

Notes and Brief Reports

Effects of OASDI Benefit Increase, June 1977*

Social security checks delivered to beneficiaries in the first week of July 1977 reflected the third automatic cost-of-living increase in cash benefits under legislation enacted in 1972 and 1973. The 5.9-percent increase, which became effective in June, applied to benefits for all persons on the social security benefit rolls at the end of May, except those receiving benefits under the "special minimum" PIA provision.

Automatic increases are initiated whenever the Consumer Price Index (CPI) of the Bureau of Labor Statistics for the first calendar quarter of a year exceeds by at least 3 percent the CPI for the base quarter, which is either the first calendar quarter of the preceding year or the quarter in

which an increase was legislated by Congress. The size of the benefit increase is determined by the actual percentage rise of the CPI during the quarters measured. The CPI for the first calendar quarter of 1977 exceeded the CPI for the first calendar quarter of 1976 by 5.9 percent.

BENEFIT AMOUNTS

Average monthly benefit amounts payable at the end of May 1977 both before and after the 5.9-percent increase are given in table 1. The new rates meant an increase of \$402 million per month for the 33.3 million persons receiving benefits at that time.

For retired workers, the higher rates increased the average monthly benefit amount to \$264.67 for men (up \$15.37) and to \$210.09 for women (\$12.34 more). For disabled workers, the average amount rose to \$285.30 for men and to \$213.18 for women—increases of \$16.03 and \$11.98, respectively. The average benefit increase for entitled dependents of these workers ranged from

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TABLE 1—Monthly cash benefits in current-payment status at end of May 1977 and under new rates effective June 1977 and average increase, by type of beneficiary and reduction status

Type of beneficiary and reduction status	Total number	Total benefit amount (in thousands)		Average benefit amount		Average benefit increase	
		Old rate	New rate	Old rate	New rate	Amount	Percent
All beneficiaries	33,344,763	\$6,516,331	\$6,918,116				6.2
Retired workers and dependents	20,873,048	4,299,981	4,566,996				6.2
Retired workers	17,296,162	3,908,341	4,150,446	\$225.97	\$239.96	\$13.99	6.2
Men	9,466,771	2,360,074	2,505,572	249.30	264.67	15.37	6.2
Benefits actuarially reduced	4,890,482	1,114,700	1,186,451	227.93	242.60	14.67	6.4
Benefits not actuarially reduced ¹	4,576,289	1,245,374	1,319,121	272.14	288.25	16.11	5.9
Women	7,829,391	1,648,267	1,644,874	197.76	210.09	12.34	6.2
Benefits actuarially reduced	5,188,589	954,535	1,015,829	183.97	195.78	13.81	6.4
Benefits not actuarially reduced ¹	2,640,802	593,732	629,045	224.83	238.20	13.37	5.9
Wives and husbands	2,884,881	330,192	351,557	114.46	121.86	7.40	6.5
Benefits actuarially reduced	1,971,774	217,365	232,060	110.24	117.69	7.45	6.8
Benefits not actuarially reduced ¹	913,107	112,827	119,497	123.56	130.87	7.31	5.9
Children	692,005	61,448	64,993	88.80	93.92	5.12	5.8
Disabled workers and dependents	4,756,461	822,420	871,497				6.0
Disabled workers	2,751,549	681,234	721,795	247.58	262.32	14.74	6.0
Men	1,874,950	604,863	534,926	269.27	285.30	16.03	6.0
Women	876,599	176,371	186,869	201.20	213.18	11.98	6.0
Wives and husbands	482,471	35,360	37,553	73.29	77.48	4.55	6.2
Children	1,522,441	105,826	112,149	69.51	73.66	4.15	6.0
Survivors of deceased workers	7,541,884	1,381,226	1,466,169				6.1
Widowed mothers and fathers	573,543	91,341	96,727	159.26	168.65	9.39	5.9
Children	2,917,982	448,132	474,406	153.58	162.58	9.00	5.9
Widows and widowers nondisabled	3,909,026	820,297	872,117	209.85	223.10	13.25	6.3
Benefits actuarially reduced	1,997,513	407,471	434,707	203.99	217.62	13.63	6.7
Benefits not actuarially reduced ¹	1,911,513	412,826	437,410	215.97	228.83	12.86	5.9
Widows and widowers, disabled	122,221	17,901	19,154	146.47	156.71	10.24	7.0
Parents	19,112	3,555	3,765	186.01	197.01	11.00	5.9
"Special age-72" beneficiaries	173,370	12,704	13,454				5.9
Primary	170,899	12,612	13,357	73.80	78.16	4.36	5.9
Wives	2,471	92	97	37.07	39.26	2.19	5.9

¹ Includes transitionally insured beneficiaries.

\$415 for children of disabled workers to \$740 for wives and husbands of retired workers. Among survivors of deceased workers, average benefit increases were highest for nondisabled widows and widowers (\$1325) and lowest for children (\$900).

Social security benefits are based on a worker's primary insurance amount (PIA), which is related by law to the average monthly earnings (AME) on which social security contributions have been paid. The full PIA is payable to a retired worker who becomes entitled to benefits at age 65 and to an entitled disabled worker at any age. Spouses and children of retired or disabled workers and survivors of deceased workers receive set proportions of the PIA subject to a family maximum. The PIA is calculated by applying varying percentages, generally in decreasing order, to succeeding parts of the AME. Whenever a cost-of-living benefit increase is implemented, these percentages are changed to reflect the percentage increase in benefits. With the cost-of-living benefit increase for June 1977, the

PIA is now based approximately on the following nine-part formula:

145.90% of the first \$110 of AME, plus 53.06% of the next \$290 of AME, plus 49.58% of the next \$150 of AME, plus 58.30% of the next \$100 of AME, plus 32.42% of the next \$100 of AME, plus 27.02% of the next \$250 of AME, plus 24.34% of the next \$175 of AME, plus 22.54% of the next \$100 of AME, plus 21.18% of the next \$100 of AME, subject to a minimum PIA of \$114.30 for AME's of \$76 or less.

The maximum family benefit effective for June 1977 is based approximately on the following formula:

For AME's under \$628 the maximum amount is equivalent to 142.6% of the first \$436 of AME, plus 71.3% of the next \$191 of AME, subject to a minimum of 150% of the PIA. For AME's of \$628 or more, the maximum is 1.75 times the PIA.

Table 2 shows examples of monthly benefits effective in June 1977 for various family groups at selected AME levels. Benefits shown for AME's of \$900 or more are not generally payable.

TABLE 2—Examples of monthly cash benefit awards to selected beneficiary families under the Social Security Act, effective June 1977

Beneficiary family	Average monthly earnings of insured worker													
	\$76 or less	\$100	\$200	\$300	\$400	\$550	\$650	\$750	\$900	\$1,000	\$1,100	\$1,175	\$1,275	\$1,375
Retired worker claiming benefits at age 65, or disabled worker														
Worker alone	\$114.30	\$147.10	\$208.80	\$261.10	\$315.40	\$389.90	\$447.40	\$478.90	\$519.60	\$546.60	\$571.00	\$589.20	\$611.70	\$632.90
Worker with spouse claiming benefits at—														
Age 65 and over	171.50	220.70	313.20	391.70	473.10	584.90	671.10	718.40	779.40	819.90	856.60	883.80	917.60	949.40
Age 62	157.20	202.30	287.10	359.10	433.70	536.20	615.20	658.50	714.50	751.60	785.20	810.20	841.20	870.30
Worker, spouse, and 1 child	171.50	220.70	313.20	428.20	575.30	705.70	782.80	838.20	909.20	956.40	999.00	1,030.90	1,070.40	1,107.60
Retired worker claiming benefits at age 62														
Worker alone	91.50	117.70	167.10	208.90	252.40	312.00	358.00	383.20	415.70	437.30	456.80	471.40	489.40	506.40
Worker with spouse claiming benefits at—														
Age 65 or over	148.70	191.30	271.50	339.50	410.10	507.00	581.70	622.70	675.50	710.60	742.30	766.00	795.30	822.90
Age 62	134.40	172.90	245.40	306.90	370.70	458.30	525.80	562.80	610.60	642.30	671.00	692.40	718.90	743.80
Widow or widower claiming benefits at—														
Age 65 or over ¹	114.20	147.10	208.80	261.10	315.40	389.90	447.40	478.90	519.60	546.60	571.00	589.20	611.70	632.90
Age 60	81.80	105.20	149.30	186.80	225.60	278.80	319.90	342.50	371.60	390.90	408.30	421.30	437.40	452.60
Disabled widow or widower claiming benefits at age 60—	57.20	73.60	104.50	130.70	157.80	195.10	223.80	239.60	260.00	273.50	285.70	294.80	306.00	316.60
1 surviving child	114.30	151.30	215.60	275.90	336.20	418.50	492.80	529.20	569.60	598.00	623.30	641.90	658.80	674.70
Widow or widower aged 65 and over and 1 child	171.50	220.70	313.20	428.20	552.00	682.40	782.80	838.10	909.20	956.40	999.00	1,030.90	1,070.40	1,107.60
Widowed mother or father and 1 child	171.50	220.70	313.20	391.80	473.20	585.00	671.20	718.40	779.40	820.00	856.60	883.80	917.60	949.40
Widowed mother or father and 2 children	171.50	220.70	313.20	428.20	575.30	705.70	782.80	838.20	909.20	956.40	999.00	1,030.90	1,070.40	1,107.60
Maximum family benefits	171.50	220.70	313.20	428.20	575.30	705.70	782.80	838.20	909.20	956.40	999.00	1,030.90	1,070.40	1,107.60

¹ Widow's or widower's benefit limited to amount spouse would have been receiving if still living but not less than 82½ percent of the PIA.

² Sole survivors.

Note: The higher monthly earnings shown in column headings on the right are not, in general, possible now, since earnings in some of the earlier

years—when the maximum amount creditable was lower—must be included in the average. Therefore, the benefit amounts shown in these columns are not generally payable until later. (Effective June 1977, the highest average monthly earnings possible is \$634 for a male worker retiring at age 65 and \$650 for a woman.)

now because current AME's are based in part on earnings for earlier years, when the maximum amounts creditable for social security purposes were lower.¹

The highest PIA's in June 1977 for workers who retired at age 65 in that year were \$437.10 for men and \$447.40 for women (table 3). These PIA's are based on AME's of \$634 and \$650, respectively.

ACTUARIALLY REDUCED BENEFITS

Although a 5.9-percent across-the-board rise was specified, the actual increase amounted to more than that for persons with actuarially reduced benefits—that is, beneficiaries who claimed benefits before they attained age 65. The larger percentage increase for members of this group resulted from the fact that the 5.9-percent rise was calculated on the beneficiary's basic benefit amount before reduction and then adjusted, if necessary, and added to the benefit amount before the rate increase. The increase thus could be more than 5.9 percent of the reduced benefit that was payable at the end of May.²

Persons in this group who had reached age 65 by June 1977 received the full amount of the increase, since no reduction for months before age 65 was necessary. Even for those with reduced benefits who were still under age 65, however, the percentage reduction applied to the increase was smaller than the original percentage reduction and the adjusted increase was still greater than 5.9 percent of the benefit amount under the old rate.

The benefit increases for persons with reduced benefits averaged 6.4 percent for retired workers, 6.8 percent for spouses, and 6.7 percent for non-disabled widows and widowers. Among those re-

¹ Maximum creditable earnings for social security purposes were \$3,000 in 1937-50, \$3,600 in 1951-54, \$4,200 in 1955-58, \$4,800 in 1959-65, \$6,600 in 1966-67, \$7,800 in 1968-71, \$9,000 in 1972, \$10,800 in 1973, \$13,200 in 1974, \$14,100 in 1975, \$15,300 in 1976, and \$16,500 in 1977. Whenever a cost-of-living benefit increase is implemented, maximum creditable earnings are also increased. The increase is measured by the rise over specified periods in the average taxable wages under the social security program for all workers.

² For a more detailed explanation of how benefit increases are calculated for those receiving reduced benefits, see Social Security Administration, *OASDI Digest*, 1974, page 15.

TABLE 3.—Minimum and maximum monthly retired-worker benefits payable to individuals who retired at age 65, 1940-77

Year of attainment of age 65 ¹	Minimum benefit		Maximum benefit			
	Payable at time of retirement	Payable effective June 1977	Payable at time of retirement		Payable effective June 1977	
			Men ²	Women	Men ²	Women
1940.....	\$10.00	\$114.30	\$41.20	.....	\$221.20	.....
1941.....	10.00	114.30	41.60	.....	221.20	.....
1942.....	10.00	114.30	42.00	.....	223.90	.....
1943.....	10.00	114.30	42.40	.....	223.90	.....
1944.....	10.00	114.30	42.80	.....	226.30	.....
1945.....	10.00	114.30	43.20	.....	226.30	.....
1946.....	10.00	114.30	43.60	.....	229.10	.....
1947.....	10.00	114.30	44.00	.....	231.20	.....
1948.....	10.00	114.30	44.40	.....	231.20	.....
1949.....	10.00	114.30	44.80	.....	233.50	.....
1950.....	10.00	114.30	45.20	.....	236.40	.....
1951.....	20.00	114.30	46.50	.....	236.40	.....
1952.....	20.00	114.30	48.50	.....	236.40	.....
1953.....	25.00	114.30	55.00	.....	261.10	.....
1954.....	25.00	114.30	55.00	.....	261.10	.....
1955.....	30.00	114.30	98.50	.....	261.10	.....
1956.....	30.00	114.30	103.50	.....	275.80	.....
1957.....	30.00	114.30	108.50	.....	288.30	.....
1958.....	30.00	114.30	108.50	.....	288.30	.....
1959.....	33.00	114.30	116.00	.....	288.30	.....
1960.....	33.00	114.30	119.00	.....	295.60	.....
1961.....	33.00	114.30	120.00	.....	297.90	.....
1962.....	40.00	114.30	121.00	\$123.00	300.60	\$305.70
1963.....	40.00	114.30	122.00	125.00	303.10	310.30
1964.....	40.00	114.30	123.00	127.00	305.70	315.40
1965.....	44.00	114.30	131.70	135.90	305.70	315.40
1966.....	44.00	114.30	132.70	135.90	307.90	315.40
1967.....	44.00	114.30	135.90	140.00	315.40	324.80
1968.....	³ 55.00	114.30	³ 156.00	³ 161.60	320.20	331.60
1969.....	55.00	114.30	160.50	167.30	329.60	343.50
1970.....	64.00	114.30	189.80	196.40	338.70	350.70
1971.....	70.40	114.30	213.19	220.40	345.80	357.40
1972.....	70.40	114.30	216.10	224.70	350.70	364.50
1973.....	84.50	114.30	266.19	276.40	359.70	373.70
1974.....	84.50	114.30	274.60	284.90	371.10	385.10
1975.....	93.80	114.30	316.30	333.70	385.10	406.20
1976.....	101.40	114.30	364.00	378.80	410.20	426.90
1977.....	107.90	114.30	412.70	422.40	437.10	447.40
1978.....	114.30	114.30	459.80	459.80	.....	.....

¹ Assumes retirement at beginning of year.
² Represents benefit for both men and women until 1962.
³ Effective for February 1968.

ceiving unreduced benefits, the increase averaged 5.9 percent for all three groups. The benefit category subject to the largest actuarial reduction—disabled widows and widowers—was also the group with the largest percentage increase (7.0 percent). Because so many beneficiaries were receiving reduced benefits, the higher percentage increase for these individuals brought the overall rise in the average benefit for all beneficiaries to 6.2 percent.

PERSONS RECEIVING BENEFITS UNDER SPECIAL MINIMUM PROVISION

Unlike the regular PIA, the "special minimum" PIA is not related to the worker's AME

TABLE 4—Beneficiaries with special minimum PIA, by type of benefit, at end of specified month, 1974-77

Beneficiaries and averages	Total	Retired workers			Disabled workers		Survivors	
		Men	Women	Dependents ¹	Workers	Dependents ¹	Widows, widowers, and parents	Widowed mothers and fathers and children
May 1974								
Number	217,475	77,817	85,456	22,063	17,389	2,944	5,940	6,136
Average								
Special minimum PIA	\$170 37	\$172 55	\$166 92	\$172 77	\$173 26	\$174 16	\$170 89	\$171 70
Regular PIA	165 73	165 20	166 04	165 62	166 13	167 68	164 63	167 56
Monthly amount	148 10	157 95	163 72	61 17	173 90	43 12	145 43	97 94
June 1974								
Number	117,120	42 331	46,242	11,821	9 230	1,482	3,035	2,979
Average								
Special minimum PIA	\$175 42	\$175 29	\$175 42	\$175 54	\$176 03	\$177 22	\$173 90	\$175 45
Regular PIA	167 04	166 82	167 00	167 23	167 92	169 20	165 91	167 49
Monthly amount	148 43	158 50	163 17	60 09	175 46	43 43	147 29	96 79
May 1975								
Number	125,175	45,387	46,973	12 487	11,305	1,990	3,646	3 387
Average								
Special minimum PIA	\$175 52	\$175 41	\$175 46	\$175 63	\$176 14	\$177 28	\$174 17	\$175 59
Regular PIA	167 21	167 07	167 08	167 54	167 85	169 13	166 24	167 43
Monthly amount	146 16	157 96	158 85	60 66	175 32	41 95	145 90	98 48
June 1975								
Number	27 803	10 223	10,693	2,635	2,468	355	745	684
Average								
Special minimum PIA	\$176 91	\$176 88	\$176 88	\$177 06	\$177 24	\$178 40	\$175 35	\$177 21
Regular PIA	170 94	170 70	179 78	171 09	170 88	171 42	169 32	170 10
Monthly amount	147 21	158 29	157 75	60 73	176 59	47 31	146 73	96 26
May 1976								
Number	29,444	10,557	11,571	2,662	2 638	393	892	731
Average								
Special minimum PIA	\$176 88	\$176 89	\$176 75	\$176 98	\$177 47	\$178 32	\$175 58	\$177 27
Regular PIA	170 76	170 76	170 57	170 98	171 48	171 97	169 71	170 78
Monthly amount	146 85	157 82	156 39	61 57	176 59	47 34	145 89	95 41
June 1976								
Number	4,296	1 563	1,708	394	845	48	115	123
Average								
Special minimum PIA	\$178 20	\$178 28	\$178 26	\$178 44	\$178 90	\$179 25	\$177 57	\$177 14
Regular PIA	173 58	173 69	173 55	173 97	174 19	174 32	172 75	170 09
Monthly amount	147 02	157 55	155 23	64 07	178 25	60 52	144 71	102 73
May 1977								
Number	4 090	1 325	1,905	295	311	47	115	92
Average								
Special minimum PIA	\$178 17	\$178 31	\$177 93	\$178 47	\$178 96	\$178 47	\$178 20	\$177 46
Regular PIA	173 51	173 79	173 08	174 05	174 78	173 66	174 12	171 68
Monthly amount	152 53	157 32	164 39	64 21	178 54	45 80	148 20	92 92
June 1977								
Number	309	100	156	18	19	4	4	8
Average								
Special minimum PIA	\$178 34	\$179 10	\$177 87	\$177 50	\$180 00	\$180 00	\$175 50	\$179 10
Regular PIA	172 70	176 13	170 21	174 33	177 24	176 60	168 63	163 90
Monthly amount	154 76	155 03	162 65	74 99	178 69	69 65	155 03	132 48

¹ Includes wives, husbands, and children

but to the number of years of employment initiated in January 1973, it was designed to help persons with many years of work in covered employment at low earnings. The minimum regular PIA was \$84.50 in January 1973 and \$114.30 in June 1977. The special minimum PIA ranged from \$85-\$170 in January 1973 through February 1974 and has remained at \$90-\$180 since March 1974.⁵ The special minimum PIA is used only when it is greater than an individual's regular PIA.

⁵ For a description of beneficiaries affected by this provision in 1973, see Barbara A. Lingg, *The Effects of the Special Minimum Primary Insurance Amount and the Delayed Retirement Credit: Initial Findings* (Research and Statistics Note No. 17), Office of Research and Statistics, Social Security Administration, 1974.

In May 1974, the impact of the special minimum provision reached its peak, in that month, the benefits for 217,745 persons were calculated on that basis (table 4). Effective for June 1974, the second stage of the 11-percent benefit increase raised the regular PIA for some 100,000 beneficiaries in the special minimum group to more than \$180, making it more advantageous for them to have their benefits based on the regular PIA. As a result, the number of persons with benefits based on the special minimum PIA dropped to 117,120.

The 8-percent benefit increase effective for June 1975 and the 64-percent benefit increase effective for June 1976 raised the regular PIA above \$180 for about 97,000 and 25,000 additional

special minimum beneficiaries, respectively. Thus, by June 1976, only 4,296 individuals were receiving benefits based on the special minimum PIA. The 5.9-percent benefit increase effective in June 1977 raised the regular PIA for most of the beneficiaries with benefits based on the special minimum PIA in May 1977. After the increase, the special minimum PIA remained advantageous for only 309 individuals.

Research Grants Studies

Sections 702 and 1110 of the Social Security Act authorize extramural research projects in the broad areas of social security. The Social Security Administration provides funding through grants to nonprofit organizations and through contracts with both nonprofit and profitmaking organizations. From time to time, as projects are completed, the BULLETIN publishes summaries of research findings. A summary of a completed project (Grant No. 57857) is presented below.



EFFECT OF MEDICAL STAFF CHARACTERISTICS ON HOSPITAL COST

This study to examine the feasibility and usefulness of combining data on the characteristics of a hospital's medical staff with data on its costs was conducted by Mark V. Pauly of the Center for Health Services and Policy Research at Northwestern University. The fundamental premise of the study was that physicians significantly affect the differences in the use of resources within hospitals. Some of those differences might be attributable to identifiable physician characteristics.

It was deemed reasonable to assume that a hospital's costs, as well as some other measures of its expensiveness, are a measure of the resources used to provide hospital care. To the extent that physicians with different characteristics systematically combine inputs to produce

different outputs, hospital costs might be associated with those characteristics.

FEASIBILITY OF DATA COLLECTION

The final data base used in this analysis consists of four major sets of information: (1) abstracts for 79,615 discharged patients with primary and secondary diagnoses, and other important clinical and demographic characteristics for each inpatient discharged from 50 California community hospitals, for the period April-July 1975; (2) characteristics, expenses, revenues, etc., of the 50 hospitals in which the 79,615 patients were treated; (3) characteristics of 2,861 physicians who admitted, attended, and/or treated 70,013 of the 79,615 patients; and (4) hospital control, facilities, and annual aggregate costs and output data for the 50 hospitals obtained from American Hospital Association *Guide Issue* data.

Patient discharge abstracts from the California Health Data Corporation's (CHDC) MR II system were combined with cost data from the Hospital Administrative Services Program of the American Hospital Association to assemble this data set. The CHDC combined physician characteristic data from the American Medical Association's *Directory* with patient records. Physicians who admitted two or fewer patients per month were not included. This deletion reduced the number of physicians whose characteristics were to be documented by nearly half but reduced the number of cases for which physician characteristics were present by only 8 percent.

It was thus possible for CHDC to link physician and patient data for almost all patient records in almost all hospitals. The final data set contains no identification of individual hospitals, patients, or physicians.

CONCEPTUAL FRAMEWORK

The conceptual framework used to analyze the data in this study is based on the theory that the cost incurred in treating any patient is based on the patient's characteristics, the characteristics of the physicians who treat him, and the general characteristics of the hospital and its medical staff. Individual physician characteristics are