

Voluntary Insurance Against Sickness: Estimates for 1948*

To what extent is voluntary insurance in the United States furnishing protection against the costs of sickness? More specifically, what proportion of income loss due to sickness is it indemnifying? What proportion of medical costs is it covering? The study that follows shows that in 1948 voluntary insurance met only a small fraction of the costs of illness in the United States.

THERE are many differences of opinion about the extent and value of voluntary insurance against sickness. The conflicts mainly concern different estimates of the number of insurance policies in force, the number of different individuals insured, the comprehensiveness of their insurance contracts, and the net value of their insurance protection.

In contrast to the difficulties of obtaining unduplicated counts of persons having voluntary insurance protection of one kind or other, substantial data are available on the amounts paid in as insurance premiums and on the amounts paid out as insurance benefits. These figures can be compared with estimates of income lost through sickness and of private expenditures for medical services. The extent of voluntary insurance protection can therefore be appraised.

The data in this report apply to the calendar year 1948, the latest year for which all the necessary figures are available.

Income Loss Due to Current Illness

There are many possible estimates of annual income loss due to nonindustrial illness and injury, depending on the problems to which the figures are applied. The highest estimates, running up to \$10 billion, \$20 billion, or more, take into consideration not only the loss in current earnings due to total and partial disability, but also the loss of future earnings due to permanent disability (partial and total) and premature death, and the produc-

tivity loss to management and to society in general.¹ For the present purposes, a conservative figure was developed to reflect only the current loss of income due to short-term illness and to the first 6 months of more extended or permanent disability.

This analysis uses a minimal estimate of \$4.1 billion for current income loss due to nonindustrial illness and injury in 1948. For employees, this includes a loss of about \$3.7 billion, derived by using (a) an average of \$11 for daily earnings,² (b) an average of 7 workdays lost per worker in a year,³ and (c) an estimate of 48.2 million full-time wage and salary workers in 1948.⁴ For self-employed persons, it includes an allowance of \$0.8 billion income loss.⁵ An offset

¹ See Oscar R. Ewing, *The Nation's Health*, 1948, pp. 26-29.

² *Survey of Current Business*, Department of Commerce, July 1949, p. 21. Average annual earnings per full-time employee, divided by 255 working days. No special downward adjustment is made for the concentration of sickness among groups with low earnings because average daily earnings already reflect the effects of sickness incidence, and earnings lost because of sickness are already absent from the calculated average.

³ Unpublished data from special surveys of sickness made by the Bureau of the Census; also *Monthly Labor Review*, Department of Labor, September 1948, pp. 235-239; *Disability Among Gainfully Occupied Persons*, Social Security Board, Bureau of Research and Statistics Memorandum No. 61, 1945; *Manual of Industrial Hygiene*, by W. M. Gafafar, 1943, pp. 420-466.

⁴ *Survey of Current Business*, July 1949, p. 20.

⁵ *Ibid.*, page 21; applying the same factors as for employees, with the assumption that higher average earnings offset disability not resulting in earnings loss.

for paid sick leave reduces the total by about \$0.4 billion.⁶

Voluntary insurance does not ordinarily undertake to make indemnity payments with respect to income loss due to the first days of disability—especially for illness, as distinguished from accident. The estimate of annual income loss might therefore be reduced by eliminating the first week of disability due to illness, and assuming about 4.2 (instead of 7) days lost per worker in a year. Again, with appropriate allowance for those who are protected by sick-leave provisions, the minimal estimate of \$4.1 billion for current income loss would thus be arbitrarily reduced to about \$2.7 billion of wage loss compensable through insurance.

Private Expenditures for Medical Services

According to the estimates of personal consumption expenditures prepared by the Department of Commerce, private expenditures for medical care in 1948 were \$7,412 million.⁷ When adjusted to meet the needs of the present analysis, the total becomes \$7,422 million (table 1). The second column of the table shows cumulative totals for the various items, providing a series of benchmarks for measuring the privately financed medical bill of the Nation.

Total Estimate of Income Loss and Medical Costs

Benchmarks against which to assess the extent of voluntary insurance pro-

⁶ Assumes for this calculation that about 10 million persons have, on the average, 100-percent wage continuation for a maximum of 1 week of disability, equivalent to nearly half their average wage loss up to 26 weeks.

⁷ *Survey of Current Business*, July 1949, table 30, p. 23. Medical care expenditures for the armed forces and veterans, for public health and other governmental services, and for publicly operated hospitals and other institutions are not included in this figure.

*Prepared in the Division of Research and Statistics, Office of the Commissioner.

Table 1.—Private expenditures for medical care in 1948¹

[In millions]		
Item	Amount	Cumulative total
Physicians' services.....	\$2, 141	\$2, 141
Hospital services.....	1, 864	4, 005
Dentists' services.....	864	4, 869
Nurses' services.....	200	5, 069
Medicines and appliances.....	1, 807	6, 876
Miscellaneous healing and curing professions.....	273	7, 149
Administrative and other net costs of voluntary insurance.....	270	7, 419
Student fees for medical care.....	3	7, 422
Total.....	\$7, 422	\$7, 422

¹ Based on data from *Survey of Current Business*, July 1949, p. 23. Excludes medical care expenditures for the armed forces and veterans and those made by public health and other government agencies. See also footnote 2.

² Includes \$300 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).

tection in 1948 can be established from these estimates. An income-loss estimate of \$4.1 billion, and a private expenditure estimate of \$7.4 billion for all kinds of medical care, are the first two benchmarks. A third benchmark is the total of these two items, \$11.5 billion.

Since only a very small amount of voluntary insurance is applicable to dental care, nursing services, drugs, and the like, a fourth benchmark might include only the estimate for the costs of physicians' and hospital services, about \$4.0 billion. A fifth benchmark would add the current income loss (\$4.1 billion) to this figure and give a total of approximately \$8.1 billion.

Still another benchmark might be of interest as representing the amount against which the purchase of insurance to cover the impact of illness might be justifiably measured. It would include the first four items in table 1 (physicians', hospital, dentists', and nurses' services), about one-third of the fifth item (drugs and appliances), and the seventh item (net cost of voluntary insurance). Together, these amounted to about \$5.9 billion in 1948. With the addition of the figure for income loss after a 1-week waiting period (\$2.7 billion), the total equals about \$8.6 billion.

Protection Through Insurance Company Policies

Voluntary insurance is available through group and individual policies sold by commercial insurance carriers and through various kinds of nonprofit organizations. The premium incomes and the benefit payments of the insurance companies will be considered first.

Premiums earned by commercial accident and health insurance companies in 1948 are estimated at \$914 million. This includes premiums for income-loss indemnification and for hospitalization, medical, and surgical expenses. When allocated between these two classes of benefits, about 54 percent of total premiums, or about \$493 million, are assigned as premiums for income-loss (so-called weekly indemnity) insurance, and the balance, or about \$421 million, as premiums for medical care insurance.⁸ The figures are shown in table 2.

Table 2.—Premium and benefit payments through commercial insurance against sickness costs in 1948¹

[In millions]		
Type of policy and insurance	Premiums earned	Losses incurred (benefits)
All policies, total.....	² \$914	\$473
Income loss (weekly indemnity).....	493	245
Hospital, medical, and surgical.....	421	228
Group policies.....	391	273
Income loss (weekly indemnity).....	179	125
Hospital, medical, and surgical.....	212	148
Individual policies.....	523	200
Income loss (weekly indemnity).....	314	120
Hospital, medical, and surgical.....	209	80

¹ For the sources and derivation see text footnotes 8 and 9.

² Includes dividends and rate credits, mainly for group policies.

⁸ Premiums earned, separately for group and individual contracts, were obtained from the *Spectator Pocket Register*, 1949, p. 49. 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., 1947 and 1948), after excluding premiums for accidental death and dismemberment. Premiums for individual policies were divided between weekly indemnity (60 percent) and medical care (40 percent) on the basis of experience among some representative companies.

It is estimated that, in the aggregate, the policyholders received money payments of about \$473 million as benefits (the insurance companies call them "losses"), the remaining 48 percent of the premium income went for selling and operational costs, reserves, adjustment expenses, potential dividends or rate credits, profits, taxes, and the like. The insured persons are estimated to have received about \$245 million as current reimbursement for lost income and about \$228 million toward their hospital and medical care bills.⁹ These figures are also shown in table 2.

For commercial group policies, if we accept informal reports that dividends and rate credits averaged 10 percent, and reduce earned premiums by this amount, benefits (losses incurred) equal about 78 cents of the average premium dollar. For commercial individual policies, benefits were about 38 cents of the average premium dollar. For all commercial policies combined, policyholders received in benefit payments in 1948 about 54 cents of the average premium dollar.

The figures in table 2 apply to commercial accident and health insurance policies. Admittedly, they do not include a small (nonreported) fraction of this type of insurance, nor do they include the premiums and benefit payments under other kinds of commercial insurance policies (classified as automobile, resident liability, life, etc.). Estimates for such items as are applicable to the risks considered here would not, however, add much to the totals in the table. Moreover, such potential additions are offset by deductions that, if possible, should be made from the figures in the table to

⁹ 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 69.8 percent, and for individual policies, 38.2 percent.

eliminate items unavoidably included though not applicable to the benchmarks used here (premiums and benefit payments for life, accidental death and dismemberment, etc.). A further offset against omissions is the use of "losses incurred," a larger figure than that for "losses paid," which is not available.

Protection Through Nonprofit Insurance Plans

Voluntary insurance against certain hospital, medical, and related costs is also available through various nonprofit organizations. These include the Blue Cross (hospitalization) and Blue Shield (medical care) plans, industrial medical care programs sponsored by employers, employees, or both, the numerous small and the occasional large cooperative health groups, and various other nonprofit

Table 3.—Income and benefit payments through voluntary nonprofit insurance against the costs of hospitalization and medical care in 1948

[In millions]

Type of insurance plan	Earned income	Benefit payments
Total	\$454	\$377
Blue Cross and Blue Shield plans ¹	\$365	\$307
Other hospitalization and medical care plans ²	9	6
Comprehensive plans, largely consumer-sponsored ³	33	27
Industrial plans, except bituminous coal mining ⁴	25	19
Bituminous coal industry ⁵	12	9
Private group clinics ⁶	7	6
Student fees for medical service ⁷	3	3

¹ Data from *Hearings on a National Health Program, 1949*, Senate Committee on Labor and Public Welfare, 81st Cong., 1st sess., Part 1, pp. 404-405 (for financial reports of Blue Shield plans); and *1949 Argus Casualty and Surety Chart*, pp. 135-139 (for financial reports of Blue Cross plans). Duplications and overlapping reports omitted; Canadian, Puerto Rican, and Hawaiian plans excluded.

² *1949 Argus Casualty and Surety Chart*, pp. 139-141, for 18 plans not included within Associated Medical Care Plans or Blue Shield or Blue Cross compilations.

³ Omits plans included in the preceding items. Estimates based on data from many plans and various sources suggesting a coverage of 1.6 million, an average per capita premium of \$20.50, and a loss ratio of 83 percent. See *Prepayment Medical Care Organizations*, Social Security Board, Bureau of Research and Statistics Memorandum No. 55, 1945; *Social Security Bulletin*, Nov. 1948; *Public Health Economics*, Oct. 1949.

⁴ Based on estimates of coverage and of average premium from various sources, and a loss ratio of 75 percent. See *A Survey of Accident and Health Coverage in the United States*, Aug. 1949; also references in footnote 3.

⁵ See references in footnotes 3 and 4. Excludes payments to Blue Cross on behalf of miners.

⁶ See references in footnotes 3 and 4. Benefit payments increased by 20 percent to allow for more comprehensive services.

⁷ Data from *Survey of Current Business*, Department of Commerce, July 1949, p. 23.

hospitalization and medical care plans. Private group clinics that are not properly classified as nonprofit, and university health plans that are not truly voluntary, are also included here.¹⁰ Earned income and benefit payments for this group of plans are shown in table 3.

The figures for the first two sub-items in table 3 were obtained from published reports. The remaining items, accounting in all for less than 20 percent of either earned income or benefit payments, are estimates based on generous allowances for the numbers of persons covered and for the per capita premiums and benefit payments.

Nonprofit medical care plans of all types received about \$454 million as earned income in 1948 and paid out about \$377 million in benefits (whether as cash payments to policyholders or as payments to hospitals, physicians, and other providers of service). The persons covered by these nonprofit insurance organizations received on the average about 83 cents per dollar of premium payment.

No attempt has been made here to separate hospitalization and medical care benefits. It is apparent, however, that much—probably 75-80 percent—of the \$377 million of benefit payments in 1948, can be assigned to hospitalization benefits. Blue Cross benefit payments for hospitalization alone account for 65 percent of the total.

Appraisal of Total Protection Through Voluntary Insurance

The dollar values of voluntary insurance provisions against loss of income on account of current illness and against medical care expenses are now available to us, by combining the applicable indemnity payments ("losses") made by the insurance companies and the benefit payments made by the nonprofit plans. Before these amounts were appraised with reference to the benchmarks established, however, an allowance was

¹⁰ Mutual insurance companies are, in a sense, nonprofit organizations. However, they were classified with stock and other insurance companies in this analysis as is the general practice, rather than with nonprofit organizations.

made for possible underreporting of payments through commercial accident and health insurance in the source data used, for possibly inequitable subdivision of commercial insurance into weekly indemnity and medical care payments, and for failure to include some miscellaneous nonprofit prepayment medical care benefits (company plans, mutual benefit associations, fraternal organizations, trade-union plans, and the like). The \$245 million estimated as wage loss indemnification was arbitrarily increased by \$30 million, to \$275 million. The medical care benefit payments (insurance companies plus nonprofit plans) were similarly expanded from \$605 million to \$650 million. These increased figures are used to give the higher estimates in the ranges shown in the last column of table 4.

With these arbitrary increases it is improbable that the final estimates in any way understate the value of sickness benefit payments through voluntary insurance. The dollar values are shown in table 4 as percentages of the income losses and the private medical care expenditures for 1948.

The current loss of income, counting only that which is not work-con-

Table 4.—Income loss, private expenditures for medical care, and offsetting voluntary insurance payments through insurance companies and nonprofit plans in 1948

Losses and expenditures	Income loss and/or medical care expenditures (in billions)	Percent met by voluntary insurance benefits ¹
Income loss only	\$4.1	6.0-6.7
Total medical care costs	7.4	8.2-8.8
Income loss plus total medical care costs	11.5	7.4-8.0
Physicians' and hospital services only	4.0	15.1-16.3
Income loss plus physicians' and hospital services only	8.1	10.5-11.4
Income loss with 1-week waiting period, plus cost of services of physicians, hospitals, dentists, and nurses, plus ¼ cost of drugs and appliances, plus net cost of insurance	8.6	9.9-10.8

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.

nected and which is due to short-term illness and the first 6 months of more extended disability, amounted in 1948 to about \$4.1 billion. It will be noted in the table that 6.0-6.7 percent of this income loss was covered by the estimated insurance indemnity payments (about \$245-275 million in 1948).¹¹ If the estimate of income loss included all disability that was not work-connected, and not merely the limited portion specified, the insurance payments would equal less than 1, 2, or 3 percent.

¹¹ This is probably an overstatement of the extent to which income loss is indemnified. The estimate of income loss dealt only with non-work-connected disabilities that were total in severity and took no account of durations beyond 6 months, whereas the insurance indemnity estimates included such payments as were made, under various policies, for work-connected disabilities, for partial disabilities, and for disabilities extending beyond 26 weeks.

If the estimate is confined to the loss (\$2.7 billion) of current income due to illness after the first 7 days, the insurance indemnity payments (\$245-275 million) equal about 9.1-10.2 percent.

Voluntary insurance, through benefit payments of \$605-650 million, met 8.2-8.8 percent of the total consumers' (private) medical care bill of \$7.4 billion in 1948.

The combined income-loss and private medical care bill amounted to at least \$11.5 billion in 1948. About 7.4-8.0 percent of this amount was indemnified through total benefit payments (\$850-925 million) from all voluntary insurance companies and organizations.

Physicians' and hospital services purchased privately cost consumers about \$4.0 billion in 1948. If all voluntary insurance benefit payments (\$605-650 million) had related only

to these services, they would have met 15.1-16.3 percent of this bill.

If the current income loss of \$4.1 billion is added to the \$4.0 billion for physicians' and hospital services, 10.5-11.4 percent of this total of \$8.1 billion was indemnified by all forms of voluntary insurance.

The combined total for income loss, with a 1-week waiting period, and private medical expenditures that might be regarded as presently within the potential scope of voluntary insurance (physician, hospital, dental, and nursing services, one-third of the expenditures for medicines and appliances, and the net costs of insurance) is \$8.6 billion. Aggregate voluntary insurance payments amounted to 9.9-10.8 percent of this total.

This analysis shows that in 1948 voluntary insurance was meeting only a small fraction of the costs of illness in the United States.

GUARDIANSHIP

(Continued from page 15)

dead or who is otherwise deprived of parental care and protection.

3. The proceeding for the appointment of the guardian of the person should be conducted in a court of general jurisdiction in children's cases.

4. The court conducting the proceeding for the appointment of the guardian of the person should have social services available to it.

Guardianship of the Estate

1. The guardian of the person

should be entitled to act for the child when the child's whole estate is valued at \$500³ or less in lump sum or consists of monthly money payments of \$50³ or less.

2. When a child is entitled to receive assets valued at more than \$500³ in lump sum or more than \$50³ in monthly payments, this fact should be reported to the local court of jur-

³ This amount was selected arbitrarily, in line with the tendency noted in a number of State laws. It should be reconsidered by individual States, however, in relation to the purchasing power of the dollar at a particular date.

isdiction for such action as it deems appropriate; in the event that no problem of management of the estate is found present, the court should permit the guardian of the person of the child to act for the child, without the necessity of appointing that individual or agency as guardian of the estate.

3. The power of appointing the guardian of the estate should be vested in a court of general jurisdiction in estate matters.

4. The court appointing the guardian of the estate should have social services available to it.