

Disability Insurance: Program Issues and Research

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Monthly benefits to replace income lost because of disability have been payable under the Social Security Act since 1956. In recent years, the disability insurance program has been growing faster than anticipated. Benefit payments in 1975 were more than 4.5 times higher than they were in 1966. The number of persons receiving these benefits rose from 1.9 million to 4.4 million in the same period. Attention has thus been focused on the operation and administration of the program. This article outlines the dimensions of work disability in the United States and summarizes the characteristics of the 15.6 million adults aged 20-64 in the civilian noninstitutionalized population in 1972 with some limitation in the amount or kind of work they could do.

The DI program growth has manifested itself by increases in the number and rate of disability applications, a rise in the number of persons requesting reconsideration and hearings, and a decline in the number and proportion of benefits being terminated as a result of recovery, return to work, or rehabilitation. Research has highlighted several major causes underlying program growth: changes in economic conditions, awareness of program, and attitudes toward the program; changes in program provisions, including the broader definition of disability and higher benefit levels; changes in program administration, particularly the application of the criteria for determining the existence of disability; and changes in the incidence of disability.

CASH BENEFITS to replace income lost as a result of disability have now been payable under the social security program for 20 years. Beginning in 1956, the disability insurance (DI) program began providing benefits for disabled workers aged 50 or over and for dependent disabled children aged 18 or over who became disabled before reaching age 18. In 1958, benefits were added for dependents of disabled workers and, in 1960, protection was extended to all disabled workers regardless of age.

To qualify for benefits, workers disabled after age 30 must have worked in covered employment for at least 5 of the 10 years immediately preceding the onset of disability. Progressively fewer

years of coverage are required for younger workers, but the minimum is a year and a half. To be deemed disabled under the program, workers must be unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment that has lasted or can be expected to last for at least 12 months or to result in death.

The number of beneficiaries and total expenditures under the DI program have grown significantly since 1966, when the last major liberalization of the disability definition took effect. During the period 1966-75, the number of persons receiving DI benefits increased more than 230 percent, rising from 1.9 million to 4.4 million. A decade ago, DI benefit payments of all types amounted to \$1.8 billion. By 1975, this figure had risen more than four and a half times, to \$8.4 billion.

These increases have generated a number of concerns about the DI program during recent years. This article focuses on many of the major questions that have been raised and also describes how the Social Security Administration's disability research effort is attempting to provide answers.

The discussion is organized around the two major focal points of the disability research program: (1) delineation of the dimensions of disability within the total population, and (2) analysis related to the program itself. The major thrust of this article is a discussion of the latter topic since the next article in this issue deals extensively with the former. Nevertheless, it is necessary to outline briefly the dimensions of disability as currently perceived, since they affect and in some instances dictate the content of the other area of research.

DIMENSIONS OF DISABILITY

This area focuses on defining and describing the broad setting in which the DI program operates. Its objective is to answer certain basic questions, such as: How many disabled persons are

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there in the United States? Who and what kind of people are they? What happens to those who have become disabled? What is the cost of disability to the individual, his family, and society? What impact does disability have on work experience, labor-force participation, and income? What are the income sources of the disabled and how much does social security disability insurance contribute? The answers to these questions can provide an insight into the magnitude of disability, its ramifications to society, and the role of disability insurance in ameliorating the economic effects of disability

Since much of the desired information is not available from other sources, the Division of Disability Studies of the Office of Research and Statistics has been gathering detailed statistics by means of household interviews. Two major surveys of this type have been conducted in the past 10 years—one in 1966¹ and the most recent in 1972

In 1969, there was a followup survey involving persons who reported less than 10 years of disability when interviewed for the 1966 survey. A year later, in the 1970 Decennial Census, a 5-percent sample of persons aged 18-64 was asked a question on work-related health conditions. The Bureau of the Census approach resembled the Social Security Administration surveys in that the definition of disability was based on self-perception. It differed, however, in that a mail questionnaire was used and because health status was not a major issue in the questionnaire.²

The sample for the 1972 survey was a stratified sample of persons who identified themselves as disabled or not disabled in the 1970 Census. In 1974, a followup survey of the respondents to the 1972 survey was conducted.

In 1972, according to the survey, a total of 15.6 million persons, or 14.6 percent of the civilian noninstitutionalized population aged 20-64, had some work-related disability. Of these, 7.7 million were severely disabled, 3.5 million were occupationally disabled, and the remaining

4.4 million had secondary work limitations (they were able to work regularly but were limited in the type or amount of work they could do)

Among the severely disabled, 5.3 million reported that they were unable to work at all and 2.4 million said that they were unable to work regularly. Since the severely disabled constitute the pool of potential beneficiaries, this group is referred to exclusively in the following discussion, unless otherwise specified.

Older people, women, persons with limited education, and blacks were represented among the disabled in greater numbers than in the population as a whole (table 1). Analysis of data from the 1970 Decennial Census 5-percent sample reveals that, even after standardizing for age, educational attainment is associated with lower levels of disability and it also is an important factor in explaining racial differences in the proportion of the population that is disabled. Standardizing for age and education simultaneously explains 63 percent of the racial differences for men and 28 percent of these differences for women.³ Disabled workers were concentrated in the lowest status and lowest-paying occupations, representing a tenth of all workers but a sixth of laborers, farm workers, and service workers (including more than a third of all private household workers).

At the time of the survey, 74 percent of the nondisabled population, 43 percent of all disabled persons, and 14 percent of the severely disabled were employed. The nondisabled who were employed averaged 41 hours of work weekly, compared with 26 hours for the severely disabled and 36 hours for the occupationally disabled. As a result of short workweeks and intermittent employment, the disabled had much lower earnings than did the nondisabled. Among those with earnings in 1971, median annual earnings for the severely disabled were approximately one-third those of the nondisabled—\$2,311 and \$6,918, respectively (table 2).

Disability reduces income less than it does earnings because the former may include payments under various forms of public income maintenance and the earnings of other family members. The more severe the disability, of course, the

¹ For the results of that survey, see Reports Nos. 1-24 from the Social Security Survey of the Disabled, 1966, Office of Research and Statistics, 1967-74.

² For estimates based on the Census question, see Bureau of the Census, *1970 Census of Population, Subject Reports: Persons with Work Disability* (Final Report PC(2)-6C), January 1973.

³ See Mordechai E. Lando, "The Interaction Between Health and Education," *Social Security Bulletin*, December 1975, pages 16-23.

TABLE 1—Selected demographic characteristics of disabled and nondisabled persons aged 20-64, by disability status, 1972

Selected characteristics	Total	Disabled in 1972				Nondisabled		
		Total	Severe	Occupational	Secondary work limitations	Total	Recovered	Never disabled
Total number	106,268	15,550	7,717	3,473	4,360	90,718	9,228	81,490
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Sex</i>								
Men	47.4	45.2	38.5	55.3	49.2	47.8	50.0	47.6
Women	52.6	54.8	61.5	44.7	50.8	52.2	50.0	52.4
<i>Race</i>								
White	88.9	85.2	82.8	86.3	88.7	89.5	90.3	89.4
Black	9.6	13.6	15.9	12.9	10.1	8.9	8.7	8.9
Other	1.1	8.8	1.0	7.7	4.4	1.2	8.8	1.2
Not reported	5.5	4.4	3.3	1.1	8.8	5.5	1.1	5.5
<i>Age</i>								
20-34	39.2	19.2	12.0	19.7	31.9	42.8	33.3	43.8
35-49	31.8	30.0	26.3	34.7	32.8	32.1	32.7	32.0
50-59	20.7	31.2	34.2	31.7	25.6	18.9	25.8	18.1
60-64	8.2	19.5	27.6	13.9	9.7	6.3	8.2	6.1
Median age	40	60	63	48	44	58	43	58
<i>Education</i>								
Less than 8 years (including none)	8.4	21.9	28.4	17.8	13.7	6.1	6.4	6.0
8 years	7.5	12.3	15.5	10.0	8.6	6.7	10.0	6.3
Some high school	16.3	21.2	22.9	21.0	18.2	15.5	17.4	15.3
High school	39.9	29.6	23.6	31.3	38.7	41.7	41.5	41.7
College	26.9	14.2	8.6	19.6	19.7	29.1	23.3	29.8
Not reported	9	9	1.0	3	1.1	9	1.4	9

Source: Social Security Administration, 1972 Survey of Disabled and Nondisabled Adults

greater the reduction in income. Median unit income in 1971 for the nondisabled and the severely disabled was \$10,700 and \$4,400, respectively (table 3).⁴

Disability insurance benefits played a significant role as an income source. Severely disabled persons who were DI beneficiaries had median unit incomes of \$5,140, a figure 17 percent higher than the median for all severely disabled persons. Their median benefits were approximately \$1,830, or 36 percent of their total unit income. Severely disabled men who were beneficiaries had median unit incomes of \$5,300, compared with \$4,600 for all severely disabled men. Median DI benefits, for those men receiving them, amounted to \$2,000, or 38 percent of their median unit income.

How do the numerical estimates of the severely disabled obtained from the surveys compare with beneficiary counts from program records? The 1966 survey estimated the number of severely disabled persons at 6.1 million, and this figure rose to 7.7 million in the 1972 survey—an increase of 26 percent. In 1966, an average of 1.1 million

disabled adults⁵ were receiving DI benefits, compared with 2 million in 1972—an increase of 94 percent.

More closely parallel growth rates can be found by comparing the number of severely disabled men who reported inability to work at all with the number of adult men beneficiaries under the DI program.⁶ For this group, the 1972 survey data refer to persons aged 20-64 while the 1966 data are for persons aged 18-64. The 1972 program estimates are overstated in relation to the 1966 program estimates but are better matches to the 1972 survey data. The program data for 1972 include disabled widowers, for whom no comparable 1966 estimate is available since they were not covered at that time. More young people are included in the 1972 program data since the insured-for-disability requirement was liberalized for persons under age 31 by the 1967 amendments. Program data for both years are understated to

⁵ This figure represents an average of the numbers of disabled worker and disabled child beneficiaries at the end of 1965 and 1966.

⁶ Women were omitted since more of them lack the required 20 quarters of work experience during the 10 years immediately preceding the onset of disability.

the extent that it was not possible to obtain counts of disabled male children

This tabulation shows that, although the DI program appears to have covered more of the

Survey year	Disabled men unable to work at all		
	Survey population (in thou sands)	Disabled worker beneficiaries (in thou sands)	Disabled worker beneficiaries as a percent of survey population
1966 - - -	1 613	771	47.8
1972 - - -	2,304	1 237	53.7
Percent of disability insurance program growth - - -	42.8	60.4	-

disabled male population in 1972 than in 1966, almost half of the men in the survey who reported that they were unable to work were not receiving benefits. Considering the growth in the program that has recently been demonstrated, however, a greater proportion of the disabled population may ultimately be receiving benefits. One indication of this growing coverage is the fact that the proportion of severely disabled men (including those who could work intermittently) receiving disabled-worker benefits rose from 26.6 percent to 33.4 percent between 1966 and 1972.

PROGRAM OPERATIONS AND ISSUES

Program Growth

The rapid growth of disability insurance during recent years is the major program issue. The number of DI beneficiaries has increased dramatically—from 2.5 million in 1969 to 4.4 million in 1975—and the aggregate amount of these expenditures has risen even more—from \$2.5 billion in 1969 to \$8.4 billion in 1975.

Despite the magnitude of these benefits, they account for but a small proportion of the total payments and services received by the disabled. A recent study lists more than 85 public and private programs providing aid by means of transfer payments (cash benefits and income support), medical care and assistance, and services such as vocational rehabilitation. Expenditures in 1973 under the 30 programs involving transfer pay-

ments amounted to \$36 billion, of which about 15 percent represented DI benefits.⁷

The growth in the DI program has manifested itself in a number of ways. There have been increases in benefit payments and the number of beneficiaries on the rolls, a rise in the number and rate of disability applications, a significant increase in the number of persons requesting reconsideration and hearings and having their disability allowed as a result, and a reduction in the number and proportion of DI benefits being terminated as a result of recovery, return to work, or rehabilitation.

Much of the recent growth in DI benefit payments can be traced to the statutory increases in benefit levels and maximum taxable earnings and is shared by the old-age and survivors insurance (OASI) program.⁸ While OASI benefit payments increased by 142 percent over the period 1969-75, DI benefits rose by 236 percent. The number of disabled workers receiving benefits went from 1.4 million in December 1969 to 2.5 million in December 1975. This rise of nearly four-fifths took place during a period in which the number of people insured for disability increased by less than two-fifths—from 71.2 million to 84.5 million.

New DI awards rose from 345,000 in 1969 to 592,000 in 1975, an increase of 72 percent. This upsurge in awards can result from three causes: (1) more applications being filed, (2) a higher proportion of applications being allowed initially, and (3) more benefit allowances generated at the reconsideration and hearing levels. Studies show that the initial allowance rate has not increased (table 4). Available data reveal that most of the growth has resulted from an increase in initial applications and that the remainder is traceable to allowances at the secondary and tertiary levels.

⁷ See *An Evaluation of the Structure and Functions of Disability Programs, Year I Summary Report*, Bureau of Economic Research, Rutgers University, 1975.

⁸ Benefit levels rose by approximately 15 percent in January 1970, 10 percent in January 1971, 20 percent in September 1972, and 11 percent in June 1974. Beginning in 1975, benefits have been increased automatically on July 1 if the Consumer Price Index has risen by 3 percent or more during a base period. This provision led to an 8 percent increase in July 1975 and a 6.4-percent rise in July 1976. Maximum taxable earnings went from \$7,800 to \$9,000 in 1972, to \$10,800 in 1973, and reached \$13,200 in 1974. Since then, the amount has been subject to automatic provisions applicable when benefits increase. The 1975 level was \$14,100 and in 1976 it became \$15,300.

of consideration—through reconsiderations and hearings

Applications for disabled-worker benefits received in district offices show a strong upward trend for the entire period. A large increase in 1968 (26 percent) was associated with the liberalization of the insured-status requirements for younger persons.⁹ The 1969-74 period was one of rapid growth (77 percent) with the biggest yearly gain (25 percent) in 1974 doubtless linked to the beginning of the supplemental security income (SSI) program (title XVI of the Social Security Act). The medical requirements for participation in supplemental security income are the same as those for disability income (title II), and the federalization of aid to the permanently and totally disabled caused a very sharp increase in applications in 1974, particularly during the first quarter of the year. The number of applications in 1975 was 4 percent below the 1974 level but lies on the trend line for the earlier years.

Between 1969 and 1975, initial determinations rose from 687,000 to 1,227,000—an increase of 79 percent. Initial allowances, however, grew at a considerably lower rate (60 percent) since the percent allowed dropped during the period from 44.6 percent to 40.0 percent. The data indicate a negative correlation between the number of applications or initial determinations and the proportion of determinations that result in benefit allowances. The simple correlation of the proportion allowed to applications is -0.87 , the correlation to initial determinations is -0.89 . In other words, the proportion allowed decreases as initial determinations increase. It appears that as applications grow the number of technical denials—those arising from a lack of insured status—grow more rapidly. With technical denials excluded, initial substantive determinations rose from 558,000 to 995,000 (78 percent) and the percentage allowed dropped from 55 percent to 49 percent.

The biggest relative increase came from allowances on the secondary and tertiary stages. Allow-

⁹ In lieu of the regular requirement of 20 quarters of covered employment during the preceding 10 years, workers disabled before age 31 need coverage in only half the quarters between attainment of age 21 and the onset of disability, workers disabled before age 24 need coverage in half the quarters in the 3 years ending with the quarter in which disablement occurs. In both cases, a minimum of 6 quarters of coverage is required.

ances upon reconsideration in 1975 rose to 73,000, two and a third times the 1969 level, and those resulting from hearings, appeals, council actions, and court decisions rose to 38,000, or triple the 1969 rate. As a result, initial allowances represented 82 percent of all allowances in 1974, compared with 87 percent in 1969.

As chart 1 shows, an exchange seems to have occurred during the past decade between initial

TABLE 2—Selected labor-force characteristics, by disability status and sex, 1972

Selected characteristics	Total	Disabled in 1972				Non-disabled
		Total	Severe	Occupational	Secondary work limitations	
Total						
<i>Current labor-force status</i>						
Total number (in thousands)	106 268	15 550	7,717	3,473	4,360	90,718
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Not in labor force	26 8	51 9	81 8	22 2	22 7	22 5
In labor force	72 9	47 5	17 4	77 8	76 7	77 2
Employed ¹	69 2	42 9	14 0	71 4	71 5	73 7
Full time	56 1	29 3	5 7	45 0	58 7	60 6
Part time	12 2	13 1	8 1	25 5	12 2	12 0
Unemployed	3 7	4 6	3 4	6 4	5 2	3 5
<i>Occupation</i>						
Total number (in thousands)	73 558	6 677	1,079	2,480	3,118	66 880
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Professionals and managerial	27 1	19 7	19 4	18 5	20 6	27 9
Clerical and sales	23 5	19 4	18 4	19 4	19 7	24 0
Craftsmen and foremen	13 4	10 4	11 0	7 8	12 3	13 7
Operatives	16 5	19 4	11 7	21 1	20 8	16 1
Farmers	2 9	7 1	13 5	6 9	5 1	2 5
Service (laborers and private household)	15 9	23 3	25 7	25 5	20 7	15 0
<i>Weekly rate of pay</i>						
Total number (in thousands)	73 558	6 677	1,079	2,480	3 118	66,880
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Less than \$50	7 9	17 7	32 3	23 1	8 4	7 0
50-99	17 2	20 4	19 1	20 6	20 6	16 9
100-199	41 3	35 7	14 3	33 9	44 8	41 9
200 or more	27 6	17 3	11 6	14 3	21 7	28 7
Not reported	5 9	8 8	22 7	8 2	4 5	5 6
Median rate	\$145	\$115	\$65	\$106	\$132	\$147
<i>1971 work experience</i>						
Total number (in thousands)	106,268	15,550	7,717	3,473	4 360	90,718
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Not employed	24 4	45 8	69 5	21 1	23 5	20 7
Employed	75 5	54 1	30 3	78 9	76 5	79 1
Full time, 50-52 weeks	48 4	22 7	5 4	37 7	41 5	50 4
Full time 26-49 weeks	12 1	11 9	6 8	14 7	18 8	12 1
Part time, 26 weeks or more	8 1	8 1	6 6	14 2	5 9	6 1
Intermittent employment	6 7	9 3	10 0	9 3	8 1	6 8
Not reported	2 2	2 0	1 6	3 0	2 0	2 2
1971 median earnings for those with earnings	\$6 684	\$4,452	\$2 311	\$4 742	\$5,651	\$6 918

See footnotes at end of table

TABLE 2—Selected labor-force characteristics, by disability status and sex, 1972—Continued

Selected characteristics	Total	Disabled in 1972				Non disabled
		Total	Severe	Occupational	Secondary work limitations	
Men						
<i>Current labor force status</i>						
Total number (in thousands)	50 414	7 036	2,972	1 919	2 145	43 377
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Not in labor force	6 9	35 0	75 2	5 2	5 8	2 3
In labor force	92 9	64 5	23 8	94 7	94 0	97 5
Employed ¹	90 0	59 6	21 1	89 1	86 4	95 0
Full time	79 3	47 1	11 7	69 8	75 9	84 6
Part time	9 2	11 7	9 2	18 3	9 3	8 9
Unemployed	2 8	5 0	2 8	5 6	7 5	2 5
<i>Occupation</i>						
Total number (in thousands)	45,395	4 190	626	1 710	1 854	41 205
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Professional and managerial	31 3	22 0	25 9	20 9	21 6	32 2
Clerical and sales	12 0	14 6	10 6	16 3	14 5	11 7
Craftsmen and foremen	20 9	16 3	18 9	11 1	20 2	21 4
Operatives	17 6	19 8	11 6	24 7	17 9	17 4
Farmers	3 9	9 3	18 7	7 5	7 9	3 3
Service (laborers and private household)	13 4	17 5	14 0	19 1	17 1	13 0
<i>Weekly rate of pay</i>						
Total number (in thousands)	45 395	4,190	626	1 710	1 854	41 205
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Less than \$50	2 5	8 6	17 8	12 0	2 2	1 9
50-99	8 1	14 3	15 6	17 6	10 8	7 6
100-199	42 0	41 7	18 2	43 8	47 6	42 0
200 or more	41 0	25 9	19 0	20 2	33 5	42 4
Not reported	6 5	9 7	29 3	6 5	6 0	6 2
Median rate	\$186	\$148	\$106	\$155	\$171	\$189
<i>1971 work experience</i>						
Total number (in thousands)	50 414	7,036	2 972	1 919	2 145	43 377
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Not employed	5 8	27 7	56 1	7 2	6 5	2 3
Employed	94 0	72 2	43 7	92 8	93 5	97 5
Full time, 50-52 weeks	67 7	35 6	10 0	54 0	54 6	72 9
Full time, 26-49 weeks	14 5	19 2	13 8	22 0	24 3	13 7
Part time, 26 weeks or more	4 2	5 7	5 5	8 0	3 7	4 0
Intermittent employment	4 8	9 1	12 0	5 4	8 4	4 1
Not reported	2 8	2 6	2 3	3 4	2 4	2 8
1971 median earnings for those with earnings	\$9 088	\$8,280	\$5,607	\$8 390	\$7,902	\$9 379

See footnotes at end of table

TABLE 2—Selected labor-force characteristics, by disability status and sex, 1972—Continued

Selected characteristics	Total	Disabled in 1972				Non disabled
		Total	Severe	Occupational	Secondary work limitations	
Women						
<i>Current labor force status</i>						
Total number (in thousands)	55 854	8 514	4 745	1,554	2,215	47 341
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Not in labor force	44 9	65 9	85 9	43 0	39 0	41 1
In labor force	54 8	33 4	13 4	56 9	60 0	58 7
Employed ¹	50 4	29 2	9 5	49 6	57 1	54 2
Full time	35 0	14 7	2 0	14 5	42 0	38 7
Part time	14 9	14 2	7 4	34 3	14 9	15 1
Unemployed	4 4	4 2	3 8	7 3	2 9	4 5
<i>Occupation</i>						
Total number (in thousands)	28 162	2,487	453	770	1,264	25,675
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Professional and managerial	20 6	15 7	10 4	13 4	19 1	21 1
Clerical and sales	42 2	27 3	29 0	26 4	27 3	43 6
Craftsmen and foremen	1 4	5 5	5 5	5 5	6 1	1 5
Operatives	14 5	18 9	11 8	13 1	25 0	14 0
Farmers	1 3	3 3	6 2	5 5	9 9	1 1
Service (laborers and private household)	19 6	33 0	42 1	39 6	25 9	18 3
<i>Weekly rate of pay</i>						
Total number (in thousands)	28,162	2,487	453	770	1,264	25 675
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Less than \$50	16 9	33 0	52 3	47 6	17 2	15 3
50-99	31 8	30 7	24 0	27 4	35 1	31 9
100-199	40 4	26 1	8 8	11 8	41 1	41 8
200 or more	6 1	2 9	1 3	1 2	4 4	6 4
Not reported	4 8	7 4	13 4	12 0	2 4	4 6
Median rate	\$98	\$69	\$50	\$46	\$94	\$101
<i>1971 work experience</i>						
Total number (in thousands)	55,854	8 514	4 745	1,554	2,215	47 341
Total percent ¹	100 0	100 0	100 0	100 0	100 0	100 0
Not employed	41 1	60 8	77 9	38 1	39 9	37 5
Employed	58 8	39 2	22 0	61 9	60 0	62 3
Full time, 50-52 weeks	27 2	12 1	2 5	17 6	28 9	29 9
Full time, 26-49 weeks	9 9	5 9	2 4	5 8	13 5	10 6
Part time, 26 weeks or more	11 6	10 1	7 2	21 8	8 0	11 9
Intermittent employment	8 5	9 5	8 8	14 2	7 9	8 3
Not reported	1 6	1 6	1 2	2 5	1 7	1 7
1971 median earnings for those with earnings	\$4,061	\$2 397	\$1,206	\$1 510	\$3 835	\$4 225

¹ Includes those not reporting on employment or occupation
Source See table 1

allowances and allowances at various levels of further consideration. The growth in the proportion of persons denied at the initial level apparently was accompanied by an increase in awards at the secondary and tertiary levels. Nearly one-fifth of all allowances result from these procedures.

The number of people leaving the DI benefit rolls has decreased both absolutely and relatively

The major reasons for leaving the rolls are attainment of age 65 (44 percent of the total in calendar year 1974) and death (42 percent). Only a small proportion (11 percent) report recovery. Even in absolute terms, fewer people left the rolls as a result of recovery in 1974 (36,000) than in 1969 (38,000). The termination rate, crudely calculated as the number of beneficiaries leaving the rolls in a given calendar year as a proportion

TABLE 3—Unit income characteristics, by disability status, 1972

Marital status and source of income	Total	Disabled in 1972				Non disabled
		Total	Severe	Occupational	Secondary work limitations	
Total number (in thousands)	106 268	15 550	7,717	3 473	4 360	90,718
Median unit income						
Total....	\$10,160	\$6,420	\$4 380	\$7,688	\$9,045	\$10 678
Married men	11,766	8 235	6 084	9,054	10,840	12,157
Married women	11 258	8 699	7,144	9,351	10,611	11,573
Nonmarried men	5 567	2,680	1 632	4 590	4 039	6 201
Nonmarried women	3 935	2 178	1,666	3,295	3,941	4,452
Percent with unit income below poverty level						
Total	11 9	25 8	37 4	14 9	14 7	9 5
Married men	6 3	16 7	26 2	13 4	7 7	4 8
Married women	7 1	14 6	21 0	7 9	7 7	5 9
Nonmarried men	24 5	43 7	62 5	18 1	33 7	20 4
Nonmarried women	33 4	55 0	66 6	37 8	31 9	28 1
Percent of unit income from source						
Earnings	90 6	75 2	58 2	90 9	92 8	93 3
Public income maintenance programs	23 1	47 6	63 2	35 4	29 7	18 9
Social security	7 6	23 0	36 0	11 3	9 3	4 9
Veterans' payments	5 6	10 3	12 4	9 1	7 7	4 8
Government pensions	1 7	3 8	5 4	2 7	1 8	1 3
Public assistance	4 0	14 1	20 8	8 1	7 0	2 3
Private pensions.....	2 2	5 4	8 2	3 2	2 0	1 6

Source See table 1

of those on the rolls during the previous December, fell from 19 percent in 1969 to 16 percent in 1974

Program Administration

One possible cause of the growth in awards is that some disabled persons currently receiving allowances would have been denied them in earlier years. The apparent liberalization may result from changes in program administration, but it is difficult to measure subtle changes in the application of program definitions.

A major change in program administration occurred in 1972 when the procedure used by the Social Security Administration to check the disability determinations of State agencies was revised from a review of all determinations to a 5-percent "quality assurance" stratified sample. In addition, the Social Security Administration since then has no longer returned questionable allowances to the State agencies.

Variations in program administration by the more than 50 State agencies making disability determinations have been a source of concern over the years. A recent staff survey by the House Ways and Means Committee focused on this issue.¹⁰ This study was based on responses from all the State agencies to more than 30 questions covering almost all phases of agency operations. Among the variations discussed were "(a) number of cases processed per examiner, (b) overhead cost, (c) purchase of medical examinations, (d) denial rates, (e) processing time, (f) cases questioned by BDI, and (g) presumptive disability."

Of the sample review system, the report stated "A majority of the State agencies do not feel that the sample review for social security and SSI cases is giving them adequate guidelines as to national policy." Twenty-four States complained that there was no feedback or feedback of little value from the quality-assurance reports sent to the Bureau of Disability Insurance. Only nine States reported that they received feedback regarded as valuable.

Disability Appeals

Relatively speaking, the biggest increase in allowances resulted from the reconsideration and appeals process. In 1974, over 90,000 such awards were made, more than double the number in 1969.

In 1974, approximately 200,000 disability applicants who were denied benefits at the initial level filed an application for reconsideration. These applicants represented about 52 percent of the 383,000 denials for that year. Of those requesting reconsideration, 64,000, or 32 percent, were allowed DI benefits.

This experience reflects some change from preceding years. In 1969, for example, 30 percent of the denied applicants filed for reconsideration and 34 percent had their claims allowed. Although the proportion receiving allowances has fluctuated—increasing from 34 percent in 1969 to 40 percent in 1972 and then decreasing in 1973 and 1974—the larger number of applications denied is the factor primarily responsible for the larger

¹⁰ Subcommittee on Social Security, Committee on Ways and Means, U.S. House of Representatives, *Staff Survey of State Disability Agencies Under Social Security and SSI Programs* (Committee Print, 94th Congress, 1st Session), August 1, 1975.

TABLE 4—Disabled-worker applications, determinations, and awards, 1965-75

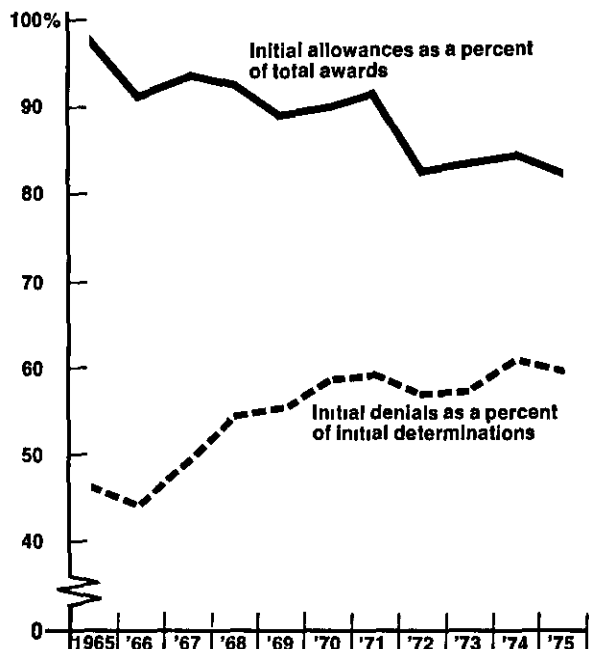
Year	Number of insured workers (in millions) ¹	Applications		Number of initial determinations (in thousands) ⁴	Initial allowances			Total awards		
		Number received (in thousands) ²	Rate per 100,000 insured workers		Number (in thousands)	Rate per 100,000 insured workers	As a percent of determinations	As a percent of total awards	Number (in thousands) ³	Rate per 100,000 insured workers
1965	54.16	547.7	1,011	460.3	247.7	457	53.8	97.7	253.5	468
1966	55.36	535.8	968	457.5	254.5	460	55.6	91.4	278.5	503
1967	56.28	573.2	1,018	556.7	282.1	501	50.7	93.6	301.4	536
1968	67.90	719.8	1,060	653.2	299.1	440	45.8	92.5	323.2	476
1969	71.24	725.2	1,018	687.5	306.6	430	44.6	88.9	344.7	484
1970	73.43	856.3	1,166	762.0	315.2	429	41.4	90.0	350.4	477
1971	75.32	936.3	1,243	929.4	380.1	505	40.9	91.4	415.9	552
1972	76.98	947.5	1,231	875.6	377.4	490	43.1	82.9	455.4	592
1973	79.10	1,067.5	1,350	967.6	412.1	521	42.6	83.8	491.6	622
1974	81.80	1,331.2	1,626	1,156.0	453.6	559	39.2	84.8	536.2	660
1975	84.54	1,284.6	1,520	1,227.2	490.3	591	40.0	82.8	592.3	714

¹ Based on average number of workers insured for disability at beginning and end of calendar year
² About 7 percent of the applications do not require a determination
³ 1965 and 1971 contain 53 report weeks, all other years, 52 report weeks
Awards reported for 12 calendar months
⁴ Includes all denials (including denials for lack of insured status and other

nondisability reasons)
⁵ Includes awards on appellate cases as well as initial allowances
⁶ The 1967 amendments liberalized the insured status requirements in case of disability onset before age 31
⁷ Preliminary estimate

number of reconsideration allowances in 1971-74. The increased rate of reconsideration filings may also suggest that the disabled have become more familiar with government programs and are exercising their right of appeal more frequently than in the past. Another factor may be the improvement in the relative value of benefits in the light of deteriorating economic conditions and increases in the benefit level.

CHART 1—Initial denial rates and initial allowances as a percent of total awards under the disability insurance program, 1965-75



Among those requesting a hearing, the proportion of allowances at the hearing level increased slightly, from an average of 38 percent for 1966-69 to 43 percent in 1972-73. Thus, in the 1970's, relatively more determinations were reversed at the hearing level than was the case in the late 1960's. The number of claimants filing for a hearing after a denial for reconsideration also rose during the 1970's along with the increase in the number of reconsideration requests. Consistently, about half of the claimants denied DI benefits at the reconsideration level have appealed their claims to the hearing examiners. Thus, the growth in the number of hearing allowances has been due both to the increase in the number of hearings requests and to the proportion of hearings allowed.

The large number of appeals and the rise in rates of allowance following appeal have led many persons to speak of an "appeals crisis." There are no indications that the number of appeals will decrease substantially. About 200,000 cases were reconsidered in 1974 and 54,000 hearings were decided in 1973.

One observer has concluded that the subjective nature of the disability definition in the law is the major cause of the appeals crisis.¹¹ He recommends a revision of the statutory definition to enable borderline disability cases to be decided

¹¹ Edwin Yourman, "Report on a Study of Social Security Beneficiary Hearings, Appeals and Judicial Review," in Subcommittee on Social Security, Committee on Ways and Means, U.S. House of Representatives, *Recent Studies Relevant to the Disability Hearings and Appeals Crisis*, 1975.

with less difficulty and with more uniformity. If the law cannot be amended in this respect, the development of more specific criteria in the regulations is suggested.

Rehabilitation and Recovery

A very small proportion of workers receiving DI benefits leave the rolls because they have recovered. In 1974, only 36,000, or 2 percent of the 2 million disabled workers with benefits in current-payment status at the end of 1973, had their payments terminated as a result of recovery. Recovery means either medical recovery—ceasing to meet the medical standards for disability—or continuing to meet the medical standards but engaging in substantial gainful activity (SGA). The SGA level is presently defined as earnings of \$230 per month.

To further encourage self-rehabilitation, a disabled person who returns to work is allowed a "trial work period" during which benefits continue as work capacity is tested. At the end of 9 months (not necessarily consecutive) his case is reviewed to see whether he is able to engage in substantial gainful activity. If such is the case, benefits are continued for 3 months longer, giving him a total of 12 benefit payments for months in which he works.

If, at the end of the trial period, it is determined that the individual cannot engage in substantial gainful activity (and provided that he has not improved from the medical standpoint), his benefits are continued. When a disabled person is participating in a trial work period, generally only months in which he is employed and earns more than \$50 are counted as part of the period. The trial work provisions do not apply to disabled widows and widowers, nor to individuals who become entitled to a second or subsequent period of disability. Those who recover from their disabilities before they have worked for 9 months, as well as beneficiaries who recover before they have tested their ability to work, may get their benefits for 3 months longer, including the month in which they recover.

Since the beginning of the DI program, applicants have also been referred to State vocational rehabilitation agencies for restorative services. To help enlarge the proportion of beneficiaries

participating in this effort, the social security trust funds have been used since 1966 to reimburse State vocational rehabilitation agencies for the costs of services.¹² Under this program, the Social Security Administration is currently spending more than \$80 million annually for vocational rehabilitation services. These payments cannot exceed 15 percent of the total benefits certified for payment to disabled beneficiaries during the preceding fiscal year.

In the 9-year period covering fiscal years 1966-74, more than 140,000 disabled beneficiaries were reported as having been rehabilitated. Currently, more than 20,000 beneficiaries are being rehabilitated each year, about half of them as a result of the trust fund reimbursement program.

Only about 4 out of 10 beneficiaries reported as rehabilitated under the trust fund program actually leave the disability benefit rolls for reason of recovery. Those who do not leave the rolls may have been rehabilitated only to the extent that they become capable of caring for themselves or participating in sheltered work. The net effect is that, out of the approximately 40,000 benefit terminations because of recovery within the year, only 8,000 (20 percent) have been rehabilitated. Among those who leave the benefit rolls because of recovery after rehabilitation in the trust fund program (and who do not die or reach age 65), about 1 in 4 return to the rolls within a few years of benefit termination.

The provisions in the law for financing the trust fund program stipulate that a sum not to exceed 15 percent of the previous year's disability benefits can be allocated for this program, but only as long as the funding results in a savings or a break even over costs. Savings result primarily from benefit terminations caused by recovery. Social Security Administration actuarial projections made in June 1974, covering experience through fiscal year 1973, indicate that savings due to benefit termination have exceeded costs by about 25 to 1.

The General Accounting Office recently challenged the figures on the results of rehabilitation services following a review of a 350-file sample of reportedly rehabilitated beneficiaries whose

¹² See Ralph Treitel, "Effect of Financing Disabled Beneficiary Rehabilitation," *Social Security Bulletin*, November 1975, and Ralph Treitel, "Recovery of Disabled After Trust Fund Financing of Rehabilitation," *Social Security Bulletin*, February 1973.

benefits had been terminated¹³ For more than half the cases (178), it was concluded that the beneficiaries had been improperly selected for services since they probably could have left the rolls even without rehabilitation services An additional 11 percent (38) of the beneficiaries were found to have returned to work without receiving such services The GAO report contends therefore that rehabilitation led to the termination of services in only 38 percent of the cases

Recomputing the cost-benefit ratio by applying the Social Security Administration actuarial formula to the 38 percent of cases where rehabilitation was effective reduces savings to only \$115 for every \$1 spent—a figure perilously close to the break-even point Moreover, the actuarial computations fail to account for persons who leave the beneficiary rolls after rehabilitation but then return at some later date

PROGRAM RESEARCH

Program Growth

Research conducted by the Social Security Administration has brought to light what appear to be several major causes for the growth in the DI program Included among these factors are

—Changes in economic conditions, particularly those affecting the labor market, have resulted in increases in the number and rate of disability applications and in the number and rate of reconsideration or hearing requests and may have also served to discourage people from leaving the benefit rolls

—Changes in public awareness of the DI program, in attitudes toward the program, and in concern for individual rights have probably affected program growth in much the same way

—Some program provisions—increases in benefits and changes in the SGA level, for example—may operate as incentives toward application and as disincentives toward benefit termination resulting from a return to work or rehabilitation

—Changes in program administration, particularly in the application of criteria for determining the existence of disability, may have occurred and resulted in allowances for the less severely disabled

Changes in economic conditions—Findings from two recent Social Security Administration

¹³ General Accounting Office, *Improvements Needed in Efforts to Rehabilitate Social Security Disability Insurance Beneficiaries*, May 1976

studies explore the relationship between unemployment and program variables One discovered a significant relationship between the unemployment rate and the number of persons applying for disability benefits—both as an absolute number and as a proportion of the population insured for disability—for the period 1962-73¹⁴ The other specified and estimated an eight-equation recursive model of the DI program for 1964-71 and found the unemployment rate to be significant in explaining both initial applications and the proportion of applications that result in awards¹⁵

Such studies currently are being expanded and updated The original regression fit in the Lando study for 1962-73, used to predict 1974 and 1975, underestimated 1974 DI applications by more than 200,000, or 15 percent, as a result of the upsurge in applications generated by the start-up of SSI In 1975, however, the error was only 2,000, or 0.2 percent

The average disabled-worker benefit rose from \$113 in December 1969 to \$216 in December 1975—a rise of more than nine-tenths The increasing proportion of earnings replaced by benefits may constitute a disincentive for disabled persons to continue in employment and encourage applications for DI benefits A study to examine benefit-replacement ratios by age-sex-race over time and to determine their effect on the “demand” for disability benefits is now underway

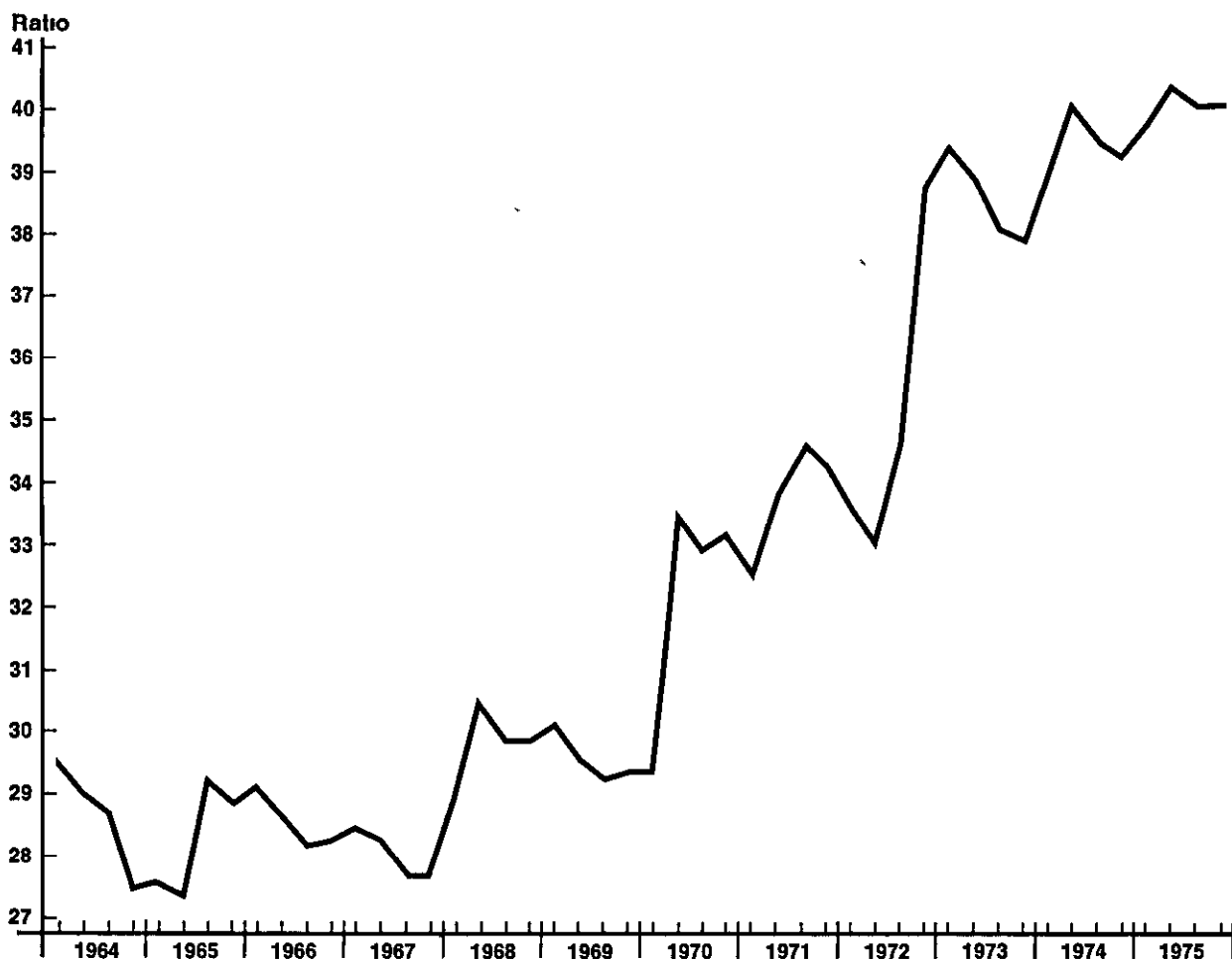
The relationship between average benefits paid to new beneficiaries and the spendable wages of a production worker with three dependents is a crude proxy for the replacement ratio Chart 2 shows that this ratio has fluctuated over time, rising from approximately 30 percent in the first quarter of 1964 to more than 40 percent in the last quarter of 1975 The big increase in the relative value of the benefit came at the end of 1972, after the initial upsurge in applications

High levels of unemployment and high benefit levels in relation to earnings both tend to depress the number of persons who leave the rolls recovered from their disability Another economic factor that could have had the same result is the

¹⁴ Mordechai E Lando, “The Effect of Unemployment on Applications for Disability Insurance,” *1974 Business and Economics Section Proceedings of the American Statistical Association*

¹⁵ John C Hamor, *Unemployment and Disability: An Econometric Analysis With Time Series Data* (Staff Paper No. 20), Office of Research and Statistics, 1975

CHART 2—Ratio of disabled worker average monthly award to average spendable earnings, quarterly, 1964-75¹



¹ Numerator is average monthly amount for disabled workers newly awarded benefits, denominator is spendable average earnings in current dollars for worker with three dependents.

from unpublished tables provided by the Bureau of Labor Statistics. Estimated Federal social security and income taxes are deducted from gross earnings to arrive at spendable earnings.

increase in the monetary definition of substantial gainful activity from \$140 a month to \$230 a month during recent years. A recent study of the labor supply of disabled workers reveals little response to changes in the SGA level.¹⁶ Perhaps this lack of reaction may reflect the very low amount of permitted earnings in relation to benefits and previous earnings levels.

Changes in public awareness and attitudes—During the 1960's and early 1970's the DI program underwent several important changes. The disability definition was broadened to mean an

impairment expected to last for at least 12 months rather than one expected to continue indefinitely or result in death, the insured-status requirements were liberalized in 1967 for persons under age 31, and in 1973 beneficiaries who had been on the rolls for at least 2 years became eligible for Medicare benefits. It takes time for the public to become aware of their entitlement to such benefits. Though responses to the disability surveys of 1966 and 1972 reveal that public awareness has increased, in the latter year only about half of all Americans aged 20-64 were aware of the DI program.

¹⁶ Paula Franklin, "Impact of Substantial Gainful Activity Level on Disabled Beneficiary Work Patterns," *Social Security Bulletin*, August 1976.

In other areas, mathematical growth models have been adapted to explain, for example, the spread of rumors and epidemics, and the diffu-

sion of new technology.¹⁷ A Social Security Administration experimental study has been started to determine whether such a model can explain the growth in the public's awareness of their rights under the DI program and their exercise of those rights.

It is quite possible that the work ethos in the US has weakened and that more people than previously are now willing to withdraw from the labor force and accept DI payments. Some observers have noted this possibility, especially on the part of older men. The labor-force participation rates for men aged 55-64, for example, declined from 83.4 percent in 1969 to 75.8 percent in 1975.¹⁸ This change resulted not only from more men accepting DI benefits, but also from more men electing reduced old-age benefits at ages 62-64. From December 1969 to December 1975, the number of retired-worker beneficiaries aged 62-64 increased by one-half—rising from 1.1 million to 1.7 million. The increasing number of DI applicants who refuse to take “no” for an answer and pursue their applications through several levels of adjudication is another reflection of a change in attitude.

Changes in incidence of disability—A recent study on “observed incidence rates”—that is, new disability benefit awards per 100,000 population at risk—examined the period 1967-74, with particular emphasis on 1970-74.¹⁹ It analyzed the growth in incidence from both the longitudinal and cross-sectional perspectives. The study findings indicate that the incidence rose from 482 per 100,000 at risk in 1970 to 670 per 100,000 in 1974, or 39 percent. The growth was more rapid for women, particularly black women, whose rate increased 61 percent.

¹⁷ See N. T. J. Bailey, *The Mathematical Theory of Epidemics*, Haffner, 1957; D. S. Ironmonger, *New Commodities and Consumer Behavior* (Department of Applied Economics Monograph No. 20), Cambridge University Press, 1972.

¹⁸ 1976 *Employment and Training Report of the President* (Department of Labor in cooperation with the Department of Health, Education, and Welfare), Statistical Appendix, table A-2, 1976.

¹⁹ Mordechai E. Lando and Aaron Krute, *The Growth in Observed Disability Incidence Rates 1967-74*, paper prepared for presentation at the Annual Meeting of the American Public Health Association, October 19, 1976. The rate was obtained by dividing the number of new awards by the difference between the insured population and the number with benefits in current-payment status at the end of the preceding year.

The study found that, among men, rates grew most rapidly for middle-aged groups—whites aged 50-54 and blacks aged 55-59—and the slowest growth in incidence was found for those under age 25. Among women, the youngest age group had the most rapid rate of growth. The increased incidence did not result from changes in the population at risk. “Standardizing” the population by using the same relative distribution in 1970 and 1974 indicated that there would have been a decrease in incidence rates rather than the observed 39-percent increase.

Some preliminary work by the Urban Institute attempts to apportion growth in the number of disabled beneficiaries in OASDI caseloads for the period 1969-74 to growth in (a) population, (b) the prevalence of disability, (c) eligibility—that is, insured status, and (d) participation—that is, eligible disabled persons opting to claim benefits.²⁰ The analysis was done separately for men and women aged 17-44 and 45-64. Greater participation was the major cause of growth for men, accounting for three-fourths of the increase and probably reflecting the changes in economic conditions discussed earlier. For younger men, population growth was also significant but prevalence showed a decline. For older men, 20 percent of the growth was due to increased prevalence.

For older women, about half the growth resulted from increased participation but prevalence and eligibility also made significant contributions. For women aged 17-44, growth in prevalence and eligibility together accounted for 80 percent of total growth with most of the remainder due to growth in population. For this age-sex group, unlike the other three, participation made no contribution at all.

Program Administration

A current cross-sectional study of 1971 disability determinations attempts to define a set of variables that explains the allowance process. Testing the parameters for earlier and later years will help determine whether there have been changes in the determination process. Three

²⁰ Alan E. Fechter and Charles O. Thorpe Jr., *Estimates of Disabled OASDI Beneficiaries* (working paper 977-04), Urban Institute, April 1976. Ten percent of those studied were OASI beneficiaries.

sets of variables are used (1) program variables, (2) demographic variables, and (3) some measures of the demand for benefits by the applicant

Program variables are those that should determine the applicant's eligibility. In addition to medical severity of disability, these variables include age, education, and occupational characteristics. In fact, it has been estimated that as many as 45 percent of all disability determinations are decided on the basis of vocational factors. Despite the fact that Congress, in enacting the 1967 amendments, attempted to "reemphasize the predominant importance of medical factors in the disability determination," the proportion of allowances based on vocational factors rose from 10 percent in 1960 to 16 percent in 1975.²¹

Demographic variables, which should not enter into the disability decision, include such factors as sex, race, and region (State) of residence. Measures of the demand for benefits by the applicant that are used in the study include such things as predisability earnings, predisability labor-force attachment, and the proportion of those in the particular age-sex-race group that apply for benefits.

A recent BULLETIN article explored the relationship of allowances to the demographic characteristics of the disabled in an attempt to find some of the causes underlying differences in disability allowances by sex and race.²² Among the causes found were differences in labor-force patterns (especially important for women and in explaining racial differences among women), educational background, and the age distributions of the insured and applicant populations. More than half the differences between the black and white applicants in the proportion allowed is explained by differences in their age distributions.

The lower proportion of claims allowed for black applicants probably reflects the greater tendency of the black insured population to apply for DI benefits. The number of applications per 100,000 persons insured for disability was 1,015 for white men, 1,760 for black men, 903 for white women, and 1,352 for black women.

²¹ Subcommittee on Social Security, Committee on Ways and Means, U.S. House of Representatives, *Disability Insurance—Legislative Issue Paper*, May 17, 1976, pages 16-17.

²² Mordechai E. Lando, "Demographic Characteristics of Disability Applicants: Relationship to Allowances," *Social Security Bulletin*, May 1976.

One suspicion frequently voiced is that increasing leniency in recent years in applying program definitions permits allowances to persons who would have been denied previously. In a 1975 study of impairment severity by the medical consultant staff of the Bureau of Disability Insurance, a sample of cases allowed during 1968-73 was reviewed to see whether there was some "deterioration" in the average medical severity of the impairment involved. Severity of impairment was determined by means of a five-point scale, and the ratings ranged from "no impairment" (a rating of 1) to "severe impairment meeting or equaling the medical listings" (a rating of 5). Cases in which the degree of impairment was determined to be less than the medical severity required for an allowance per se were further examined on the basis of additional vocational factors. The study found significant statistical variations between years but no consistent trend toward erosion of medical adjudicative standards during the period studied.

Ongoing research in the Social Security Administration points to differences among geographic areas in the proportion of eligibles who apply, the proportion of denied applicants requesting reconsideration, and the reconsideration reversal rates. It is, however, virtually impossible to determine whether these differences arise from State and regional variations in age, sex, race, and health status of the insured population or from differences in program administration by the State agencies.

In 1970, there were 12.9 disabled-worker beneficiaries per 1,000 persons aged 18-64 in the Nation as a whole, but by geographic division this figure varied from a high of 18.2 in the East South Central States to a low of 10.8 in New England (except that Puerto Rico was still lower at 5.9). The State ratios varied from a high of 26.9 per 1,000 in West Virginia to a low of 3.6 in Alaska (within the contiguous States, the low was 8.4 in Utah).²³ The low rate in Alaska undoubtedly can be traced to the self-selection process. Mainly healthy young people choose to settle there, and many of those who become disabled probably move to a lower-cost area.

The General Accounting Office recently resub-

²³ Phoebe H. Goff, "Disabled-Worker Beneficiaries Under OASDHI: Regional and State Patterns," *Social Security Bulletin*, September 1973.

mitted a sample of 221 previously adjudicated DI and SSI disability claims to 10 State agencies to determine "(1) if objective, uniform, equal treatment was being provided to all applicants and (2) that State agencies were operating in the most efficient manner"²⁴ A lack of uniformity was found in the adjudication of these claims In only 23 percent of the cases was there complete agreement among the 10 States as to disposition Three weaknesses in the administration of disability determinations having implications for the uniformity of decisions were identified According to the study, the Social Security Administration has not (1) provided the State agencies with clear, concise guidelines, and criteria, (2) assured that uniform training was provided to all State agency employees; and (3) assured that its three-tier quality assurance review was adequately implemented

In commenting on the report, the Social Security Administration agreed that the recommendations were basically sound and useful but questioned whether improved administration alone would significantly improve the equity and uniformity of decisions made from State to State

The GAO study focused on some problems of significant concern to the DI program Unfortunately, the study does not provide any definitive data on the real magnitude of interstate differences in disability-claim processing Obviously, more research involving an appropriate definition of uniformity and a better study design are needed

Disability Appeals

The Social Security Administration recently completed a study of the demographic and health characteristics of persons whose applications were initially denied and who subsequently appealed that decision—at any level of consideration beyond the initial application²⁵ The study was based on a cohort of disabled-worker applicants whose claims were initially decided in 1967 Analysis of the earnings and benefit experience

²⁴ Statement of Gregory J Ahart, director of the Manpower and Welfare Division, General Accounting Office, before the Subcommittee on Social Security, House Ways and Means Committee, February 3, 1976

²⁵ Ralph Treltel, *Appeal by Denied Disability Claimants* (Staff Paper No 23), Office of Research and Statistics, 1976

of this group through 1973 resulted in the following general conclusions

A somewhat greater rate of appeal was found for workers who were in their fifties, had dependent children, had musculoskeletal or respiratory disorders, and who resided in the East South Central States A greater rate of reversal upon appeal and entitlement to benefits was found for men, older workers, those with circulatory disorders, and those with greater mobility limitations

Based on reports of death within the 5 years following initial denial, those claimants who were allowed initially or who won reversal to an allowance through appeal were more severely disabled than those who did not contest denials

Few of the denied returned to work Four-fifths of the claimants who were initially denied in 1967 did not return to sustained competitive employment in the next 5 years About half of all the denied became entitled to disability benefits, or died within the next 5 years²⁶

Rehabilitation and Recovery

To evaluate the long-term effects of rehabilitation in general, the Social Security Administration and the Rehabilitation Services Administration (RSA) recently have tested the feasibility of linking rehabilitation case data with information from social security earnings and beneficiary records²⁷ Analyses are now being made on the subsequent employment, earnings, and benefit status through calendar year 1972 of all cases closed in fiscal year 1971 by the State vocational rehabilitation agencies

Evaluations of the impact of social and health programs often end prematurely when selection factors associated with a favorable outcome are identified but not controlled to determine whether they account for program effects A study employing the SSA-RSA data link finds that rehabilitants were more often gainfully employed and had higher 1972 earnings than unrehabilitated clients and persons referred but not accepted for services²⁸ Preliminary results of further analysis indicate that these differences in earn-

²⁶ *Ibid*

²⁷ Joseph Greenblum, "Evaluating Vocational Rehabilitation Programs for the Disabled National Long-Term Followup Study," *Social Security Bulletin*, October 1975

²⁸ Joseph Greenblum, *The Impact of Vocational Rehabilitation on the Disabled*, paper prepared for presentation at the annual meeting of the American Public Health Association, October 20, 1976

ings reflect the impact of rehabilitation services and experiences and are not merely the result of selection and self-selection factors involved in rehabilitation

Future Research Goals

Basically, the issues and research discussed earlier can be restructured into a trichotomy. The demand for disability insurance benefits (the reaction of the consumer—the disabled person—to changes in income, benefits, relative prices, and tastes); the supply of disability insurance benefits (how the program is administered by the Social Security Administration and the State agencies) and legislative changes, and the cost to society of disability (considered either from the “tax and transfer” approach as the amount of disability-associated benefits paid out and the loss of payroll and income taxes or from a national income viewpoint as a measure of the decrease in output resulting from disability)

Demand for disability insurance—The focus here is on the individual's decision to apply for disability benefits, that is, to choose between labor-force participation, perhaps on a reduced basis, and withdrawal from the labor force. This decision is influenced by a great many factors of a demographic, socioeconomic, medical, and other nature. Insight into this microdecision process can best be obtained from the series of surveys of the disabled that the Office of Research and Statistics has planned and published.

A major study of the decision to apply, drawing on the 1970 Decennial Census, the 1972 and 1974 Surveys of Disabled Adults, and relevant program data, should supply answers to many of the questions being asked in this area.

Supply of disability insurance—Once a person has decided to withdraw from the labor force and apply for DI benefits, then, in all likelihood, he has to be approved either for such benefits or for some form of public assistance. The second major focus of the research program is to analyze the factors that result in acceptance or denial

of a given applicant. One primary study is a multivariate analysis of a stratified sample of all 1971 disability determinations to explain the probability of an allowance. Among the important independent variables are health status, health and physical requirements of the occupation, education, previous work history, and the standard demographic characteristics.

If this project finds a set of variables that explain the allowance process, the parameters of the model can then be tested for stability. Given stability of the cross-sectional parameters over time, they can be used in a predictive model to project the future growth of the DI program.

Social cost of disability—The series of disability surveys provide much data on the costs of disablement to individuals and family units. These costs include not only direct expenditures for health services, but also indirect costs resulting from reduced labor-force participation, increased unemployment (due in part, perhaps, to discrimination against the disabled), and lower earnings (traceable to forced job changes made necessary by deteriorating health).

A study based on the 1967 Survey of Economic Opportunity concludes that disability reduced earnings in 1966 by \$23 billion, or approximately 6 percent of total earnings for that year.²⁹ The loss per sick adult was approximately \$1,500, more than one-third of earnings. A new estimate using more recent survey data is now needed, especially in light of the significant growth in the DI program over the past decade.

More important, a simultaneous econometric time series model of DI program costs is to be constructed using both program and survey data. This model will involve specifying and estimating a model for the purpose of simulating and projecting all variables affecting the financing of the DI program. It will require estimates of the number of workers insured for disability, benefit amounts for the population categories of interest, termination rates, and the volume of applications, awards, denials, and reversals.

²⁹ See Harold S. Luft, “The Impact of Poor Health on Earnings,” *Review of Economics and Statistics*, February 1975, pages 43-57.