

# The Disabled Widow

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*Almost 80,000 disabled widows and a few disabled widowers currently receive benefits under provisions of the 1967 social security amendments. Most are in their late 50's, and more live in the South than in the Northeast, North Central, or West. Most of the applications for disabled-widow benefits were from persons with diseases of the circulatory system. Ischemic heart disease was the most frequent primary diagnosis among the 1971 awards. Disabled widows who were awarded benefits differ from those denied in the limitations on their physical mobility and in the severity of their disabling condition. Because of the strictness of the program's definition, prognosis for recovery may be expected to be poor. In spite of the recommendations of two advisory councils to remove the restriction, the minimum age for disabled-widow benefits remains at age 50.*

*Since more women are in the labor force than ever before, more are earning disability coverage in their own right. Thus the number of disabled-widow beneficiaries should decrease as more women receive benefits as disabled workers.*

IN DECEMBER 1973, the Social Security Administration paid about \$8.8 million to about 79,000 disabled widows<sup>1</sup> and dependent widowers,<sup>2</sup> for an average monthly benefit of \$111. This study describes the group of disabled persons who became eligible for cash payments with the passage of the 1967 amendments to the Social Security Act.<sup>3</sup> Program statistics provide relevant demo-

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<sup>1</sup> Disabled surviving divorced wives are eligible for cash benefits if the divorce followed 20 years of marriage. In 1971, 195 such persons received benefits.

<sup>2</sup> Since dependent widowers (men who had been receiving more than half their support from their wives) comprise less than 2 percent of the disabled-widow/widower population, "widows" is used throughout this article to include both men and women, unless otherwise noted.

<sup>3</sup> The legislation provided reduced benefits for the disabled widows aged 50-59 and the disabled dependent widowers aged 50-61 of fully insured workers. The law specified that these persons must have been disabled either before their spouse's death, or before their youngest child reached age 18, or within 7 years of either event. The 1972 amendments lowered the early retirement age for men to age 60.

graphic and medical information from disability decisions made in 1971. The sampling rate of the statistics is 100 percent for awards and 10 percent for denials. (The technical note at the end of the article gives details of the sampling procedure, variances, and the differences between allowances and awards.)

The requirements for cash benefits for disabled widows differ in several ways from those for disabled workers. The social security program's definition of disability is more stringent for widows, requiring total inability to work as a prerequisite for entitlement. In contrast, disabled workers qualify for benefits when a significant impairment prohibits their "substantial gainful activity." Disabled widows become eligible for benefits at age 50; disabled workers have no age limitation. Entitlement for disabled-widow benefits is based only on medical evidence. In the eligibility determination for disabled workers, vocational factors such as age, education, and work experience are also considered. In addition, after the benefit is awarded, disabled-worker beneficiaries are permitted a 9-month trial work period, not provided the disabled-widow beneficiaries, to test their capacity to engage in substantial gainful activity.

Certain similarities exist in the provisions for both groups. For either a worker or his dependents to qualify for any disability coverage at all, the worker must be fully insured and have recent work experience.<sup>4</sup> For all applicants, the disability must be expected to last at least 12 months or to result in death. Vocational rehabilitation referral is available for all disability insurance applicants, including both allowed and denied disabled widows.

Although most widows are able to work, disabled widows often are not. The 1966 Social

<sup>4</sup> A worker is fully insured if he has 40 quarters of coverage, with at least one quarter of coverage for each year after 1950 (or the year in which he attained age 21, if later) and before the year in which insured status is determined. Recent work experience is defined as 20 quarters of coverage earned within the past 40 quarters. (For workers under age 31 these requirements are reduced.)

Security Survey of the Disabled reports that about 90 percent of the severely disabled widows<sup>6</sup> were not in the labor force. Nondisabled widows under age 65 had a nonparticipation rate of only 25 percent. Widows generally had a higher rate of labor-force participation than did all nondisabled women aged 18-64.<sup>6</sup>

By the end of 1971, more than 55,000 disabled-widow beneficiaries were receiving monthly cash payments. Between 15,000 and 23,000 have become entitled to benefits each year since payments began in March 1968 (table 1). The higher figure during the first 2 years of the program's implementation includes the backlog of persons who would have been eligible had the program been in effect before that time.

TABLE 1.—Disabled widows/widowers entitled to benefits, with benefits in current-payment status, and monthly amount, 1968-71

At end of year	Number entitled	With benefits in current-payment status	
		Number	Monthly amount (in thousands)
1968.....	22,507	21,563	\$1,558
1969.....	21,200	39,469	2,803
1970.....	15,609	49,281	4,041
1971.....	17,022	58,743	5,113

Source. Adapted from *Social Security Bulletin, Annual Statistical Supplement, 1971*, tables 65 and 98.

## DEMOGRAPHIC CHARACTERISTICS

### Age and Sex

In 1971, more than 45,000 persons applied for benefits as disabled widows. Of these, 17,000 were awarded benefits (table 2), producing an award rate of 37.4 percent. The rate was higher for the first 2 years of the program—47.5 percent and 43.0 percent, respectively—possibly another indication of the backlog of severe cases.<sup>7</sup>

<sup>6</sup> The definition of severely disabled used in the survey differs from the definition used in the administration of the social security disability insurance program. Those unable to work altogether or unable to work regularly are classified as severely disabled in the survey reports.

<sup>7</sup> Donald T. Ferron, "Disabled Widows," *Social Security Survey of the Disabled: 1966* (Report No. 22), Office of Research and Statistics, November 1972, page 4.

<sup>8</sup> Philip R. Lerner, *Social Security Disability Applicant Statistics, 1969*, Office of Research and Statistics, 1973, table 1.

TABLE 2.—General characteristics of disabled-widow/widower applicants, by benefits awarded and denied, 1971

General characteristics	Number			Percentage distribution			Award rate
	Total	Awarded	Denied	Total	Awarded	Denied	
Total.....	45,493	17,022	28,471	100.0	100.0	100.0	37.4
Age in 1971:							
Under 50.....	64	0	64	.1	0	.2	0
50-64.....	13,258	4,752	8,506	29.1	27.9	29.9	35.8
55 and over.....	32,171	12,270	19,901	70.7	72.1	69.9	38.1
55-59.....	26,200	9,753	16,447	57.6	57.3	57.8	37.2
60 and over.....	5,971	2,517	3,454	13.1	14.8	12.1	42.2
Median.....	57	57	57	-----	-----	-----	-----
Sex:							
Men.....	546	66	480	1.2	.4	1.7	12.1
Women.....	44,572	16,956	27,616	98.0	99.6	97.0	38.0
Unknown.....	375	0	375	.8	0	1.3	.
Race:							
White.....	30,831	14,422	16,409	67.8	84.7	57.6	46.8
Black.....	6,098	2,454	3,644	13.4	14.4	12.8	40.2
Other races.....	310	119	191	.7	.7	.7	38.4
Unknown.....	8,254	27	8,227	18.1	.2	28.9	.3

About 1 percent of disabled-widow applicants are dependent widowers. These disabled men had received more than half their income from their wives, who were fully insured workers. Data from the 1970 census indicate that men in the general population are less likely to be widowed than are women.<sup>8</sup> Between the ages of 45 and 64, 2.7 percent of the men (535,753) lost their spouse, compared with 13.4 percent of the women (2,902,296). In addition to the much smaller proportion of men becoming widowed, the disparity in the application rates between men and women may also occur as a function of different labor-market patterns for each sex. More men are economically independent, and more men have earned disability benefits in their own right. In the general population aged 18-64, only 9 percent of men with total work disabilities had never worked, in contrast to 23 percent of the women. The award rate for disabled-widow benefits for men is much lower than that for women: 12 percent versus 38 percent.

### Race and Geographical Distribution

Information on the racial composition of the disability applicant population is known only for persons who received awards; the racial data are missing for almost one-third of the denied applicants. About 85 percent of the widows entitled

<sup>8</sup> Department of Commerce, 1970 Census of Population, *Persons with Work Disability*, January 1973, table 2.

in 1971 are white; blacks comprise more than 14 percent (table 2). Data on work disability from the 1970 census indicate that blacks account for 14 percent of the widowed women in the age range 45-64. Twenty-two percent of the older widows (those aged 45-64) with a complete work disability for a year or longer, however, are black women.<sup>9</sup>

The 1970 census data and the social security statistics on disabled widows are not completely comparable. Differences in age categories and the differences between the standards of what constitutes severe disability to the reporting layman and to the diagnosing physician using medical criteria may partially account for any disparities between the percentage of black disabled widows awarded benefits in 1971 (14 percent) and the proportion of black severely disabled widows reported in the 1970 census (22 percent). Another possible explanation may be that many of these black women could not qualify for disability benefits because their husbands were not fully insured. The high unemployment rate among black men in relation to the general population at large, and the lower labor-force participation this group has experienced may have limited their ability to earn the necessary technical requirements to be eligible for disability coverage. However, the trend of greater prevalence of disability among blacks is confirmed by Social Security Administration disability program data. Just over 11 percent of the workers insured for disabled-worker benefits in 1970 were black, but they comprised 15 percent of those receiving disabled-worker benefits.

The geographic distribution of widows awarded disability benefits in 1971 indicates that among the four regions within the United States the greatest number reside in the South. The smallest number of applications and awards occur in the West. A comparison with general population figures confirms the variation among regions in the prevalence rate of disabled widows. In the South almost 2 of every 1,000 women aged 50-59 received benefits as severely disabled widows in 1971. The other three regions all had about the same prevalence rate—1.4 per 1,000 women aged 50-59 (table 3).

This regional variation is consistent with find-

<sup>9</sup> Department of Commerce, 1970 Census of Population, *op. cit.*, table 2.

TABLE 3.—U.S. female population aged 50-59 in 1970 and number of 1971 disabled widow benefits awarded and number per 1,000 women aged 50-59, by region

Region	Total female population	Disabled-widow benefits awarded in 1971	Number per 1,000 females
Total.....	10,965,330	16,791	1.5
Northeast.....	2,916,519	3,945	1.4
North Central.....	3,008,234	4,273	1.4
South.....	3,265,612	6,191	1.9
West.....	1,774,965	2,382	1.3

Source: Bureau of the Census, "General Social and Economic Characteristics," 1970 Census of Population, table 130, June 1972.

ings for all disability beneficiaries. "At the beginning of 1971, 13 in every 1,000 persons aged 18-64 were insured workers receiving a benefit because of disablement, and the prevalence rates varied considerably among the States and regions. The rates were lowest in New England (11 per 1,000) and highest in the East South Central States (18 per 1,000)."<sup>10</sup>

### Age of Onset and Mobility

Even though the disabled widow cannot receive benefits under the program until age 50, her disability may have begun years before. The age of onset—the age at which an illness becomes sufficiently disabling to meet the program's definition of severity—occurs below age 50 in a substantial number of cases.

The differences in the age of onset between those awarded and those denied benefits are quite striking (table 4). Of those denied, the physical and mental disorders of more than a third began

<sup>10</sup> Phoebe H. Goff, "Disabled-Worker Beneficiaries Under OASDHI: Regional and State Patterns," *Social Security Bulletin*, September 1973, page 14.

TABLE 4.—Age at onset of disabled-widow/widower applicants, by benefits awarded and denied, 1971

Age at onset	Total	Awarded	Denied	Award rate
Total number.....	45,493	17,022	28,471	37.4
Total percent.....	100.0	100.0	100.0	-----
Under 50.....	29.9	17.7	37.2	22.1
50-54.....	34.9	37.1	33.7	36.7
55 and over.....	34.0	45.2	27.3	49.7
Unknown.....	1.1	( <sup>1</sup> )	1.8	1.2
Median.....	53	54	52	-----

<sup>1</sup> Less than 0.05 percent.

before they were 50 years old. Less than 1 in 5 of the claimants awarded benefits was disabled before age 50.

The range of physical mobility (table 5) indicates another difference between the awarded and denied claimants among the applicants for disabled-widow benefits. Those awarded are generally more limited in their mobility: they are more likely to be housebound, confined either to a chair or bed, or a patient in a general hospital or an institution. They are also more likely to need the help of a person or a device to go outside the home.

Applicants who receive benefit awards seem to have later onset of disability and have greater functional limitations. The severity of the disabling condition is the major difference between those disabled widows awarded and those denied benefits, as the following tabulation shows. A

Basis for adjudication	Awarded	Denied
Total number.....	17,022	28,471
Total percent.....	100.0	100.0
Severe impairment.....	99.7	
Return to customary work.....		.5
Working despite impairment.....		.2
Failure to cooperate.....		1.8
Duration less than 12 months.....		.1
Minor impairment.....		87.5
Onset after prescribed time.....		2.5
Unknown.....	.3	7.3

small fraction of those who were denied benefits continue or return to work in spite of their impairment. A few applicants were denied benefits because their illness began more than 7 years after the spouse's death or the youngest child became age 18. Yet in almost 9 out of 10 cases denials were based on medical evidence that the impairment was minor by program standards.

In contrast, disabled women workers are denied benefits for a wider range of reasons. In about

TABLE 5.—Mobility status of disabled-widow/widower applicants, by benefits awarded and denied, 1971

Mobility status	Total	Awarded	Denied
Total percent.....	100.0	100.0	100.0
Confined in an institution.....	2.3	4.7	.9
Patient in a general hospital.....	.7	1.4	.2
Confined in bed at home.....	.7	1.4	.3
Confined in a chair.....	.8	1.8	.3
Housebound.....	1.3	2.2	.7
Able to go outside home with help of another person or device.....	10.1	17.4	5.7
Able to go outside home without help.....	76.4	64.6	83.5
Unknown.....	7.7	6.5	8.4

10 percent of the cases in 1969 the impairment was minor or was not expected to last 12 months. The majority of denials were because the women could still do their former work. In addition, about a quarter of the group had not met the earnings requirement.<sup>11</sup>

### Leading Diagnostic Groups and Primary Diagnoses

There are some similarities in the disorders that affect both awarded and denied groups. Diseases of the circulatory system rank highest among all applicants. Mental disorders and diseases of the musculoskeletal system each include about 12 percent of all the applicants in 1971. These three diagnostic groups account for more than 50 percent of the applications and about 60 percent of the awards (table 6).

The award rate in certain diagnostic groups is lower than that for others. Endocrine, nutri-

<sup>11</sup> Philip R. Lerner, *op. cit.*, table 43.

TABLE 6.—Diagnostic group and primary diagnosis of disabled-widow/widower applicants, by benefits awarded and denied, 1971

Diagnostic group and primary diagnosis	Total	Awarded	Denied	Award rate
Total number.....	45,493	17,022	28,471	37.4
Total percent.....	100.0	100.0	100.0	
Infective and parasitic diseases (000-136).....	1.4	2.0	1.0	53.5
Neoplasms (140-239).....	4.0	6.1	2.8	56.6
Endocrine, nutritional, and metabolic diseases (240-279).....	10.8	7.9	12.5	27.6
Mental disorders (290-315).....	14.0	17.0	12.2	45.5
Psychoses (290-299).....	5.1	8.8	2.9	64.6
Neuroses, personality, and other non-psychotic mental disorders (300-309).....	7.9	6.2	8.9	29.2
Diseases of the nervous system and sense organs (320-389).....	5.5	8.0	4.0	54.3
Diseases of the circulatory system (390-459).....	24.9	32.0	20.7	48.0
Active rheumatic fever and chronic rheumatic heart disease (390-398).....	1.2	2.2	.5	72.4
Hypertensive disease (400-404).....	6.9	2.0	9.8	10.7
Ischemic heart disease (410-414).....	11.6	20.4	6.4	65.6
Cerebrovascular disease (430-438).....	2.0	3.9	.8	75.3
Diseases of the veins and lymphatics, and other diseases of circulatory system (450-458).....	2.0	1.4	2.4	25.7
Diseases of the respiratory system (460-519).....	5.1	6.0	4.6	43.8
Diseases of the digestive system (520-577).....	4.1	2.3	5.2	20.7
Diseases of the musculoskeletal system and connective tissue (710-738).....	15.6	13.8	16.8	33.0
Arthritis and rheumatism, except rheumatic fever (710-718).....	11.3	10.2	12.0	33.7
Osteomyelitis and other diseases of bone and joint (720-729).....	3.0	2.6	3.2	33.0
Other diseases of musculoskeletal system (730-738).....	1.3	1.0	1.6	26.7
Accidents, poisonings, and violence (800-999).....	4.0	2.8	4.6	26.7
All other diseases.....	4.4	2.1	5.8	18.0
Unknown.....	6.2		9.9	

tional, and metabolic diseases and diseases of the digestive system are denied in more than 2 out of 3 cases. About 1 applicant in 10 with a primary diagnosis of hypertensive disease receives benefits. However, more than 6 in 10 applicants with ischemic heart disease (the result of inadequate blood supply to the heart) meet the disability program's definition of severity.

Among 1971 awards, ischemic heart disease leads as the most frequent primary diagnosis (20.4 percent). The arthritis and rheumatism category follows closely, representing 10.2 percent of the disabled widows awarded benefits in 1971. Psychoses (8.8 percent), diseases of the nervous system and sense organs (8.0 percent), and endocrine, nutritional, and metabolic diseases (7.9 percent) all account for important segments of awards.

### Recovery Indicators

What expectations of recovery are there for disabled widows? Most disabled-worker beneficiaries continue to receive benefits until retirement age or death.<sup>12</sup> From 1957 to 1966 only 11.5 percent left the rolls as recovered, that is, they no longer met the medical standards for disability or else they returned to work.<sup>13</sup>

Disability insurance program experience has provided extensive statistical information about medical conditions that are more prone to improvement, such as tuberculosis and mental illness.<sup>14</sup> For beneficiaries with these conditions, a date is scheduled—"diaried"—for medical reexamination after a specified period of time. The proportion scheduled for medical reexamination is considered in this study as a recovery indicator, a measure of the likelihood that the disability will significantly decrease in severity.

Table 7 indicates that medical reexaminations were diaried for 5 percent of the disabled widows awarded benefits in 1971, in contrast to 17 percent

<sup>12</sup> Disability benefits are automatically converted to retirement benefits when the beneficiary becomes age 65. This does not signify recovery from the disability but indicates attainment of retirement age.

<sup>13</sup> Phoebe H Goff, "Disabled Beneficiary Population, 1957-66," *Social Security Bulletin*, July 1971.

<sup>14</sup> Barbara Levenson and Jerome Green, "Return to Work After Severe Disability," *Journal of Chronic Disability*, vol. 18, 1965, page 170.

TABLE 7.—First recovery indicator for disabled-widow/widower and disabled-worker applicants awarded benefits in 1971

Recovery indicator	Total	Widows	Workers
Total number.....	432,919	17,022	415,897
Total percent.....	100.0	100.0	100.0
Medical reexamination:			
Not diaried.....	82.4	94.4	81.9
Diaried for reexamination.....	16.8	5.3	17.3
Hospitalized, not diaried.....	.8	.3	.8

of the disabled workers awarded benefits during the same period. Although the age range of the disabled workers is much wider (18-65) than that of the widows (50-61), the median age of disabled-worker awardees in 1971 is 55. The difference in percent diaried may be explained by the greater number of young persons among the workers. Disability is directly related to age, and the likelihood of recovery varies inversely with age.

Since any work activity denotes recovery, measures of the referral rate for widows to vocational rehabilitation agencies can serve as a second recovery indicator. State agencies refer about 9 percent of disabled-widow applicants to vocational rehabilitation agencies; they refer about 18 percent of the disabled-worker applicants. The denied applicants are more likely to be selected for referral than those awarded benefits, whether they are workers or widows (table 8).

These two recovery indicators point toward

TABLE 8.—Second recovery indicator for disabled-widow/widower and disabled-worker applicants, by benefits awarded and denied, 1971

Recovery indicator	Total	Awarded	Denied
	Widows		
Total number.....	45,493	17,022	28,471
Total percent.....	100.0	100.0	100.0
Vocational rehabilitation:			
Referred by State agency.....	8.9	6.3	10.4
Referred by district office.....	.1	(?)	.1
Not referred.....	78.0	81.0	78.2
Unknown.....	13.1	12.6	13.3
Workers			
Total number.....	804,976	415,897	389,079
Total percent.....	100.0	100.0	100.0
Vocational rehabilitation:			
Referred by State agency.....	17.6	13.3	22.3
Referred by district office.....	.1	.1	.2
Not referred.....	69.8	76.1	63.1
Unknown.....	12.4	10.4	14.5

<sup>1</sup> Less than 0.05 percent.

the probability that the disabilities of the entitled disabled widow will continue to be chronic. The prognosis for improvement appears poor.

## PROGRAM ISSUES

The 1971 Advisory Council on Social Security reaffirmed the 1965 Council's recommendation that benefits be provided to disabled widows regardless of age. The report notes the needs of a younger disabled widow may be even greater than those of an older disabled widow since the former's husband, having died at an early age, would have had less time to accumulate savings. Of the disabled widows entitled during 1971, 18 percent (about 3,000) were less than age 50 when they first became disabled. Medical evidence is not available to confirm what proportion of that number would have been entitled to benefits had there been no age restriction.

The 1966 Social Security Survey of the Disabled estimated that of the disabled widows aged 18-49, 91,000 could be categorized as severely disabled. About half of these received social security benefits under the survivor provisions for widows with dependent children in their care.<sup>15</sup> Therefore some younger disabled widows already receive support from the Social Security Administration under another program.

The 1971 Advisory Council also proposed raising the benefit level. Since the disabled widow has lost her means of support and cannot earn her own living, and yet has additional expenses resulting from her disability, her need for benefits is as great as that of aged widows. Currently, disabled-widow benefits range only from 50 percent to 71.5 percent of the spouse's primary insurance amount. Aged widows' benefits range from 71.5 percent to 100 percent. Aged widows and widowers receive an average of \$157 a month, or about 40 percent more than disabled widows and widowers.

In the future will the disabled-widow program increase in size, become stable, or gradually diminish in the numbers entitled each year? Any further legislation affecting this particular group will be reflected in numbers served and dollar amounts spent. For example, eliminating the

minimum age requirements would increase entitlements. Similarly, the 1972 legislation that lowered the age requirement to age 60 for reduced survivor benefits should decrease the number of disabled widowers on the rolls because the benefits of those aged 60-61 will convert to survivor benefits.

The long-term trend suggests that the disabled-widow program will diminish in numbers as more women participate in the labor market, earning disability coverage as workers in their own right. About 50 percent more women had their own disability insurance coverage in 1972 than in 1968, in contrast to 27 percent more men (table 9). A great proportion of the increase was due to the 1967 legislation that reduced the insured-status requirement to allow disability coverage for younger workers. Thus, the proportion of the young increased in relation to older groups. In 1968, women under age 35 comprised 28 percent of all women covered in the event of disability; in 1972, they were 47 percent of the total. Similarly, in 1968, men under age 35 represented 32 percent of disability-insured men, although in 1972 the proportion of men in that age category increased to about 45 percent.

Much of this change is a function of legislation as well as the high birth rates of post World War II that followed the low birth rates of the depression. Some change is also attributable to an increase in the number of women participating in the labor force. In 1968, of all persons covered for disability benefits, women accounted for 29.5 percent. By 1972, they comprised 33.5 percent. Over the past 20 years the proportion of women aged

TABLE 9.—Workers insured in event of disability, by sex and age, 1968-72

[In millions, estimated]

Age attained at beginning of year	1968	1969	1970	1971	1972
<b>Men</b>					
Total number.....	40.05	47.79	48.90	49.83	50.85
Under 35.....	12.84	20.41	21.28	22.00	22.76
35-49.....	15.42	15.35	15.38	15.36	15.38
50-64.....	11.77	12.03	12.24	12.47	12.71
<b>Women</b>					
Total number.....	16.81	22.33	23.46	24.65	25.64
Under 35.....	4.63	9.81	10.57	11.36	12.00
35-49.....	6.24	6.32	6.45	6.60	6.70
50-64.....	5.95	6.20	6.44	6.69	6.94

Source: Adapted from *Social Security Bulletin, Annual Statistical Supplement, 1971*, table 48, p. 66.

<sup>15</sup> Donald T. Ferron, *op. cit.*, page 6.

14 and over either working or looking for work has risen from 29 percent of the labor force in 1950 to about 40 percent in 1970.<sup>16</sup>

More striking are the changes in labor-force participation by married women with husbands present. The rate increased from 14 percent in 1940 to 21 percent in 1950, to 31 percent in 1960, and to 40 percent in 1970.<sup>17</sup> Therefore more married women are earning insurance protection against disability in their own right. Over the next 20 years, then, the proportion of women receiving disabled-worker benefits should increase and the proportion receiving disabled-widow benefits decrease.

## Technical Note\*

### Sample Design

The disability applicant statistical program reflects disability decisions taken during the year. This article discusses two categories of applicants for benefits—disabled workers and disabled widows and widowers—and two types of decisions—awards and denials.

The sources of the data are the disability determination form and the administrative award record. Selected characteristics such as age, sex, race, education, and occupation of the applicant, as well as medical information underlying the disability and other relevant items, are collected and then processed to produce the desired tabulations. An allowance, recorded on the disability determination form, indicates that an individual is disabled because of an inability to work by reason of a physical or mental impairment. An award, summed in the administrative award record, is a determination that a disabled individual is entitled to monthly benefits that may be paid immediately (current-payment status) or withheld (deferred-payment or conditional-payment status).

<sup>16</sup> Department of Commerce, 1970 Census of Population, *General Social and Economic Characteristics, United States Summary*, June 1972.

<sup>17</sup> Donald Cymrot and Lucy Mallan, *Wife's Earnings as a Source of Family Income* (Research and Statistics Note No. 10), Office of Research and Statistics, April 30, 1974.

Although every disability award must be preceded by an allowance, all allowances are not followed by awards. Therefore the allowance universe is always greater than the awards universe. An award is made following an allowance unless other factors of entitlement are not met. These allowance-without-award cases generally fall into two groups. First are the statutorily blind individuals who are working though severely disabled. Second are the joint social security-railroad retirement allowances in which the social security insured-status test is not met for monthly benefits. In these cases the Social Security Administration allowance functions mainly to preserve entitlement to retirement benefits at a later date.

In this study, data on disabled-worker awards and on denials for both applicant categories were based on samples of actions taken during 1971. Data on disabled-widow or widower awards were based on all actions taken during the year. The sampling rate for denial actions was a uniform 10 percent for both applicant categories, and the sampling rate for disabled-worker awards varied by State and depended on the number of award actions in the State for the preceding year.

### 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) in order to make the estimated total agree with previously published award totals. The ratio estimates for awards were done separately for each State for workers but only nationally for widows. For denials, the ratio estimates were on a national basis for all categories.

### Sampling Variability

Because of 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, rather than a specified sample or samples, had been used for the tabulations. The standard error is a measure of sampling variability. The chances are about 67 out of 100 that the difference due to sampling variability between a sample estimate and the figure that would have been obtained from a tabulation of all records is less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error and about 99 out of 100 that it is less than two and one-half times the standard error. The standard error of an estimate depends on sample design elements, such as the method of sampling and the sample size, and on the estimation process.

Table I provides approximate standard errors for estimates of the number of persons with given characteristics for disabled-widow and widower denied applicants. The estimates and approximate sampling variability shown are for the inflated sample data. Linear interpolation may be used for estimated numbers not shown in the table.

The reliability of an estimated percentage depends on both the size of the percentage and the size of the total upon which the percentage is

TABLE I.—Standard errors of estimated number of persons

Size of estimate	Standard error
100.....	30
250.....	50
500.....	70
750.....	85
1,000.....	95
5,000.....	195
7,500.....	230
10,000.....	250

based. Table II shows the approximate standard error for percentages of persons with given characteristics for denied disabled-widow applicants. The body of the table is expressed in percentage points. The bases shown are expressed in terms of the inflated sample data. Linear interpolation may be used for percentages and base figures not shown in these tables.

TABLE II.—Standard errors of estimated percentage of persons

Size of base	Estimated percentages				
	2 or 98	5 or 95	10 or 90	25 or 75	50
250.....	2.7	4.2	5.8	8.4	9.7
500.....	1.9	3.0	4.1	6.0	6.9
750.....	1.6	2.5	3.4	4.9	5.6
1,000.....	1.4	2.1	2.9	4.2	4.9
5,000.....	.6	1.0	1.3	1.9	2.2
7,500.....	.5	.8	1.1	1.5	1.8
10,000.....	.4	.7	.9	1.3	1.5

### Nonsampling Variability

The data in the survey are also subject to nonsampling variability. This type of variability occurs in every survey regardless of whether it is a sample survey or a complete (100 percent) enumeration. Random errors in the coding of diagnosis and occupation are among the types of nonsystematic nonsampling errors present in this survey. In addition, there may be systematic errors such as one coder always erroneously coding an occupation or diagnosis. Other types of nonsampling errors occur when records are not available for processing, records are incomplete, etc.