

# Voluntary Health Insurance and Medical Care Expenditures: A Ten-Year Review

by AGNES W. BREWSTER\*

*Each year, starting with 1948, the Social Security Administration has prepared an annual summary of the extent to which voluntary health insurance is enabling the population of the United States to budget its medical care expenditures. The methodology originally developed has been consistently applied each year, although refinements and improvements have been made in the data. This year the series incorporates the revisions in personal consumption expenditures for medical care for the entire period 1948-56, recently released by the Department of Commerce.*

**D**URING 1957 consumers in the United States spent nearly \$15.1 billion for private medical care. About \$4.1 billion of this total was expended through prepaid health insurance, and almost \$11.0 billion represented payments made by individuals at the time they received the services or supplies or later. Total expenditures in 1957 were nearly \$1 billion higher than those in 1956 and nearly double the 1948 aggregate of \$7.6 billion.

These sums exclude expenditures for the medical care of civilians that were derived from public funds. Thus, expenditures for veterans and Indians and vendor payments for persons receiving public assistance have been excluded from the data. Expenditures made under Medicare (the new program that, beginning in 1957, provides dependents of members of the Armed Forces with care in civilian hospitals from private doctors) were also excluded. Because it is impossible to eliminate entirely expenditures for workmen's compensation cases, the aggregates include some of these expenditures. The totals also include some money originally derived from taxes but spent directly by individuals, such as cash assistance payments used by public assistance recipients to pay doctors, druggists, and the like. Such expenditures are appropriately regarded as private consumer expenditures. That part of the hospital and medical care benefits under the California and New York

temporary disability insurance laws derived from private carriers is also contained in the figures, but, since the volume is known, it can be excluded if this adjustment is desired.

## *Aggregate Private Expenditures for Medical Care*

The yearly figures representing aggregate private expenditures for medical care used in this article are a composite of separate items developed by the National Income Division of the Department of Commerce and by the Division of Program Research of the Social Security Administration. Each year the Department of Commerce revises some of its figures relating to personal consumption expenditures for medical care. The 1958 revisions<sup>1</sup> were more extensive than those of other years and applied to most of the items in the series. In addition, adjustments were carried back to earlier years to a greater extent than has usually been the case; as a consequence there was a cumulative impact on the aggregates in the composite table (table 1) and some change in the relative magnitudes of individual items.

Newly available data from the Bureau of Internal Revenue gave the Department of Commerce a new basis for extrapolating incomes of physicians and dentists and resulted in a slight upward revision of its previous estimate for physicians' income and an upward readjustment equal to \$555 million in 1956 in incomes of den-

tists. The most significant alterations occurred in the "drug preparations and sundries" component of the item labeled "medicines and appliances" in the Social Security Administration's series, published each year in the December issue of the SOCIAL SECURITY BULLETIN. Until 1958 the Department of Commerce had based this item on the 1947 Census of Business, using 1947 data on sales by drug stores as a benchmark and as a basis for establishing the relationship of prescription sales to total sales. The 1954 Census of Business, released in 1958, showed an increase in prescription sales as a proportion of total sales that established not only a new 1954 benchmark but a new relationship between the two items. By extrapolation, these new levels were applied to the years before and since 1954. As a result, the Commerce Department figure for drug preparations and sundries in 1956, as revised in 1958, is nearly \$1 billion higher than that published in 1957, and the 1952 figure is half a million dollars higher.

When the various adjustments made by the Commerce Department had all been taken into account, the medical care expenditures for 1956 in the Social Security Administration's series had become \$14,097 million instead of \$12,091 million—the figure published in last year's article. In 1957 a total of \$15.1 billion was expended by consumers for medical care. Of this amount, \$10.9 billion was in the form of direct (out-of-pocket) payments to physicians, dentists, nurses, and other practitioners, for care in hospitals and nursing homes, and for medicines and appliances. Health insurance benefits equaled \$3.5 billion, and individuals spent \$670 million for the cost of operating plans, additions to plan reserves, and the like. The benefits received, plus these expenses for prepayment, equaled 27.4 percent of the consumer's medical care dollar.

Expenditures for hospital care

\*Division of Program Research, Office of the Commissioner.

<sup>1</sup> U. S. Income and Output, A Supplement to the Survey of Current Business, 1958.

(both directly and through insurance) and for medicines and appliances have more than doubled in the 10-year period under review. For the other four components of the Nation's medical bill—physicians' services, dental care, other professional services, and skilled nursing-home care—the increases have been smaller.

Insurance benefits for hospital care have increased fivefold in the period, and those for physicians' services have increased almost sevenfold. There has not been a corresponding expansion in expenses to operate prepayment plans, which amounted to \$256 million in 1948 and \$670 million in 1957. Medicines and appliances required

the largest out-of-pocket (as distinguished from prepayment through insurance) expenditures in each of the years 1950-57. Direct payments to physicians ranked second, and those for hospital services third.

The amount spent for the purchase of all forms of health insurance has exceeded direct payments for physicians' services from 1953 on and has been greater than direct payments to hospitals since 1950. In both 1956 and 1957, benefits from hospitalization insurance were greater than direct payments to hospitals. Direct payments for physicians' services were about \$1.5 billion greater than insurance benefits in these 2 years.

The lower portion of table 1 indicates the shift that has occurred in the division of the medical care dollar among the six components of the private medical care bill. Physicians' services, together with the costs of prepayment for them, required nearly a third of the medical care dollar in 1948, and hospital care took one-fourth. In 1953, total expenditures for hospitals and physicians were identical in size; by 1956, hospital care was taking significantly more of the consumer's dollar than physicians' services. By 1957 the expenditure for hospital services (whether paid for directly or through hospital insurance) was the leading component, 29 percent of the total expended, and that for physicians' services was second—27 percent. The expenditure for medicines and appliances, the second largest component in 1948, has ranked third among the six categories since 1951.

Table 1.—Private expenditures for medical care and for voluntary health insurance, 1948-57<sup>1</sup>

Expenditures	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
	Amount (in millions)									
Total.....	\$7,625	\$7,888	\$8,619	\$9,304	\$10,030	\$10,901	\$11,733	\$12,708	\$14,097	\$15,062
Direct payments.....	6,763	6,872	7,328	7,644	8,037	8,482	8,977	9,558	10,473	10,918
Insurance benefits.....	606	767	992	1,353	1,604	1,921	2,179	2,536	3,015	3,474
Expenses for prepayment <sup>2</sup> .....	256	249	299	307	389	498	577	614	609	670
Hospital services <sup>3</sup> .....	1,859	1,947	2,289	2,477	2,766	3,105	3,381	3,722	4,111	4,395
Direct payments.....	1,212	1,240	1,420	1,392	1,460	1,549	1,614	1,704	1,743	1,715
Insurance benefits.....	455	539	680	897	1,074	1,273	1,442	1,679	2,022	2,304
Expenses for prepayment.....	192	168	189	188	232	283	325	339	346	376
Physicians' services <sup>4</sup> .....	2,424	2,452	2,672	2,675	2,859	3,105	3,414	3,517	3,811	4,077
Direct payments.....	2,209	2,143	2,150	2,100	2,172	2,242	2,425	2,385	2,555	2,613
Insurance benefits <sup>5</sup> .....	151	225	312	456	530	648	737	857	993	1,170
Expenses for prepayment.....	64	81	110	119	157	215	252	275	263	294
Medicines and appliances.....	1,897	2,009	2,205	2,525	2,638	2,741	2,758	3,158	3,683	3,971
Dentists' services.....	900	920	961	997	1,098	1,234	1,406	1,508	1,625	1,705
Other professional services <sup>6</sup> .....	445	455	482	510	544	586	634	653	697	734
Nursing homes <sup>7</sup> .....	100	105	110	120	125	130	140	150	170	180
	Percentage distribution									
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Direct payments.....	88.7	87.1	85.0	82.2	80.1	77.8	76.5	75.2	74.3	72.5
Insurance benefits.....	8.0	9.7	11.5	14.5	16.0	17.6	18.6	19.9	21.3	23.1
Expenses for prepayment.....	3.3	3.2	3.5	3.3	3.9	4.6	4.9	4.9	4.4	4.4
Hospital services.....	24.4	24.6	26.6	26.6	27.6	28.5	28.8	29.3	29.2	29.2
Direct payments.....	15.9	15.7	16.5	15.0	14.0	14.2	13.7	13.4	12.4	11.4
Insurance benefits.....	6.0	6.8	7.9	9.6	10.7	11.7	12.3	13.2	14.3	15.3
Expenses for prepayment.....	2.5	2.1	2.2	2.0	2.3	2.6	2.8	2.7	2.5	2.5
Physicians' services.....	31.8	31.1	29.8	28.8	28.5	28.5	29.1	27.7	27.0	27.1
Direct payments.....	29.0	27.2	24.9	22.6	21.6	20.6	20.7	18.8	18.1	17.4
Insurance benefits.....	2.0	2.9	3.6	4.9	5.3	5.9	6.3	6.7	7.0	7.8
Expenses for prepayment.....	.8	1.0	1.3	1.3	1.6	2.0	2.1	2.2	1.9	1.9
Medicines and appliances.....	24.9	25.5	25.6	27.1	26.3	25.1	23.5	24.8	26.1	26.4
Dentists' services.....	11.8	11.7	11.1	10.7	10.9	11.3	12.0	11.9	11.5	11.3
All other.....	7.1	7.0	6.9	6.8	6.7	6.6	6.6	6.3	6.2	6.0

<sup>1</sup> Except where otherwise noted, data are from tables 2-4, the Department of Commerce, *U.S. Income and Output, Supplement to Survey of Current Business, 1958*. Consumer expenditures include employer contributions to health insurance premiums. Excludes medical care expenditures for the Armed Forces and veterans, those made by public health and other government agencies and under workmen's compensation laws, and those of private philanthropic organizations directly to or by hospitals. No attempt has been made to identify and exclude expenditures made by individuals from payments received by them under the public assistance programs.

<sup>2</sup> Data from table 2. Represents the difference between expenditures for health insurance premiums (earned income) and amounts returned to consumers as benefits.

<sup>3</sup> Combines amounts received by hospitals from patients (equal to direct payments and insurance benefits) and the costs of providing the mechanism of prepaid hospital care. Amounts received by hospitals computed from data in *Hospitals*, June of each year 1949-54 and September 1955-58. Based on income from patients for each year ending September 30 in all types of general and special short-term hospitals. Data are projected to December 31 of each year, and additions have been made for (1) nonregistered hospitals and (2) estimated income received from patients by general and special long-term hospitals, mental and allied hospitals, and tuberculosis sanitariums. Amount of private

expenditures is overstated by an unknown amount recorded by the hospitals as patient income in some instances where a government or welfare agency or workmen's compensation carrier actually made payment or reimbursed the patient. Includes estimated annual expenditures for hospital care under student health services.

<sup>4</sup> Combines amounts received by physicians from patients (equal to direct payments and insurance benefits) and the costs of providing the mechanism of prepaid physicians' services. Amounts received by physicians from patients adjusted by an addition each year to figure reported in *Survey of Current Business* for salaries of physicians employed in prepayment medical service plans and for physicians' services in student health services. Excludes amounts private practitioners received from nonconsumer sources (equal to about 10 percent of the amounts shown), such as those for workmen's compensation cases, and physical examinations connected with writing life insurance.

<sup>5</sup> Includes also prepaid dental benefits and other services provided through prepayment plans; amounts for these items are relatively insignificant.

<sup>6</sup> Services of osteopathic physicians, chiropractors, podiatrists, private-duty trained nurses, and miscellaneous curative and healing professions.

<sup>7</sup> Estimates for 1955 and 1956 by the Public Health Service were used as a basis for determining the level for earlier years and for 1957; includes only nursing homes with skilled nursing care.

and \$10.26 more for medicines and appliances in 1957 than in 1948, with lesser increases in the remaining items. The per capita increase of \$36.00 in total medical expenditures resulted from an increase in direct payments of \$17.71 and in the cost of insurance premiums (benefits and expenses combined) of \$18.29.

The 10 years also saw a substantial rise in disposable personal income, from \$1,291 per capita to \$1,782. In current dollars, this rise of nearly \$500 per capita was equivalent to a 38-percent increase. With more dollars available to purchase goods and services, including medical care, some of the impact of the rise—91 cents per capita—in medical care expenditures on family budgets was offset. Per dollar of disposable personal income, the population was spending out of pocket less than 1 cent more

for medical care in 1957 than it was 10 years earlier. Almost all the additional expenditure resulted from the growth in health insurance. In relation to per capita income, out-of-pocket expenditures were almost exactly at the same level in 1957 as they had been in 1948. Reductions in direct payments for hospital services (8 cents) and for physicians' services (31 cents) offset the increases recorded in direct payments for medicines and appliances (30 cents) and for dentists' services (8 cents).

These data on the percentage of per capita disposable income going for medical care highlight—even more than the data for aggregate expenditures or those for per capita expenditures—the effect of rising hospital costs and increases in the costs of drugs (the main component of the

item "medicines and appliances"). In a decade during which per capita disposable income increased by 38 percent, hospital charges so far outpaced this increase as to take half again as large a share of income in 1957 as in 1948. Direct payments to physicians and the insurance benefits paid for physicians' services together took almost the same proportion of disposable personal income in 1948 and 1957. The period was one in which a significant shift had occurred from direct payment for physician's services to prepayment, with the result that expenses to obtain prepayment had increased in relation to per capita income. Further studies are needed to determine the volume of services the population is receiving at given periods of time, since expenditures are related both to the volume of services being provided and

Table 2.—Private expenditures for medical care and for health insurance, amount per capita and as a percent of per capita disposable personal income, 1948-57

Item	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	Change, 1957 from 1948		
											Amount	Percent	
Amount per capita													
Total medical expenditures <sup>1</sup> .....	\$52.03	\$52.87	\$56.82	\$60.29	\$63.84	\$68.34	\$72.30	\$76.90	\$83.76	\$88.03		+ \$36.00	+ 69.2
Direct payments.....	46.09	46.01	48.33	49.53	51.22	53.16	55.37	57.80	62.17	63.80		+17.71	+38.4
Insurance benefits.....	4.13	5.21	6.57	8.84	10.19	12.02	13.45	15.45	17.96	20.31		+16.18	+391.8
Expenses for prepayment <sup>2</sup> .....	1.81	1.65	1.92	1.92	2.43	3.16	3.48	3.65	3.63	3.92		+2.11	+116.6
Hospital services.....	12.65	13.09	15.06	16.07	17.63	19.46	20.88	22.59	24.52	25.66		+13.01	+102.8
Direct payments.....	8.26	8.26	9.31	8.99	9.27	9.65	9.96	10.30	10.36	9.98		+1.72	+20.8
Insurance benefits.....	3.10	3.69	4.52	5.90	6.84	8.07	8.86	10.13	12.09	13.54		+10.44	+336.8
Expenses for prepayment.....	1.29	1.14	1.23	1.18	1.52	1.74	2.06	2.16	2.07	2.14		+ .85	+65.9
Physicians' services.....	16.62	16.40	16.98	17.39	18.24	19.46	21.04	21.20	22.62	23.88		+7.36	+44.6
Direct payments.....	15.10	14.36	14.25	13.71	13.83	13.93	14.87	14.45	15.20	15.33		+ .23	+1.5
Insurance benefits.....	1.03	1.53	2.05	2.95	3.35	4.11	4.59	5.15	5.87	6.77		+5.74	+557.3
Expenses for prepayment.....	.39	.51	.68	.74	1.06	1.42	1.58	1.66	1.55	1.78		+1.39	+356.4
Medicines and appliances.....	12.91	13.47	14.51	16.36	16.88	17.24	16.93	19.10	21.93	23.17		+10.26	+79.5
Dentists' services.....	6.20	6.10	6.30	6.34	6.99	7.75	8.70	9.14	9.67	9.98		+3.78	+61.0
All other <sup>3</sup> .....	3.74	3.69	3.97	4.13	4.10	4.43	4.75	4.81	5.02	5.35		+1.61	+43.0
Percent of per capita disposable personal income													
Total medical expenditures <sup>1</sup> .....	4.03	4.16	4.15	4.09	4.20	4.32	4.57	4.63	4.85	4.94		+0.91	+22.6
Direct payments.....	3.57	3.62	3.53	3.36	3.37	3.36	3.50	3.48	3.60	3.58		+ .01	+ .3
Insurance benefits.....	.32	.41	.48	.60	.67	.76	.85	.93	1.04	1.14		+ .82	+256.2
Expenses for prepayment <sup>2</sup> .....	.14	.13	.14	.13	.16	.20	.22	.22	.21	.22		+ .08	+57.1
Hospital services.....	.98	1.03	1.10	1.09	1.16	1.23	1.32	1.36	1.42	1.44		+ .46	+46.9
Direct payments.....	.64	.65	.68	.61	.61	.61	.63	.62	.60	.56		- .08	-12.5
Insurance benefits.....	.24	.29	.33	.40	.45	.51	.56	.61	.70	.76		+ .52	+216.7
Expenses for prepayment.....	.10	.09	.09	.08	.10	.11	.13	.13	.12	.12		+ .02	+20.0
Physicians' services.....	1.28	1.29	1.24	1.18	1.20	1.23	1.33	1.28	1.31	1.34		+ .06	+4.7
Direct payment.....	1.17	1.13	1.04	.93	.91	.88	.94	.87	.88	.86		- .31	-26.5
Insurance benefits.....	.08	.12	.15	.20	.22	.26	.29	.31	.34	.38		+ .30	+375.0
Expenses for prepayment.....	.03	.04	.05	.05	.07	.09	.10	.10	.09	.10		+ .07	+233.3
Medicines and appliances.....	1.00	1.06	1.06	1.11	1.11	1.09	1.07	1.15	1.27	1.30		+ .30	+30.0
Dentists' services.....	.48	.48	.46	.43	.46	.49	.55	.55	.56	.56		+ .08	+16.7
All other <sup>3</sup> .....	.29	.29	.29	.28	.27	.28	.30	.29	.29	.30		+ .01	+3.4
Per capita disposable personal income <sup>4</sup> .....	\$1,291	\$1,271	\$1,369	\$1,474	\$1,520	\$1,582	\$1,582	\$1,661	\$1,727	\$1,782		+ \$491	38.0

<sup>1</sup> Includes expenditures for health insurance premiums.

<sup>2</sup> Represents the difference between expenditures for health insurance premiums and amounts returned to consumers as benefits.

<sup>3</sup> Other professional services and nursing homes.

<sup>4</sup> Data from table 3, page 6, *Survey of Current Business*, July 1958.

the charges for those services. Eventually the National Health Survey being conducted by the Public Health Service will yield some of the trend data of the kinds needed.

### Insurance Against Medical Care Costs

The record of expansion in health insurance premiums and benefit payments in the past 10 years can be examined in table 3. Premium income rose by \$521 million in 1957, compared with a rise of \$473 million in 1956. The increase in benefit payments was slightly less in 1957 (\$459 million) than in the preceding year (\$479 million). The ratio of benefits to premiums was substantially higher in 1956 than in the earlier years in the decade; the 1957 loss ratio was only slightly greater than that of 1956.

The data on benefit payments shown in table 1 are repeated in table 3, and earned income is the sum of insurance benefits and expenses for prepayment, shown separately for each year in table 1. Separate trend data for hospitalization insurance and for insurance for physicians' services can be derived from table 1.

The sources from which the population obtained its voluntary health insurance protection in 1957 are listed in table 4. Slightly more than half (52.5 percent) of the income received by all carriers for such protection was received by insurance companies—an increase of 1.7 percentage points from the past year. Group insurance rose 2 percentage points, and individual insurance diminished 0.3 percentage points. Blue

Cross-Blue Shield and all other plans showed slight declines. Blue Cross continued to maintain its place as the largest single form of hospitalization insurance, although group and individual insurance companies combined collected more than half of all premium income for hospitalization in 1957. Group insurance was again the leading mechanism for insurance against the costs of physicians' services; in 1957 it pulled further ahead of Blue Cross-Blue Shield plans to account for 39.6 percent of all premium income for physicians' services.

On the benefit side of the ledger, the percentage distributions by type of carrier are substantially the same as the income distributions, although

there are some slight variations. Blue Cross plans, with payments to hospitals of \$1,077 million, accounted for 46.8 percent of the \$2.3 billion that all forms of prepayment made available as protection against hospital costs; this was exactly the same percentage as in 1956. Group insurance rose slightly percentagewise, and individual insurance fell a little; together, their benefit expenditures of \$1,080 million were only \$20 million less than the total of \$1,100 million paid out for hospital care by all Blue Cross and Blue Shield plans.

The two main sources of insurance benefits for physicians' services in 1957 were group insurance plans (\$478 million) and Blue Shield plans (\$419

Table 4.—Income and expenditures for medical care among voluntary health insurance plans, by type of carrier or plan, 1957

Type of insurance carrier or plan	Income <sup>1</sup>			Expenditures for benefits <sup>4</sup>			Benefits as percent of income
	Total	For hospital services <sup>2</sup>	For physicians' services <sup>3</sup>	Total	For hospital services <sup>2</sup>	For physicians' services <sup>3</sup>	
Amount (in millions)							
Total.....	\$ 4,143.9	\$2,680.8	\$1,463.1	\$3,474.0	\$2,304.5	\$1,169.5	83.8
Blue Cross plans <sup>4</sup> .....	1,162.9	1,131.4	31.5	1,106.0	1,077.4	28.6	93.1
Blue Shield plans <sup>7</sup> .....	504.9	23.3	481.6	441.0	22.5	418.5	87.3
Other medical-society-sponsored plans <sup>8</sup> .....	8.2	.5	7.7	7.0	.4	6.6	85.4
Other nonprofit plans.....	247.8	123.1	124.7	222.1	109.7	112.4	89.6
Community.....	84.2	46.8	37.4	71.7	39.9	31.8	85.2
Consumer-sponsored.....	6.0	1.9	4.1	5.1	1.6	3.5	85.0
Fraternal societies.....	1.9	1.0	.9	1.9	1.0	.9	100.0
Employer and/or employee.....	61.8	30.2	31.6	56.4	27.2	29.2	91.3
Union health and welfare <sup>9</sup> .....	93.9	43.2	50.7	87.0	40.0	47.0	92.7
Student health services <sup>10</sup> .....	5.6	2.3	3.3	5.5	2.2	3.3	98.2
Private group clinics with prepayment.....	39.5	13.2	26.3	37.4	12.3	25.1	94.7
Insurance companies <sup>11</sup> .....	2,175.0	1,387.0	788.0	1,655.0	1,080.0	575.0	76.1
Group.....	1,476.0	897.0	579.0	1,318.0	840.0	478.0	89.3
Individual.....	699.0	490.0	209.0	337.0	240.0	97.0	48.2
Percentage distribution							
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	-----
Blue Cross plans.....	28.1	42.2	2.2	31.9	46.8	2.4	-----
Blue Shield plans.....	12.2	.9	32.8	12.7	1.0	35.8	-----
Insurance companies.....	52.5	51.8	53.9	47.7	46.9	49.2	-----
Group.....	35.6	33.5	39.6	38.0	36.5	41.0	-----
Individual.....	16.9	18.3	14.3	9.7	10.4	8.2	-----
All other plans.....	7.2	5.1	11.1	7.7	5.3	12.6	-----

Table 3.—Earned income, benefit payments, and loss ratios for voluntary insurance against the costs of medical care, 1948-57

[Amounts in millions]

Year	Earned income <sup>1</sup>	Benefit payments	Loss ratio (percent)
1948.....	\$862	\$606	70.3
1949.....	1,016	787	75.5
1950.....	1,291	992	76.8
1951.....	1,660	1,353	81.5
1952.....	1,993	1,604	80.5
1953.....	2,420	1,921	79.4
1954.....	2,756	2,179	79.1
1955.....	3,150	2,536	80.5
1956.....	3,623	3,015	83.2
1957.....	4,144	3,474	83.8

<sup>1</sup> Represents benefit payments plus expenditures for obtaining prepayment insurance; for detail, see table 1.

<sup>1</sup> Earned income for Blue Cross, Blue Shield, and similar plans and for insurance companies; total income for plans providing services rather than third-party or cash-indemnity benefits. Division of income between hospital services and physicians' services among service plans providing both types estimated on the basis of their expenditures.

<sup>2</sup> Includes some income or expenditures for out-patient services.

<sup>3</sup> Includes some income or expenditures for services other than those received from physicians (nurses, dentists, laboratories, etc.).

<sup>4</sup> Benefits paid, for nonprofit and other organizations; losses incurred, for insurance companies.

<sup>5</sup> Includes premiums or benefits for hospitalization and physicians' services among private plans under the State temporary disability insurance laws of California and New York (see table 5).

<sup>6</sup> For the 5 combined Blue Cross-Blue Shield plans,

data for medical-surgical insurance shown under Blue Shield plans. Distribution between hospital and physicians' services for these combined plans and for the 8 Blue Cross plans that write both types of insurance furnished by Blue Shield medical care plans. Addition made for Health Services, Inc.

<sup>7</sup> Addition made for Medical Indemnity of America. Excludes hospital insurance of the 5 Blue Cross-Blue Shield plans. Includes 4 Blue Shield plans that also furnish hospital insurance. Data supplied by Blue Shield medical care plans.

<sup>8</sup> Excludes plans underwritten by insurance companies.

<sup>9</sup> Covers only those funds or portions of funds used for the direct purchase of medical care without an intermediary insurance company or plan.

<sup>10</sup> Estimated.

<sup>11</sup> Estimated by Health Insurance Council.

million). All the other types of plan (including Blue Cross and individual insurance policies) provided \$273 million or 23.2 percent of the total expenditures for benefits for physicians' services. As in the field of hospitalization benefits, there was relatively little change from 1956 to 1957 in the percentage distribution of physicians' benefits among the different forms of insurance underwriters.

The data in tables 3 and 4 are not confined exclusively to nongovernment programs but include a small amount of health insurance resulting from the compulsory temporary disability insurance laws of California and New York. Not included, however, are the expenditures of \$3.1 million from the State fund for hospitalization in California. The extent of medical care benefits provided in 1957 under the two State laws is shown in table 5 separately for private carriers and for the public program in operation in California. Income under these programs amounted to an estimated \$22.6 million, and expenditures for benefits totaled \$20.2 million.

The 1957 data shown in table 1 include the California hospitalization benefits of \$8.1 million among the direct payments for hospital care; they also contain—within the insurance benefits shown for hospital and physicians' services—the \$20.2 million in benefits from private plans under public auspices. An adjustment to confine table 1 to voluntary health insurance can be made by (1) reducing private expenditures by \$28.3 million (the combined benefits under public auspices) plus an estimated \$4–5 million for the cost of providing these benefits and (2) removing \$20.2 million from the amounts shown as paid by insurance. An alternative adjustment—if the purpose is to measure the extent of prepayment, whether voluntary or not—calls for adding the \$8.1 million paid in benefits under California's State-operated program to the \$3,474 million of private health insurance benefits. The changes alter the original data only slightly.

### Trends in Insurance Protection

It is evident from the data on expenditures for medical care and health insurance on a per capita basis or in relation to disposable per-

sonal income that comparisons of the extent of health insurance protection provided at different periods in time are affected by the proportion of the population with insurance, by the value of the dollar, and by changes in the benefits provided. Some seeming improvements in benefits are merely adjustments to reductions in the purchasing power of the dollar, and others represent significant additional protection.

When the annual survey of voluntary health insurance was inaugurated, it contained—as it still does—a method of measuring the extent of health insurance protection from year to year that is divorced from considerations of rising prices, increases in enrollment, and upgrading of benefits. Table 6 shows for each year from 1948 through 1957 the proportion of the medical care bill of the Nation accounted for by insurance. In any given year, the dollars of health insurance benefits are similar in value to the dollars of medical care expenditures, and there is thus no question of the validity of the comparison of the proportion of the expenditure represented by insurance. The five benchmarks shown in table 6 and the total have been calculated both to exclude and to include the expenditures made necessary by the use of prepayment to purchase the insurance protection measured.

Insurance was meeting 24.1 percent of the Nation's private medical bill in 1957, compared with 22.4 percent in 1956 and 8.2 percent in 1948. The percentage of the medical bill

met by insurance has increased by somewhat less than 2 percentage points—from 1.0 to 1.9 points—every year except 1951, when the increase was 3.1 percentage points. The year-to-year percentage increase is almost the same whether or not the expense to obtain insurance is included in the data.

In 1957 more than 57 percent of the amounts received by hospitals from patients paying privately for their care was derived from prepayment plans. The increases in 1957 and 1956 in the proportion of the hospital bill met by insurance were exceeded only in 1951. Of the payments made to physicians, almost 31 percent was from insurance sources in 1957, compared with 28 percent in 1956 and 6 percent in 1948.

Private expenditures for hospitalization and physicians' services together account for more than half the Nation's medical care bill. Most, though not all, of the health insurance purchased today applies only to this segment of medical care costs, and in 1957 insurance benefits (\$3.5 billion) equaled 44.5 percent of the total amount spent for these purposes. In actuality, some of these insurance benefits pay for the services of dentists and nurses and for drugs and appliances, but since the amounts cannot be identified no adjustment can be made for them.

Some of these other types of expenditures are combined with the total expenditures for hospitalization and physicians' services and used as the benchmark labeled "currently insurable expenditures." This total omits the costs of nursing homes, nursing care, and care from other nonphysician practitioners and nine-tenths of the Nation's expenditures for drugs and appliances. It can be considered as "currently insurable under the prevailing forms of existing health insurance." Insurance benefits met about 35 percent of this benchmark in 1957 and 12 percent in 1948.

Some existing forms of health insurance are already providing benefits of broader scope than the items included in the data labeled "currently insurable." Certain comprehensive prepayment plans, major medical expense policies, and comprehensive policies of insurance companies in-

Table 5.—Benefits from hospital and medical care insurance under California<sup>1</sup> and New York State temporary disability insurance laws, 1950–57

Year	[In millions]		
	Total	Under public plans <sup>1</sup>	Under private plans <sup>2</sup>
1950.....	\$6.5	\$2.7	\$3.8
1951.....	11.0	2.6	8.4
1952.....	13.4	3.3	10.1
1953.....	16.2	3.7	12.5
1954.....	19.2	5.7	13.5
1955.....	21.3	6.3	15.0
1956.....	24.1	7.0	17.1
1957.....	28.3	8.1	<sup>3</sup> 20.2

<sup>1</sup> Hospital benefits in California.  
<sup>2</sup> Hospital benefits in California; hospital, surgical, and medical benefits in New York.

<sup>3</sup> Estimated data for New York; reported data for California.

clude drugs, private-duty nursing, and, in some instances, dentistry. Among the benefits the benchmark for "potentially insurable" expenditures amounted to \$11.1 billion in 1957. It included about 80 percent of all private expenditures for medical care, exclusive of the cost of the prepayment mechanism. Insurance benefits represented 31 percent of this benchmark.

The last two benchmarks are designed only to illustrate a technique of measuring the potential areas as yet unmet by voluntary health insurance. The reader may establish the level of expenditures that he considers potentially insurable, using the data in table 1 for his selections, and then relate them to the insurance benefits to establish hypothetical goals for voluntary health insurance in the years ahead.

### Measurements of Consumer Medical Care Expenditures

As interest in the extent to which prepayment is financing hospitalization and medical care has increased, two types of inquiries about the com-

ponents of the Nation's aggregate medical care bill have occurred more often than any others. How do the data developed in this report differ from those published by the Department of Commerce in its series on personal consumption expenditures, and how do they differ from the data projected on a national basis from sample surveys based on household interviews? Because of the recent revision in the series published by the Department of Commerce and because of the growing number of sample surveys designed to measure medical care utilization, the present time seems appropriate for explaining the differences in some detail.

*Department of Commerce data.*—Data from *U.S. Income and Output, A Supplement to the Survey of Current Business* (1958) have been used exactly as published for three of the six expenditure items appearing in table 1—that is, for medicines and appliances, dentists' services, and other professional services. The Commerce Department figures for physicians' services form the basis for that line of table 1, with an addition

made by the Social Security Administration each year to cover the salaries paid to physicians by those pre-paid health plans employing physicians to staff their clinics.

The data in the Commerce Department series labeled "medical care and hospitalization insurance" are not altogether appropriate for the purposes of the present analysis. They include both the net cost of income-loss insurance and an addition for the salaries paid to physicians by those pre-paid health plans employing physicians to staff their clinics. Furthermore, the current year's figure is developed by projection before all the data appearing in table 4 of the present article are available.<sup>2</sup>

A fuller explanation of the differences between the Commerce Department

<sup>2</sup> The Division of Program Research, Social Security Administration, provides the National Income Division of the Department of Commerce with the preliminary estimate appearing in its series for the current year. The amount of net cost of income-loss insurance is derived from the article on this subject appearing in each January issue of the *Social Security Bulletin*.

Table 6.—Private expenditures for medical care and percent accounted for by voluntary health insurance, 1948–57

(Amounts in millions)

Year	Total medical care expenditures		Hospital services only		Physicians' services		Hospital and physicians' services		Currently insurable expenditures		Potentially insurable expenditures	
	Amount	Percent accounted for by insurance	Amount <sup>1</sup>	Percent accounted for by insurance	Amount	Percent accounted for by insurance <sup>2</sup>	Amount	Percent accounted for by insurance <sup>2</sup>	Amount <sup>3</sup>	Percent accounted for by insurance	Amount <sup>4</sup>	Percent accounted for by insurance
With expense to obtain insurance excluded												
1948	\$7,369	8.2	\$1,667	27.3	\$2,360	6.4	\$4,027	15.0	\$5,117	11.8	\$5,701	10.6
1949	7,639	10.0	1,779	30.3	2,371	9.6	4,150	18.5	5,271	14.6	5,893	13.0
1950	8,320	11.9	2,100	32.4	2,462	12.7	4,562	21.7	5,744	17.3	6,422	15.4
1951	8,997	15.0	2,289	39.2	2,556	17.8	4,845	27.9	6,095	22.2	6,859	19.7
1952	9,641	16.6	2,534	42.4	2,702	19.6	5,236	30.6	6,598	24.3	7,400	21.7
1953	10,403	18.5	2,822	45.1	2,890	22.4	5,712	33.6	7,220	26.6	8,059	23.8
1954	11,156	19.5	3,056	47.2	3,162	23.3	6,218	35.0	7,901	27.6	8,753	24.9
1955	12,094	21.0	3,383	49.6	3,242	26.4	6,625	38.3	8,449	30.0	9,404	27.0
1956	13,488	22.4	3,765	53.7	3,548	28.0	7,313	41.2	9,306	32.4	10,396	29.0
1957	14,392	24.1	4,019	57.3	3,783	30.8	7,802	44.5	9,904	35.0	11,071	31.4
With expense to obtain insurance included												
1948	\$7,625	7.9	\$1,859	24.5	\$2,424	6.2	\$4,283	14.1	\$5,373	11.3	\$5,957	10.2
1949	7,888	9.7	1,947	27.7	2,452	9.3	4,399	17.4	5,520	13.9	6,142	12.5
1950	8,619	11.5	2,289	29.7	2,572	12.1	4,861	20.4	6,043	16.4	6,721	14.8
1951	9,304	14.5	2,477	36.2	2,675	17.0	5,152	26.3	6,402	21.1	7,166	18.9
1952	10,030	16.0	2,766	38.8	2,859	18.5	5,625	28.5	6,987	23.0	7,789	20.6
1953	10,901	17.6	3,105	41.0	3,105	20.9	6,210	30.9	7,718	24.9	8,557	22.4
1954	11,733	18.6	3,381	42.6	3,414	21.6	6,795	32.1	8,478	25.7	9,330	23.4
1955	12,708	20.0	3,722	45.1	3,517	24.4	7,239	35.0	9,063	28.0	10,018	25.3
1956	14,097	21.4	4,111	49.2	3,811	26.1	7,922	38.1	9,915	30.4	11,005	27.4
1957	15,062	23.1	4,395	52.4	4,077	28.7	8,472	41.0	10,574	32.9	11,741	29.6

<sup>1</sup> Expenditures include outpatient services provided by hospitals. Insurance benefits are applicable to such services when service is given in an emergency.

<sup>2</sup> Slight overstatement because the data used for insurance benefits include some payments for services from nurses, dentists, and laboratories.

<sup>3</sup> Includes total expenditures for services of physicians, dentists, and hospitals and one-tenth the expenditures for drugs and appliances.

<sup>4</sup> Includes total expenditures for services of physicians, hospitals, dentists, and nurses and one-third the expenditures for drugs and appliances.

ment figures for hospital care (labeled "privately controlled hospitals and sanitariums" in that series) will serve to show why the Social Security Administration develops an estimate for hospital care expenditures completely apart from the Commerce Department figure and uses this figure in its tabulations each year.

In the terms of reference of the national income accounts, the appropriate figure for consumer expenditures for hospital care is one restricted to private hospitals, since expenditures for public hospitals appear elsewhere in these accounts than under "Personal Consumption Expenditures for Medical Care." In addition, nonprofit hospitals are regarded as "consumers" in the national income accounts. The current operating expenses of nonprofit hospitals—rather than the income such hospitals received from patients—are therefore selected. Patient payments to proprietary hospitals are added to the operating expenses of the nonprofit hospitals to yield the total for the item "privately controlled hospitals and sanitariums" in the Commerce Department series. The figures shown in that series are derived from the "Guide Issue" of *Hospitals* (American Hospital Association), with appropriate adjustments to include nonregistered hospitals and to place the data on a calendar-year basis. An addition has also been made for private (nonprofit and proprietary) nursing homes.<sup>3</sup>

In the Social Security Administration tabulations the hospital expenditure data represent payments by individual consumers or by insurance carriers for hospital care in both public and private hospitals (that is, income from patients). The most important source of these data also is the "Guide Issue" of *Hospitals*. Income received from patients by general hospitals and by psychiatric, tuberculosis, and other special hospitals, under all types of sponsorship, is calculated on the basis of studies of the relationship between hospital expense and hospital income. An addition is made for hospitalization under student health service programs. Income

derived by both public and private hospitals from public revenues is determined from the yearly survey of public expenditures for hospital care prepared by the Bureau of the Census and is omitted. Among publicly controlled hospitals, and particularly psychiatric, tuberculosis, and long-term hospitals, the bulk of the revenue comes from tax sources. Public expenditures for the purchase of hospital care in private hospitals, through vendor payments, and under Medicare, are excluded.<sup>4</sup>

Income received from patients by the so-called nonregistered hospitals (hospitals not meeting the registration requirements of the American Hospital Association) is determined from reports of such associations and included among private expenditures for hospital care. The data are placed on a calendar-year basis by projection from the September date used in the American Hospital Association series. Income received by skilled nursing homes from private patients is shown separately.

In recent years, even though conceptually different, the actual data relating to hospital care from the Commerce Department series have varied little in size from the Social Security Administration data because the adjustments for public expenditures in private hospitals and for private expenditures in public hospitals have been of about the same order of magnitude. It is conceivable, however, that in future years one of these items might be larger than the other. In that event the concept underlying the Social Security Administration's method of deriving the hospital expenditure figure would be preferable, and these data should be used if expenditures by consumers are being measured.

*Household interview data.*—Data obtained from sample households serve many valuable purposes since they can be related to the demographic characteristics of the persons included in the households. In the area of expenditures for medical care, and particularly in the area of

expenditures for hospital care, these data have one major drawback that detracts from their value as a source for national totals. Persons who are no longer living are not included in the sampling and consequently their expenditures are not reflected in the family expenditure data. Since many terminal illnesses may have involved hospitalization, the expenditure item for hospital care would be understated in household interview data relating to the 12 months before the interview date.

Other disadvantages arise from the fact that families frequently pay medical bills in installments so that bills incurred in one year may not be paid in full until another year or may never be paid. Still another problem is encountered when a family has paid the medical bill itself but expects to be reimbursed by insurance—either its own or that covering the person held liable for the accident or injury causing the expenditure. For these reasons, data from household interviews must be used with certain reservations as a source for determining national aggregates of medical care expenditures.<sup>5</sup>

The time required for processing the data results in a long interval between the interview period and the release of the data; consequently the findings are less timely than those based on national aggregates. Finally, the costliness of collecting data through household interviews has limited their frequency and hence their availability for annual comparisons.

BY THE END of the decade covered by this year's report on private expenditures for medical care and health insurance protection, budgeting for the costs of medical care through prepayment plans had become an accepted approach to family money management. Having learned from experience that payment in advance for some of the costs of an illness can mean avoidance of reductions in their living standards or

<sup>3</sup> Such an addition was not made before 1957 in the Commerce Department series but is now included for earlier years.

<sup>4</sup> Public funds going for hospital and other forms of medical care are shown in the series that appears regularly in the October issue of the *Social Security Bulletin*.

<sup>5</sup> For a further discussion of these and other areas of difference between the Department of Commerce data and data from sample surveys, see Odin W. Anderson, with Jacob J. Feldman, *Family Medical Care Costs and Voluntary Health Insurance: A Nationwide Survey*, pages 109-111.



going into debt, consumers may be expected in the decade ahead to seek extensions of prepayment to include more and more of the items still requiring direct payments. That portion of the population not reached by the group insurance mechanisms

that provide most of today's insurance benefits can be expected to press for coverage. Their demands are apt to find supporters among the ranks of the insured who see the need for protection similar to their own for such individuals as their aging rela-

tives. The \$4 billion health insurance industry of 1957 obviously has had an impact on the American economy that warrants continuous attention from economists, consumers, providers of services, and the industry itself.

## Notes and Brief Reports

### Selected Sources of Money Income For Aged Persons, June 1958\*

The employment of older persons was less affected by the recession than might have been expected. The impact was cushioned by the seniority provisions in the mass-production industries, which were hardest hit. The number of men aged 65 and over with earnings nevertheless dropped from 2.5 million in June 1957 to only slightly more than 2.3 million in June 1958. The total number of women in this age group who had a paying job remained about the same—roughly three-fourths of a million. In relation to the total aged population (which grew by about 320,000 during the 12-month period) the number of earners dropped from 21.9 percent to 20.2 percent. When the number of married women who are not employed but whose husbands are earners is added to the number of persons with paid employment in June 1958, it is estimated that almost 4 million, or 26 percent of all persons aged 65 and over, had some money income from employment (table 1).

More than 1.6 million aged persons were eligible for benefits under the old-age, survivors, and disability insurance program at the end of June 1958 but were not receiving them because of their own employment or the earnings of their husbands. Thus, fully two-fifths of the aged persons with income from employment could have drawn benefits if it were not for that employment.

\*Prepared by Lenore A. Epstein, Division of Program Research, Office of the Commissioner.

Because many aged persons in the labor force have small earnings based on part-time or intermittent work, a considerable proportion of those at work in June 1958 were probably at the same time drawing retirement or survivor benefits. The number cannot be estimated, however, pending completion of special tabulations of data from the national survey of a sample of beneficiaries conducted by the Bureau of Old-Age and Survivors Insurance in the fall of 1957.

Summary information from that survey on beneficiaries' income from various sources in 1957<sup>1</sup> cannot be used to estimate the number of persons receiving income concurrently—in any one month—from both employment and social insurance programs or the number receiving bene-

<sup>1</sup> See "Income of Old-Age and Survivors Insurance Beneficiaries: Highlights From Preliminary Data, 1957 Survey," *Social Security Bulletin*, August 1958.

Table 1.—Estimated number of persons aged 65 and over receiving money income under one of the Social Security Administration programs and estimated number with income from employment, June 1958<sup>1</sup>

[In thousands]

Selected sources of money income	Total	Male	Female
Population aged 65 and over, total.....	15,190	6,930	8,260
Old-age, survivors, and disability insurance.....	8,840	4,440	4,400
Public assistance: <sup>2</sup>			
Public assistance and no old-age, survivors, and disability insurance.....	1,900	600	1,300
Public assistance and old-age, survivors, and disability insurance.....	610	350	260
Employment:			
Earners.....	3,070	2,310	760
Earners' wives not themselves employed.....	880		880

<sup>1</sup> Continental United States, Alaska, Hawaii, Puerto Rico, and the Virgin Islands.

<sup>2</sup> Old-age assistance recipients and persons aged 65 and over receiving aid to the blind. Includes a relatively small number of persons receiving vendor payments for medical care but no direct cash pay-

ment.

Source: Estimated in the Division of Program Research on the basis of published and unpublished data from the Bureau of Old-Age and Survivors Insurance and the Bureau of Public Assistance and from the Bureau of the Census.