*Voluntary Insurance Against Sickness: 1950 Estimates**

In the pages that follow, the BULLETIN *again presents an appraisal of the protection against sickness costs provided by voluntary insurance. It is apparent from the analysis that, though the voluntary programs have been growing, they still meet only a relatively small part of these costs.*

THE extent to which voluntary insurance is furnishing protection against the costs of sickness must be continually reappraised as the numbers of persons holding one or several forms of such insurance increase. Differences of opinion on the extent and value of voluntary insurance against sickness arise in part from difficulties in obtaining unduplicated counts of persons insured under very different forms of insurance and of attempting to translate such counts into meaningful aggregates. As the number of policies in force increases, the amount of multiple policyholding probably expands. An appraisal technique that does not depend on determination of the number of different persons insured and the precise scope of their insurance therefore continues to be useful. The appraisal presented in this report is based on the dollar value of the insurance protection, measured against the current costs of sickness in the United States.

For 1950, as for the two preceding years, estimates have been prepared on the extent of protection provided by voluntary insurance against income loss and private medical care costs.[1] The 1950 data are somewhat more detailed than those developed previously because estimates separating hospitalization insurance and medical care (physicians' services) insurance are now available. The 1949 data are shown with slight revisions to adjust them to the 1950 series and with the hospitalization and medical care data separated. Since some refinements in the benchmark estimates and in the analysis of the insurance benefit payments have recently become possible, they have been applied to both the 1949 and the 1950 data, and the analysis is presented in its entirety for both these years. It has not been possible to make similar revision of the 1948 data, but the previously published data for that year are included to indicate trends in the 3 years.

Sickness Costs

The direct and private costs of sickness are incurred mainly through loss of income and the purchase of income-loss insurance and through personal expenditures for medical care and for medical care insurance.

Income loss.—Estimates of income loss due to nonoccupational illness and injury may fall within a wide range, depending on what is included or excluded and what the figures are intended to mean. This analysis calls for a figure that reflects only current loss of income due to short-term illness and loss incurred in the first 6 months of more extended periods of disability. This is a conservative benchmark; it excludes income loss resulting from long-continued total disability (beyond the first 6 months), from permanent partial disability or handicapping conditions, and from premature death.

For 1950, the basic estimate assumes an average of 60 million workers in civilian employment (including self-employment) in an average week, an average daily wage of $11.85, and an average sickness loss of 7 workdays per worker in the year. When these factors are used, the loss of income in the calendar year 1950 amounts to about $4,977 million. The net cost of income-loss insurance, which amounted to $288 million in 1950 (the difference between premiums earned and losses incurred on account of income-loss insurance), increases the total to about $5,265 million. An offset, to take account of paid sick leave applicable to 8.4 million persons,[2] reduces the total to about $4,984 million.

A further adjustment in the estimate of income loss can be made to take into account the fact that voluntary insurance ordinarily does not provide indemnity payments for the first few days or the first week of disability. The amount of income loss potentially insurable under the common forms of voluntary insurance is therefore substantially less than the actual or total income loss. Such an adjustment leads to an income-loss estimate for 1950 of about $3,248 million.

The corresponding income-loss estimates for 1949, as recomputed, are $4,358 million for the net total and $3,044 million when the first week of income loss is disregarded.[3]

Private expenditures for medical care.—The annual estimates prepared by the Department of Commerce provide, as in the earlier articles, most of the figures on personal expenditures for medical care.[4] The Commerce series does not, however, meet the needs of the present analysis in several respects. The figures from the Commerce series are used in table 1 when they are the most reliable available, and independently derived estimates are substituted when they more nearly reflect personal consumption expenditures for medical care. The latter method applies (for both 1949 and 1950) to the private expenditure estimates for (1) physicians' services, (2) hospitalization, and (3) net payments

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

[1] Estimates for 1948 appeared in the *Social Security Bulletin* for January–February 1950; those for 1949 were published in the March 1951 *Bulletin*. Details of methodology are given in the 1950 article and in the footnotes of the present report.

[2] Health Insurance Council, *A Survey of Accident and Health Coverage in the United States*, September 1951. The same figure was used in recomputing the income-loss figure for 1949.

[3] Both the 1950 figures and the revised figures for 1949 include an addition for net costs of income-loss insurance, an item that was not included in the earlier reports.

[4] U. S. Department of Commerce, National Income Division, *National Income and Product of the United States, 1929–1950, Supplement to Survey of Current Business*, 1951.

Table 1.—*Private expenditures for medical care, 1949 and 1950* [1]

[In millions]

Item	Amount	
	1949	1950
Total	$7,627	$8,368
Physicians' services [2]	2,297	2,503
Hospital services [3]	1,858	2,121
Dentists' services [4]	931	991
Nurses' services [4]	207	225
Medicines and appliances [4]	1,798	1,927
Miscellaneous healing and curing professions [4]	283	297
Administrative and other net costs of medical care insurance [5]	249	300
Student fees for medical care [4]	4	4

[1] Excludes medical care expenditures for the Armed Forces and veterans and those made by public health and other government agencies.

[2] Figure for 1949 derived from data in *Survey of Current Business*, July 1951, pp. 9–26; the July 1, 1949, population (145.7 million) was multiplied by per capita personal consumption expenditures for private practitioner services ($15.43). To this aggregate was added an estimate for salaries of physicians employed by consumer and industrial nonprofit medical care organizations. No adjustment for physicians' services paid from community chest funds and similar private charities.

Figure for 1950 derived by advancing the 1949 per capita figure by 7 percent, the increase between 1949 and 1950 in the consumers' price index; the July 1, 1950, population (150.2 million) was multiplied by the adjusted per capita figure ($16.51). Estimate added for salaries of physicians employed by consumer and industrial nonprofit organizations. No adjustment for physicians' services paid from community chest funds and similar private charities. (If no increase in per capita expenditures for medical care between 1949 and 1950 is assumed, the 1950 aggregate for physicians' services is $2,341 million, with the increase from 1949 almost entirely due to population growth.)

[3] Based on patient income for each year ending September 30, in all types of general and special short-term hospitals as shown in tables 4 and 5 of *Hospitals*, American Hospital Association, June 1951. The data are projected to December 31 of each year, and additions have been made for (1) nonregistered hospitals; (2) estimated patient income received by general and special long-term hospitals, mental and allied hospitals, and tuberculosis sanatoria; (3) contributions received by hospitals from private charities, such as community chest funds.

[4] Data from table 30, pp. 194 and 195, *National Income and Product of the United States, 1929–1950, Supplement to Survey of Current Business*, 1951.

[5] Total expenditures for benefits subtracted from total earned income as shown in table 3.

to insurance carriers for hospitalization and medical care insurance.

Private expenditures for all kinds of medical care amounted to $8,368 million in 1950, about 10 percent higher than the corresponding total of $7,627 million for 1949 (table 1).[5] The largest segments of the 1950 total are, as in past years, the amounts estimated for physicians' services ($2,503 million), hospital services ($2,121 million), and drugs and orthopedic products and supplies ($1,927 million).

Voluntary Insurance Protection

Voluntary insurance against income loss, separately or in conjunction with insurance against medical costs, is available from commercial insurance companies through group and individual policies. In the main, nonprofit and other organizations offer only medical care insurance.[6] For 1950, the estimated premium income of the commercial companies for both income-loss and medical care insurance was $1,252 million (table 2).

Protection against income loss.—Of the total of $1,252 million, $647 million (51.7 percent) represented premiums for income-loss insurance; losses incurred for income loss alone were $359 million or 48 percent of all losses incurred by group and individual accident and health insurance companies. The net cost of income-loss insurance was $288 million, the difference between premiums earned and losses incurred.

Differences in the proportion of premiums returned as benefits are evident in table 2 with respect to group and individual policies and the kind of insurance. Holders of group income-loss policies received 70 cents in benefits per dollar of earned premium in 1949 and 72 cents in 1950. If earned premium is adjusted for dividends and rate credits to the extent of 10 percent of premiums, these "loss ratios" are increased to 78 and 80 percent, respectively. Individually written insurance paid policyholders about 42 cents per dollar of premium for income loss in both 1949 and 1950. The loss ratios for group income-loss insurance are slightly less than those for group medical care insurance; the loss ratio for individual income loss insurance is about 10 percentage points lower than for individual medical care insurance.

Protection against medical care costs.—Separate estimates are now available on the amount of insurance against the costs of hospitalization, including X-ray and other services furnished by hospitals, and against the costs of medical services.[7] Table 3

Table 2.—*Premium and benefit payments through commercial insurance against sickness costs, 1949 and 1950*

[In millions]

Type of policy and insurance	1949		1950	
	Premiums earned [1]	Losses incurred (benefits) [2]	Premiums earned [1]	Losses incurred (benefits) [2]
All policies, total	[3] $1,031	$595	[3] $1,252	$759
Income loss (weekly indemnity)	570	300	647	359
Hospital, medical, surgical	461	295	605	400
Group policies	456	330	620	463
Income loss (weekly indemnity)	215	150	287	206
Hospital, medical, surgical	241	180	333	257
Individual policies	575	265	632	296
Income loss (weekly indemnity)	355	150	360	153
Hospital, medical, surgical	220	115	272	143

[1] Premiums earned, separately for group and individual contracts, were obtained from the *Spectator Pocket Register*, 1950 (p. 42) and 1951 (p. 42). Premiums for group policies were adjusted to eliminate Canadian business and further adjusted to the level of total premiums according to the Life Insurance Association of America (*Group Insurance and Group Annuity Coverage, Continental U. S., 1949 and 1950*), after excluding premiums for accidental death and dismemberment; the premiums were then distributed between income loss and medical care insurance on the basis of this survey. Premiums for individual policies were adjusted to eliminate life insurance and Canadian business and further adjusted to the level of total premiums as derived from data in the U. S. Chamber of Commerce survey (*American Economic Security*, July–August 1951); the premiums were then distributed between income loss and medical care insurance by reference to the mean amount of coverage according to this survey.

[2] Losses incurred, as reported by the *Spectator*, were reduced by deducting 1.9 percent of premiums earned for group policies and 3.2 percent for individual policies to eliminate adjustment costs because these are not benefit payments.

The percentage reduction for group insurance was taken from the aggregate figures of 7 leading companies and is probably lower than that obtaining for the 295 companies writing this insurance. The percentage reduction for individual policies was taken from the aggregate figures of 71 companies writing individual policies and is probably lower than that obtaining for the 275–300 companies writing this insurance. See U. S. Senate Committee on Labor and Public Welfare, *Health Insurance Plans in the United States* (S. Rept. 359, 1951), Part II, pp. 110 and 111.

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

[5] The 1949 data in the March 1951 *Bulletin* article have been revised. Major changes are a downward revision of the figure for hospital services, to confine it to income from patients and private sources, and a reduction in the size of the net payments for insurance, effected by ascribing a lower percentage of earned premium to adjustment costs for commercial insurance.

[6] The amount of voluntary income-loss insurance not provided by the insurance companies is relatively small and is omitted here; its omission is offset by the inclusion of certain insurance amounts that should but cannot be entirely eliminated. (See the *Bulletin*, January–February 1950.)

[7] Medical services represent surgical services — the largest component — and medical (nonsurgical), dental, nursing, and related services, such as X-ray, physiotherapy, and laboratory services, and appliances. Only a small part of the total insurance applied to services other than those furnished by physicians.

shows these separate estimates for 1949 and 1950, as well as the combined amounts of insurance income and expenditures for both medical services and hospitalization. The data apply to all types of insurance carriers or plans.

For all forms of voluntary prepayment for medical care, total income was about $1,292 million in 1950, an increase of 27 percent over the total of about $1,016 million in 1949. Hospitalization insurance in 1950 accounted for approximately 67 percent of the aggregate income of all types of voluntary insurance carriers; it accounted for 70 percent in 1949.

Benefit payments rose from about $766 million in 1949 to about $992 million in 1950, an increase of 30 percent. Benefits for medical services amounted to 31.4 percent of the total benefit payments in 1950—1.7 percent more than in 1949.

All forms of medical care insurance returned 77 cents of the average premium dollar in the form of benefits in 1950 and 75 cents in 1949. The proportion returned as hospitalization benefits in both years was 1 or 2 percent higher. The corresponding proportion returned as benefits for medical services was 1 or 2 percent lower. There was a wide range among the different types of insurance carriers or plans in the proportion of the average premium dollar returned as medical care and hospitalization benefits, varying from 53 percent to approximately 100 percent.

Part of the increases in premium income and in expenditures for benefits between 1949 and 1950 results from additional enrollment and hence expanded insurance in force, but some of the increases reflect higher premiums per capita, increased payments to hospitals, and higher fee schedules or other rates of payment to physicians and others. The net change in insurance protection has to be measured with reference to the aggregate personal expenditures for medical care, which also increased between 1949 and 1950 because of population growth, higher price levels, and so on.

Appraisal of Voluntary Insurance Protection

Comparable estimates of income loss from sickness and of private medical care expenditures are now available in this series for the 3 years 1948–50. They provide benchmarks against which to measure both the amount of voluntary insurance protection provided each year and the expansion in such protection from year to year during this period. Table 4 contains a series of benchmarks (income loss and/or private medical care expenditures) and the corresponding amounts of insurance benefits for each year. The figures for 1948 are taken from the first report in this series without the refinements in methodology developed for the last 2 years.

It is evident from the first two lines in table 4 that voluntary insurance protection against income loss is small by comparison with the benchmarks and has expanded relatively little in the 3 years. In spite of an increase in insurance benefit payments of about $114 million from 1948 to 1950, these payments amounted to only 7 percent (or 11 percent) of the income loss in 1950. The increase in insurance payments was almost wholly offset by increases in wages and salaries. The net increase in protection from 1948 to 1950 was at most about 1 percent.

Similarly, voluntary insurance protection against total private medical care expenditures has risen by less than 4 percent—from 8.2 to 11.9 percent—between 1948 and 1950, although benefit payments were higher in 1950 than in 1948 by nearly $400 million. While the insurance benefit payments were expanding by about $387 million, total private expenditures for medical care increased by approximately $1 billion.

If the benchmark measuring medical care expenditures is narrowed to include only private expenditures for hospital care and the services of phy-

Table 3.—*Income and expenditures for hospitalization and medical care benefits of voluntary insurance, 1949 and 1950*

[In millions]

Type of insurance carrier or plan	Earned income						Expenditures for benefits [1]					
	Total		Hospital		Medical care		Total		Hospital		Medical care	
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950
Total	$1,015.5	$1,291.5	$706.5	$869.2	$309.0	$422.3	$766.4	$991.9	$538.6	$680.0	$227.8	$311.9
Blue Cross plans [2]	362.2	436.7	356.7	430.8	5.5	5.9	308.6	382.9	303.3	378.0	5.3	4.9
Physician-sponsored surgical plans [3]	.7	5.3	----	----	.7	5.3	.4	3.8	----	----	.4	3.8
Blue Shield plans [4]	93.1	137.3	4.3	5.1	88.8	132.2	74.2	107.7	4.1	4.9	70.1	102.8
Independent plans: [5]												
Comprehensive industrial plans	37.0	37.1	15.8	15.8	21.2	21.3	34.6	35.2	14.8	15.1	19.7	20.1
Comprehensive nonindustrial plans	26.5	33.4	6.0	7.9	20.5	25.5	21.9	27.0	6.6	7.8	15.3	19.2
Limited hospitalization and surgical plans [6]	12.4	13.5	9.8	10.6	2.6	2.9	10.3	13.3	8.1	10.5	2.2	2.8
Private group clinic prepayment plans	10.0	11.0	2.7	3.0	7.3	8.0	8.8	9.8	2.5	2.7	6.4	7.1
Commercial insurance: [7]												
Group	241.0	333.0	145.0	198.0	96.0	135.0	180.0	257.0	109.0	154.0	71.0	103.0
Individual	220.0	272.0	159.0	191.0	61.0	81.0	115.0	143.0	83.0	100.0	32.0	43.0
Bituminous-coal plans [8]	8.6	8.2	5.7	5.5	2.9	2.7	8.6	8.2	5.7	5.5	2.9	2.7
Student health services [9]	4.0	4.0	1.5	1.5	2.5	2.5	4.0	4.0	1.5	1.5	2.5	2.5

[1] Benefits paid, for nonprofit and other organizations; losses incurred, for commercial insurance.

[2] Data from Argus Casualty-Surety Chart, 1949, 1950, 1951, and from correspondence with the plans. Includes 3 Blue Cross-Blue Shield plans.

[3] Data from Argus Casualty-Surety Chart, 1949, 1950, 1951. Includes 6 plans sponsored by medical societies, affiliated with Blue Cross and not members of Blue Shield.

[4] Data from Argus Casualty-Surety Chart, 1949, 1950, 1951, and from correspondence with the plans. Excludes 3 Blue Cross-Blue Shield plans.

[5] 1949 data from 1950 survey of nonaffiliated prepayment plans (*Bulletin*, May 1951, pp. 10–17). Excludes 5 Oregon comprehensive Blue Shield plans. 1950 data projected on basis of partial resurvey of plans.

[6] Includes industrial plans with limited benefits.

[7] See table 2 for sources and method of derivation.

[8] Estimated for 1949; for 1950, based on 6 months' operation of Welfare and Retirement Fund, United Mine Workers of America.

[9] See footnote 4, table 1. Distribution between hospitalization and medical care estimated.

Table 4.—*Income loss, private expenditures for medical care, and insurance benefits through all voluntary insurance carriers, 1948–1950*

[Amounts in millions]

Benchmarks	1948 [1]		1949		1950		Percentage of sickness costs met by insurance		
	Income loss and/or medical care expenditures	Voluntary insurance benefits	Income loss and/or medical care expenditures	Voluntary insurance benefits	Income loss and/or medical care expenditures	Voluntary insurance benefits	1948 [1]	1949	1950
Income loss only	$4,111	$245	$4,358	$300	$4,984	$359	6.0	6.9	7.2
Income loss with 1-week waiting period	2,695	245	3,044	300	3,248	359	9.1	9.9	11.1
Total medical care expenditures	7,422	605	7,627	766	8,368	992	8.2	10.0	11.9
Total medical care expenditures *plus* income loss	11,427	850	11,985	1,066	13,352	1,351	7.4	8.9	10.1
Physicians' and hospital services only	4,005	605	4,155	766	4,624	992	15.1	18.4	21.5
Physicians' and hospital services only *plus* income loss	8,120	850	8,513	1,066	9,608	1,351	10.5	12.5	14.1
Physicians' services only	2,141	[2] 151	2,297	228	2,503	312	[3] 7.1	[3] 9.9	[3] 12.5
Hospital services only	1,864	[2] 454	1,858	539	2,121	680	[4] 24.4	[4] 29.0	[4] 32.1
Medical care expenditures potentially insurable under present forms of voluntary insurance [5]	5,941	605	6,141	766	6,782	992	10.2	12.5	14.6
Medical care expenditures and income loss potentially insurable under present forms of voluntary insurance [6]	8,636	850	9,185	1,066	10,030	1,351	9.8	11.6	13.5

[1] Figures for 1948 not revised to conform to the benchmark and insurance benefit figures developed here for 1949 and 1950; because they contain recognized overstatements, especially with respect to hospital services, only the lower figures in the ranges shown in the *Bulletin*, for January–February 1950, are used here.

[2] Assumes that 75 percent of the total benefits paid for both hospitalization and medical care were for hospitalization.

[3] Slight overstatement because total benefit payments include some payments for services other than those received from physicians (nurses, dentists, laboratories, etc.).

[4] Slight overstatement because total benefit payments include some payments for services other than those received from hospitals (X-ray services, emergency accident services, etc.).

[5] Includes expenditures for services of physicians, hospitals, dentists, and nurses *plus* one-third expenditures for drugs and appliances *plus* net cost of medical care insurance.

[6] Adds income loss with 1-week waiting period to items listed in footnote 5.

sicians, the net expansion of voluntary insurance protection is somewhat more marked. When these two items are considered together, it is found that the $600 million expansion in private expenditures was accompanied by an expansion in benefit payments of nearly $400 million, resulting in a net increase of more than 6 percent in insurance protection.

The addition of income loss to the benchmark that covers only private expenditures for hospital care and physicians' services reduces the percentage met by voluntary insurance to 10.5 percent in 1948 and 14.1 percent in 1950; the net gain from the expansion of $500 million in insurance payments amounts to 3.6 percent.

The number of persons with some kind or amount of voluntary hospitalization insurance was shown in a study made for the United States Senate [8] as having increased by 25 percent in the 3 years under review, so that at the end of 1950 nearly 50 percent of the population was protected by hospitalization insurance. At the same time, this type of insurance, which had covered about 24.4 percent of the private expenditures for hospitalization in 1948, provided protection against 32.1 percent of such expenditures in 1950, leaving more than two-thirds of these expenditures still uninsured.

The number of persons having some kind or amount of voluntary insurance against the costs of physicians' services has increased 60 percent between 1948 and 1950, according to the Senate report, and included more than a third of the population at the end of 1950. In terms of dollar value, however, this insurance met only 12.5 percent of private expenditures for physicians' services in 1950, compared with 7.1 percent in 1948. The net increase of 5.4 percent in protection, while of some significance, nevertheless still leaves most of this type of expenditure uninsured.

The final benchmarks in table 4 are limited to so-called "insurable" items —that is, selected portions of total private expenditures for medical care and of income loss (with a 1-week waiting period). The benchmark measuring potentially insurable medical care expenditures increased by about $840 million in the 3 years. Offsetting insurance payments increased by $387 million. The net increase in protection amounted to only 4.4 percent—from 10.2 percent in 1948 to 14.6 percent in 1950. When income loss with a 1-week waiting period is added, there is a net increase of $1.4 billion in the benchmark between 1948 and 1950. Since this rise was accompanied by an increase in protection of $500 million, the percentage met by insurance rose by 3.7 percent—from 9.8 percent in 1948 to 13.5 percent in 1950.

The 1950 analysis and the 3-year comparison both demonstrate that voluntary insurance is still meeting only relatively small parts of the need for insurance protection against the costs of illness in the United States. Expansion in benefit payments was greatest in relation to private expenditures for hospitalization—7.7 percent in the 3 years—and least with respect to income loss.

[8] U. S. Senate Committee on Labor and Public Welfare, *Health Insurance Plans in the United States* (S. Rept. 359, 82d Cong., 1st sess.), Part I, pp. 1, 2, 26, 30.

RAILROAD RETIREMENT ACT

(*Continued from page 2*)

are transferred to old-age and survivors insurance. In addition, provisions for financial interchanges between the systems are incorporated so that the old-age and survivors insurance trust fund will be placed in the same position as it would have been if such railroad employment had always been covered under old-age and survivors insurance.

The principal provisions of the new law and its legislative history will be given in the February BULLETIN.