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# Effect of Substantial Gainful Activity Level on Disabled Beneficiary Work Patterns

by Paula A. Franklin and John C. Hennessey\*

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Analysis of disabled beneficiaries' earnings records from the 1-percent Continuous Work History Sample over a 15-year period indicates that increases in the substantial gainful activity (SGA) level in 1966, 1968, and 1974 were not followed by incremental increases in beneficiary earnings. This article examines the flow of disabled-worker beneficiaries through the disability program in relation to their work history and earnings patterns. The recovery rate dropped steadily during the late 1960's and early 1970's. The earnings patterns indicate that about 10 percent of the beneficiaries were employed; about 3 percent had earnings above the SGA level. Median annual earnings remained well below \$1,000, whatever the SGA level. Findings of the study suggest that policy considerations on changing the SGA level should not center on the implications for marginal part-time employment. Most of the evidence from beneficiary work and earnings patterns indicates that the SGA level has not operated as an effective work incentive. The program-flow analysis suggests that the allowance process rather than termination of benefits for recovery after sustained work holds the key to controlling program growth.

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The effectiveness of work incentives in the disability insurance program under the Social Security Act continues to be a major concern in discussions about program structure and administration. The substantial gainful activity (SGA) level<sup>1</sup>—the amount of earnings sufficient to cause a medically nonrecovered individual to lose disability benefits—has been frequently characterized as a work disincentive, a major factor in inhibiting work and rehabilitation. As early as 1974, a congressional committee report noted that the major social

security benefit increases in the late 1960's and early 1970's had intensified the disincentive effect of the disability insurance program's earnings limit of \$140 a month.

In 1968 allowable earnings of \$140 a month were not too far out of line with the average benefits of about \$180 a month for a disabled worker with a wife and one child. Today that same family would be receiving benefits of about \$300 a month and the cutting off of those substantial benefits when the \$140 a month earning level is exceeded can hardly be encouraging to work effort.<sup>2</sup>

In 1974, when the SGA level was raised to \$200 a month, the average benefit for a disabled-worker beneficiary was \$205.68, a figure substantially higher than the 1968 average benefit of \$111.50.<sup>3</sup> The wide gap

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\* Division of Disability Studies, Office of Research and Statistics, Social Security Administration. The authors wish to acknowledge the assistance of Kay Allan, Michael Bostron, Florence Buffington, Barry Bye, Karol Krause, and Kay Merrick.

<sup>1</sup> The SGA level, which was \$100 a month in 1961, was raised to \$125 in July 1966, \$140 in December 1968, \$200 in August 1974, \$230 in January 1976, and \$240 in July 1978. Earlier this year the level was raised to \$260 a month for 1978, retroactive to January 1, and to \$280 monthly for 1979. All the tables and charts accompanying this article show the changes effective the year they were made, but the impact of the changes should not be expected to be apparent until the following year.

<sup>2</sup> Committee on Ways and Means, U.S. House of Representatives, **Committee Staff Report on the Disability Insurance Program**, July 1974. Data compiled by the Social Security Administration gives the average family benefit for a disabled worker with a wife and one child as \$230 a month in 1968 and \$410 in 1974.

between allowable earnings and benefits continues to be regarded as discouraging to work efforts.

The focus on work incentives has recently been sharpened by reductions in the recovery rate—the proportion of beneficiaries leaving the rolls because of medical recovery or the regained ability to earn above the SGA level. The range of recovery rates fell from 2.7–3.2 percent during the years 1967–71 to 1.5–2.2 percent in 1972–76.<sup>4</sup>

This decline is set against a background of sharp recent growth in the disability program. Benefit payments in 1975 were more than four and one-half times higher than they had been in 1966, and in the same period the number of persons receiving benefits rose from 1.9 million to 4.4 million. Program growth has manifested itself in increases in the number and rate of disability applications, a rise in the number of persons requesting reconsideration and hearings, as well as in declines in the number and proportion of beneficiaries with benefits terminated as a result of recovery, return to work, or rehabilitation. Attention has thus been directed to the operation and administration of the program.<sup>5</sup>

A 1976 study on the impact of substantial gainful activity, which examined administrative records for a period of 12 years, found that the earnings of disabled-worker beneficiaries did not respond to SGA-level increases as those of retired-worker beneficiaries responded to the earnings test.<sup>6</sup> Increases in the SGA level in 1966 and 1968 did not increase labor-force participation markedly. Disabled-worker beneficiaries, unlike aged beneficiaries, do not appear to control and increase their earnings by small incremental amounts in response to changes in the program's earnings limits. Only about 10 percent of all disabled-worker beneficiaries were employed in a given year. The low median earnings of such individuals, which never amounted to more than \$700 for any year during the period, suggest a pattern of part-time, intermittent labor-force participation.

<sup>3</sup> *Social Security Benefits by State and County*, Office of Research and Statistics, Social Security Administration, 1968 and 1974.

<sup>4</sup> See Ralph Treitel, *Disability Beneficiary Recovery*, a forthcoming report from the Office of Research and Statistics.

<sup>5</sup> See Mordechai E. Lando and Aaron Krute, "Disability Insurance: Program Issues and Research," *Social Security Bulletin*, October 1976.

<sup>6</sup> See Paula A. Franklin, "Impact of Substantial Gainful Activity Level on Disabled Beneficiary Work Patterns," *Social Security Bulletin*, August 1976. Retired workers aged 65 and over currently may earn \$4,500 a year without losing any benefits; \$1 in benefits is withheld for every \$2 in earnings above that figure. See Kenneth Sander, *The Effects of the 1966 Retirement Test Changes on the Earnings of Workers Aged 65-72* (Research and Statistics Note No. 1), Office of Research and Statistics, Social Security Administration, 1970.

## Work Patterns

This article examines the work history and earnings patterns of disabled-worker beneficiaries under the social security program. Sustained and recent attachment to the labor force has always been a technical requirement for coverage. For benefits to be payable, severe, chronic illness and the inability to earn as much as the SGA level of income are also required.<sup>7</sup> The levels of labor-force participation of disabled-worker beneficiaries, benefit-termination patterns, and policy options regarding changes in the SGA earnings limit are the major topics for inquiry and discussion here.

The findings are based on 15 consecutive years (1961–75) of employment and earnings data for all men disabled-worker beneficiaries derived from the 1-percent Continuous Work History Sample (CWHHS).<sup>8</sup> The analysis has been developed in two different, complementary directions. The first analytic technique involves the investigation of changes in employment patterns as they relate to disabled-worker beneficiary status. The second evaluates detailed information on earnings levels in relation to the SGA level and recovery.

Historically, the labor-force participation of women has been much lower than that of men and has been characterized by intermittent employment. The number of women in the sample is therefore quite small. As a consequence, this analysis has been limited to men disabled-worker beneficiaries. The complexity of the analysis of labor-force participation also made necessary the selection of a sample size that did not permit partitioning for demographic variables such as age. Instead, the first category chosen was beneficiary status.

The program flow of individuals from nonbeneficiary to beneficiary status ("new beneficiary") and, subsequently, from new beneficiary status to another status ("full-year beneficiary," "retirement" or death," or "recovery") is structured in the form of a sequence of transition matrices to measure the percentage of individuals who remain in the same status or change to some other status from one year to the next. Work status is subdivided into three levels of labor-force participation: No employment, indicated by no quarters of coverage during the year; marginal employment, meas-

<sup>7</sup> Disability is defined under the program as the inability to engage in any substantial gainful activity by reason of a medically determinable physical or mental condition that has lasted or is expected to last for a continuous period of not less than 12 months or to result in death. To be insured in the event of disability, a worker must have fully insured status and at least 20 quarters of coverage during the 40-quarter period ending with the quarter in which the worker became disabled.

<sup>8</sup> For further description of the data sources, see the technical note on page 16.

<sup>9</sup> At age 65, disabled-worker benefits are converted to retired-worker benefits.

**Table 1.**—Number and percentage distribution of men disabled-worker beneficiaries, by beneficiary and work status for 2-year periods, 1961–75

Beneficiary and work status in first year	Total number	Total	Percentage distribution, by beneficiary and work status <sup>1</sup> in second year								
			New beneficiaries			Full-year beneficiaries			With benefits terminated for—		
			No work	Little work	Sustained work	No work	Little work	Sustained work	Recovery	Non-beneficiary status	Retirement or death
<b>1961–62:</b>											
New beneficiaries:											
No work	92,000	100.0				82.3	3.7	1.9	0.4	11.7	
Little work	46,900	100.0				72.3	10.9	2.8	.6	13.4	
Sustained work	21,800	100.0				48.6	12.4	17.4	2.3	19.3	
Full-year beneficiaries:											
No work	391,000	100.0				82.2	1.6	.7	.4	15.1	
Little work	16,300	100.0				59.5	17.2	5.5	9.8	8.0	
Sustained work	11,900	100.0				21.9	16.8	38.7	14.3	8.4	
With benefits terminated for—											
Recovery	3,300	100.0								87.9	
Nonbeneficiary status	3,686,800	100.0	2.2	1.3	0.7					95.2	
Retirement or death	371,900	100.0								100.0	
<b>1962–63:</b>											
New beneficiaries:											
No work	79,900	100.0				82.9	3.9	1.1	.6	11.5	
Little work	48,700	100.0				73.9	9.9	2.5	1.4	12.3	
Sustained work	26,300	100.0				50.2	13.7	16.7	4.6	14.8	
Full-year beneficiaries:											
No work	453,900	100.0				82.8	1.7	.6	.4	14.5	
Little work	22,200	100.0				57.2	19.8	8.1	5.9	9.0	
Sustained work	15,100	100.0				26.5	7.3	35.1	17.9	13.3	
With benefits terminated for—											
Recovery	5,900	100.0	1.7	1.7						6.8	
Nonbeneficiary status	3,512,700	100.0	2.4	1.5	.6					89.8	
Retirement or death	475,100	100.0								94.9	
<b>1963–64:</b>											
New beneficiaries:											
No work	85,700	100.0				85.0	3.3	1.6	.7	9.5	
Little work	51,000	100.0				72.4	9.4	3.5	2.4	12.4	
Sustained work	22,100	100.0				52.0	12.7	14.9	2.7	17.7	
Full-year beneficiaries:											
No work	508,100	100.0				84.4	1.7	.6	.6	12.7	
Little work	24,700	100.0				47.4	19.8	8.9	15.4	8.5	
Sustained work	16,200	100.0				25.9	9.9	35.8	20.4	8.0	
With benefits terminated for—											
Recovery	8,400	100.0	3.6	1.2	1.2					91.7	
Nonbeneficiary status	3,339,900	100.0	2.3	1.4	.8					94.9	
Retirement or death	577,700	100.0								100.0	
<b>1964–65:</b>											
New beneficiaries:											
No work	78,200	100.0				85.9	4.9	1.4	1.2	6.7	
Little work	47,300	100.0				73.8	9.3	5.3	3.0	8.7	
Sustained work	27,900	100.0				49.1	15.8	18.6	2.5	14.0	
Full-year beneficiaries:											
No work	566,000	100.0				82.8	1.9	1.0	.6	13.8	
Little work	25,600	100.0				42.6	23.1	11.7	13.3	9.4	
Sustained work	17,500	100.0				18.9	12.0	41.7	19.4	8.0	
With benefits terminated for—											
Recovery	12,600	100.0		.8	4.0					89.7	
Nonbeneficiary status	3,177,800	100.0	2.6	1.7	1.1					93.9	
Retirement or death	683,600	100.0								100.0	

<sup>1</sup> See footnote at end of table.

ured by 1 or 2 quarters of coverage; and sustained employment, defined as 3 or 4 quarters of coverage.<sup>10</sup>

All men were assigned by work status and beneficiary status for each year and the year preceding it within the study period. The transition matrices in table 1 were generated from these data for each 2-year

<sup>10</sup> From 1961 to 1975, a calendar quarter of coverage was credited when a worker was paid \$50 or more in nonfarm wages or salary. For farm wages and salaries, a person was deemed to have 1 quarter of coverage for each \$100. Self-employed persons were deemed to have 4 quarters of coverage for \$400 or more of reported earnings. Otherwise, no quarters were assumed to have been acquired. Combinations also occur.

period from 1961 to 1975. These matrices provide the analytic framework to examine the interaction between work, disability, and benefit termination over a period of time.<sup>11</sup> The structure of these categories is based on the fact that much of the data from the CWHS is yearly data. In particular, the beneficiary status of an individual is given for January 1 of each year. The data of entry into the program or exit from it is generally not known. Thus, the analysis focuses mainly on the

<sup>11</sup> For further explanation of the analytic technique, see the technical note.

**Table 1.—Number and percentage distribution of men disabled-worker beneficiaries, by beneficiary and work status for 2-year periods, 1961-75—Continued**

Beneficiary and work status in first year	Total number	Total	Percentage distribution, by beneficiary and work status <sup>1</sup> in second year								
			New beneficiaries			Full-year beneficiaries			With benefits terminated for—		
			No work	Little work	Sustained work	No work	Little work	Sustained work	Recovery	Non-beneficiary status	Retirement or death
<b>1965-66:</b>											
New beneficiaries:											
No work	82,900	100.0				84.4	4.2	2.3	1.2	7.8	
Little work	54,400	100.0				66.2	15.6	3.7	3.5	11.0	
Sustained work	34,700	100.0				45.2	17.3	21.3	4.6	11.5	
Full-year beneficiaries:											
No work	598,700	100.0				83.3	2.8	1.3	.4	12.3	
Little work	36,100	100.0				41.5	22.2	16.1	12.5	7.7	
Sustained work	24,500	100.0				24.9	10.6	36.7	22.0	5.7	
With benefits terminated for—											
Recovery	12,900	100.0	2.3	3.1	1.6					3.7	
Nonbeneficiary status	2,995,400	100.0	2.6	2.1	1.1					93.5	
Retirement or death	792,700	100.0								100.0	
<b>1966-67:</b>											
New beneficiaries:											
No work	79,200	100.0				82.1	4.2	3.0	1.9	8.8	
Little work	62,400	100.0				68.8	11.5	3.7	6.3	9.8	
Sustained work	33,600	100.0				44.4	17.3	17.0	6.9	14.6	
Full-year beneficiaries:											
No work	639,900	100.0				83.3	2.1	.9	.7	13.0	
Little work	44,600	100.0				46.4	22.9	13.2	10.3	7.2	
Sustained work	32,900	100.0				23.1	14.6	35.3	15.5	11.6	
With benefits terminated for—											
Recovery	16,100	100.0	1.2	1.9	8.1					6.2	
Nonbeneficiary status	2,811,600	100.0	2.5	2.6	1.5					92.5	
Retirement or death	907,900	100.0								100.0	
<b>1967-68:</b>											
New beneficiaries:											
No work	71,200	100.0				80.3	4.6	2.1	3.0	10.0	
Little work	72,600	100.0				66.3	13.6	4.4	4.6	11.2	
Sustained work	44,700	100.0				45.2	19.2	18.8	5.2	11.6	
Full-year beneficiaries:											
No work	686,800	100.0				82.9	2.3	1.3	.5	13.0	
Little work	44,700	100.0				47.2	20.1	13.7	11.9	7.2	
Sustained work	33,800	100.0				22.2	10.7	39.4	18.3	9.5	
With benefits terminated for—											
Recovery	21,600	100.0	1.9	3.7	5.6					2.3	
Nonbeneficiary status	2,613,400	100.0	3.5	3.1	1.7					90.7	
Retirement or death	1,023,300	100.0								100.0	
<b>1968-69:</b>											
New beneficiaries:											
No work	92,900	100.0				81.7	5.5	2.9	1.7	8.2	
Little work	82,500	100.0				65.6	13.3	5.9	5.6	9.6	
Sustained work	45,100	100.0				43.7	18.4	19.1	9.1	9.8	
Full-year beneficiaries:											
No work	727,400	100.0				82.9	2.3	1.1	.5	13.3	
Little work	50,600	100.0				45.9	18.8	15.2	10.3	9.9	
Sustained work	41,200	100.0				20.2	12.6	42.0	14.6	10.7	
With benefits terminated for—											
Recovery	22,700	100.0	2.6	4.0	4.4					1.8	
Nonbeneficiary status	2,387,700	100.0	3.7	3.4	2.0					89.6	
Retirement or death	1,154,500	100.0								100.0	
<b>1969-70:</b>											
New beneficiaries:											
No work	88,200	100.0				81.9	4.0	1.7	3.1	9.4	
Little work	82,700	100.0				68.6	11.7	4.4	5.4	9.9	
Sustained work	49,800	100.0				41.4	20.1	18.5	7.0	13.1	

<sup>1</sup> See footnote at end of table.

work patterns of full-year beneficiaries and does not evaluate work patterns during the year of entry into or exit from the program.

### Program Flow

One way to view the disability program is as an open system with an entrance, a period in the system, and an exit. Table 2 shows the proportion of all men

beneficiaries in each of these categories by the single years 1961-75.<sup>12</sup> The number of beneficiaries in each category is expressed as a percentage of the total number of beneficiaries during the initial year.

Persons classified as new beneficiaries in a given

<sup>12</sup> Data for 1975 are preliminary and incomplete. They should therefore be interpreted with caution. Self-employment and agricultural earnings tend to be underreported in the CWHS for the most recent year.

**Table 1.— Number and percentage distribution of men disabled-worker beneficiaries, by beneficiary and work status for 2-year periods, 1961-75—Continued**

Beneficiary and work status in first year	Total number	Total	Percentage distribution, by beneficiary and work status <sup>1</sup> in second year								
			New beneficiaries			Full-year beneficiaries			With benefits terminated for—		
			No work	Little work	Sustained work	No work	Little work	Sustained work	Recovery	Non-beneficiary status	Retirement or death
<b>1969-70—Continued</b>											
Full-year beneficiaries:											
No work	788,000	100.0				83.4	1.6	.7	.6		13.7
Little work	56,000	100.0				50.2	19.5	11.4	9.1		9.8
Sustained work	49,600	100.0				22.2	14.5	35.3	16.9		11.1
With benefits terminated for—											
Recovery	24,800	100.0	2.8	4.0	4.0					87.5	1.6
Nonbeneficiary status	2,160,100	100.0	4.6	4.6	2.4					86.9	1.5
Retirement or death	1,292,900	100.0									100.0
<b>1970-71:</b>											
New beneficiaries:											
No work	100,400	100.0				83.0	3.4	1.9	3.4		8.4
Little work	100,500	100.0				68.1	11.6	3.5	6.3		10.6
Sustained work	52,000	100.0				49.0	18.7	14.8	7.5		10.0
Full-year beneficiaries:											
No work	849,900	100.0				85.1	1.4	.7	.5		12.4
Little work	54,000	100.0				55.7	19.4	9.3	8.5		7.0
Sustained work	44,100	100.0				25.9	10.9	39.2	14.3		9.8
With benefits terminated for—											
Recovery	28,800	100.0	2.1	4.5	2.8					87.2	3.5
Nonbeneficiary status	1,899,700	100.0	6.5	5.3	3.2					83.4	1.7
Retirement or death	1,448,400	100.0									100.0
<b>1971-72:</b>											
New beneficiaries:											
No work	124,100	100.0				83.6	3.8	2.7	2.3		7.7
Little work	101,300	100.0				73.4	9.6	4.1	4.4		8.6
Sustained work	60,600	100.0				46.4	19.3	17.5	6.4		10.4
Full-year beneficiaries:											
No work	946,700	100.0				84.5	1.7	1.2	.5		12.2
Little work	52,500	100.0				55.6	19.4	9.9	5.5		9.5
Sustained work	41,400	100.0				20.8	13.0	43.0	11.4		11.8
With benefits terminated for—											
Recovery	28,400	100.0	1.8	1.1	3.2					90.1	3.9
Nonbeneficiary status	1,608,900	100.0	7.7	6.4	3.5					80.2	2.3
Retirement or death	1,616,900	100.0									100.0
<b>1972-73:</b>											
New beneficiaries:											
No work	123,600	100.0				83.1	3.9	1.9	1.9		9.2
Little work	103,300	100.0				70.8	10.9	4.7	3.7		10.0
Sustained work	57,000	100.0				45.4	19.5	19.0	6.5		9.7
Full-year beneficiaries:											
No work	1,050,100	100.0				84.5	2.0	1.0	.3		12.2
Little work	57,800	100.0				52.6	18.7	13.3	5.0		10.4
Sustained work	52,200	100.0				21.7	10.7	46.6	10.9		10.2
With benefits terminated for—											
Recovery	23,500	100.0	1.3	1.3	4.7					90.6	2.1
Nonbeneficiary status	1,315,500	100.0	10.2	9.3	6.3					70.7	3.5
Retirement or death	1,784,900	100.0									100.0
<b>1973-74:</b>											
New beneficiaries:											
No work	134,100	100.0				85.7	4.0	1.6	1.6		7.0
Little work	123,000	100.0				71.5	12.1	4.8	2.1		9.4
Sustained work	84,000	100.0				47.1	22.0	16.6	4.8		9.5
Full-year beneficiaries:											
No work	1,135,600	100.0				84.8	1.7	.8	.3		12.3
Little work	64,300	100.0				55.4	19.3	12.8	6.2		6.4
Sustained work	60,800	100.0				18.6	12.5	44.2	17.6		7.1
With benefits terminated for—											
Recovery	21,800	100.0	1.8	2.3	3.2					91.3	1.4
Nonbeneficiary status	951,700	100.0	13.0	12.8	9.0					61.1	4.2
Retirement or death	1,975,400	100.0									100.0
<b>1974-75:</b>											
New beneficiaries:											
No work	124,200	100.0				85.9	3.6	1.4	2.0		7.1
Little work	122,300	100.0				74.9	11.2	3.8	2.1		8.0
Sustained work	86,200	100.0				49.4	21.6	16.2	3.1		9.6
Full-year beneficiaries:											
No work	1,259,800	100.0				86.1	1.3	.6	.4		11.7
Little work	78,700	100.0				60.0	17.9	10.0	4.6		7.5
Sustained work	66,200	100.0				26.6	12.4	42.0	11.8		7.3
With benefits terminated for—											
Recovery	27,100	100.0	1.9	3.0	1.5					90.8	3.0
Nonbeneficiary status	601,000	100.0	20.1	17.9	12.0					44.9	5.1
Retirement or death	2,173,100	100.0									100.0

<sup>1</sup> Little work, 1-2 quarters of work; sustained work, 3-4 quarters.

**Table 2.**—Number and percentage distribution of men disabled-worker beneficiaries receiving benefits any time in 1961–75, by beneficiary status

Year	Total number <sup>1</sup>	Percentage distribution, by beneficiary status					
		Total	New beneficiaries	Full-year beneficiaries	With benefits terminated for—		
					Total	Retirement or death	Recovery
1961...	663,900	100.0	24.2	63.1	12.7	12.2	0.5
1962...	734,800	100.0	21.1	66.9	12.1	11.3	.8
1963...	805,000	100.0	19.7	68.2	12.1	11.0	1.0
1964...	861,200	100.0	17.8	70.7	11.5	10.0	1.5
1965...	934,500	100.0	18.4	70.0	11.6	10.2	1.4
1966...	1,003,100	100.0	17.5	71.5	11.0	9.4	1.6
1967...	1,085,900	100.0	17.4	70.5	12.2	10.2	2.0
1968...	1,180,400	100.0	18.7	69.4	11.9	10.0	1.9
1969...	1,269,600	100.0	17.4	70.4	12.2	10.3	2.0
1970...	1,374,500	100.0	18.4	69.0	12.6	10.5	2.1
1971...	1,496,800	100.0	19.1	69.5	11.4	9.5	1.9
1972...	1,622,200	100.0	17.5	71.5	11.0	9.5	1.5
1973...	1,795,500	100.0	19.0	70.2	10.8	9.6	1.2
1974...	1,948,500	100.0	17.1	72.1	10.8	9.4	1.4
1975...	2,055,500	100.0	14.7	74.7	10.6	9.4	1.2

<sup>1</sup> Persons receiving benefits at any time during year.

year came on the disability rolls during that year. Those listed as full-year beneficiaries were in the program for the entire year. Individuals who left the program during the given year are counted in the benefit terminations columns by type of termination. Terminations caused by retirement or death are referred to here as involuntary terminations. The individuals involved are included in the calculations in order to provide a comprehensive analysis of flows out of the program.

Viewed this way, the percentage of men whose benefits were terminated for any reason shows remarkable stability over the 15-year period. The ratio dropped by about one percentage point, however, from the early 1960's to the early 1970's. The recovery rate grew throughout the 1960's to about 2.0 percent and then fell to about 1.4 percent in the early 1970's. Involuntary terminations declined from about 11.0 percent in the early 1960's to about 9.4 percent in the early 1970's. Except for 1961 and 1962, the proportion of new beneficiaries ranged from 17 percent to 19 percent of the total number of beneficiaries during the period. This fact, coupled with a termination rate ranging from 10.6 percent to 12.7 percent, shows that steady expansion has been part of the program during the years under examination. The proportion of full-year beneficiaries has stayed at around 70 percent, but the numerical size of the beneficiary population has climbed steadily, reflecting the incremental effect of the sustained growth during the period.

Can any of the above shifts in percentage be attributed, in part, to a change in the age distribution? Legislative changes in the 1960's reduced the age requirements and the required duration of the medical

impairment.<sup>13</sup> Since age is closely linked to the likelihood of being disabled, the liberalization of the program might have changed the age structure of the beneficiary population. Other data indicate that the age distribution has remained fairly constant.

The program primarily serves members of middle-aged and aged working populations who have encountered severe limitations in their health. A slow, gradual shift has taken place over the years, however, in the distribution of beneficiaries under age 45. The proportion of beneficiaries under age 35 has increased while that for beneficiaries aged 35–44 has decreased. In 1964, for example, 3.8 percent of the beneficiaries were under age 35 and 13.8 percent were aged 35–44. By 1974, the proportions had shifted to 7.6 percent and 10.5 percent, respectively. This shift may explain the declining involuntary termination rate. The fact that younger beneficiaries demonstrate a higher incidence of recovery, together with the reduced duration of medical impairment in the eligibility requirements, may account for the rise in the recovery rate through the late 1960's. This increase, however, was not sustained through the early 1970's.

To obtain a more comprehensive analysis of this phenomenon, tables 3, 4, and 5 were derived from data in table 1. These tables further subdivide the beneficiary population according to amount of work.

Table 3 reveals what happened during the second year to those who were in disabled-worker beneficiary status and had no employment (no quarters of coverage) during the entire first year. Of those full-year beneficiaries who did not work in 1961, 82.2 percent did not work again in 1962 and continued in beneficiary status during the entire year. An additional 1.6 percent became marginally employed, and 0.7 percent moved into sustained employment while remaining in beneficiary status for the full year 1962. Only 0.4 percent recovered, and 15.1 percent retired or died in 1962. Examination of the data for subsequent years indicates that the proportion of persons remaining unemployed and in beneficiary status increased slightly during the study period and that the proportion of involuntary terminations decreased slightly. The proportion of those who switched to marginal or sustained employment or who recovered remained stable.

In contrast, table 4 shows what happened during the second year to all individuals in beneficiary status who experienced sustained employment throughout the entire first year. Roughly 20 percent dropped out of employment during the second year, remaining in benefi-

<sup>13</sup> Before 1965, the duration had to be long, continued, and indefinite. In that year, it was changed to 12 months. In 1967, an alternative to the 20-out-of-40 quarters rule for achieving disability insured status—quarters of coverage in half the quarters after age 21, with a minimum of 6—was made available to all workers under age 31.

**Table 3.**—Number and percentage distribution of men full-year disabled-worker beneficiaries with **no work** in preceding year, 1961–75, by beneficiary and work status in second year

Year	Total number	Percentage distribution, by beneficiary and work status					
		Total	Full-year beneficiaries			With benefits terminated for—	
			No work	Little work	Sustained work	Recovery	Retirement or death
1961–62	391,000	100.0	82.2	1.6	0.7	0.4	15.1
1962–63	453,900	100.0	82.8	1.7	.6	.4	14.5
1963–64	508,100	100.0	84.4	1.7	.6	.6	12.7
1964–65	566,000	100.0	82.8	1.9	1.0	.6	13.8
1965–66	598,700	100.0	83.3	2.8	1.3	.4	12.3
1966–67	639,900	100.0	83.3	2.1	.9	.7	13.0
1967–68	686,800	100.0	82.9	2.3	1.3	.5	13.0
1968–69	727,400	100.0	82.9	2.3	1.1	.5	13.3
1969–70	788,000	100.0	83.4	1.6	.7	.6	13.7
1970–71	849,900	100.0	85.1	1.4	.7	.5	12.4
1971–72	946,700	100.0	84.5	1.7	1.2	.5	12.2
1972–73	1,050,000	100.0	84.5	2.0	1.0	.3	12.2
1973–74	1,135,600	100.0	84.8	1.7	.8	.3	12.3
1974–75	1,259,800	100.0	86.1	1.3	.6	.4	11.7

ciary status. A smaller proportion, 10–15 percent over the years, reduced the amount of employment from 3 or 4 quarters to 1 or 2 quarters. About 40 percent continued in sustained employment while remaining in beneficiary status. In the early 1970's the percentage remaining in sustained work and in beneficiary status rose, and recoveries showed a corresponding decrease. By 1971 the increase was sufficiently large that more than 50 percent of these individuals continued as beneficiaries with some work (1–4 quarters).

**Table 4.**—Number and percentage distribution of men full-year disabled-worker beneficiaries with **sustained work** in preceding year, 1961–75, by beneficiary status and quarters worked

Year	Total number	Percentage distribution, by beneficiary status and quarters worked					
		Total	Full-year beneficiaries, quarters worked			With benefits terminated for—	
			0	1–2	3–4	Recovery	Retirement or death
1961–62	11,900	100.0	21.9	16.8	38.7	14.3	8.4
1962–63	15,100	100.0	26.5	7.3	35.1	17.9	13.3
1963–64	16,200	100.0	25.9	9.9	35.8	20.4	8.0
1964–65	17,500	100.0	18.9	12.0	41.7	19.4	8.0
1965–66	24,500	100.0	24.9	10.6	36.7	22.0	5.7
1966–67	32,900	100.0	23.1	14.6	35.3	15.5	11.6
1967–68	33,800	100.0	22.2	10.7	39.4	18.3	9.5
1968–69	41,200	100.0	20.2	12.6	42.0	14.6	10.7
1969–70	49,600	100.0	22.2	14.5	35.3	16.9	11.1
1970–71	44,100	100.0	25.9	10.9	39.2	14.3	9.8
1971–72	41,400	100.0	20.8	13.0	43.0	11.4	11.9
1972–73	52,200	100.0	21.7	10.7	46.6	10.9	10.2
1973–74	60,800	100.0	18.6	12.5	44.2	17.6	7.1
1974–75	66,200	100.0	26.6	12.4	42.0	11.8	7.3

Table 5 shows what happened during the second year to persons in beneficiary status with marginal employment during the entire first year. About 20 percent continued to work during 1 or 2 quarters in the second year. In the early 1970's, the proportion of those who dropped out of employment rose to more than 50 percent. The proportion of those who increased their employment to 3 or 4 quarters while remaining in beneficiary status went down in 1970–71, compensating for the sharp increase in the percentage of those who dropped out of work. In 1972–75, the proportion began rising to the previous levels of the 1960's. The recovery rate continued to drop steadily throughout the late 1960's and early 1970's.

The data in these three tables demonstrate that the more quarters in which a beneficiary has earnings the more likely he is to continue to work. The probability of recovery in a given year also increases with the amount of employment in the previous year. A direct relationship exists between employment experience while in beneficiary status and recovery.

### Terminations

Interpretation of the relationship between work and recovery is confounded by the fact that recovery data include both medical recovery and the ability to earn at the SGA level or higher. These data do not permit the precise determination of the reasons for recovery. It is possible, however, to examine changes in the proportion of recoveries over a period of time. Generally, during the final 10 years of the study period, the proportion of beneficiaries working at all who recovered

**Table 5.**—Number and percentage distribution of men full-year disabled-worker beneficiaries with **little work** in preceding year, 1961–75, by beneficiary status and quarters worked

Year	Total number	Percentage distribution, by beneficiary status and quarters worked					
		Total	Full-year beneficiaries, quarters worked			With benefits terminated for—	
			0	1–2	3–4	Recovery	Retirement or death
1961–62	16,300	100.0	59.5	17.2	5.5	9.8	8.0
1962–63	22,200	100.0	57.2	19.8	8.1	5.9	9.0
1963–64	24,700	100.0	47.3	19.8	8.9	15.4	8.5
1964–65	25,600	100.0	42.6	23.1	11.7	13.3	9.4
1965–66	31,100	100.0	41.5	22.2	16.1	12.5	7.7
1966–67	44,600	100.0	46.4	22.9	13.2	10.3	7.2
1967–68	44,700	100.0	47.2	20.1	13.7	11.9	7.2
1968–69	50,600	100.0	45.9	18.8	15.2	10.3	9.9
1969–70	56,000	100.0	50.2	19.5	11.4	9.1	9.8
1970–71	54,000	100.0	55.7	19.4	9.3	8.5	7.0
1971–72	52,500	100.0	55.6	19.4	9.9	5.5	9.5
1972–73	57,800	100.0	52.6	18.7	13.3	5.0	10.4
1973–74	64,300	100.0	55.4	19.3	12.8	6.2	6.4
1974–75	78,700	100.0	60.0	17.9	10.0	4.6	7.5

**Table 6.—Annual earnings of men full-year**

Amount of earnings	1961	1962	1963	1964	1965	1966	1967	1968
Total number.....	419,200	491,200	549,000	609,100	654,300	717,400	765,300	819,200
Total percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
With no earnings.....	91.8	91.1	91.6	91.7	90.3	88.1	88.3	87.6
\$1-599.....	5.3	5.8	5.0	4.9	5.2	6.3	6.0	5.9
600-1,199.....	1.4	1.4	1.4	1.6	2.0	2.5	2.6	2.5
1,200-1,499.....	.4	.4	.5	.3	.6	.7	.7	1.0
1,500-1,679.....	.1	.0	.2	.1	.2	.3	.4	.4
1,680-1,999.....	.2	.2	.2	.2	.3	.5	.4	.5
2,000-2,399.....	.2	.2	.2	.2	.3	.4	.3	.5
2,400-2,999.....	.1	.2	.4	.3	.4	.3	.4	.4
3,000-3,599.....	.1	.1	.3	.2	.2	.2	.3	.3
3,600 or more.....	.4	.6	.4	.6	.5	.8	.7	.9
Median:								
Earnings.....	\$325.7	\$349.0	\$428.4	\$428.2	\$501.1	\$543.1	\$579.4	\$655.3
95-percent confidence limit.....	258.4 393.0	298.0 400.0	363.0 493.9	342.9 513.4	416.4 585.8	473.1 613.0	481.9 676.8	580.6 729.9
Percent with—								
Earnings.....	8.2	8.9	8.5	8.3	9.1	12.0	11.8	12.4
Earnings above SGA level <sup>1</sup> .....	1.5	1.7	2.1	1.8	2.5	2.4	2.5	2.6
Earnings above SGA level as percent of all with earnings.....	18.7	19.0	24.4	22.1	25.9	20.1	21.2	21.3

<sup>1</sup> For SGA levels, see footnote 1, page 3.

from their disabilities in a given year declined. The average proportion of recoveries changed from 10.8 percent in 1966-70 to 6.0 percent in 1971-75 for marginally employed beneficiaries and from 17.5 percent to 13.2 percent for those with sustained employment. Less than 1 percent of the unemployed beneficiaries recovered. About 12 percent of the unemployed beneficiaries had their benefits terminated because of death or conversion to retirement status in any given year. The proportion was less (about 9 percent) for those beneficiaries who worked.

Chart 1 summarizes benefit terminations by the previous year's employment status for 2-year periods a decade apart, 1963-64 and 1973-74, for those who were beneficiaries for the entire first year. The recovery patterns are strikingly similar: The more sustained the employment the more likely the recovery. Although the proportion of involuntary benefit terminations remained fairly consistent over the decade, the recovery rates for those in each work-status category revealed a definite decline over the same period.

### Earnings Patterns

What are the earnings patterns of those working? How does the consistency of labor-market investment interact with the levels of earnings? How do these factors relate to the SGA level? Do earnings of working beneficiaries increase as the SGA level is raised?

The distribution of earnings for disabled-worker beneficiaries in table 6 indicates that the basic earnings patterns have not changed. Around 10 percent of all the beneficiaries were employed; about 3 percent had

earnings at the SGA level or higher. Though median annual earnings levels increased in the period, they remained well below \$1,000, regardless of the SGA level.

Data for the 5 most recent years in the period 1971-75 provide a finer discrimination by age, within these distributions (table 7). Although the amount of median earnings was fairly close for all age groups, younger men—especially those under age 35—were much more likely to have had earnings. Men under age 35 made up only a small proportion of the total beneficiary population, but this group doubled its absolute size during the decade ended in 1975. In addition, the percentage of those under age 45 with earnings above the SGA level increased during 1971-73—a finding that is consistent with the increased percentage of persons acquiring 3 or 4 quarters of coverage while remaining in beneficiary status. The proportion of those earning above the SGA level dropped in 1975, however, when the impact of the 1974 change would have taken effect. The data on medians confirm that the earnings distribution did not shift upward when the level increased.

Table 8 indicates that median earnings increase by incremental jumps according to the number of quarters of employment. Except in 1973, the medians for persons with 4 quarters of coverage hovered around the SGA level.

Work attempts by beneficiaries demonstrated considerable consistency (table 9). About 1 in 5 beneficiaries had earnings during the first year after entitlement. The proportion of those with earnings in the second year was only about half as large. During the next few years, the ratio slowly diminished, stabilizing



disabled-worker beneficiaries, 1961-75

1969	1970	1971	1972	1973	1974	1975	Amount of earnings
893,600	948,000	1,040,600	1,160,100	1,260,700	1,404,700	1,536,000	Total number.
100.0	100.0	100.0	100.0	100.0	100.0	100.0	Total percent.
87.0	88.6	89.7	89.3	89.1	88.8	90.2	With no earnings.
6.0	5.1	5.1	4.6	4.4	4.7	4.1	\$1-599.
2.5	2.3	1.9	1.9	1.8	1.9	1.5	600-1,199.
.9	.8	.6	.8	.7	.6	.5	1,200-1,499.
.5	.5	.3	.4	.4	.5	.4	1,500-1,679.
.5	.5	.4	.4	.5	.5	.5	1,680-1,999.
.5	.5	.4	.4	.4	.5	.5	2,000-2,399.
.6	.5	.3	.5	.5	.5	.5	2,400-2,999.
.4	.3	.3	.4	.3	.4	.3	3,000-3,599.
1.2	.9	1.0	1.3	1.9	1.6	1.7	3,600 or more.
\$697.8	\$699.0	\$597.4	\$807.8	\$936.5	\$847.2	\$882.3	Median:
608.6	636.3	494.8	703.2	837.6	769.9	774.9	Earnings.
786.9	761.7	700.0	912.5	1,035.5	924.6	989.8	95-percent confidence limit.
13.0	11.4	10.3	10.7	10.9	11.2	9.8	Percent with—
3.2	2.8	2.4	3.0	3.6	2.5	2.4	Earnings.
							Earnings above SGA level. <sup>1</sup>
24.2	24.0	23.1	28.0	32.9	22.7	24.8	Earnings above SGA level as percent of all with earnings.

finally at about 1 in 20 for those with 5 years in the disability program. As the table shows, the closer in time a disabled man is to previous labor-force attachment the more likely he is to be working.

The economic rewards were meager, however. Even beneficiaries with earnings in the highest intervals 3

years before entitlement that suggest higher educational and skill levels had median annual earnings after entitlement of about \$1,000 (table 10). Severe chronic illness sharply limits economic productivity and earnings capacity.<sup>14</sup>

### SGA Level As Work Incentive

The contention that the SGA level is a work incentive implies that disabled-worker beneficiaries, like retired-worker beneficiaries, earn up to the maximum amount allowed. The distributions in chart 2 suggest that when the SGA level amounted to \$1,200 per year, it was close to the earnings level of the majority of the disabled-worker beneficiaries with earnings. The three changes in SGA level that occurred in 1966-74, however, moved the earnings limit progressively farther away from the bulk of the earners. The proportion of men beneficiaries with any earnings in a given year during the study period ranged from only 8.2 percent to 13.0 percent. The distributions in chart 2, therefore, represent only about a tenth of the beneficiary population in any given year.<sup>15</sup>

Chart 2 also contains distributions for two other

<sup>14</sup> Explanations of observed relationships can only be conjectural when they are based on administrative earnings records of this type. Surveys currently planned by the Division of Disability Studies will focus on the relationship between health, work, and the disability program.

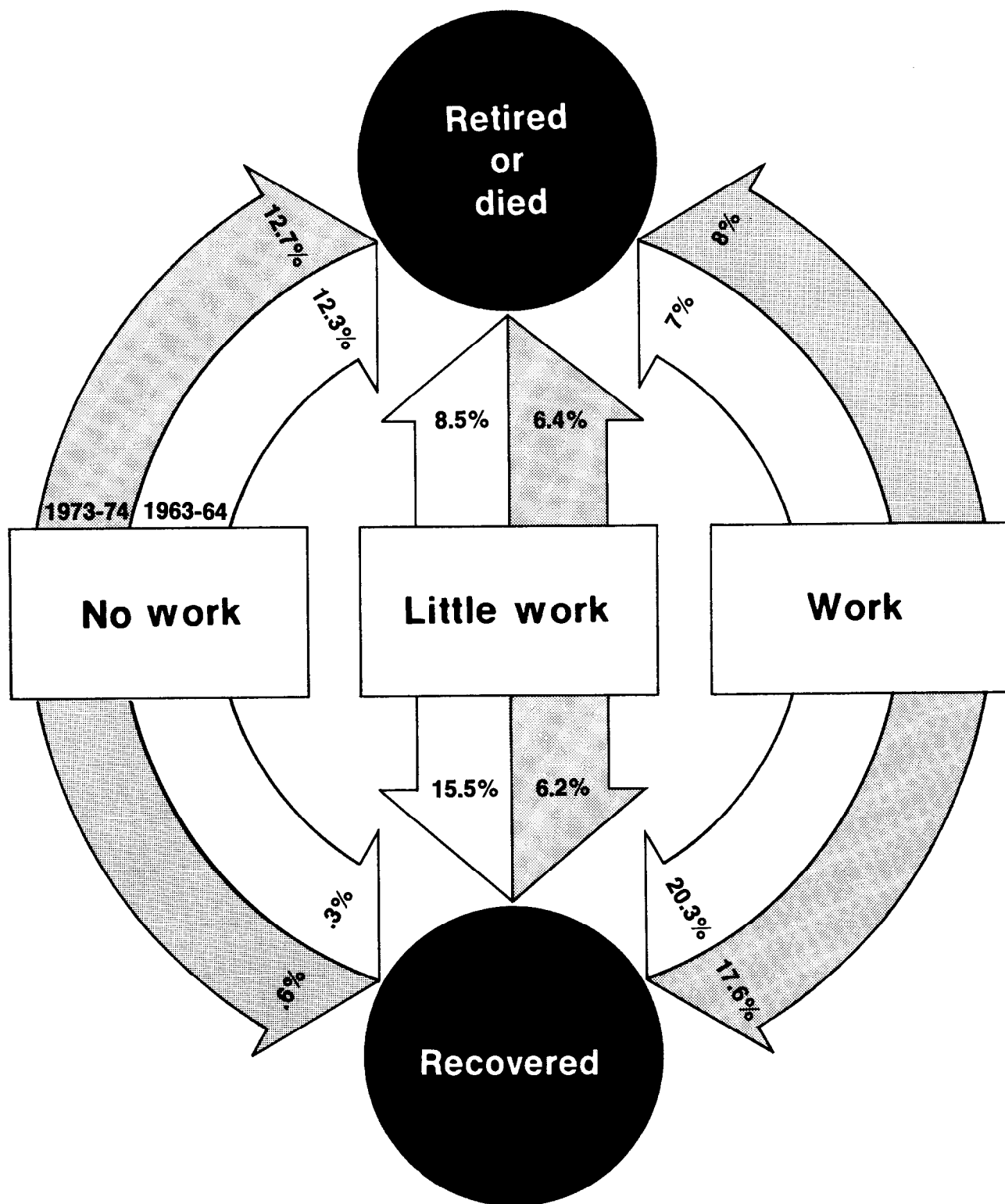
<sup>15</sup> The earnings intervals are spaced unequally to include all SGA levels. The intervals from \$1,200 to \$2,400 have been magnified, and the ranges at both ends have been compressed. Because of the visual distortion thus created, the intervals are not comparable.

**Table 7.**—Men full-year disabled-worker beneficiaries, by age, number, percent with earnings, and annual median earnings, 1971-75

Year and age	Total number	Percent with—		Median	
		Earnings	Earnings above SGA level <sup>1</sup>	Earnings	95-percent confidence limits
1971:					
Under 35 . . .	65,400	23.7	6.0	\$595	\$544-645
35-44 . . . . .	119,300	14.3	3.7	704	652-756
45-54 . . . . .	277,200	9.7	2.2	479	453-505
55-64 . . . . .	578,300	8.2	1.7	622	596-648
1972:					
Under 35 . . .	76,800	27.7	8.3	980	853-1,108
35-44 . . . . .	127,600	13.9	4.3	787	683-890
45-54 . . . . .	310,900	10.8	3.1	907	765-1,050
55-64 . . . . .	644,300	8.0	2.0	735	701-769
1973:					
Under 35 . . .	88,800	27.6	9.9	891	752-1,029
35-44 . . . . .	134,400	17.3	6.0	1,082	907-1,259
45-54 . . . . .	338,500	11.2	3.9	1,024	963-1,085
55-64 . . . . .	698,600	7.3	2.1	836	812-859
1974:					
Under 35 . . .	107,300	29.2	6.2	734	594-875
35-44 . . . . .	147,300	16.3	3.1	739	671-807
45-54 . . . . .	366,600	12.0	2.8	935	884-986
55-64 . . . . .	783,300	7.5	1.8	908	870-947
1975:					
Under 35 . . .	125,400	25.1	4.8	724	643-805
35-44 . . . . .	162,200	13.6	4.1	1,068	914-1,222
45-54 . . . . .	390,900	10.2	2.9	937	808-1,065
55-64 . . . . .	857,000	6.6	1.5	902	874-930

<sup>1</sup> For SGA levels, see footnote 1, page 3.

**Chart 1.**—Men disabled-worker beneficiaries with benefits terminated, by employment status and reason for termination, 1963–64 and 1963–74



categories of earners—those who would be most likely to respond to any change in SGA level and those most susceptible to recovery. The first group is composed of

beneficiaries with sustained work (3 or 4 quarters of coverage in a given year). When these distributions are examined—especially those for all earners and those

with sustained earnings—it is important to note that high earners could be participating in their trial-work period. Little is known about beneficiary work patterns

**Table 8.**—Number and percentage distribution of men disabled-worker beneficiaries entitled to benefits before first of year, 1971–75, by earnings status, quarters of coverage, and annual median earnings

Earnings status and quarters of coverage <sup>1</sup>	Total	Median	
		Earnings	95-percent confidence limits
<b>1971</b>			
Total number.....	1,040,600		
Total percent.....	100.0		
With no earnings.....	89.7		
With earnings:			
Less than 1.....	1.3	\$27	\$22–32
1.....	3.5	224	188–260
2.....	1.6	703	603–804
3.....	1.0	1,339	1,037–1,641
4.....	3.0	1,677	1,623–1,731
<b>1972</b>			
Total number.....	1,160,100		
Total percent.....	100.0		
With no earnings.....	89.3		
With earnings:			
Less than 1.....	1.2	\$28	\$23–33
1.....	3.2	239	204–275
2.....	1.8	860	760–959
3.....	1.3	1,924	1,489–2,359
4.....	3.2	1,842	1,675–2,008
<b>1973</b>			
Total number.....	1,260,700		
Total percent.....	100.0		
With no earnings.....	89.1		
With earnings:			
Less than 1.....	.9	\$27	\$22–33
1.....	3.3	252	218–287
2.....	1.8	989	831–1,147
3.....	1.3	1,999	1,452–2,546
4.....	3.5	2,349	2,010–2,688
<b>1974</b>			
Total number.....	1,404,700		
Total percent.....	100.0		
With no earnings.....	88.8		
With earnings:			
Less than 1.....	.9	\$28	\$23–33
1.....	3.5	229	204–254
2.....	2.1	995	842–1,149
3.....	1.3	1,487	1,281–1,693
4.....	3.5	2,242	2,014–2,470
<b>1975</b>			
Total number.....	1,536,000		
Total percent.....	100.0		
With no earnings.....	90.2		
With earnings:			
Less than 1.....	.7	\$28	\$23–33
1.....	3.3	298	264–333
2.....	1.7	995	784–1,206
3.....	1.0	2,118	1,619–2,617
4.....	3.1	2,369	2,155–2,583

<sup>1</sup> Less than 1 quarter represents earnings of less than \$50.

**Table 9.**—Men disabled-worker beneficiaries, by number of years on benefit rolls, percent with earnings, and annual median earnings, 1971–75

Years on benefit rolls	Total number	Percent with earnings	Median	
			Earnings	95-percent confidence limits
<b>1971:</b>				
1.....	220,400	19.6	\$533	\$489–577
2.....	164,700	12.1	574	515–633
3.....	138,500	8.8	524	480–568
4.....	98,800	8.9	799	728–870
5.....	77,900	7.5	524	473–576
5 or more.....	340,300	5.0	718	681–754
<b>1972:</b>				
1.....	256,800	19.8	803	739–867
2.....	188,500	12.5	1,003	965–1,042
3.....	140,700	10.0	912	810–1,013
4.....	122,700	7.8	732	684–781
5.....	85,200	8.1	937	877–996
5 or more.....	366,200	5.2	619	588–650
<b>1973:</b>				
1.....	251,700	20.0	693	630–755
2.....	220,200	11.9	1,305	1,145–1,465
3.....	162,400	10.7	1,374	1,163–1,585
4.....	122,800	9.8	999	969–1,029
5.....	108,400	9.0	812	636–988
5 or more.....	395,200	5.4	912	854–969
<b>1974:</b>				
1.....	310,700	21.2	717	669–765
2.....	216,700	11.0	684	630–738
3.....	189,800	10.1	1,166	994–1,338
4.....	141,700	9.5	1,112	972–1,251
5.....	104,700	9.3	1,187	1,110–1,263
5 or more.....	441,100	5.8	964	921–1,008
<b>1975:</b>				
1.....	305,800	20.2	808	751–865
2.....	274,100	8.9	812	694–929
3.....	185,400	7.6	1,049	773–1,325
4.....	162,300	7.6	1,174	865–1,483
5.....	122,700	8.2	1,524	1,423–1,625
5 or more.....	485,700	5.7	891	834–948

during the trial-work period.<sup>16</sup> Table 11 indicates that these persons represent more than a third of all beneficiaries with earnings in each year. Another, much smaller group is composed of those beneficiaries with 3 or 4 quarters of work a year for a period of 3 or more consecutive years—that is, those with prolonged employment. Earnings in the third year are represented in chart 2.

The earnings behavior of the members of the latter group is important because it can be assumed that these persons would have completed all trial-work months and have been subjected to any administrative action related to termination of benefits because of earnings at the SGA level or higher. In the years examined, from 5 percent to 10 percent of all employed beneficiaries, or about 1 percent of the entire beneficiary population, could have been classified as having prolonged employment. Taken together, these two groups make up the small fraction of the entire beneficiary population exhibiting labor-force behavior that may be

<sup>16</sup> The trial-work period permits beneficiaries to work for nine, not necessarily consecutive, months for any amount while continuing to receive benefits. Administrative and survey data are being collected to describe and analyze this program work incentive.

**Table 10.**—Earnings in third year before entitlement of men disabled-worker beneficiaries, by number, percent with earnings, and annual median earnings, 1971-75

Earnings in third year before entitlement	Total number	Percent with earnings	Median	
			Earnings	95-percent confidence limits
<b>1971</b>				
Total	1,040,600	10.3	\$597	\$565-630
With no earnings	139,600	5.3	849	747-951
\$1-599	74,200	13.2	332	273-392
600-1,679	141,700	11.2	479	434-524
1,680-3,599	228,000	9.7	616	572-660
3,600-5,399	294,700	7.1	749	618-880
5,400 or more	162,400	19.0	633	595-671
<b>1972</b>				
Total	1,160,100	10.7	808	774-842
With no earnings	139,600	6.7	724	590-858
\$1-599	76,100	12.9	513	488-538
600-1,679	146,800	12.6	721	688-754
1,680-3,599	241,000	9.2	799	742-857
3,600-5,399	299,400	7.2	980	931-1,030
5,400 or more	257,200	16.7	987	916-1,057
<b>1973</b>				
Total	1,260,700	10.9	937	908-965
With no earnings	142,900	6.7	982	937-1,028
\$1-599	77,800	13.2	391	330-452
600-1,679	152,000	12.9	799	675-923
1,680-3,599	245,200	9.9	770	735-806
3,600-5,399	299,200	7.9	1,099	1,063-1,135
5,400 or more	343,600	14.4	1,162	1,089-1,235
<b>1974</b>				
Total	1,404,700	11.2	847	822-873
With no earnings	151,500	7.3	849	772-926
\$1-599	84,200	16.2	513	479-548
600-1,679	158,600	11.5	974	899-1,049
1,680-3,599	255,000	10.5	629	576-682
3,600-5,399	303,700	8.6	904	867-941
5,400 or more	451,700	13.7	1,038	991-1,085
<b>1975</b>				
Total	1,536,000	9.8	882	847-918
With no earnings	159,800	7.3	724	685-763
\$1-599	91,500	13.7	544	502-586
600-1,679	164,300	10.9	824	636-1,012
1,680-3,599	269,900	8.9	724	632-816
3,600-5,399	300,000	6.8	943	896-990
5,400 or more	550,500	11.5	1,154	1,074-1,234

affected by SGA changes. Therefore, they can provide an empirical base for estimates of the probable costs and effects of any of the currently proposed increases in the SGA level.

Examination of the distributions for the entire study period reveals a gradual rise in the proportion of persons with relatively high earnings, especially earnings of more than \$3,600. Tables 11 and 12 show that the trend, particularly since the late 1960's, has been one of gradual increase in the proportions of beneficiaries with sustained employment and those with sustained, prolonged employment. Except in the very early years of the program, the median earnings of such persons have stayed below the SGA level. Close examination of

**Table 11.**—Number, percent, and median earnings of men disabled-worker beneficiaries with **sustained work**<sup>1</sup> among all beneficiaries with earnings, 1961-75

Year	All men beneficiaries with earnings <sup>2</sup>	With sustained work			SGA level
		Total number	Percent of total	Median earnings <sup>2</sup>	
1961	34,207	11,900	34.8	\$1,155	\$1,200
1962	43,619	15,100	34.6	1,239	1,200
1963	46,390	16,200	34.9	1,240	1,200
1964	50,616	17,500	34.6	1,327	1,200
1965	63,271	24,500	38.7	1,316	1,200
1966	85,729	32,900	38.4	1,333	1,500
1967	89,923	33,800	37.6	1,367	1,500
1968	101,335	41,200	40.7	1,427	<sup>3</sup> 1,680
1969	116,878	49,600	42.4	1,550	1,680
1970	108,167	44,100	40.8	1,571	1,680
1971	106,900	41,400	38.7	1,608	1,680
1972	124,200	52,200	42.0	1,885	1,680
1973	136,900	60,800	44.4	2,249	1,680
1974	157,800	66,200	42.0	1,980	<sup>4</sup> 2,400
1975	150,000	63,500	42.3	2,324	2,400

<sup>1</sup> With 3-4 quarters a year.

<sup>2</sup> More than \$1.

<sup>3</sup> Effective December 1968.

<sup>4</sup> Effective August 1974, retroactive to January 1.

the earnings intervals around the SGA level for both groups reveals no clustering just below the SGA level that moves systematically with the changes. Therefore, no small subgroup of disabled earners differs radically from the total group. Their labor-force behavior is not the same as that of the retired population. As a whole, the majority has earnings below the SGA level. The most able workers, those in sustained work, do not vary their earnings concomitantly with the SGA level. Changing the SGA level therefore, does not appear to be an effective device for controlling beneficiary earnings.

**Table 12.**—Number, percent, and median earnings of men disabled-worker beneficiaries with **sustained and prolonged work** among all beneficiaries with earnings, 1963-75

Year	All men beneficiaries with earnings <sup>2</sup>	With sustained and prolonged work <sup>1</sup>			SGA level
		Total number	Percent of total	Median earnings <sup>2</sup>	
1963	46,390	2,900	6.3	\$1,425	\$1,200
1964	50,616	3,400	6.7	1,501	1,200
1965	63,271	3,000	4.7	1,501	1,200
1966	85,729	4,100	4.8	1,237	1,500
1967	89,923	4,600	5.1	1,250	1,500
1968	101,335	6,200	6.1	1,400	<sup>3</sup> 1,680
1969	116,878	7,200	6.2	1,325	1,680
1970	108,167	9,200	8.5	1,400	1,680
1971	106,900	9,200	8.6	1,400	1,680
1972	124,200	9,400	7.6	1,501	1,680
1973	136,900	11,200	8.2	1,725	1,680
1974	157,800	15,400	9.8	1,965	<sup>4</sup> 2,400
1975	150,000	16,300	10.9	2,106	2,400

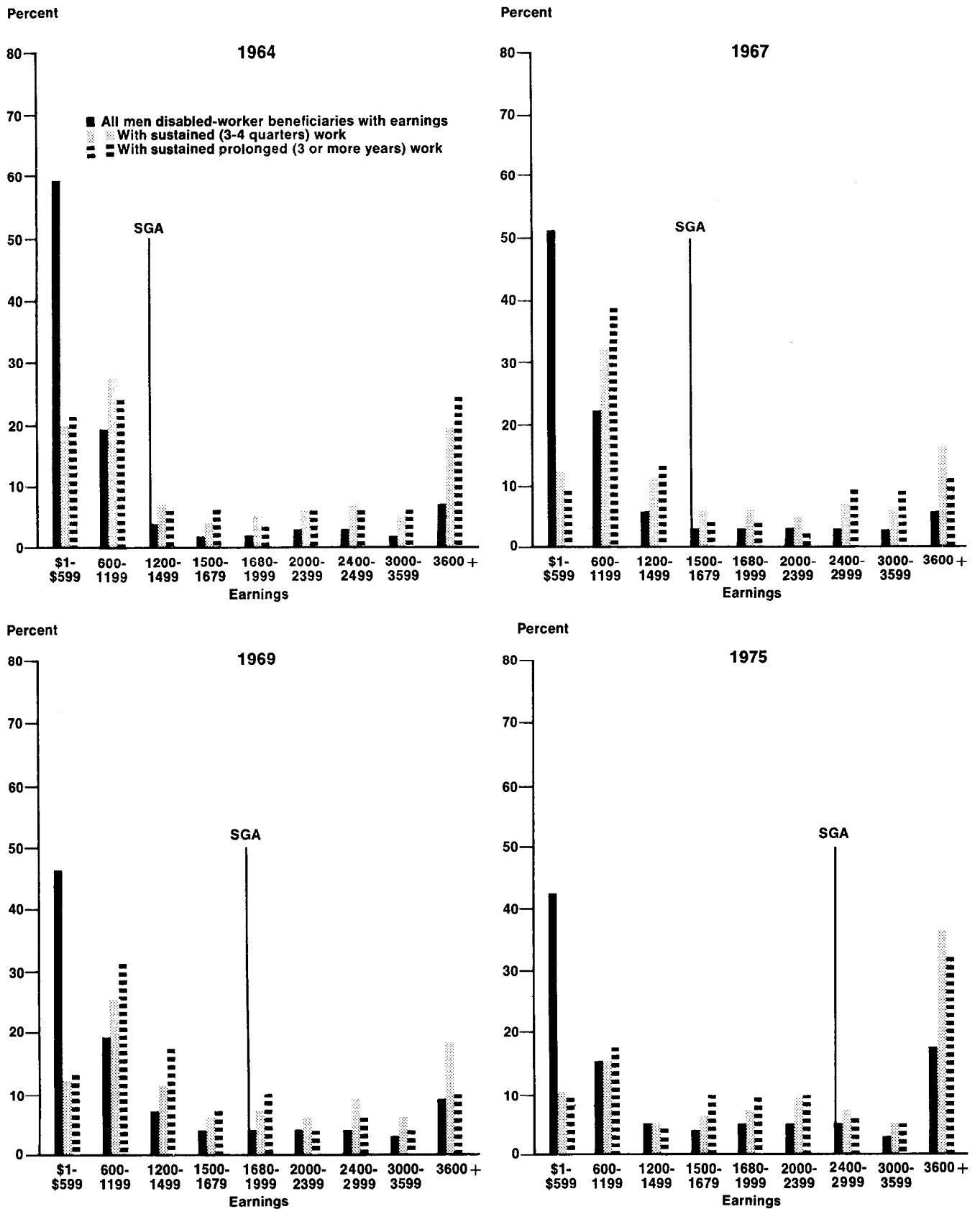
<sup>1</sup> Represents 3-4 quarters of work per year in 3 or more consecutive years.

<sup>2</sup> More than \$1.

<sup>3</sup> Effective December 1968.

<sup>4</sup> Effective August 1974, retroactive to January 1.

**Chart 2.**—Percent of men disabled-worker beneficiaries (full year), by amount of earnings and employment status, 1964–75



## Program Implications

Most of the evidence obtained from beneficiary work and earnings patterns indicates that the SGA level has not operated as an effective work incentive. In the early 1970's, the percentage of disabled-worker beneficiaries remaining employed while in beneficiary status increased and recoveries among working beneficiaries decreased. The work history and earnings data presented here show that about 10 percent of the persons awarded benefits worked for median earnings of less than \$1,000 a year. The earnings data show that, because of periodic adjustments, the SGA level has kept up with inflation but the real earnings of the working disabled have not.

These research findings raise questions of consistency and equity—questions that also arise when the earnings criteria for the disabled are compared with those for the retired.<sup>17</sup> The earnings criteria applied to the elderly are becoming increasingly different from those for the severely and chronically ill.

The SGA level serves as the administrative measure of work productivity. In conjunction with the medical severity criteria, it controls eligibility for the program. Raising the SGA level would increase program costs by enlarging the size of the eligible population and by reducing the number of persons whose benefits could be terminated. The program-flow analysis suggests that the key to controlling program growth is in the allowance process and the eligibility criteria.

Much less control over terminations is possible. Recovery for work is sharply limited by the original eligibility requirements—that is, severe and chronic illness that drastically affects earning capacity. Benefit terminations caused by recovery, either medical recovery or sustained employment above the SGA level, are minuscule compared with the number of beneficiaries coming on the rolls. There seems to be some room for improvement in the recovery rates of working beneficiaries. Any expectation of substantially reducing the program's size by means of work incentives, however, is placed in sobering perspective by the very low rate of benefit terminations for recovery among those who had sustained work while still beneficiaries.

## Technical Note

The Social Security Administration's 1-percent Continuous Work History Sample (CWHs) is derived from the reporting and informational forms and records used in administering the old-age, survivors, disability, and health insurance program. Data on age, sex, and race

<sup>17</sup> The annual exempt amount of earnings for aged beneficiaries was \$4,000 in 1978 and was scheduled to rise in \$500 increments to \$6,000 by 1982.

are obtained from the employee's application for a social security number. Data on the amount of earnings and length and type of employment are derived from the report forms submitted by employers and self-employed persons. Beneficiary claims data are obtained from the Social Security Administration master beneficiary record. The sample design is a stratified-cluster probability sample of the population of possible social security numbers.<sup>18</sup>

Estimates based on samples can be expected to differ from figures that would have been obtained if all, rather than a sample, of the records had been used for the compilations. The standard error is a measure of sampling variability. The chances are about 68 out of 100 that the difference caused by sampling variability between a sample estimate and the figure that would have been obtained from a compilation of all records is less than the standard error. The chances are 95 out of 100 that the difference is less than twice the standard error. The standard error of an estimate depends on sample design elements such as the method of sampling, the sample size, and the estimation process.

Table I shows the approximate standard errors for numbers of persons, and table II shows the approximate standard errors for percentages of persons with a given characteristic. The reliability of an estimated percentage depends on both the size of the percentage and the size of the total base population. The standard errors in the body of table II are expressed in percentage points. Standard errors for percentages and bases not shown in the table can be obtained by linear interpolation.

The approximate standard error on differences of percentages,  $P_1 - P_2$ , over time, can be obtained by

$$SE_{P_1 - P_2} = \text{SQRT} [(SE_{P_1})^2 + (SE_{P_2})^2].$$

Standard errors obtained by means of this approximation are likely to be conservative (biased high) since the estimates are obtained from overlapping samples with presumed high positive correlation.

The transition-matrix analytic technique assumes that examining a characteristic of an individual for change over a period of time involves a limited number of possibilities or states. In this analysis, nine states of beneficiary and work status were used. The records of all men beneficiaries were checked to see how many quarters they worked each year and the year before. Transition matrices were constructed from this data for each 2-year period; from 1961 to 1975, to illustrate the switching patterns from one status to another. Each

<sup>18</sup> For a more detailed discussion of the sample design and size, sampling variability, and sources of nonsampling variability, see **Earnings Distribution of the United States, 1969**, Appendix B, Office of Research and Statistics, Social Security Administration, 1975.

**Table I.**—Approximate standard errors of estimated number of disabled-worker beneficiaries

Estimated number	Standard error
1,000	300
2,500	500
5,000	700
7,500	900
10,000	1,000
25,000	1,600
50,000	2,200
75,000	2,800
100,000	3,200
250,000	5,000
500,000	7,000
750,000	9,000
1,000,000	10,000
2,500,000	16,000

horizontal line sums to 1 or 100 percent. The structure is similar to a Markov chain model, widely used in analyzing socioeconomic mobility. The classical Markov model is based on a panel study, following the movement of the same population over a period of

**Table II.**—Approximate standard errors of estimated percentage of disabled-worker beneficiaries

Size of base	Estimated percentage				
	2 or 98	5 or 95	10 or 90	25 or 75	50
2,500	2.8	4.4	6.0	8.7	10.0
5,000	2.0	3.1	4.2	6.1	7.1
7,500	1.6	2.5	3.5	5.0	5.8
10,000	1.4	2.2	3.0	4.3	5.0
25,000	.9	1.4	1.9	2.7	3.2
50,000	.6	1.0	1.3	1.9	2.2
75,000	.5	.8	1.1	1.6	1.8
100,000	.4	.7	1.0	1.4	1.6
250,000	.3	.4	.6	.9	1.0
500,000	.2	.3	.4	.6	.6
750,000	.2	.3	.4	.5	.6
1,000,000	.1	.2	.3	.4	.5
2,500,000	.1	.1	.2	.3	.3

time. This examination centered on the changes in transition probabilities over a period of time. The population observed consisted of all men in the CWHS sample who were in disabled-worker beneficiary status at some time during 1961–75.