	2.6	2.7	2.6	4.0	9.9	14.6	8.8	10.4	6.1
Genito-urinary	.8	1.0	.8	.8	1.0	9.2	10.6	8.8	9.1	10.7
Musculoskeletal	19.8	19.1	19.9	20.3	13.2	9.9	16.8	8.2	9.3	19.6
Traumatic injuries	9.1	12.5	8.3	9.2	8.4	29.0	34.6	26.9	27.6	46.7
Other	1.7	1.8	1.7	1.7	2.0	10.5	16.1	9.0	11.0	4.5
Primary disabling condition 7/										
Pulmonary tuberculosis	1.0	1.0	1.0	1.0	1.3	42.1	47.6	40.8	40.2	59.2
Lung cancer	.5	.2	.6	.2	4.2	3.5	11.8	2.6	7.0	1.0
Diabetes	2.3	2.2	2.3	2.4	1.9	2.2	4.2	1.7	2.2	1.7
Schizophrenia	5.3	4.3	5.6	5.0	8.7	8.9	10.0	8.7	9.2	6.8
Neuroses	2.4	2.3	2.4	2.4	1.9	6.8	7.7	6.6	6.6	9.6
Retardation	.8	.2	.9	.8	1.0	3.4	6.5	3.2	3.5	2.1
Multiple sclerosis	.8	1.4	.7	.8	.9	1.5	1.0	1.8	1.5	1.3
Ischemic heart disease	19.5	21.0	19.2	20.1	12.6	3.9	5.9	3.3	3.9	4.1
Acute cerebrovascular	1.9	1.7	1.9	1.9	1.5	1.7	2.8	1.5	1.8	1.1
Arteriosclerosis	.9	.8	.9	.9	.5	2.1	2.7	2.0	2.0	5.1
Emphysema	3.3	3.1	3.3	3.3	2.3	.6	.2	.8	.5	2.5
Rheumatoid arthritis	2.8	2.5	2.8	2.8	2.3	2.6	6.6	1.7	2.5	4.7
Osteoarthritis	5.6	3.7	6.0	5.8	3.2	3.5	5.0	3.2	3.3	7.1
Disc displacement	5.3	6.7	4.9	5.4	3.4	17.5	23.8	15.4	16.2	41.3
Fractures	5.4	7.3	4.9	5.4	5.1	37.8	43.9	35.5	34.4	55.0
Statutory blind	.0	.0	.0	.0	.0	11.7	.0	12.9	11.2	20.0
Other	40.4	39.6	40.6	39.8	46.8	7.3	11.7	6.3	7.2	8.3

TABLE 6.--Percent recovered of surviving working-age adults allowed disability benefits in 1972 by demographic and disability characteristics--Continued

Demographic, employment, disability and benefit characteristics	Percent distribution by characteristic					Percent recovered 2/				
	Total working-age adults 1/	Benefit amount 3/		Benefit replacement 4/		Total working-age adults 1/	Benefit amount		Benefit replacement	
		$300 or more	Under $300	75% or more	Under 75%		$300 or more	Under $300	75% or more	Under 75%
Mobility at application										
Institutionalized	4.3	4.2	4.3	5.9	2.9	14.5	15.7	14.2	14.8	14.1
Hospitalized	3.0	4.5	2.7	3.2	2.9	13.2	17.2	11.5	16.0	10.5
Bed	1.3	1.4	1.3	1.3	1.3	11.0	15.7	9.7	13.8	8.8
Chairbound	.8	1.0	.8	.9	.7	7.7	12.4	6.2	10.1	5.2
Housebound	1.4	1.4	1.4	1.2	1.6	9.9	15.8	8.4	10.8	9.2
Needs help	15.5	15.7	15.6	14.6	16.3	11.6	18.9	9.8	12.5	11.0
No limitations	70.5	69.9	70.0	71.1	70.0	7.1	10.6	6.2	7.0	7.2
Other and unknown	2.8	1.6	3.1	1.5	3.9	6.8	14.4	5.8	10.2	5.7
Medical reexamination 8/										
Not diaried	77.1	68.0	79.3	72.6	80.9	4.6	6.6	4.2	4.4	4.7
Diaried	22.8	31.9	20.6	27.3	19.1	21.3	25.6	19.6	20.4	22.5
BENEFIT CHARACTERISTICS										
Monthly benefits										
Under $100	6.2	---	7.7	8.1	4.5	7.2	---	7.2	4.4	11.4
$100-$149	15.0	---	18.7	19.3	11.3	5.3	---	5.3	5.0	5.6
$150-$199	18.3	---	22.3	18.8	17.9	6.9	---	6.9	7.6	6.3
$200-$249	20.4	---	25.5	14.3	25.2	6.7	---	6.7	8.7	5.7
$250-$299	14.2	---	17.7	7.2	20.1	8.2	---	8.2	11.1	7.3
$300-$349	4.3	21.6	---	6.4	2.5	12.6	12.6	---	10.4	17.1
$350-$399	5.0	25.3	---	5.7	4.5	11.1	11.1	---	12.0	10.2
$400-$449	2.8	14.2	---	3.1	.9	13.0	13.0	---	12.3	16.4
$450 and over	7.7	38.7	---	14.3	2.1	13.5	13.5	---	13.3	14.9
Unknown	5.7	---	7.1	---	10.5	14.5	---	14.5	---	14.5

TABLE 6.--Percent recovered of surviving working-age adults allowed disability benefits in 1972 by demographic and disability characteristics--Continued

Demographic, employment, disability and benefit characteristics	Percent distribution by characteristic					Percent recovered 2/				
	Total working-age adults 1/	Benefit amount 3/		Benefit replacement 4/		Total working-age adults 1/	Benefit amount		Benefit replacement	
		$300 or more	Under $300	75% or more	Under 75%		$300 or more	Under $300	75% or more	Under 75%
Earnings replacement										
Less than 25%.....	1.0	0	1.2	---	1.9	19.7	---	19.7	---	19.7
25-49.....	20.9	1.1	25.9	---	38.7	7.4	25.5	7.2	---	7.4
50-74.....	24.1	25.7	23.7	---	44.7	7.3	13.2	5.7	---	7.3
75-99.....	17.7	42.3	11.5	38.6	---	9.4	11.7	7.3	9.4	---
100-124.....	8.0	12.8	6.7	17.4	---	10.5	14.6	8.6	10.5	---
125-149.....	4.8	6.2	4.4	10.5	---	10.1	15.0	8.4	10.1	---
150-174.....	3.2	3.6	3.1	7.1	---	8.6	11.4	7.8	8.6	---
175-199.....	2.2	2.2	2.2	4.8	---	9.4	13.0	8.5	9.4	---
200 and over.....	9.8	5.2	10.9	21.4	---	5.5	9.2	5.0	5.5	---
Unknown.....	7.9	.5	9.7	---	14.6	10.9	4.0	11.0	---	10.9
Recent earnings (1974)										
None.....	85.1	80.1	86.3	84.0	85.9	1.9	2.2	1.8	2.3	1.6
Under $1,000.....	4.9	4.9	4.9	6.3	3.7	12.0	12.4	11.9	12.9	10.8
$1,000-$1,999.....	1.7	2.0	1.6	2.3	1.2	24.2	18.7	25.9	23.8	24.9
$2,000-$2,999.....	1.1	1.3	1.1	1.2	1.0	43.5	46.0	42.7	48.4	38.4
$3,000-$3,999.....	.8	.9	.7	.9	.7	57.6	56.0	58.1	62.7	51.9
$4,000-$4,999.....	.8	.9	.8	.8	.8	65.0	59.7	66.6	73.9	57.8
$5,000-$5,999.....	.7	1.1	.6	.7	.7	75.1	70.7	76.9	80.6	70.7
$6,000-$6,999.....	.6	.8	.6	.5	.7	73.5	68.5	75.2	81.6	68.2
$7,000-$7,999.....	.6	.8	.5	.5	.6	78.9	80.6	78.2	92.1	69.9
$8,000-$8,999.....	.5	.7	.4	.4	.6	86.2	86.9	85.8	92.3	82.7
$9,000-$9,999.....	.4	.8	.3	.3	.5	82.2	87.8	78.9	91.0	77.6
$10,000-$10,999.....	.4	.9	.3	.3	.5	82.0	89.0	76.8	90.0	78.1
$11,000 and over.....	1.9	4.2	1.3	1.2	2.4	79.5	89.3	71.6	89.6	75.0

1/ Disabled workers allowed benefits in 1972 who have neither died nor reached age 65 and attained retirement benefits nor terminated for other reasons. Those remaining consist of those continuing on the disability rolls and those who recovered.

2/ Percent recovered of those continuing on the disability rolls and those who recovered.

3/ Benefits paid at the end of 1972. See Table 2, footnote 2.

4/ Ratio of annual benefits to average annual predisability earnings in 1967-71.

5/ See footnote 5, table 2 for nature of classification according to the Dictionary of Occupational Titles.

6/ See footnote 4, table 2, for States in each administrative region.

7/ See table 3 for derivation of diagnostic classifications.

8/ Administrative decision to review medical status.

9/ Ratio of annual benefit amounts (12 times "monthly benefits") to average earnings 1967-1971.

10/ Not shown in percent distribution are those age 62-64 in 1972, all of whom left the disability rolls for retirement or death or recovery.