

Notes and Brief Reports

Voluntary Insurance Against Sickness, 1949 Estimates

The extent and value of voluntary insurance against sickness may be assessed in terms of the number of persons and families with such insurance or in terms of the proportion of costs, due to sickness, that are met by the voluntary plans. There is no satisfactory information on the number of different individuals covered, but estimates of the proportion of sickness costs met by voluntary plans can be made. The BULLETIN for January-February 1950 contained an appraisal of the protection afforded by voluntary insurance against the income loss and medical costs incurred because of sickness in the calendar year 1948. That article, prepared in the Division of Research and Statistics, included a discussion of the various kinds of voluntary insurance and developed in some detail the methodology used and the rationale behind the estimating procedures. Similar estimates have been developed for the calendar year 1949, the latest year for which the necessary data are available.

Sickness Costs

Costs due to sickness are incurred by the individual in two ways—through loss of income and through medical care expenditures. Estimates of income loss due to nonindustrial illness and injury may be derived by several different methods; in this analysis a conservative figure was developed to reflect only the current loss of income due to short-term illness and the loss incurred in the first 6 months of more extended or permanent disability. In estimating the amount of income loss in 1949, an average daily wage of \$11.25 and an average of 7 workdays lost per worker in the year are assumed. The number of workers represents the number in civilian employment (including self-employment) in an average week during the year, or about 58.7 million. When these factors are used, the loss of income amounts to about \$4.6 bil-

lion in the calendar year 1949. An adjustment for paid sick leave reduces the total income loss to \$4.2 billion. Since voluntary insurance usually does not make indemnity payments for the first few days or first week of illness, the amount of income loss reimbursable through voluntary plans would be less than the actual income loss. An adjustment made to exclude the loss occurring during the first week of disability or illness further reduces the income-loss figure for 1949 to about \$2.7 billion.

Private expenditures for medical care in 1949 have been estimated by the Department of Commerce¹ at \$7,949 million. The addition of amounts spent by private patients in government hospitals and an adjustment for the administrative and net costs of voluntary insurance bring the total to \$7,894 million (table 1), about 6 percent above the same expenditures for 1948.

Voluntary Insurance Protection

Voluntary insurance is available both through commercial companies, which offer group as well as individual policies, and through various

Table 1.—Private expenditures for medical care in 1949¹
[In millions]

Item	Amount	Cumulative total
Physicians' services	\$2,267	\$2,267
Hospital services	2,085	4,352
Dentists' services	631	5,283
Nurses' services	207	5,490
Medicines and appliances	1,798	7,288
Miscellaneous healing and curing professions	283	7,571
Administrative and other net costs of voluntary insurance	319	7,890
Student fees for medical care	4	7,894
Total	\$7,894	\$7,894

¹ Based on data from *Survey of Current Business*, July 1950, p. 24. Excludes medical care expenditures for the armed forces and veterans and those made by public health and other government agencies. See footnote 2.

² Includes \$250 million (not in the source data) estimated to have been spent by patients for services in government hospitals (general and special, mental, and tuberculosis).

³ Total benefit payments through commercial and nonprofit insurance subtracted from total premiums and earned income, as shown in tables 2 and 3 (hospital, medical, and surgical care only).

⁴ *Survey of Current Business*, Department of Commerce, July 1950, p. 24.

types of nonprofit organizations. For 1949, commercial companies' premium income is estimated at \$1,124 million (table 2), of which \$595 million, or 53 percent, was for income-loss indemnification. About 58 percent of the total premium income was from individual policies and 42 percent from group policies. Losses incurred—benefits paid by the commercial carriers—amounted to \$605 million. Income-loss indemnification payments were \$309 million, 52 percent of the amount collected for that purpose; hospital, medical, and surgical benefits amounted to \$296 million, 56 percent of the corresponding premium income. Group policyholders received in benefits a much higher proportion of premiums paid than did individual policyholders; the average amounts per premium dollar returned in benefits were 71 cents and 41 cents, respectively. If an adjustment of commercial group policy

Table 2.—Premium and benefit payments through commercial insurance against sickness costs in 1949
[In millions]

Type of policy and insurance	Premiums earned ¹	Losses ² incurred (benefits paid)
All policies, total	\$ 1,124	605
Income loss (weekly indemnity)	585	309
Hospital, medical, surgical	529	296
Group policies	476	340
Income loss (weekly indemnity)	216	154
Hospital, medical, surgical	260	186
Individual policies	648	265
Income loss (weekly indemnity)	379	155
Hospital, medical, surgical	269	110

¹ Premiums earned, separately for group and individual contracts, were obtained from the *Spectator Pocket Register*, 1950, p. 42. Premiums for group policies were distributed between weekly indemnity and medical care by applying the proportions obtained from a study made by the Life Insurance Association of America (*Group Insurance and Group Annuity Coverage, Continental U.S., 1948 and 1949*), after excluding premiums for accidental death and dismemberment. Premiums for individual policies were divided between weekly indemnity (58.5 percent) and medical care (41.5 percent) on the basis of experience among some representative companies.

² Losses incurred, as reported by the *Spectator*, were reduced by deducting 2.8 percent of premiums earned for group policies and 5.5 percent for individual policies, to eliminate adjustment costs because these are not benefit payments. (These percentages were based on the study by R. H. Blanchard, *Survey of Accident and Health Insurance*, Bureau of Research and Statistics Memorandum No. 62, Social Security Board, 1945.) Loss ratios were then recalculated, and the new ratios were applied uniformly to the estimates of premiums earned (1) for weekly indemnity and (2) for medical care, to obtain the estimated losses incurred. The loss ratio used for the group policies was 71.4 percent; for individual policies, 40.9 percent.

³ Includes dividends and rate credits, mainly for group policies.

Table 3.—Income and benefit payments through voluntary nonprofit insurance against the costs of hospitalization and medical care in 1949

[In millions]

Type of insurance plan	Earned income	Benefit payments
Total	\$559.7	\$473.9
Blue Cross and Blue Shield 1.	454.3	380.5
Other hospitalization and/or surgical plans 2.	14.9	12.6
Comprehensive plans, largely those sponsored by consumers or medical societies 2 3.	30.2	24.9
Industrial plans, except bituminous coal mining 2.	32.9	32.2
Bituminous coal mining 4.	11.5	8.6
Private group clinics 2.	11.9	11.1
Student fees for medical services 2.	4.0	4.0

¹ Excludes data for Canadian, Puerto Rican, and Hawaiian plans and for the 2 comprehensive Oregon plans included in *Blue Shield Financial Reports, 1949* (see footnote 3). Duplications and overlapping reports omitted.

² Data from survey of nonaffiliated prepayment plans in 1949, made by the Division of Research and Statistics in 1950.

³ Includes 5 Oregon Blue Shield plans, 2 of which were covered in *Blue Shield Financial Reports, 1949* (see footnote 1).

⁴ Estimated. Data not available.

⁵ Data from the *Survey of Current Business*, Department of Commerce, July 1950, p. 24.

premiums is made to reflect a reported 10-percent dividend and rate credit, group policyholders received 79 cents on the average premium dollar.

Voluntary insurance against hospital, medical, and surgical bills is also provided by several kinds of nonprofit organizations. Nonprofit medical plans had earned income of \$560 million in 1949, of which \$454 million or more than 80 percent was paid to Blue Cross and Blue Shield plans (table 3). Benefit payments for all nonprofit plans totaled \$474 million, and \$86 million was used for administration, selling costs, reserves, and the like. Policyholders received in benefits an average of 85 cents on their premium dollar. Blue Shield and Blue Cross subscribers had benefits equal to 84 percent of their premium payments, and benefits to subscribers of all other nonprofit plans were 89 percent of premiums.

During 1950 the Division of Research and Statistics made a survey of nonaffiliated prepayment plans in 1949. In preparation of the data for nonprofit plans (other than those included under Blue Cross and Blue Shield), the results of the special

survey were used to derive income and expenditures. These findings differed from the crude estimates made for the 1948 table. Changes in amounts and in the loss ratios for these plans between 1948 and 1949 are therefore not significant.

Appraisal of Protection

The amount of protection provided by voluntary insurance may be assessed by comparing the aggregate benefits paid with the amount of income loss and of private expenditures for medical care. Table 4 contains a series of estimates of the costs of illness and shows the percentage of these costs met by the voluntary plans. In computing the percentages, a range of benefit payments was used. The benefit amounts shown in tables 2 and 3 were first adjusted upward to correct for possible underreporting of payments made by commercial health and accident companies, for possible inequitable subdivision of commercial insurance into weekly indemnity and medical care payments, and for failure to include some miscellaneous nonprofit organizations. These arbitrary increases raised the total figure for weekly indemnity payments from \$309 million to \$340 million and the medical benefits from \$770 million to \$825 million; these amounts represent the range of benefits upon which the percentages in table 4 were computed.

Voluntary insurance against income loss provided benefits of 7.4-8.1 percent of the current income loss from illness and 9.7-10.4 percent of total medical care costs. Income loss and private medical care costs combined equaled \$12.1 billion in 1949, of which 8.9-9.6 percent was met by voluntary insurance. When the benefit amounts for medical care are applied only against hospital and physicians' costs (those covered by the most usual type of medical contract), benefits met 17.5-18.8 percent of the bill. Still another measure of the effectiveness of voluntary insurance is a comparison of benefits with the portion of the costs of sickness that are usually or might potentially be covered by voluntary plans—income indemnity after the first week of illness plus medical care costs limited

Table 4.—Income loss, private expenditures for medical care, and offsetting voluntary insurance payments through insurance companies and nonprofit plans in 1949

Losses and expenditures	Income loss and/or medical care expenditures (in billions)	Percent met by voluntary insurance benefits ¹
Income loss only	\$4.2	7.4-8.1
Total medical care costs	7.9	9.7-10.4
Income loss plus total medical care costs	12.1	8.9-9.6
Physicians' and hospital services only	4.4	² 17.5-18.8
Income loss plus physicians' and hospital services only	8.6	² 12.5-13.5
Income loss with 1-week waiting period, plus cost of services of physicians, hospitals, dentists, and nurses, plus 1/2 cost of drugs and appliances, plus net cost of insurance	9.1	11.9-12.8
Cost of services of physicians, hospitals, dentists, and nurses, plus 1/2 cost of drugs and appliances, plus net cost of insurance	6.4	12.0-12.9

¹ Larger figure in each range calculated from estimates, which were arbitrarily increased to allow for possible underreporting of insurance payments in the sources and for other possible or known omissions; the smaller figure calculated from the figures in tables 1-3, without such arbitrary inflation.

² Slight overstatement because total benefit payments include some payments for services other than those received from physicians and hospitals.

to hospital, physician, dental, and nursing services plus one-third of the expenditures for drugs and appliances plus the net cost of voluntary insurance. In 1949 voluntary insurance benefits were 11.9-12.8 percent of this aggregate of \$9.1 billion. The medical care portion of that bill was \$6.4 billion, of which 12.0-12.9 percent was covered by voluntary insurance benefits.

Voluntary insurance in 1949 met only a small portion of the costs of sickness incurred by individuals and families. About one-eighth of the \$9.1 billion of such costs that might be considered within the scope of voluntary insurance was covered by the voluntary plans. There was roughly a 20-percent increase between 1948 and 1949 in the portion of these costs covered. Actual benefit payments, both for income-loss indemnity and medical care, increased more than 25 percent while the costs rose about 6 percent during the 1-year period.