

# Eliminating the Medicare Waiting Period for Social Security Disabled-Worker Beneficiaries

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Medicare eligibility for Social Security Disability Insurance beneficiaries begins no earlier than 24 months after entitlement to cash benefits. The original purposes of the 24-month waiting period were to limit costs to the Medicare trust funds at a time when many workers might have other health insurance coverage and to ensure that Medicare protection is extended only to persons whose disabilities are severe and long lasting. Some policymakers have advocated shortening or eliminating the waiting period to improve access to medical services and to alleviate the burden of very high medical expenses.

Using a unique file of longitudinal data from Social Security and Medicare records, Medicare costs during the waiting period have been estimated for a randomly selected cohort of 18,782 disabled-worker beneficiaries first entitled to disability benefits in 1972. The estimates suggest that the 10-year cost to Medicare of this cohort would have increased by about 45 percent if the waiting period had been eliminated and if Medicare were the primary payer during that time. Thirty percent of the increase in expenses would have been for persons who died within 2 years of entitlement to disability benefits.

Data from the New Beneficiary Survey indicate that in 1982 about 27 percent of disabled-worker beneficiaries had no health insurance coverage in the last 6 months of their waiting period. These beneficiaries and others without insurance who died in the first 18 months of eligibility for Disability Insurance would benefit the most from elimination of the waiting period. Other data show that providing timely Medicare coverage might be difficult for some beneficiaries because of the retroactive nature of many disability program entitlements.

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Social Security Disability Insurance (DI) beneficiaries have been eligible for health insurance benefits under the Medicare program since July 1, 1973. Medicare coverage was extended to these beneficiaries by the 1972 Amendments to the Social Security Act. Disabled workers, disabled widows and widowers, and adults disabled as children qualify for Medicare coverage. In mid-1987, disabled beneficiaries with Medicare entitlement numbered more than 3 million and accounted for 10 percent of the Medicare population.

Before becoming eligible for Medicare, a disabled beneficiary must have been entitled to benefits for not less than 24 months. This 24-month waiting period was enacted primarily to limit program costs, according to the Senate Finance Committee report that accompanied the amendments.<sup>1</sup> This report indicated a concern that overlapping private health insurance protection might result in cost shifting onto the Medicare trust funds, particularly with regard to group insurance that may continue for a period of time after the onset of disability. The report also stated that the waiting period would help assure that Medicare protection would be extended only to persons

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<sup>1</sup> Committee on Finance, U.S. Senate, **Social Security Amendments of 1972: Report to Accompany H.R. 1** (92d Cong., 2nd sess.), 1972, S. Rept. No. 92-1230.

whose disabilities are severe and long lasting.

For disabled workers who are able to return to work, cash disability benefits are terminated, even if the worker continues to have a severe impairment. Under the 1980 Amendments to the Social Security Act, such beneficiaries continue to receive Medicare coverage for 2 years after cash benefits are terminated, and they do not have to undergo another 24-month waiting period to be eligible for Medicare coverage, if they become reentitled to DI benefits within 5 years after leaving the program. These provisions were added to encourage DI beneficiaries to return to work.

## **Background**

Because DI beneficiaries are, by definition, in ill health, many of them experience high medical care costs during the waiting period for Medicare entitlement. These expenses can create severe financial hardship and limit access to needed health services for DI beneficiaries without health insurance. Some policymakers advocate eliminating the waiting period because of its potential adverse effect on access to medical care.

The number of DI beneficiaries with Acquired Immune Deficiency Syndrome (AIDS) is increasing

rapidly. The Congressional Budget Office (CBO), using data from the Centers for Disease Control, estimates that more than 15,000 DI beneficiaries will be diagnosed as having AIDS by the end of 1989; this number is expected to increase to nearly 35,000 by the end of 1992.<sup>2</sup> Persons with AIDS often have very high medical care costs. For 1988, the CBO estimates that Medicare costs averaged \$40,000 for beneficiaries with AIDS.

Some Members of Congress and the Department of Health and Human Services have considered eliminating the 24-month waiting period for Disability Insurance beneficiaries with AIDS because of their high medical care costs.<sup>3</sup> In 1987, for example, resolutions introduced in both houses of Congress (House resolution 276 and Senate resolution 24) would have waived the 24-month waiting period for DI beneficiaries for a 5-year period after enactment. A

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<sup>2</sup> Letter dated June 9, 1987, from Edward Gramlich, Acting Director, Congressional Budget Office, to the Honorable Ted Weiss, U.S. House of Representatives.

<sup>3</sup> Unpublished data from Social Security Administration's Office of Disability and Office of the Actuary suggest that approximately 80 percent of beneficiaries with AIDS die during the Medicare waiting period. About 60 percent die in the first year. These estimates are based on very early data. The DI program experience of beneficiaries with AIDS will continue to be monitored.

precedent for waiving the waiting period for beneficiaries with AIDS was established when only a 3-month waiting period was mandated for persons with end-stage renal disease, another group with very high medical expenses. William L. Roper, M.D., former Administrator of the Health Care Financing Administration, has stated that the waiting period should not be eliminated only for DI beneficiaries with AIDS or other specified diseases because beneficiaries with other conditions also incur high medical care costs.<sup>4</sup> For example, beneficiaries with cancer also have characteristics that are associated with high medical expenses during the waiting period.

In the 1980 amendments, Congress authorized demonstration projects and experiments to test the effectiveness of alternative methods of encouraging DI beneficiaries to return to work. One proposal was to shorten or eliminate the initial 24-month waiting period to improve the chances for medical recovery by improving access to medical services relatively soon after the onset of disability. If enough DI beneficiaries were able to return to work because of earlier and more effective medical intervention, the long-run savings in DI cash benefits and Medicare payments might offset the initial increase in costs resulting from shortening the 2-year waiting period under Medicare.

The purpose of this article is to present estimates of what Medicare costs would have been during the 2-year waiting period for a cohort of disabled-worker beneficiaries first entitled to DI benefits in 1972, assuming the waiting period had

not actually been in effect. The article also presents findings on the extent of health insurance coverage for disabled-worker beneficiaries during the waiting period. Lastly, the article presents data on the extent of retroactive entitlement to disability benefits, which would imply retroactive entitlements to Medicare benefits as well, if the waiting period were eliminated. Due to limitations on data availability, the analysis of these three aspects of the waiting period question are addressed with different data sets reflecting different time periods. Still, the analysis provides information on the basic framework of the waiting period issues that are regarded as relevant today.

### Estimating Medicare Costs

Expenditure data for medical care utilization by disabled-worker beneficiaries in the first 2 years of DI entitlement are not available. The Medicare administrative record system does not contain this information because Medicare eligibility does not begin until after the first 2 years of eligibility for disability benefits. Various personal interview surveys that might have such information do not contain sufficient numbers of DI program beneficiaries with recent awards to permit an analysis.<sup>5</sup>

<sup>5</sup> Gordon Bonham, "Procedures and Questionnaires of the National Medical Care Utilization and Expenditure Survey," *National Medical Care Utilization and Expenditure Survey (Series A, Methodological Report No. 1)*, National Center for Health Statistics, Public Health Service, Washington, DC, 1983, and Gordon Bonham and Larry Corder, "National Medical Care Utilization and Expenditure Survey Household Instruments, Instruments and Procedures 1," *National Medical Care Utilization and Expenditure Survey*, National Center for Health Statistics, Public Health Service, Washington, DC, 1981.

An estimate of the cost of eliminating the Medicare waiting period must include costs for those DI beneficiaries whose cash benefits are terminated, due to death or recovery, before the end of the period. Costs also must be estimated for the first 2 years of DI entitlement for beneficiaries who ultimately become eligible for Medicare. Although actual expenditure data for medical care use by DI beneficiaries in the first 2 years are not available, empirical regularities in the Medicare utilization data after the first 2 years suggest the possibility of making predictions of utilization in the first 2 years based on subsequent utilization.<sup>6</sup> The data indicate that Medicare use for beneficiaries who died or recovered in the first 2 years might be estimated from the utilization experience of those who died or recovered at a later point in time. Over time, the cost patterns for beneficiaries who died appear to be the same regardless of the length of time they were in the Medicare program. Similar results seem to hold for those who recovered.

These findings led to the conclusion that estimates of costs during the waiting period could be obtained by applying the utilization rates of decedents, survivors, and recovered persons observed after the waiting period to the observed incidence of death and recovery in the waiting period. In addition, average levels of medical care utilization for those in the DI program over long periods of time seemed very stable in that period,

<sup>6</sup> Barry Bye, Gerald Riley, and James Lubitz, "Medicare Utilization by Disabled-Worker Beneficiaries: A Longitudinal Analysis," *Social Security Bulletin*, December 1987, pages 13-28.

<sup>4</sup> William L. Roper and William Winkenwerder, "Making Fair Decisions About Financing Care for Persons with AIDS," *Public Health Reports*, May/June 1988, pages 305-308.

again permitting average utilization to be applied to the first 2 years in the program for those in the DI program for substantially longer periods. Medical care utilization by disabled-worker beneficiaries immediately following the onset of disability might be somewhat higher in the early years, until the health problem that caused the disability has stabilized. The kind of backward projection described above could, therefore, underpredict actual costs for this period; however, two factors mitigate this effect. First, the onset of disability for many individuals is gradual; thus medical conditions may have stabilized before entitlement. Second, the DI program has a 5-month waiting period before entitlement to cash benefits. Even persons with abrupt onsets of disability will probably have had substantial medical care before DI program entitlement begins.

### Sample Data

The data for this analysis are the same as those previously described in Bye et al.<sup>7</sup> A 5-percent sample of newly entitled worker beneficiaries was selected from the cohort of 1972 entitlements. The cohort was limited to beneficiaries under age 62 at the time of entitlement because it was difficult to ascertain from Social Security Administration (SSA) administrative records if initial periods of entitlement for persons aged 62-64 were for disability or for reduced retired-worker benefits.

After the sample cases were drawn, data were matched from two statistical data files: the Continuous Disability History Sample (CDHS) and the Continuous Medicare

History Sample (CMHS).<sup>8</sup> The CDHS contains information on beneficiary characteristics for a 20-percent sample of disability determination decisions at the time of benefit award. Included are primary diagnoses associated with the disabling conditions, former occupation, and years of education. The CMHS contains demographic, entitlement, and claims information on a 5-percent sample of Medicare beneficiaries. The file is longitudinal in structure and, at the time of this study, included annual summaries of Medicare utilization and reimbursement for 1974-81.

### Methodology

A detailed description of the estimation approach is provided in a recently published SSA Working Paper.<sup>9</sup> A brief overview of the approach follows. The first step in the construction of waiting period projections was to estimate prediction equations for Medicare utilization. The equations describe the marginal relationship between Medicare utilization and a set of covariates—demographic characteristics and factors relating to the nature of the disability—conditional on DI program outcome (death, recovery, still in the

<sup>8</sup> **Continuous Disability History Sample, Restricted Use Data File: Description and Documentation**, Office of Research and Statistics, Social Security Administration, 1978, and **Medicare Statistical Files Manual**, Bureau of Data Management and Strategy, Health Care Financing Administration, April 1987.

<sup>9</sup> Barry V. Bye and Gerald F. Riley, **Statistical Methods for the Estimation of Costs in the Medicare Waiting Period for Social Security Disabled-Worker Beneficiaries** (ORS Working Paper Series, No. 37), Office of Research and Statistics, Office of Policy, Social Security Administration, 1989.

program) as of December 1981. A total of 12 equations was estimated, four for each of the three program outcome groups. The four equations measured (1) the probability of Medicare utilization in a year; (2) the probability of hospital use in a year, given Medicare utilization in that year; (3) the average reimbursement per month, given hospital use in a year; and (4) the average reimbursement per month, given Medicare utilization but no hospital use in a year.

These equations were used to estimate expected Medicare costs for the 1972 beneficiary cohort in both years of the waiting period and separately in the second year only. To obtain the overall cost estimates, monthly costs were estimated for each person during the 2-year waiting period and then totaled over the period. Similar calculations were made for the second year of the waiting period separately. Beneficiaries who were in the program for less than 1 year did not contribute to the costs of eliminating the waiting period in the second year. Expected costs were inflation-adjusted to 1981 dollars.

## Results of Waiting Period Estimates

### DI Program Outcome

Table 1 shows the Disability Insurance program experience for the 1972 cohort under age 62.<sup>10</sup> It shows the proportion of disabled-worker beneficiaries whose cash benefits were terminated in the first 2 years of entitlement and who did not become eligible for Medicare. Of the cohort, 12.8 percent died

<sup>10</sup> End-stage renal disease cases were excluded from the analysis because of their shortened waiting period.

<sup>7</sup> *Ibid.*

**Table 1.—Program outcome for a 1972 cohort of disabled-worker beneficiaries, by selected characteristics, 1972-81**

Characteristic	Sample size	Percent of population	Total	Time in DI program								
				Less than 2 years				2 years or more				
				Percent of deaths		Percent recovered		Medicare enrollees	Percent as of 1981			Still in program
				Total	2nd year	Total	2nd year		Death	Recovery	Age 65	
Total.....	18,782	100.0	100.0	12.8	5.2	5.3	4.0	81.9	16.7	4.3	28.3	32.6
Sex:												
Men.....	13,150	70.0	100.0	13.9	5.4	6.0	4.4	80.1	18.4	4.8	26.9	30.1
Women.....	5,632	30.0	100.0	10.4	4.7	3.7	3.0	85.9	12.6	3.1	31.8	38.4
Race:												
White and unknown.....	15,958	85.0	100.0	12.8	5.2	5.4	4.0	81.8	16.3	4.3	29.2	32.0
Black.....	2,617	13.9	100.0	13.2	5.7	4.7	3.6	82.0	18.7	4.2	23.7	35.5
Other.....	207	1.1	100.0	8.2	1.9	5.8	3.4	86.0	17.9	6.3	22.7	39.1
Age in 1972:												
Under 40.....	2,961	15.8	100.0	6.7	2.2	15.2	10.9	78.1	8.1	15.5	(2)	54.4
40-49.....	3,602	19.2	100.0	13.4	5.1	7.9	6.1	78.7	16.2	6.0	(2)	56.5
50-59.....	9,407	50.1	100.0	14.0	5.8	2.6	2.0	83.4	21.4	1.3	34.4	26.3
60-61.....	2,812	14.9	100.0	14.8	6.3	.6	.5	84.6	10.4	.1	74.2	(2)
Diagnostic group:												
Infectious and parasitic.....	319	1.7	100.0	7.2	2.8	23.2	15.7	69.6	14.4	7.2	21.9	26.0
Neoplasms.....	1,582	8.4	100.0	64.5	17.6	1.9	1.6	33.6	17.1	.9	8.1	7.5
Endocrine and metabolic.....	613	3.3	100.0	12.6	7.4	1.6	1.4	85.8	20.7	1.5	31.3	32.3
Mental disorders.....	1,736	9.2	100.0	3.3	1.6	4.7	3.6	92.1	11.5	6.6	16.8	57.2
Nervous system.....	681	3.6	100.0	6.3	2.6	2.8	1.9	90.9	14.7	3.8	24.5	47.9
Eye and ear.....	385	2.0	100.0	4.2	3.1	4.9	3.6	90.9	6.8	3.9	38.2	42.1
Circulatory.....	5,321	28.3	100.0	12.3	6.0	2.5	2.2	85.3	22.8	2.2	35.3	25.0
Respiratory.....	1,163	6.2	100.0	10.2	5.6	1.0	.7	88.8	27.7	.6	40.3	20.2
Digestive.....	542	2.9	100.0	22.5	10.5	4.2	3.7	73.3	24.0	3.7	21.2	24.4
Genitourinary.....	128	.7	100.0	25.0	9.4	6.3	4.7	68.8	16.4	5.5	21.9	25.0
Musculoskeletal.....	2,883	15.3	100.0	2.7	1.6	6.8	4.8	90.5	9.8	5.4	36.6	38.7
Traumatic injuries.....	1,260	6.7	100.0	2.5	1.0	22.1	15.8	75.5	7.2	15.1	18.8	34.4
Other and unknown.....	2,179	11.6	100.0	6.6	3.4	5.2	3.7	88.2	14.0	5.0	25.1	44.2
Years of education:												
None.....	215	1.1	100.0	10.7	6.1	1.4	1.0	87.9	19.5	1.0	37.7	29.8
1-8.....	6,540	34.8	100.0	12.2	5.2	3.2	2.4	84.6	17.9	2.4	35.2	29.2
9-12.....	8,180	43.6	100.0	14.4	5.6	6.7	5.0	78.9	16.5	5.1	24.5	32.9
13 or more.....	1,459	7.8	100.0	15.4	4.9	8.4	6.5	76.2	15.2	7.8	22.6	30.6
Other and unknown.....	2,388	12.7	100.0	8.1	3.8	4.7	3.1	87.3	14.4	4.9	25.5	42.5
Occupation:												
Professional, technical, and managerial.....	1,878	10.0	100.0	17.2	6.7	9.9	5.1	77.8	18.1	4.8	28.9	26.0
Clerical, sales.....	2,266	12.1	100.0	14.5	6.1	9.1	5.0	80.5	14.4	4.1	28.5	33.5
Service.....	2,656	14.1	100.0	12.1	5.0	8.1	4.1	83.7	16.2	4.0	30.0	33.6
Farming, fishing, and forestry.....	757	4.0	100.0	10.8	4.6	4.4	2.9	84.8	18.4	3.3	36.2	27.0
Processing.....	564	3.0	100.0	13.3	5.3	4.8	3.6	81.9	18.3	3.6	29.1	31.0
Machine trades.....	1,632	8.7	100.0	12.8	4.8	5.8	4.3	81.4	17.7	3.6	29.3	30.9
Benchwork.....	1,164	6.2	100.0	10.3	4.1	4.4	3.2	85.7	12.3	3.9	29.6	39.9
Structural.....	2,220	11.8	100.0	12.5	4.9	6.1	4.8	81.4	19.1	4.9	30.0	27.4
Miscellaneous.....	2,847	15.2	100.0	12.8	5.8	6.4	4.4	80.9	18.2	4.6	27.0	31.2
Unknown.....	2,798	14.9	100.0	11.2	4.2	5.6	3.8	83.2	14.9	4.7	22.9	40.7

See footnotes at end of table.

**Table 1.—Program outcome for a 1972 cohort of disabled-worker beneficiaries, by selected characteristics, 1972-81—Continued**

Characteristic	Sample size	Percent of population	Total	Time in DI program																
				Less than 2 years				2 years or more												
				Percent of deaths		Percent recovered		Medicare enrollees	Percent as of 1981											
				Total	2nd year	Total	2nd year		Death	Recovery	Age 65	Still in program								
Primary insurance amount (1985):																				
Less than \$300.....	3,052	16.2	100.0	8.3	3.7	8.4	6.0	83.4	14.3	7.6	26.5	34.9								
\$300-\$399.....	4,285	22.8	100.0	10.5	5.0	6.4	4.4	83.1	15.2	5.5	27.1	35.4								
\$400-\$499.....	3,803	20.2	100.0	13.1	5.7	4.6	3.4	82.3	17.8	3.5	27.7	33.3								
\$500-\$599.....	5,022	26.7	100.0	15.6	5.9	1.9	1.6	82.6	18.5	1.9	32.0	30.1								
\$600 or more.....	2,620	13.9	100.0	16.3	5.3	7.6	6.2	76.1	16.7	4.2	26.2	29.1								

<sup>1</sup> Beneficiaries under age 62 and entitled to benefits in 1972.

<sup>2</sup> Data not applicable.

and 5.3 percent recovered in the first 2 years of benefit receipt. Alteration of the waiting period would make them Medicare enrollees for the first time. The proportion of deaths among this group of beneficiaries will determine, to a large extent, the cost of eliminating the waiting period because Medicare costs are especially high in the year of and in the year preceding death. Of those who died within the first 2 years, the data show that about 40 percent (5.2 percent overall) of the deaths occurred in the second year of eligibility. There was substantial variation in death rates by diagnostic group. Death rates in the first 2 years range from a high of 64.5 percent for the neoplasms group to a low of about 2.5 percent for the traumatic injuries group. About two-thirds of the deaths in the neoplasms group occurred in the first year. The amount of variation in these early death rates portends substantial variation across these diagnostic groups in the costs of eliminating the Medicare waiting period.

Table 1 also shows some pronounced variation in recovery rates in the first 2 years of the program. A notable decline is seen, for example, in recovery by age: from a high of 15.2 percent for beneficiaries under age 40 to a low of less than 1 percent for beneficiaries aged 60-61. Two of the diagnostic groups—*infectious and parasitic diseases* and *traumatic injuries*—show early recovery rates exceeding 20 percent.

The last four columns of table 1 show the proportions of additional program terminations among the 1972 cohort during the next 8 years and the proportion of beneficiaries still in the program. About 16.7 percent of the cohort die after attaining Medicare eligibility, 4.3 percent recover, 28.3 percent are transferred from the DI program to retired-worker beneficiary status at age 65, and about 32.6 percent (under age 65) remain in the program. Large variations occur in these outcome distributions by age,

diagnosis, and other beneficiary characteristics.

### Eliminating the Waiting Period

**Both years.** Table 2 shows the estimated cost per entitlee in the 1974-81 period and the cost of eliminating the entire waiting period under the assumption that Medicare utilization for all beneficiaries would be covered from the first day of DI entitlement and that Medicare is the first payer. In 1981 dollars, the overall average additional costs for eliminating the full 2-year waiting period are projected to be approximately \$2,692 per beneficiary under age 62.<sup>11</sup> The overall average cost for this cohort for the period 1974-81 is estimated

<sup>11</sup> Due to the presumed high death rates and low recovery rates in this group, this average would be somewhat higher if beneficiaries aged 62-64 were included in the analysis.

**Table 2.—Estimated 2-year Medicare waiting period costs for a 1972 cohort of disabled-worker beneficiaries, by program status, 1972-81**

Characteristic	Sample size	Average reimbursement per entitlee		Percent increase in 10-year costs	Distribution by DI program status						
		Total, 1974-81	Additional, 2 years		All	Died		Recovered		Age 65	Still in program
						Total	Within first 2 years	Total	Within first 2 years		
Total.....	18,782	\$6,018	\$2,692	44.7	100.0	58.3	29.5	3.0	1.1	19.0	19.7
Sex:											
Men.....	13,150	5,140	2,328	45.3	100.0	62.1	31.1	3.3	1.2	17.7	16.9
Women.....	5,632	8,066	3,542	43.9	100.0	52.4	27.0	2.6	1.0	21.1	23.9
Race:											
White and unknown.....	15,958	5,956	2,694	45.2	100.0	57.8	29.2	3.1	1.2	19.7	19.5
Black.....	2,617	6,340	2,699	42.6	100.0	61.9	31.9	2.7	.9	15.0	20.5
Other.....	207	6,701	2,415	36.0	100.0	52.1	20.0	3.8	.9	17.9	26.2
Age in 1972:											
Under 40.....	2,961	5,643	1,923	34.1	100.0	45.5	23.0	13.6	4.3	(2)	40.9
40-49.....	3,602	6,687	2,666	39.9	100.0	58.8	31.6	4.6	1.8	(2)	36.7
50-59.....	9,407	6,727	2,846	42.3	100.0	62.9	29.8	1.1	.5	20.7	15.3
60-61.....	2,812	3,182	3,017	94.8	100.0	51.8	30.5	.2	.1	48.0	(2)
Diagnostic group:											
Infectious and parasitic.....	319	4,604	1,981	43.0	100.0	56.1	24.9	9.4	5.8	16.3	18.3
Neoplasms.....	1,582	3,038	5,375	176.9	100.0	93.8	72.5	.5	.2	3.1	2.7
Endocrine and metabolic.....	613	9,451	3,867	40.9	100.0	53.8	24.5	1.0	.3	22.9	22.4
Mental disorders.....	1,736	6,184	1,696	27.4	100.0	30.1	9.6	6.8	1.9	15.8	47.3
Nervous system.....	681	6,758	2,261	33.5	100.0	47.5	16.5	3.1	.7	17.5	31.8
Eye and ear.....	385	5,880	1,972	33.5	100.0	32.7	18.4	4.0	1.4	32.0	31.3
Circulatory.....	5,321	6,159	2,717	44.1	100.0	57.6	23.7	1.6	.6	24.4	16.4
Respiratory.....	1,153	6,941	3,077	44.3	100.0	65.9	23.0	.4	.2	22.5	11.1
Digestive.....	542	6,537	3,899	59.6	100.0	74.4	43.1	2.0	.7	11.0	12.6
Genitourinary.....	128	6,651	3,749	56.4	100.0	58.7	40.5	3.1	1.6	18.0	20.2
Musculoskeletal.....	2,883	6,131	1,983	32.4	100.0	35.6	10.8	5.4	1.9	30.0	29.0
Traumatic injuries.....	1,260	4,350	1,499	34.5	100.0	33.0	10.2	17.4	7.3	19.9	29.7
Other and unknown.....	2,179	6,897	2,570	37.3	100.0	50.1	20.9	3.2	1.2	17.9	28.9
Years of education:											
None.....	215	5,220	2,064	39.5	100.0	56.0	23.2	.7	.2	25.5	17.8
1-8.....	6,540	5,721	2,488	43.5	100.0	57.3	27.3	1.3	.5	24.0	17.4
9-12.....	8,180	6,165	2,872	46.6	100.0	60.3	32.1	3.6	1.4	16.5	19.6
13.....	1,459	5,587	2,894	51.8	100.0	59.8	32.8	6.3	2.2	15.4	18.5
Other and unknown.....	2,388	6,659	2,564	38.5	100.0	52.1	23.5	3.1	1.0	17.8	26.9
Occupation:											
Professional, technical, and managerial.....	1,878	5,969	3,238	54.3	100.0	62.9	33.9	4.4	1.6	17.9	14.8
Clerical, sales.....	2,266	6,884	3,271	47.5	100.0	56.6	31.4	3.9	1.5	18.8	29.8
Service.....	2,656	7,036	3,007	42.7	100.0	55.1	26.5	2.1	.8	21.6	21.1
Farming, fishing, and forestry.....	757	4,155	1,675	40.3	100.0	51.0	21.7	2.5	1.0	28.3	18.3
Processing.....	564	6,117	2,634	43.1	100.0	61.0	31.3	2.1	.8	18.4	18.5
Machine trades.....	1,632	5,934	2,621	44.2	100.0	59.0	30.0	2.4	1.1	19.8	18.8
Benchwork.....	1,164	6,431	2,686	41.8	100.0	52.1	26.5	2.3	.8	20.8	24.8
Structural.....	2,220	4,947	2,201	44.5	100.0	61.8	28.7	3.1	1.2	20.0	15.1
Miscellaneous.....	2,847	5,202	2,340	45.0	100.0	62.9	31.4	2.9	1.2	17.1	17.2
Unknown.....	2,798	6,423	2,633	41.0	100.0	56.1	27.8	2.9	1.0	15.9	25.2

See footnotes at end of table.

**Table 2.—Estimated 2-year Medicare waiting period costs for a 1972 cohort of disabled-worker beneficiaries, by program status, 1972-81—Continued**

Characteristic	Sample size	Average reimbursement per entitlee		Percent increase in 10-year costs	Distribution by DI program status							
		Total, 1974-81	Additional, 2 years		All	Died		Recovered		Age 65	Still in program	
						Total	Within first 2 years	Total	Within first 2 years			
Primary insurance amount (1985):												
Less than \$300.....	3,052	6,399	2,536	39.6	100.0	48.9	20.8	5.4	1.9	20.7	25.0	
\$300-\$399.....	4,285	6,378	2,649	41.5	100.0	52.7	26.9	3.3	1.2	20.1	24.0	
\$400-\$499.....	3,803	6,122	2,618	42.8	100.0	56.7	28.6	2.1	.8	20.2	21.0	
\$500-\$599.....	5,022	5,880	2,844	48.4	100.0	64.2	33.8	1.4	.5	18.8	15.1	
\$600 or more.....	2,620	5,096	2,757	54.1	100.0	67.5	35.7	4.4	2.0	14.4	13.7	

<sup>1</sup> Beneficiaries under age 62 and entitled to benefits in 1972.

<sup>2</sup> Data not applicable.

by the model to be \$6,018 per beneficiary.<sup>12</sup> Thus, the average increase in the cost for the cohort over the first 10 years is about 45 percent by covering the first 2 years as well as the next 8 years.

Of the total cost associated with eliminating the entire waiting period, about 58 percent is attributed to costs for beneficiaries who died in the 10-year period. Almost 30 percent of the additional cost is attributed to those who died within the first 2 years of DI entitlement. The reason the latter number is so high is that Medicare costs for these persons are being measured at the most expensive time in their medical care utilization histories. Only 3 percent of the increase in cost would be for beneficiaries who recover. The remaining increase

would be split more or less equally between beneficiaries who remain in the program and those attaining age 65, with 19-20 percent of the increase attributed to each. In particular, only 20 percent of the increase in Medicare costs would be for beneficiaries who stay in the program and who might be viewed as the prime candidates for Medicare support as an aid to return to work.

Variation in the additional costs by diagnosis is large. For beneficiaries in the neoplasms group, additional Medicare costs are almost double that of existing costs. This difference, of course, is due to the extremely high death rates in this group during the first 2 years of DI entitlement. Virtually all (93.8 percent) of the increase would be for those who die within 10 years of entitlement, with 72.5 percent of the increase attributed to those who die in the first 2 years. The digestive and genitourinary groups also have relatively large cost increases (59.6 percent and 56.4 percent, respectively) with large proportions related to those

who died within 10 years. The mental disorders group shows the lowest projected increase—27.4 percent—of which only 30.1 percent is for those who died. This group also had the lowest dollar increase—\$1,696 in 1981 dollars.

Several subgroups show fairly high proportions of increased costs relating to recovery: 14 percent for the youngest group, 9.4 percent and 17.4 percent, respectively, for the infectious and parasitic diseases and traumatic injuries groups. Other subgroups have relatively high proportions of increased costs for beneficiaries who remained in the program. For example, 47.3 percent of the increased cost projected for beneficiaries with mental disorders would be for beneficiaries remaining in the program.

Among beneficiaries with nervous system disorders, eye and ear disease, musculoskeletal diseases, and traumatic injuries, a relatively large percent of the increased costs also would be for persons remaining in the DI program (29.0-31.8 percent). Persons in these diagnostic subgroups may be expected to benefit more from early access to medical care than other

<sup>12</sup> This figure differs from the \$7,563 cost shown in table 1 of the 1987 article by Bye et al, *op. cit.*, for three reasons: (1) the denominator contains all beneficiaries, not just those who survive the first 2 years, (2) end-stage renal disease cases are excluded, and (3) it is based on the model estimate and not the observed data.

subgroups because relatively more of the increase in waiting period costs would be for younger disabled-worker beneficiaries who tend to remain in the program. Many other factors would influence the effectiveness of eliminating the waiting period as a work incentive for these diagnostic subgroups—for example, responsiveness of these conditions to treatment and their tendency to worsen over time.

**Second year only.** Table 3 shows the additional program costs that would be incurred if only the second year of the waiting period were eliminated. As the total line of the table shows, the overall increase in Medicare costs would be about 20 percent, a little less than one-half of the increase in 2-year costs. Although 56 percent of the increase over the 10-year period is attributed to beneficiaries who died, only 19.5 percent would be for those who die in the second year. This increase is substantially smaller than the corresponding figure for the 2-year estimate, reflecting the shape of the death rate distribution. Most of the other results are qualitatively the same as those for the 2-year cost projections.

## Health Insurance Coverage

One important issue related to waiver of the waiting period is the extent to which disabled workers have health insurance coverage before Medicare entitlement begins. Health insurance coverage includes private insurance, Medicaid, and other government-sponsored insurance. If most beneficiaries already have health insurance coverage during the 2-year waiting period (for example, through their former employer, through their spouse, or under Medicaid), then Medicare benefits may merely

replace this existing coverage. Even if Medicare were designated as the second payer, there might be a quick adjustment in the insurance industry to limit liability for disabled workers. The most recent data on the extent of insurance coverage during the waiting period pertains to beneficiaries in the last 6 months of their 2-year waiting period in 1982. An important qualification of these data, however, is that the Consolidated Omnibus Budget Reconciliation Act of 1985 contained a provision mandating that certain persons who lose their jobs be allowed to enroll voluntarily and at their own expense in the group health insurance plan of their former employer for up to 18 months after the loss of employment.<sup>13</sup> Consequently, the data presented here may underestimate the extent of health insurance coverage existing among disabled-worker beneficiaries today.

The data used here were obtained from a sample of new disabled-worker beneficiaries who were interviewed as part of the New Beneficiary Survey (NBS) in December 1982.<sup>14</sup> At the time of the interview, disabled survey respondents had been in the DI program 18-30 months. For this study, responses of beneficiaries still in the Medicare waiting period were analyzed.<sup>15</sup> These beneficiaries were interviewed 18-24 months after DI entitlement.

<sup>13</sup> Public Law 99-272, Consolidated Omnibus Budget Reconciliation Act of 1985, 100 Stat. 222, Title X—Private Health Insurance Coverage, April 7, 1986.

<sup>14</sup> Linda Drazga Maxfield, "The 1982 New Beneficiary Survey: An Introduction," *Social Security Bulletin*, November 1983, pages 3-11.

<sup>15</sup> No coverage information was available for beneficiaries who died or were institutionalized in the first 18 months in the program.

Seventy-three percent of these beneficiaries reported some form of health insurance. The estimated 27 percent reporting no private health insurance or other coverage is about the same as the proportion found by Packard using the full NBS disabled-worker sample.<sup>16</sup> The percent reporting no coverage was smaller than in 1972 when, in a major SSA survey of the disabled, respondents were asked about the presence of health insurance coverage.<sup>17</sup> Thirty-five percent of respondents who had been entitled to DI benefits for less than 2 years in 1972 indicated they did not have any kind of coverage.

In the waiting period, the proportion of NBS respondents reporting health insurance coverage varied by individual characteristics. The proportion increased with increasing age. About 63 percent of those under age 45 reported coverage, compared with 74 percent of those aged 45-54 and 78 percent of those aged 55-61. As indicated above, older beneficiaries are projected to have higher costs in the waiting period.

Coverage rates for men and women were about the same. By race, blacks were less likely to have coverage than nonblacks; by marital status, married persons were more likely to have some form of coverage than unmarried persons

<sup>16</sup> Michael D. Packard, "Health Status of New Disabled-Worker Beneficiaries: Findings from the New Beneficiary Survey" (unpublished manuscript), Division of Program Analysis, Office of Research and Statistics, Office of Policy, Social Security Administration.

<sup>17</sup> Donald Ferron (editor), *Disability Survey 72, Disabled and Nondisabled Adults: A Monograph* (Research Report No. 56), Office of Research and Statistics, Office of Policy, Social Security Administration, 1981.

**Table 3.—Estimated second-year Medicare waiting period costs for a 1972 cohort of disabled-worker beneficiaries, by program status, 1972-81**

Characteristic	Sample size	Average reimbursement per entitlee		Percent increase in 10-year costs	Distribution by DI program status						
		Total, 1974-81	Additional, 2 years		All	Died		Recovered		Age 65	Still in program
						Total	Within first 2 years	Total	Within first 2 years		
Total .....	18,782	\$6,018	\$1,218	20.3	100.0	56.0	19.5	2.5	0.6	20.8	20.6
Sex:											
Men .....	13,150	5,140	1,037	20.2	100.0	59.8	20.2	2.8	.7	19.6	17.9
Women .....	5,632	8,066	1,641	20.4	100.0	50.5	18.5	2.2	.5	22.6	24.7
Race:											
White and unknown .....	15,958	5,956	1,221	20.5	100.0	55.5	19.2	2.6	.6	21.5	20.4
Black .....	2,617	6,340	1,211	19.1	100.0	59.8	22.3	2.3	.5	16.4	21.6
Other .....	207	6,701	1,103	16.5	100.0	50.1	11.1	3.4	.5	19.3	27.1
Age in 1972:											
Under 40 .....	2,961	5,643	833	14.8	100.0	42.6	12.3	12.6	2.5	(2)	44.8
40-49 .....	3,602	6,687	1,152	17.2	100.0	56.0	20.7	4.0	1.1	(2)	40.1
50-59 .....	9,407	6,727	1,307	19.4	100.0	61.3	20.5	.8	.3	22.0	15.9
60-61 .....	2,812	3,182	1,413	44.4	100.0	48.2	19.9	.1	.1	51.7	(2)
Diagnostic group:											
Infectious and parasitic .....	319	4,604	833	18.1	100.0	53.5	11.8	7.1	3.2	19.0	20.5
Neoplasms .....	1,582	3,038	1,726	56.8	100.0	90.7	50.7	.6	.2	4.7	4.0
Endocrine and metabolic .....	613	9,451	1,889	20.0	100.0	54.1	20.1	.8	.2	23.3	21.9
Mental disorders .....	1,736	6,184	807	13.1	100.0	30.8	6.5	6.0	1.1	16.3	46.9
Nervous system .....	681	6,758	1,074	15.9	100.0	47.2	9.7	2.8	.4	18.2	31.8
Eye and ear .....	385	5,880	947	16.1	100.0	33.1	17.2	3.3	.8	32.9	30.7
Circulatory .....	5,321	6,159	1,309	21.3	100.0	57.4	17.0	1.2	.3	25.1	16.2
Respiratory .....	1,153	6,941	1,530	22.0	100.0	66.7	17.4	.3	.2	22.4	10.6
Digestive .....	542	6,537	1,758	26.9	100.0	72.9	32.8	1.7	.4	12.1	13.4
Genitourinary .....	128	6,651	1,521	22.9	100.0	51.2	24.0	2.9	1.2	22.1	23.8
Musculoskeletal .....	2,883	6,131	968	15.8	100.0	37.4	9.0	4.2	1.0	30.3	28.1
Traumatic injuries .....	1,260	4,350	702	16.1	100.0	35.8	7.7	15.5	3.5	20.9	29.8
Other and unknown .....	2,179	6,897	1,230	17.8	100.0	50.4	15.9	2.6	.6	18.4	28.6
Years of education:											
None .....	215	5,220	1,013	19.4	100.0	57.1	19.5	.5	.1	25.4	17.0
1-8 .....	6,540	5,721	1,160	20.3	100.0	55.8	19.0	1.1	.3	25.5	17.7
9-12 .....	8,180	6,165	1,271	20.6	100.0	57.5	20.7	3.1	.8	18.4	21.1
13 or more .....	1,459	5,587	1,225	21.9	100.0	55.2	17.9	6.0	1.4	18.0	20.8
Other and unknown .....	2,388	6,659	1,212	18.2	100.0	51.9	17.6	2.6	.5	18.6	27.0
Occupation:											
Professional, technical, and managerial .....	1,878	5,969	1,431	24.0	100.0	59.9	21.6	4.0	1.0	20.1	16.0
Clerical, sales .....	2,266	6,884	1,450	21.1	100.0	53.3	20.1	3.4	.8	21.0	22.3
Service .....	2,656	7,036	1,379	19.6	100.0	52.9	16.9	1.8	.4	23.4	21.9
Farming, fishing, and forestry .....	757	4,155	802	19.3	100.0	51.1	15.7	2.0	.5	29.0	17.9
Processing .....	564	6,117	1,178	19.3	100.0	58.5	22.0	1.7	.3	20.3	19.6
Machine trades .....	1,632	5,934	1,172	19.8	100.0	56.3	19.3	2.0	.6	21.9	19.9
Benchwork .....	1,164	6,431	1,220	19.0	100.0	49.5	16.3	1.9	.4	22.6	26.0
Structural .....	2,220	4,947	997	20.2	100.0	60.1	18.9	2.5	.6	21.7	15.7
Miscellaneous .....	2,847	5,202	1,089	20.9	100.0	62.2	23.7	2.3	.6	18.1	17.4
Unknown .....	2,798	6,423	1,189	18.5	100.0	53.8	18.4	2.5	.6	17.3	26.4

See footnotes at end of table.

**Table 3.—Estimated second-year Medicare waiting period costs for a 1972 cohort of disabled-worker beneficiaries, by program status, 1972-81—Continued**

Characteristic	Sample size	Average reimbursement per entitlee		Percent increase in 10-year costs	Distribution by DI program status						
		Total, 1974-81	Additional, 2 years		All	Died		Recovered		Age 65	Still in program
						Total	Within first 2 years	Total	Within first 2 years		
Primary insurance amount (1985):											
Less than \$300.....	3,052	6,399	1,191	18.6	100.0	48.4	13.9	4.6	1.1	21.7	25.3
\$300-\$399.....	4,285	6,378	1,230	19.3	100.0	51.3	19.6	2.7	.6	21.4	24.6
\$400-\$499.....	3,803	6,122	1,206	19.7	100.0	54.9	20.0	1.7	.4	21.8	21.6
\$500-\$599.....	5,022	5,880	1,259	21.4	100.0	61.2	21.7	1.3	.3	21.1	16.6
\$600 or more.....	2,620	5,096	1,171	23.0	100.0	64.4	20.7	3.8	1.2	16.7	15.2

<sup>1</sup> Beneficiaries under age 62 and entitled to benefits in 1972.

<sup>2</sup> Data not applicable.

(table 4). About 78 percent of married persons reported they had health insurance coverage; about 64 percent of unmarried persons reported such coverage. Some married respondents were probably covered under their spouse's policy. Of respondents who reported having a working spouse, 82 percent had coverage; nearly 73 percent of those reporting no working spouse had coverage.

Other tabulated data (not shown here) indicate that most beneficiaries with some health insurance had some form of nongovernmental coverage. About 54 percent reported private or other insurance, about 14 percent reported Medicaid, and about 12 percent reported CHAMPUS (Civilian Health and Medical Program of the Veterans' Administration) or military insurance. Twenty-seven percent of the beneficiaries reported no coverage. The proportion of beneficiaries with private insurance reaches almost 74 percent if the individual is married with a spouse working. Only 37 percent of nonmarried persons reported such

**Table 4.—Percent of Disability Insurance beneficiaries with health insurance coverage during the last 6 months of the Medicare waiting period, by selected characteristics, 1982**

Characteristic	Percent
Total.....	73.0
Men.....	72.5
Women.....	74.3
Married.....	77.5
Spouse working.....	82.0
Spouse not working.....	73.7
Not married.....	64.6
Under age 45.....	62.9
Age 45-54.....	73.7
Age 55-61.....	78.1
Black.....	60.5
Nonblack.....	75.5

coverage. Muller has done further analysis of the factors associated with having and not having private insurance.<sup>18</sup>

<sup>18</sup> L. Scott Muller, "Medicare and Other Health Insurance Coverage Among Recently Entitled Disability Insurance Beneficiaries: Findings from the New Beneficiary Survey" (unpublished manuscript), Office of Disability, Social Security Administration, 1988.

### Retroactive Entitlement

Frequently, entitlement to Disability Insurance benefits is established retroactively because of delayed filing by the beneficiary or because of the length of time needed for disability claims adjudication, including the appeals process. If entitlement is established more than 24 months

retroactively, Medicare entitlement is also established retroactively to the specific date 24 months from the entitlement date for cash benefits. In such cases, the beneficiary has 6 months to file Medicare claims retroactively for services received after the Medicare entitlement date.

If the waiting period for Medicare is defined retroactively as the result of retroactive entitlement to disability benefits, the advantages created by waiving the 2-year waiting period may be substantially diluted. The monies for medical care would not actually be available soon after the onset of disability. Administration of the Medicare program might also be very difficult if long periods of retroactivity are permitted for many beneficiaries.

Table 5 shows the frequency of retroactive entitlement to DI benefits. The data are derived from an extract of the Master Beneficiary Record (MBR) for a 1-percent sample of new DI benefit awards in 1987.<sup>19</sup> The award date refers to the date that the payment record was posted to the MBR. The date of posting roughly corresponds to the date a decision to award DI benefits was made. In a few cases, however, several months may elapse between the award decision and the posting of the award to the MBR.

From the 1-percent file, records were selected for workers who were under age 62 in the month of entitlement and who had no previous periods of DI entitlement. This selection resulted in a sample of 2,993 records. For each beneficiary in the sample, the number of months between the date

**Table 5.—Percentage distribution of number of months between date of entitlement and date of posting on Master Beneficiary Record for disabled-worker beneficiaries, by diagnostic group and age, 1987**

Characteristic	Total	Months			
		Less than 1	1-12	13-24	25 or more
<b>Diagnosis</b>					
Total .....	100	25.3	42.9	22.7	9.1
Mental disorders.....	100	11.2	44.9	33.1	10.8
Circulatory diseases.....	100	33.7	44.2	15.4	6.8
Neoplasms.....	100	52.9	40.2	5.4	1.5
Musculoskeletal diseases....	100	17.4	43.2	24.9	14.6
All other and unknown.....	100	26.0	41.8	23.4	8.9
<b>Age</b>					
Under 45.....	100	22.4	37.9	28.2	11.4
45-54.....	100	24.1	45.7	20.8	9.5
55-61.....	100	29.5	46.0	18.3	6.3

of entitlement to DI benefits and the date of posting of the award to the MBR was calculated.

As the table indicates, about 32 percent of DI awards involved an entitlement awarded more than 1 year retroactively. Nine percent involved retroactive entitlement of more than 2 years. In only 25 percent of cases did the month of entitlement coincide with or succeed the month of posting of the award to the MBR.

The table also indicates substantial variation in retroactive DI entitlements by primary diagnosis of the disabling condition. Neoplasms and circulatory diseases resulted in fewer retroactive awards and in shorter periods of retroactivity. The majority of awards for mental disorders and for impairments of the musculoskeletal system were associated with retroactive entitlements of more than 1 year. Almost 15 percent of awards for musculoskeletal diseases and nearly 11 percent for mental disorders involved retroactive entitlements of more

than 24 months, compared with only 2 percent and 7 percent for neoplasms and circulatory diseases, respectively.

The degree of retroactivity also varied by age. Younger beneficiaries tended to have more retroactive entitlements with longer periods of retroactivity than older beneficiaries. For example, 40 percent of the DI awardees under age 45 had retroactive entitlement going back more than 12 months; only 25 percent of the awardees aged 55-61 had entitlement retroactive to more than 12 months. The differences in retroactivity by age may be related to the nature of the disabling condition—for example, awards to younger persons are often for mental disorders; for older workers the DI awards more frequently tend to be based on diseases of the circulatory system. No appreciable differences were evident between sex or racial groups (data not shown).

These results indicate that some arrangements for retroactive

<sup>19</sup> Lewis L. Frain, "The Monthly OASDI One-Percent File" (unpublished manuscript), Division of Statistics Analysis, Office of Research and Statistics, Office of Policy, Social Security Administration.

payment of Medicare costs would have to be made for a majority of disabled-worker beneficiaries. If it is impractical to permit payments for long retroactive periods—for example, more than 1 year—the cost of altering the waiting period might be lessened by the amount of retroactivity, though at the risk of financial hardship or reduced access to medical care. It should be noted, however, that the cases with less retroactivity also tend to be the cases with higher death rates and therefore greater cost—for example, neoplasms and circulatory disease cases. Thus, it is not clear to what extent the increase in costs would be lessened.

It should be noted also that the beneficiaries with longest periods of retroactivity are also the beneficiaries who might be the most likely to be helped in returning to work—that is, they are the younger beneficiaries with primary diagnoses that tend to result in lengthy periods in the DI program. For these beneficiaries, retroactive entitlement may particularly serve to dilute the effectiveness of eliminating the waiting period in improving access to medical care.

## Limitations of the Analysis

The results presented in this article are limited in several important respects. First, the analysis is restricted to disabled-worker beneficiaries under age 62 at the time of entitlement. The effect of omitting the group aged 62-64 is to substantially understate additional Medicare costs in the first 2 years of DI entitlement.

A second limitation of the results is that no data source provides information on all three aspects of

Medicare utilization discussed above. Each of the three issues relating to the costs in the waiting period was analyzed using a different sample and data source. The extent to which Medicare utilization patterns vary among beneficiaries with differing health insurance coverage and retroactivity cannot be ascertained.

A third limitation in the data concerns the determination of Medicare costs in current dollars. The cost estimates presented in this article are in 1981 dollars. One difficulty in bringing these estimates forward in terms of absolute dollars is that the Medicare reimbursement system changed in 1984, the year in which the prospective payment system for hospitals based on Diagnosis-Related Groups (DRG's) became effective. Because the new payment system is not based directly on cost reimbursement, the National Hospital Input Price Index that was used to adjust Medicare Hospital Insurance (Part A) reimbursements in this study to 1981 dollars is not appropriate as an inflation adjustor after 1983. It is possible to get a rough estimate of current costs by inflating the estimates provided in tables 2-3 by a factor of 1.57.<sup>20</sup> This factor represents the difference between July 1981 and July 1987 prices for medical care services as measured

<sup>20</sup> For example,  $1.57 \times \$2,692 = \$4,226$  would be the estimated average increase in Medicare costs in 1987 dollars for a new entitlee under age 62. If the average cost per entitlee aged 62-64 is the same (as noted elsewhere, it is believed to be larger) and there are about 400,000 new worker entitlements each year, the increase in costs for a new cohort of DI beneficiaries would be about \$1.7 billion. These additional costs would be incurred annually as there is a new entitlement cohort each year. The \$1.7 billion is about 20 percent of Medicare costs for DI beneficiaries eligible for Medicare in 1987 under current law.

by the Medical Care Component of the Consumer Price Index for All Urban Consumers.<sup>21</sup> Using this inflation factor, the average waiting period cost per member of the 1972 cohort would be \$4,226 in 1987 dollars.

In addition to adjustments for overall growth in costs, other factors need to be considered in extrapolating from the experience of the 1972 cohort. Some real changes in kinds and costs of services provided to disabled-worker beneficiaries may have occurred over time. For example, advances in treatment for coronary artery disease may have changed Medicare expense patterns for disabled workers with this diagnosis and changed their death rates as well. Also, current cohorts of beneficiaries now include persons with AIDS. Their medical care costs are much higher than those of most other beneficiaries, which tends to increase average Medicare costs.

## Discussion

In this article, several aspects of eliminating the Medicare waiting period have been examined. The cost appears to be substantial, due mainly to the high death rates of disabled-worker beneficiaries in the first 2 years of entitlement and high costs associated with dying. If beneficiaries aged 62-64 at entitlement were also accounted for, cost estimates would be even higher.

The cost to the Medicare program of eliminating the waiting period could be substantially reduced if Medicare were a secondary rather than a primary payer. As reported

<sup>21</sup> Social Security Administration, *Social Security Bulletin*, January 1985, table M40, and Social Security Administration, *Social Security Bulletin*, August 1988, table M39.

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above, many DI beneficiaries have some form of health insurance during the waiting period, and about half have some form of private insurance. The Medicare costs would certainly be lower if Medicare were a second payer in these cases. A precedent for making Medicare a second payer is found in the coverage arrangement for the working aged who have health insurance through their employer.

The estimation of waiting-period costs with Medicare as second payer is beyond the scope of this article. The estimation of such costs would depend on the comprehensiveness of existing private coverage for DI beneficiaries. It would also depend on whether or not changes in current law were enacted to maintain existing health insurance patterns for DI beneficiaries. In the absence of legislation, it is likely that many employers and insurers would alter the provisions of their private insurance plans to reduce or eliminate coverage during the waiting period.

The results of the analysis of retroactive benefits showed more than 30 percent of a recent award cohort with more than 12 months of retroactivity. The impracticality of covering long retroactive periods could limit the increases in Medicare costs if the waiting period were altered. However, beneficiary filing patterns might change and more pressure might be brought to bear on the disability determination process to reduce the number of retroactive months.

It is clear from an examination of the distribution of increased cost among beneficiaries with different programmatic outcomes that elimination of all or part of the waiting period is very unlikely to be cost-beneficial in enabling beneficiaries to return to work. Most of the increased costs would be for

expenses of beneficiaries who die within the first 10 years after DI entitlement or are near age 65. These are the beneficiaries who are least likely to return to work. If Medicare is first payer, it does not seem possible that the overall costs of altering the waiting period could be recovered by increased DI program terminations and the long-run savings that they imply. Many more beneficiaries would have to have terminations based on recovery in addition to the number that now do so. Thus, it appears that altering the waiting period would most likely result in a net cost to the Medicare trust funds.

Finally, a precedent for eliminating the 24-month waiting period for special groups with extraordinary medical expenses exists: Beneficiaries with end-stage renal disease have been exempted from that waiting period. A similar arrangement for other groups such as beneficiaries with AIDS might be considered. However, it is not clear how the AIDS group differs from other beneficiaries who have high death rates at DI entitlement. Even the rather broadly constructed neoplasms group described in the tables exhibits the same kinds of needs as beneficiaries with AIDS. If a special exception were made for beneficiaries with AIDS, there could be pressure to include other groups of disabled workers as well, at least in those cases where no other health insurance is available.