

*Underwriting Problems*

- A. What new limits of issue have been established for monthly income benefits? What considerations have led to these limits? What consideration is given to disability benefits provided under the Social Security Act? What problems exist in establishing limits of issue for other benefits?
- B. What has been learned about insuring substandard lives for individual health insurance benefits? What proportion of all new issues is on a substandard basis? What results are obtained in using extra premium and impairment waiver methods of substandard underwriting? In what respects does substandard underwriting of disability, hospital and major medical coverages differ?

MR. W. R. MULLENS: The Business Men's Assurance Company recently adopted the following limits of issue for monthly income benefits:

Class A-C . . . . .	Men	\$500
	Women	300
Class D-E . . . . .	Men	400
	Women	200
Class F . . . . .	Men	300
	Women	200

The maximum amount issued to an individual and the maximum amount in which we will participate is 50% of his earned income plus \$50. Coverage will not be offered to individuals earning less than \$125 per month. Our limit of participation is \$1,000.

Since most of our monthly income sales are to individuals without other monthly income coverage, our basic consideration in setting limits was to cover as much of the market as feasible within our limits. We also gave consideration to the financial impact of a claim of maximum amount since our company retains the entire risk on monthly income benefits. The variation in limits by class is primarily due to this factor and to the nature of the individual risk as the occupational classification becomes less favorable.

Qualitatively, the answer to the question of what portion of an individual's earned income can be safely covered is easy to formulate. A company may safely cover

- (1) the applicant's earned income, less
- (2) taxes not paid while disabled, less
- (3) disability income from sources other than the policy for which application is being made, less
- (4) expenses not incurred while disabled, less

- (5) a coinsurance factor measuring the extent to which the applicant is willing to lower his standard of living in exchange for not working, less
- (6) a further protective factor measuring the probability of future decrease in earned income due to changes in economic climate or other factors.

Quantitatively, an exact evaluation of some of these factors is all but impossible. The problem is further complicated by the fact that several of these factors should be evaluated in a varying manner depending on length of elimination period and duration of coverage. It would appear, however, that a rather substantial discount from the earned income of the applicant is in order.

If we assume that our formula of 50% + \$50 is a reasonable approximation of the portion of income which can be safely covered and if we consider the distribution of families and unattached individuals by before-tax income of over \$250 per month, we can probably estimate with safety that our new limits would have covered about 80% of the market in 1959. This illustrates that limits do not have to be astronomical in order to write a reasonable volume of this business. From the period from 1955 to 1961 the proportion of \$100 per month policies written by our company has decreased materially, but 96% of our sales in the first nine months of 1961 were still for policies of \$300 or less.

Disability benefits under Social Security are not directly recognized in our issue limits. In a very real sense the Social Security disability benefit is a bonus for which the insurance claimant may or may not qualify. It is probably of rather limited significance in connection with short-term coverage, but for long-term benefits it may well be the difference between making a determined effort to return to productive efforts and relaxing in the comparative luxury of continued disability. For these reasons we will underwrite very carefully the amount of monthly income requested under our long-term disability policies, if it approaches our maximum limit of issue for the individual. Fortunately, the majority of our applicants are woefully underinsured with respect to disability income judged by any reasonable standard. However, as the amount of coverage approaches the limit that a company may safely cover as defined above, a much more exact approach to the recognition of Social Security disability benefits must be devised.

**MR. J. HENRY SMITH:** It is the practice of the Equitable to charge the Social Security disability benefit up to \$125 a month against our participation limits in issuing noncancelable disability income benefits where the sickness benefit period is in excess of 30 months. Our participation limits are 60% of earned income with an outside maximum of \$1,000 a month. The issue limit is \$500.

The Equitable re-entered the disability policy field as of January 1, 1961 after a lapse of 40 years—40 years of losses, I might add. Our underwriting rules were developed after the Social Security benefit was established and the age 50 limitation was eliminated. Furthermore, we are attempting to encourage policies with long durations. In these circumstances, and remembering our troublesome history, we felt that we had no choice but to take Social Security benefits into account.

Since most of our applicants are covered for the maximum Social Security benefit of approximately \$125 a month and about one-third of our applications are for the longer benefit periods, our rule occasionally forces us to limit the amount of income benefit to some figure below that which the applicant might buy. Our agents have complained about our rule because it is not competitive, but we feel that it is valid and should stand. In the light of history and in the light of underwriting theory we can see no excuse for disregarding any important element of overinsurance. One cannot safely look forward to a continuing relatively rigorous administration of the Social Security benefit.

MR. FRANK J. GAGLIUSO: Issue limits in the Paul Revere are currently as follows:

1. *Class AAA*: \$500 per month, of which not more than \$400 may be long-term coverage of ten years or more.
2. *Class AA*: \$500 per month, of which not more than \$400 may be long-term coverage of five years or more and not more than \$300 may be long-term coverage of ten years or more.
3. *Class A*: \$300 per month sickness coverage of which not more than \$200 may be long-term coverage of five years or more. \$400 per month accident coverage, of which not more than \$200 may be accident only and not more than \$200 may be lifetime accident.
4. *Class B*: \$200 per month accident and sickness.

For qualifying professions we will issue an additional \$1,000 per month in overhead expense benefits. These limits are in keeping with our general approach of establishing issue limits by tempering conservatism with competitive pressures. The limits may seem unduly conservative considering today's social and economic conditions, but we believe them to be realistic standards for covering the possible swings of the future.

As for Social Security disability benefits, our first reaction was that these benefits should be counted toward our participation limit. However, since we do not specifically count Workmen's Compensation, cash sickness, salary continuance or benefits under limited coverage policies, we came to the conclusion that Social Security disability benefits should be

treated similarly. The relatively low amounts and the present strict administration of Social Security disability benefits were, of course, a major factor leading to our decision; and should these change we undoubtedly shall review our decision.

MR. SMITH: The Equitable has compiled a Special Class Manual with numerical ratings for various impairments and extra premiums running up to 180% of standard. We have no experience to report as yet, although it may be of some interest to note that during the first six months our paid business showed that policies with standard premiums accounted for 87.4% of the total, standard with exclusion riders 9.1%, and extra premium cases 3.5%. This distribution suggests that the substandard premium system is not yet very significant. We are hopeful that gradually it will become more so and the section of our business with exclusions will gradually diminish.

MR. CHARLES N. WALKER: The use of exclusion riders or, in some cases, extended waiting periods or substitute plans suffers from inherent defects. Exclusion riders often become vague in intent. Extended waiting periods and substitute plans create the necessity for the agent to unsell his prospect from the coverage originally offered and start all over again. Our practice of using extra premiums whenever possible has not entirely avoided the above problems but has been a great improvement.

With respect to ratings in the Lincoln National we issue to applicants with physical impairments ratings ranging from 25% to 300% above the standard level. Issue limits are graded down sharply as the rating increases. In the best occupational classes, our issue limit for substandard risks is \$700 per month; for cases rated up to 50% this limit is dropped to \$500; at 75% and 100% ratings to \$350; and for 150% and higher ratings to \$250. Our commercial loss-of-time policies are issued up to 300%; our 15 month and 36 month noncancelable plans are issued at ratings of 50% and lower; and the longer benefit noncancelable plans are not issued substandard. Our hospital and surgical plan is guaranteed renewable for life and is issued at all ratings. Our major medical plan is issued only at 50% and lower ratings.

In handling accident and sickness coverage it is not enough to be concerned with the higher claim frequencies expected from a group of impaired lives. One must also give some thought to the other variables involved—the length of disability, the necessity for hospitalization as distinguished from disability, the amount of medical expenses, and the effect of particular disabilities on claim administration. Each impairment must be carefully studied. Taken all in all, we feel the group of applicants with

a history of coronary heart disease is outside the limits of any substandard program feasible at the present time. On the other hand, obesity and elevated blood pressure present an impairment which is either static or slowly progressive in its adverse effect on general health. Adverse urinary findings fall in this category too. For these impairments, extra premiums become the only feasible way to issue coverage and the current findings become the primary factor.

Another category of impairments is that in which the primary concern is more with related complications than with the impairment itself. Diabetes and head injury require careful evaluation of past history in an attempt to determine which of the group are least likely to develop complications.

Overtly degenerative conditions such as degenerative arthritis might be taken as a classic example of an impairment usually not eligible for loss-of-time coverage, perhaps too much a risk for major medical, but eligible for hospitalization coverage within the confines of a reasonable extra premium.

Finally there is a group or category of impairments which do not lend themselves to an extra premium approach. The most obvious examples are situations presenting elective and semielective surgery hazards, such as hernia, hemorrhoids, uterine fibroids and the like. In similar vein are those situations where the applicant has what might be termed an elective disability—situations where some objective evidence of disability is combined with subjective symptoms. Examples here are unoperated herniated disc coupled with low back syndrome, which can be handled with an exclusion rider. Organic heart murmurs are best left alone.

Some impairments naturally lead to significant additional sickness costs and little or no additional accident costs, while just the opposite is the case for other impairments. And some impairments present both. In addition, a number of impairments can be expected to have quite a different impact on loss-of-time coverages than on hospital coverages. For these reasons we designed a rating system which will be flexible enough to accommodate differences of this sort. We accomplished this by separating the accident and sickness risks for underwriting purposes. The underwriter makes separate assessments and assigns two separate ratings to the case. Further separation is made between loss-of-time and medical expense policies so that different pairs of ratings can be made for the two coverages. The total gross premium is then the sum of these three items—the standard gross, the accident extra and the sickness extra.

Our volume of substandard business now seems to have reached a fairly stable level of  $7\frac{1}{2}\%$  of total business by number and  $10\%$  by premium.

For the most part, the agents have reacted favorably and have almost uniformly preferred rated business over exclusion riders. In looking at over-all loss ratios, our experience runs consistently at levels virtually identical with corresponding standard business. All in all, we feel that the initial experimentation is maturing into a desirable and satisfactory block of business.

MR. JOHN F. RYAN: The main features of the New York Life's substandard lives program are as follows:

1. Noncancelable and guaranteed renewable policies (including lifetime hospital expense and major medical) are available to substandard risks without any reduction in benefits.
2. Extra premiums are used for a wide range of impairments and extra premiums may be temporary instead of permanent. For some impairments such as a general impairment which is difficult to evaluate like a back disorder, we use exclusion riders in lieu of extra premiums.
3. Where the applicant qualifies for a policy with an extra premium, we will not issue a policy with an exclusion rider.
4. Where extra premiums are charged we use our regular policy forms and endorse the preexisting conditions provision to make it inapplicable to the impairment for which the extra premium is charged.
5. Regular commissions are paid on permanent extras. No commissions are paid on temporary extras.
6. In general, we have two morbidity ratings for each impairment, one for accident only policies and one for accident and sickness. There are five special classes covering morbidity between 125% and 305%.
7. Extra premiums do not vary by occupation.

Our morbidity experience under this program is limited and is not significant at this time. We are writing about 18% of our health insurance business on substandard lives, about half with exclusion riders and half with extra premiums. On the extra premium business, about one-third is on a temporary extra basis. On major medical, the percentage on substandard lives is about 23% and on loss-of-time accident policies the percentage is about 7%. The fifty-fifty split between exclusion rider cases and extra premium cases generally holds for each type of health coverage.

About 40% of extra premium business falls in our first substandard class and about 35% falls in the second substandard class. There is little variation by type health coverage in the percentage distribution of extra premium business by substandard class.

Almost 60% of our permanent extra premium business results from ratings for three types of impairments, namely elevated blood pressure (10%), overweight (25%), and stomach disorders (23%). Before we in-

troduced our extra premium program, applicants with mildly elevated blood pressure or with a mild degree of overweight generally were issued standard insurance, while the more serious cases were declined. Similarly, applicants with stomach disorders were generally offered policies with exclusion riders.

In general, the percentage of applicants rejected as being uninsurable has decreased from about an 8% level prior to the introduction of this program to a current level of 6%, even though we get more applications submitted on impaired lives than we did on our former program. There has been a decided increase in the number of medical requirements called for. However, there has been no significant change in the percentage of applicants not furnishing complete requirements. This has fluctuated in the range of 6% to 8%.

Not-taken rates on substandard issues are currently running about 175% of those on standard issues. Before we introduced the current program, not-taken rates on substandard policies were running about 200% of those on standard policies.

Our substandard lives program enables agents to offer policies to many previously uninsurable risks and to offer full coverage in many cases which previously would require exclusion riders. The program has not resulted in any particular difficulties, and, in fact, helps minimize underwriting problems on borderline risks. In general, our program seems to be working at least as well in health insurance as it has for many years in life insurance.

**MR. PAUL E. SINGER:**\* Although Continental Casualty Company has been actively engaged in the underwriting of substandard health insurance since about 1954, and has had for some years an annual premium volume in excess of two million dollars, as yet the underwriting results provide no very sound basis for evaluation of the extensive physical impairment and rating systems which are employed. About the most that can be said for the experience at the present time is that it has demonstrated the validity of our rate-ups for about a half-dozen fairly common conditions.

In a recent sample tabulation of written premium and paid claim data, the twenty most common impairments represent nearly 60% of our premium volume; the remaining 40% was spread over scores of conditions of very rare occurrence. Even among the twenty most common impairments, those ranking as high as tenth or eleventh in order of frequency show premium volumes of the order of one-half of 1% of our total ex-

\* This discussion by Mr. Singer, Assistant Vice President of the Continental Casualty, was presented by MR. HERBERT L. DEPRENGER.

posure. Obviously, only conditions of far more frequent occurrence could provide us with any significant morbidity experience. About 42% of our total exposure was in fact due to four specific impairments: coronary occlusion (15.5%), high blood pressure (12.0%), diabetes (9.9%), and angina pectoris or coronary artery disease (4.3%).

The total volume of premium studied consisted of three general types of policies with relative premium volumes as follows: loss-of-time (24%), hospital (60%), and catastrophe hospital (16%). Within each category the same pattern of distribution of premium repeated itself; each of the four most common impairments had the same rank in each type of coverage, and only minor variations in rank occurred among the ten most frequent conditions.

A limitation on the value of the experience lies in the fact that the bulk of it is concentrated at the high ages. It was not anticipated at the inception of the program that the bias toward a higher average age would be nearly as large as has actually developed. Our distribution of premium by age at issue is as follows: under 50, 15.5%; 50-59, 26.8%; 60 and over, 57.7%. Clearly, our relatively small volume of business under age 50 coupled with the concentration of exposure in a few major impairment classes makes it impossible to either confirm or disprove our underwriting assumptions with regard to younger risks in any detail.

Probably only two really significant conclusions can be drawn from an analysis of this experience as it has developed to date. First, our basic rating structure appears to be approximately correct in the aggregate, since our incurred losses are at about the expected level for the entire block of business. Second, the half dozen most frequent impairments clearly have been assigned the proper table ratings. In each instance where the premium volume is sufficient for the loss ratio to be credible, it falls very close to our aggregate loss ratio, whether the rate-up for physical impairment is as little as 50% or as much as 125%.

MR. GAGLIUSO: The Paul Revere has been issuing noncancelable health insurance to substandard risks using the extra premium method since 1930. Our over-all experience on this business has been very satisfactory. For example, the combined experience for the years 1956 to 1960 totaled over \$4½ million of earned premium; and the incurred loss ratio on this business ran between 95% and 100% of Company average. We are now issuing about 5% of our new business to substandard risks on the extra premium basis. This is part of a continually increasing trend aimed at reducing the use of exclusion riders to a minimum consistent with experience.

We believe that the reason for our satisfactory results in this area is conservative underwriting whereby selected impairments are issued waiver free irrespective of the applicant's occupational classification provided there is definite evidence of the prospect's ability to function economically with his impairment. This is most important, since in the process of liberalizing the use of extra premiums over the years we have formed the definite opinion that it is risky to assume that extra premiums alone will cover the extra morbidity on impairments where their use is feasible unless the applicant's employment record indicates his willingness to function with his impairment.

With respect to the underwriting of substandard disability income and substandard hospital risks, we find that in practice there is relatively little difference between the two. True, some impairments such as those involving skin diseases may allow for somewhat more liberal action on hospital applications; but broadly speaking, the difference in underwriting substandard risks by type of coverage is negligible as far as we are concerned.

**MR. BEN J. HELPHAND:** Pacific Mutual has been issuing substandard Health insurance on a rated basis for about four years and the results to date appear to be satisfactory. Impaired risks are handled on either a rated premium basis, with ratings up to 300% of standard, or by attaching a restrictive rider, depending on the type of impairment. About 4% of current business is being issued on a rated premium basis.

A recent study of about a thousand loss-of-time cases indicated that abnormal blood pressure accounted for 24.8% of the ratings, build 16.4%, neurosis and nervous tension 6.4%, heart murmurs 4.7% and ulcers, tuberculosis, diverticulosis, diabetes and asthma accounted for 2% to 3% each.

It was interesting to find that our not-taken rate for new issues on rated premium cases is running about 32% for loss-of-time policies and approximately the same for hospital-surgical policies. One would expect the persistency to be good once the applicant had accepted a rated premium policy. Our study indicated otherwise. The first year lapse rate on loss-of-time policies was 29.8% and the second year 10.6%.