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## EMPLOYEE BENEFIT PLANS

*Group Long-Term Disability Benefits*

What is the impact on group long-term disability insurance of the 1965 changes in OASDI with reference to matters such as:

A. Effect on market for private insurance?
B. Underwriting considerations?
C. Policy provisions?

*San Francisco Regional Meeting*

MR. KENNETH T. CLARK: It is significant that today we are talking about the effect of the 1965 amendments to the social security law on group long-term disability insurance and on group medical care insurance. Nobody is talking about the effect on group life insurance, even though any expansion of social security means an expansion of the death benefits. Nobody is talking about the effect on group life insurance, because there is no effect—we just leave our benefits the way they are or try to add more.

But with disability income insurance, and with medical care insurance, the situation is different. Here the matter of the total benefit—our benefit plus the social security benefit—is of very real and very immediate concern. As underwriters, we do not want a disability benefit to be more than take-home pay, and we do not want a medical care benefit to be greater than medical expenses—in fact, we may want them to be less.

The situation can be likened to a pail with some stones in it which has been filled with wine. If you throw another stone in the pail, it will displace some of the wine, causing it to spill over onto the ground. Here the pail is an employee's total insurance needs, the stones are the part provided by social security, and the wine is the part provided by our group long-term disability benefit.

The question before us today is how large a stone Congress has thrown into the insurance pail.

There are three important features of the 1965 amendments to the social security law which affect group long-term disability insurance—a liberalization in the definition of disability, more benefits per dollar of income covered by social security, and an increase in the number of dollars covered by social security.

First, let us look at the definition of disability for social security purposes. Disability still means "the inability to engage in any substantially

gainful activity by reason of a medically determinable physical or mental impairment." What has changed is the length of time disability has to be expected to last in order to qualify for benefits. Under the old rule, it had to be expected to result in death or be of long-continued and indefinite duration. The long-continued-and-indefinite-duration requirement has now been dropped, and the disability will now qualify if it is expected to last, or if it does last, for a year.

The result is that more disabilities will qualify for social security. This, in turn, means that there will be fewer claims against long-term disability benefits if they have been integrated with social security. Some authorities have suggested that this and the other 1965 amendments will permit a lowering of premiums for LTD benefits, and I guess that will sometimes be true. I suspect, though, that often the result will be that the low premiums now being charged will be less unsound than they were.

However, the new definition should have little effect on our market. The people who bought LTD benefits did not do so because they felt that the tight *definition* in social security needed supplementing. They bought it because they felt that the *low level of benefits* in social security needed supplementing.

Here we come to the area in which Congress has thrown a more substantial boulder into the benefit bucket and more wine has been spilled onto the barren ground. Three key numbers have been changed by the 1965 amendments—the primary insurance amount, the maximum family benefit, and the average monthly wages.

The primary insurance amount is what a disabled employee gets if he has no eligible children—having a wife does not get him any more benefits unless she is over 62. This primary insurance amount used to be 59 per cent of the first $110 of average earnings and 21 per cent of the next $290 of average earnings; this would be $127 per month for someone with maximum earnings. Each of these has been raised by 7 per cent. The 59 per cent has gone up to 63 per cent, and the 21 per cent has gone up to 23 per cent. The maximum has thus gone up to $136 per month. Thus, in the case of employees who qualify for the primary insurance amount, the 1965 amendments have thrown a stone ranging in size up to $9 per month into the insurance pail.

If eligible children are involved, the employee's social security disability benefit is increased by 50 per cent of the primary insurance amount for each child and for his wife. However, this is subject to the maximum family benefit. For those with average earnings above about $1,500 per year—and, of course, this includes everyone in our LTD market—the old formula was 80 per cent of average earnings, with a ceiling of $254 per

month. This $254 ceiling has now been scrapped, and the new formula is 80 per cent of the first $370 of average earnings plus 40 per cent of the rest. The maximum has thus gone from $254 to $309—a $55 stone into the wine.

If the pail was full, some wine has spilled on the ground. Just how much, of course, depends on the particulars of the group of employees, but roughly it will be about a 5 per cent loss when the primary insurance amount is involved and 10 per cent when the maximum family benefit is involved.

All this is an immediate loss in market, caused by the dumping of one large boulder into the pail. But there is more to come. Over the next years there will be a stream of small pebbles falling into the pail as a result of an increase in the wages covered by social security. These have been increased from $400 a month to $550 a month. The average monthly wage used for determining social security benefits is a sort of career average of covered wages. This career average will go up over the years as more $550 years are mixed in with the $400 years. This, in turn, will drive up both the primary insurance amount and the maximum family benefit. The primary insurance amount will go up $32 a month, and the maximum family benefit will go up $59 a month—but this will fortunately take time.

Where does all this leave our market? Obviously, the stone in the pail is by no means a drop in the bucket. But I do not think that we are out of business yet by a long shot. I have four reasons for saying this.

The first reason is that there are less than 5 million insurance pails in this country which have the wine of group long-term disability insurance in them. Probably ten times that number could have. But these tens of millions have in their pails only dry stones.

The second reason for some optimism is that many of the pails with wine in them still are not full. The pail's size is, after all, what you can soundly make it. If you think that it is a straight 50 per cent or 60 per cent of an employee's gross earnings, you may be missing opportunities to underwrite soundly a bigger benefit by taking a more imaginative account of the employee's family responsibilities, income tax status, and so forth.

The third reason for thinking that we still have market is that most of our benefits run only to age 65. There is a need for lifetime benefits, taking account, of course, of accumulated pension credits. Just think of the employment possibilities for actuaries in this complicated project!

Finally, our aim in underwriting LTD benefits is to gear them to the future—to the earnings that an employee will lose by a disability which cuts off his future wages. The social security benefits, on the other hand,

are geared to the average of the employee's past earnings, which tends to be less. Historically, our expanding economy, with rising wages and rising insurance needs, has always managed to stay ahead of the congressional enthusiasm for throwing stones into the pail.

All of our ingenuity will be needed in the years ahead to steer the narrow course between dangerously high benefits, on the one hand, and, on the other hand, an indifference to the insurance needs of the public which will simply hasten the expansion of social security. That expansion will come, inevitably, but it will come more slowly and in smaller measure if we do our marketing job well.

MR. EUGENE H. NEUSCHWANDER: Of first importance, the market has shrunk; of second importance, the business is more difficult to sell; and of third importance, it is anticipated that the business will be more difficult to administer.

The market has shrunk for two reasons: (*a*) the amount of coverage for each employee has decreased and for some low-paid employees has completely vanished and (*b*) there is no longer the same interest on the part of unions and employers to provide this form of coverage.

Our group LTD business has been largely developed on an employee-pay-all basis. By so doing, all benefit payments are completely tax exempt. Premiums and resultant employee contributions had previously been determined as a uniform percentage of earnings subject to a stated maximum. Participation had been excellent, enrolments of 90 per cent or better being the rule rather than the exception. Now, with many of the lower-paid employees receiving little or nothing in the way of coverage, the idea of employee contributions based on a uniform percentage of earnings is no longer applicable. Instead, two rates are now being used—a low rate which applies to the first $500 of monthly earnings and a higher rate which applies to monthly earnings in excess of $500. This complicates the policyholder's deduction procedure, requires higher contributions from those in top management deciding upon the plan, and creates enrolment problems, all of which makes the business more difficult to sell.

Future administration can become more difficult by reason of such factors as (*a*) misunderstanding by covered employees with regard to the amount and extent of the LTD coverage; (*b*) periodic revisions in social security disability rules and regulations, which may necessitate revisions of booklets and possibly certificates; and (*c*) general dissatisfaction on the part of unions and employers.

MR. ALAN N. FERGUSON: The 1965 changes affect social security disability benefits in four important ways: the amounts of benefits are increased in relation to covered earnings, the maximum family benefits are increased, covered earnings are increased, and the disability definition is changed. Clearly, the market is reduced because of these increases in benefits.

LTD plans generally provide that the aggregate income from certain defined sources during disability shall not exceed a percentage of salary before disablement. The effect of this is that, as social security benefits are increased, there is a corresponding decrease in LTD benefits. The maximum family benefit with average covered earnings of $400 per month is now $309.20, and, after average covered earnings increase to $550, the maximum benefit will rise to $368. The insurable gap between these amounts and net take-home pay before disability is reduced.

The following examples illustrate how the changes in benefits relate to take-home pay (using current tax tables). An employee with a wife and two dependent children, who earns $500 a month, could before the amendments receive 55 per cent of net pay. Currently, he can receive 67 per cent, and as average covered earnings rise he can get 75 per cent. Comparable figures for $1,000 earnings are 29 per cent before, 35 per cent currently, and 42 per cent ultimately.

More social security disability benefits will also be paid because of the change in the disability definition. The government estimate of the increase in disability approvals because of the change is $2\frac{1}{2}$ per cent, which seems low.

Employers' interest in new plans may also be affected by the increase in their contributions to social security from $3\frac{5}{8}$ per cent of covered earnings in 1965 to 4.2 per cent in 1966, with further increases still to come and, of course, the increase in maximum covered earnings from $4,800 to $6,600 per annum.

MR. NEUSCHWANDER: While social security disability has created an impact on many phases of the disability market served by the insurance industry, the underwriting of new master applications for LTD coverage has been affected but little. Assuming that proper underwriting was the rule before social security disability, then the addition of social security disability just created one more item for consideration when determining amounts and periods of coverage and the premium rates. It is on the claim adjuster that the heavier impact fell.

Let us assume that the underwriter's responsibility extends to checking up on the claim adjuster to determine that policy provisions, especially

in regard to other disability income, are being complied with. This, of course, creates a further impact on the underwriter or, if not on the underwriter, then on someone else, since this operation is not to be neglected or passed over lightly. It can be generally assumed that if disability has existed for six months or more and LTD benefits are being paid, social security disability is also payable. When this is not the case, the underwriter should know the reason why. Perhaps the claimant is not sufficiently disabled to even qualify for the LTD benefit.

After an LTD policy is issued, in effect the underwriter has a continuing responsibility for the further duration of the policy. Regarding each such policy, the claim administration produces end results which show up in the experience record which, in turn, is used by the underwriter to determine (*a*) periodic renewal rates, (*b*) possible rating refunds, and (*c*) possible revisions in benefit schedules and/or contract terminology. For this reason the underwriter cannot avoid having at least some interest in the claim administration. When it comes to underwriting, our company is quite flexible and has had good success in tailoring LTD plans to suit the needs of employers. Our experience is that prefabricated LTD plans have little or no appeal to the large employers.

By way of illustrating our approach, I will briefly outline what was done for our 10,000 employees on June 1, 1964. This was almost two years ago. The first step was to review the then-existing situation, which involved seven different sources of disability income. These seven sources produced a coverage that had both overlaps and holes and left much to be desired. The next step was to decide on what was desired as an end result and then to work toward that end. The end result decided upon for long-term disabilities was to provide, *from all sources combined:*

1. Full salary for up to 26 weeks, depending upon length of service.
2. Then half-salary until age 65 normal retirement date.
3. Continuation of group life in full amount.
4. Accrual of retirement plan credited service on a full-salary basis.
5. Optional continuation in the savings plan.

To accomplish this, the following initial steps were taken:

1. The informal salary-continuance plan was formalized.
2. The disability income feature was deleted from both the group life plan and the retirement plan.
3. An employee-pay-all LTD plan was developed and put into operation. This plan contained an elimination period equal to the period for which salary-continuance-plan benefits were payable.

Then two final steps were taken:

4. The retirement plan was amended to provide accrual of credited service on a full-salary basis during disability.
5. The savings plan was amended to provide an option to continue or withdraw in the event of disability.

The final results were:

1. An upgrading of our entire employee benefit program.
2. A reduced over-all employer cost.
3. An LTD enrolment of close to 95 per cent.
4. All employees quite happy.

This is what we refer to as imaginative underwriting.

| Income Disability | | End Result |
|---|---|---|
| Source | Revision | |
| Statutory disability<br>Federal social security<br>Workmen's compensation | None<br>None<br>None | No change |
| Savings plan | None | Added flexibility |
| Informal salary continuance | Formalize and add LTD | Continuous coverage to age 65 |
| Group life | Formalize only | Face amount continued on waiver-of-premium basis |
| Retirement plan | Formalize only | Accrual of credited service on full-salary basis |

MR. FERGUSON: It is necessary to adjust for the new social security offsets in determining the net LTD benefits. LTD should be integrated with family rather than merely with the primary benefits, as has been the case on occasion previously. The current primary benefit for a man with a wife and two children and $500 average salary amounts to 29 per cent of his gross pay. For an LTD plan integrating at the 70 per cent level with a primary benefit only, he could receive 41 per cent of gross pay from the LTD plan. He can currently receive a family benefit of 62 per cent of gross pay from social security; thus his total social security and LTD benefit would amount to 103 per cent of gross pay or 111 per cent of net take-home pay—hardly an inducement for him to recover.

One effect of integration with social security is that LTD benefits to lower-paid workers are illusory—in many cases they will not qualify for any LTD benefits at all. Thus it is probably desirable that the LTD plan should be noncontributory, at least for earnings under $6,000 per annum.

For renewal underwriting it will be important to take into considera-

tion the changes in reserves resulting from the changes in benefits for existing disabled lives. There may be reductions in incurred claims which mask increases in basic morbidity costs.

It will be necessary to make certain that disabled lives previously rejected for social security benefits are encouraged to reapply under the relaxed definition.

MR. CLARK: One of the effects of the 1965 amendments to social security on the underwriting of group long-term disability insurance will be the complicating of plan design and pricing.

I suspect that the days are ending for plans integrated with social security which provide total benefits of a flat 50 per cent (or 60 per cent) of current gross salary. More sophisticated plans will be needed fully to exploit the market and meet insurance needs, while avoiding overinsurance. Plans will have to be geared more closely to employees' actual social security benefits and income tax situation.

The death knell may also have sounded for plans which are integrated with the primary insurance amount only. Many such plans have been written in the past. A rough justification could be found for them in that they provide greater benefits for the employee with dependent children and thus roughly reflect actual needs. With such a plan the disabled employee would get an integrated benefit equal to the total benefit in the long-term disability plan minus the primary insurance amount. However, if he had eligible dependent children, his social security benefit would be greater than the primary insurance amount—up to the maximum family benefit. Thus his total benefit would be equal to (*a*) the long-term disability benefit expressed in the plan (60 per cent of salary, 50 per cent of salary, or whatever) and (*b*) the difference between the maximum family benefit and the primary insurance amount. The following table shows that this difference ranges from 35 per cent to 45 per cent of average monthly wage.

| Average Monthly Wage (AMW) | Primary Insurance Amount (Per Cent of AMW) | Maximum Family Benefit (Per Cent of AMW) | Difference (Per Cent of AMW) |
|---|---|---|---|
| $200 | 45% | 80% | 35% |
| 250 | 41 | 80 | 39 |
| 300 | 38 | 80 | 42 |
| 350 | 35 | 80 | 45 |
| 400 | 34 | 77 | 43 |
| 450 | 33 | 73 | 40 |
| 500 | 31 | 70 | 39 |
| 550 | 31 | 67 | 36 |

Thus it would be possible for an employee to collect a benefit in excess of 100 per cent of wages. It therefore appears that the "primary only" plans lose much of their appropriateness.

The calculation of premiums will be complicated by the 1965 amendments. With the social security benefit assuming a greater part of the total benefit, it is necessary to give greater attention to the offset credit which is deducted from a total premium in order to arrive at a premium for a plan integrated with social security. Frequently this offset has been calculated as a very broad average involving varying income levels and varying degrees of family responsibility and thus involving varying primary insurance amounts and varying family benefits under social security.

This is unfortunate because it will increase the amount of data needed and time taken to make an accurate premium calculation.

MR. FERGUSON: There does not seem to be any need to change basic policy provisions. As previously mentioned, integration should be with family rather than primary benefits. It should also be on an entitlement rather than on a receipt basis so that the worker is motivated to apply for social security benefits.

Although I have not seen any yet, there may be requests that currently payable LTD benefits not be reduced because of increases in social security benefits. To the extent that these increases reflect increases in the cost of living, a generous employer may feel that they should be passed along in full to the disabled worker. Maybe we will even see a variable LTD. I expect that the Metropolitan will want to carry the ball on this one.

MR. NEUSCHWANDER: Two problems are involved—existing outstanding policies and new policies being issued. It may be advisable to reissue many or all outstanding policies on current forms so that uniform administrative and claim procedures can be applied.

The policy provisions should accurately reflect the insurer's attempt to provide each covered employee with such income (if any) as may be required to bring his total income during disability up to but not in excess of the predetermined standard established by the policyholder. This means that all other disability income from whatever source, including social security at the full family level, must be recognized and made a part of the claim procedure.

When referring to disability income from other sources, have the policy terminology clear on the point of such income being "payable" rather than "received" or "paid." This provides the insurer some degree of

leverage if the claimant fails to make proper application for certain benefits to which he is or may be entitled, as for example federal social security. When this happens, the benefits provided by the LTD policy can be reduced by the estimated amount of these other benefits until such time as they are either formally disallowed or paid. A retroactive adjustment is then in order.

After the policy provisions are fixed and determined, carry them over properly to all certificates and booklets. This, admittedly, is an elementary sort of comment, but all too often it is overlooked with rather unfortunate and even expensive results.

Indications all point to an ever expanding segment of our population being made up of those who have no interest in working if they can live at least 80 per cent as well by not working. The insurance industry should assume responsibility for seeing that LTD coverage does not encourage this expansion.

CHAIRMAN WILLIAM CUNNINGHAM: The topics are now open for discussion or questions.

MR. GARNETT E. CANNON: Mr. Neuschwander, what limit do you put on the maximum income payable, and is it the same for your employee group as outside?

MR. NEUSCHWANDER: Our employee plan was set at 50 per cent, which is nontaxable, and for others we try not to exceed 60 per cent, although we have a few as high as 65 per cent. We have run into plans in which the continuation of accruals under the pension plan was adjusted so that the salary remained fixed at the salary at the time of disability, but we have not worked out anything that would allow for any possible salary increases. In the package that I described, the disabled individual has the option of contributing on his salary at the commencement of disability. Our attorneys have advised us that the plan will qualify, but we have not yet had approval from the Treasury.

MR. J. MARTIN DICKLER: Mr. Clark, would you please explain what you meant by the statement that social security–LTD payments looked to the past, whereas imaginative group underwriting LTD should look to the future.

MR. CLARK: Social security payments are based on average earnings, and, since past earnings are usually less than current earnings, this is

favorable to us even though Congress increases the benefits periodically. We are interested in replacing a portion of current earnings, not of past average earnings.

MR. WILLIAM F. MARPLES: Mr. Neuschwander, I believe that you stated that you got into difficulties because the booklet did not agree with the master contract. Did you not have an exculpatory clause in the booklet stating that the contract governed regardless of what the booklet said?

MR. NEUSCHWANDER: Where the booklet provides bigger benefits than the policy and is distributed among several thousand employees, it is difficult to deal with the union no matter what safeguarding clauses may be in the booklet.

MR. JAMES F. A. BIGGS: It seems logical to me that a company writing variable annuities might, subject to SEC approval, permit a disabled individual to elect to have his long term disability benefits paid on a variable basis.

If a disabled employee continues contributions under a company savings plan, the question arises whether his contributions should be based on the amount of his disability income or the amount of salary he received before being disabled. The Internal Revenue Service may question the latter approach.

*Washington Regional Meeting*

MISS JOSEPHINE W. BEERS: Occidental, the company with which I am associated, has not written enough group long-term disability plans to give me a neat picture of our business as it was before the 1965 amendments. To start today's discussion, therefore, I can but offer a few impressions, gained chiefly from reading, and hope that others will be able to substitute the facts to confirm or contradict my suggestions.

We hear much talk about the addition of a temporary disability benefit to the total and permanent disability benefit previously provided under social security. But is this change as substantial as the words in the act seem to imply? Is there a significant number of employees who will be considered entitled to the disability benefit under the new definition who would have, in fact, been denied benefits under the previous definition? I do not know.

I have seen an abstract of a survey of 3,400 workers who were ruled to be disabled in 1960, either for wage-freezing under age 50 or for disability income between ages 50 and 65. A high proportion of those under 50 was

observed in long-term public hospitals on account of mental disease. The older workers were more susceptible to degenerative diseases. They made more use of the short-term hospitals but presumably were not expected to recover fully. I believe that we may assume that anyone who could qualify in the past would be granted benefits under the amended act.

I do not recall ever having seen an analysis of the disabilities which have been denied social security benefits. I am, therefore, unable even to guess whether there will be many disabilities which have lasted six months and which will appear likely to last another six months but which would not be considered to qualify under the old definition of permanent disability. It seems conceivable that this change in the act may not amount to much in the actual administration.

On the other hand, this change may turn out to have a much greater effect than anyone intended. Our disability continuance tables suggest that at least half of the persons disabled for six months may be expected to recover before the end of the twelfth month. But will a public agency find it possible, or politic, to tell that to anywhere near half of the individuals who have been disabled for six months? It may turn out that the 1965 amendment has actually changed the benefit to something very close to our long-term disability income with a six-month waiting period.

We may have to wait for some time to see the real significance of this particular change. This will chiefly affect our renewal underwriting. Any effect that it has on our current market and initial underwriting will depend less on what social security will pay than on what we and our prospective policyholders expect social security to pay. If we expect that most of our claimants will be receiving social security payments, we will recognize problems in trying to include the lower-paid employees and in trying to find a satisfactory way to charge for the higher-paid. These problems are not new, however. It may only be a little more difficult to design a plan which will seem equitable to the Insurance Commissioner of New Jersey. Or maybe not. It could be that our job will become easier as the social security benefit comes closer to ours.

If, in fact, Congress has changed the social security plan to adopt our six-month waiting period, we may find it desirable to change our plans to make them more consistent with social security in other ways.

We might avoid a good deal of misunderstanding and dissatisfaction among our insured by making our definition of total disability conform as closely as is feasible to that used by social security. The statutory definition is "inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment." We may want to consider whether that is too broad for our purposes or whether we

might benefit by accepting the government's determination of the existence or nonexistence of total disability.

Heretofore, most group insurance contracts have imposed a stricter definition of total disability after disability has continued for a period such as two years. The intent seems to be to control costs by putting pressure on the insured to get some kind of job. May it not be that the desired end could be more often achieved—and with better public relations—through a rehabilitation benefit roughly similar to that provided under social security?

Disability payments under social security will be made during the first twelve months of rehabilitation or employment, regardless of the amount of earnings, if the individual has not medically recovered. Already, some insurance companies have added some type of rehabilitation benefit to their long-term disability plans, and I expect that we will see more in the future. To the extent that our rehabilitation conditions are less liberal than those of the government, we may be inviting claims problems. On the other hand, we have to try to keep our claims costs within the amounts that we can feasibly require as premiums. This may not always be easy.

A part of the 1965 amendments which has received less publicity than the change in definition is the extension of the disability benefit to supplement other social security income, such as old age payments elected at age 62. We have no adequate basis for changing our premium rates in anticipation of any savings that we may enjoy due to this liberalization. However, we will do well to assure ourselves that our contracts provide for integration with other retirement income and are not limited to integration with other disability income.

The provision for retroactive allowance of social security payments seems to permit an employee to draw our monthly income right up to age 65 or obvious recovery and then make a late application for social security payments covering the same disability. Possibly our best protection against such a contingency (other than the honesty of most people) would consist of making our requirements similar to those of the government and investigating closely any claim received from an employee who has not been approved for social security benefits. One serious difficulty, of course, is that the governmental approval may frequently be delayed. Should we change our waiting period from six months to seven months to bring our action closer?

To sum up, I believe that the 1965 amendments will primarily affect our future claims and, therefore, our renewal underwriting. Regarding the more immediate impact, I have offered questions. I hope that some of the other speakers will give us answers.

CHAIRMAN DANIEL W. PETTENGILL: This particular subject is a relative newcomer to the group health field, and I do not think that any of us are experts on it.

MR. PETER M. THEXTON: The changes in the social security law have not provoked much change in our underwriting practices. The changes have, however, brought the provisions of the law to a point more nearly in accordance with the premium credits that we have been giving in order to be competitive.

MR. ROBERT J. MYERS: In our opinion, at the Social Security Administration, the change in the definition of disability was not a very great one. This will increase the cost of the benefits by about $1\frac{1}{2}$ per cent relatively, although the number of claims will be increased somewhat more because they will be the short-duration ones. Our original definition did not use the words "permanent and total disability" because it was believed that a doctor would not certify that something was going to be permanent. Our original interpretation of the "long-continued and indefinite" duration amounted to at least an eighteen-month expectation of duration, whereas the new amendments amount to an expectation of at least twelve months. We will continue to administer this provision strictly, despite the large number of people who are disabled for six months and who will terminate before twelve months.

In the little experience to date, there seem to be very few additional cases qualifying. In the future we will not be able to measure the precise effect of the new definition against the old one, but at the moment we can measure it because of the technical reason of retroactivity. Cases that qualify under the old definition that come in currently and that were received in the past few months are allowed retroactivity before the effective date of the new change, whereas cases that come in just under the new definition get retroactivity only up to a certain point. Therefore, for a short period we can determine cases that did not qualify under the old definition but do under the new one.

*Group Medical Expense Insurance*

What are the implications of Medicare on group medical expense insurance with reference to matters such as:

A. Benefit structure for (1) new business, (2) existing business? Is there any evidence of increases in benefit levels for persons under 65?
B. Claims administration?
C. Group conversions?

*San Francisco Regional Meeting*

MR. BURTON E. BURTON: One of the very basic changes in benefit structure caused by Medicare is that, for both new and existing business, plans will be written on a basis providing for termination of coverage upon becoming eligible for Medicare or providing for a specific modification of benefits to take into account the benefits of Medicare.

Where coverage under the plan is terminated upon an individual's becoming eligible for Medicare, the general practice among the eastern insurance companies will be to provide for continuation of coverage for other family members until it would otherwise have been terminated in accordance with the provisions of the plan, for example, at death or retirement. Some companies provide or will offer more liberal continuation of coverage provisions for remaining family members in order to prevent gaps in the protection for adult family members not yet eligible for Medicare, particularly when a plan of benefits supplementing Medicare is provided for individuals over 65. In at least one company, these more liberal provisions include widow's coverage when the death of the employee occurs after becoming insured under a plan of benefits supplementing Medicare.

Where supplemental Medicare benefits are provided, the benefit structure usually falls into one of two general categories. The first category might be described as specially designed major medical type supplements to provide benefits which do not depend on the amount of benefits provided by Medicare and are therefore at least partially independent. Under these plans, covered expenses are defined in terms of the expense items not paid for or covered by Medicare, such as $40 Part A deductible, $10 Part A coinsurance, hospital expenses after 90 days, drugs and medicines, private-duty nursing, physicians' charges to the extent of the Part B deductible, hospital outpatient charges not paid for, and so forth.

Some companies also offer to include, as part of their standard plans or as an option, the 20 per cent coinsurance under Part B on physicians' services. This type of supplemental plan is generally written on a deductible and coinsurance basis. There is, however, a great variety of approach

in this area, with some companies having no deductible on covered hospital expenses and, in some cases, no coinsurance on covered hospital expenses.

It appears that this type of supplemental plan was developed to facilitate understanding by covered employees and employers and to permit prompt claim settlement without having to ascertain the status of the individual's claim under Medicare. With respect to claim settlement, these plans generally contain a provision which provides that covered medical expenses and the benefits of the plan are determined as if all individuals were covered for both Parts A and B of Medicare to the extent they are eligible. Therefore, the benefits do not vary in amount between persons who do or do not have Part B, and it is not necessary usually to determine the amount of Medicare benefits.

The second category of supplements includes plans designed to maintain the existing level of benefits. This is a very complicated approach which should prove to be difficult to explain and administer. For a basic medical plan, this can be done by providing that the benefits of the supplemental plan will be equal to the excess, if any, of the plan's regular benefits that would have been payable in the absence of Medicare over the benefits provided by Medicare for the same eligible expenses. To obtain complete "maintenance of benefits," it would be necessary to follow this approach separately for each individual basic benefits coverage.

Maintenance-type supplements are generally written so that only the actual Medicare benefits to which an individual is entitled are taken into account in determining the benefits of the supplemental plan. If an individual is not covered by Part B, the plan provides for the payment of the full regular benefits. This type of supplement is proving to be particularly popular with large employers with negotiated benefit plans. Perhaps the outstanding example of a Medicare supplemental plan along maintenance lines is the automotive industry's agreement with the UAW.

In the case of major medical and comprehensive medical expense plans, maintenance of benefits has generally been interpreted to mean an expense carve-out or expense-reduction approach rather than the benefit-reduction approach that I have described for basic benefits.

For existing business, it appears that there will be a significant number of substantial-sized cases requiring that the existing plan continue without any change whatsoever or that the plan be specifically modified so as to ignore the benefits payable under Part A or Part B or under both parts of Medicare because of the provisions of a labor agreement or the current demands of their union. Where a plan is continued without change, this would generally mean that the full benefits of the plan would be available

for hospital expenses not reimbursed under Part A of Medicare. This result arises because most group insurance plans contain some type of provision providing that there is no coverage for expenses for which an individual has no legal obligation to pay. Therefore, in the case of a $20 daily benefit, 70-day basic hospital plan, the full $20 per day would be available for hospital private-room charges not reimbursed by Medicare and for other room and board charges not paid for by Medicare, such as charges after 90 days. In the case of Part B, many existing plans do not contain adequate governmental benefits exclusions which would take into account the benefits of Part B, and the regular surgical-medical benefits of the plan would therefore be payable on a basis which duplicates the benefits of Medicare. Even where the governmental exclusions are adequate to take into account Part B, the full scheduled allowances of the surgical-medical plan would be available for the out-of-pocket expenses of the individual not paid for by Part B. Typically, this would mean that the individual would collect 100 per cent reimbursement of all surgical-medical charges covered by the basic medical plan. We are hoping that these employers will make suitable changes in their plans at the time the plan is renegotiated in order to avoid the duplication of benefits or unsatisfactory integration with Medicare benefits which results when a plan is left unchanged.

Employers have been so concerned about the changes to be made in their programs for individuals over 65 that there has been little evidence of the expected and hoped for interest in improving benefit levels for persons under 65. However, several companies are strongly recommending the establishment of "under 65" and "over 65" benefit plans and corresponding premium and claim accounts to replace current plan distinctions between active and retired employees. Under this approach, dependents of over 65 employees and early retirees and their dependents who are under 65 would be covered by the regular active employees' plan for persons under 65 rather than by an existing or separate plan providing a different and usually lower scale of benefits. Similarly, employers are being encouraged to eliminate any distinction in benefits which they may now have between active employees over 65 and retired employees over 65 by selecting a single supplemental Medicare plan for both groups of employees.

MR. HENRY K. KNOWLTON: I agree with Mr. Burton that we expect to see pressures for increased benefits for all employees to bring benefits up to a minimum equal to the Medicare benefits.

Medicare can certainly be expected to speed the expansion of convales-

cent-hospital and home-care benefits, which should be a positive contribution to our insurance programs. Pressure to provide full ward or semi-private room and board benefits will likely, however, result in benefits with with little or no coinsurance and encourage increased utilization.

While we expect these changes to occur, we have seen very few requests for such changes to date—perhaps because our policyholders are too preoccupied with benefit changes for persons over age 65.

In the over-age 65 area, we have already had requests from our larger policyholders for almost every type of benefit imaginable, and some that I would never have imagined. Two major problems in this area are keeping benefits within manageable bounds relative to claim administration and setting rates. There is certainly little agreement between actuaries with regard to what some of the more exotic benefits cost, as we have had cases in which rates of two carriers were in a ratio of 2 to 1 and, in one instance, 8 to 1.

Such rate variations may lead brokers to wonder if the carriers know what they are doing, and they once again verify that rate-setting in the group health area is an inexact science at best.

MR. NEAL A. FARMER: We are offering five options to employees or dependents over 65:

1. Termination of coverage.
2. Integration of the present coverage with Medicare.
3. A "base plan" supplement to Medicare, covering $10 of hospital daily room for the 61st through the 90th days, first three pints of blood per spell of illness, limited coverage of out-of-hospital drugs at 50 per cent coinsurance, convalescent-hospital coverage at $5 per day from the 21st to the 100th day per spell of illness, and limited out-of-country coverage.
4. A "base plan plus major medical" supplement to Medicare, including the benefits under the basic supplement plan described above plus 80 per cent reimbursement of covered charges for hospital daily room for the 91st through the 365th day per spell of illness, private-duty nursing, out-of-hospital drugs, and out-of-country coverage. Some inside limits apply in each of the above categories.
5. A comprehensive medical expense supplement to Medicare, which will pay 80 per cent reimbursement after a $100 deductible has been satisfied for the following coverage: the first $40 of hospital expense, the first $50 of physicians' fees per calendar year, the cost of hospital room and board for the 61st through the 90th day of confinement at $10 per day, the cost of daily room charges from the 91st day of confinement through the 365th day, $40 per day for private-duty nursing, the cost of out-of-hospital prescription drugs, $5

of daily room charges for convalescent hospital from the 21st day through the 100th day, and out-of-country coverage. The maximum on this plan is $10,000 per lifetime.

We are pooling the experience on the three standard Medicare supplement plans for those employers who are covering active employees on a nonoccupational basis. We are not pooling the experience for integrated plans, for plans with occupational coverage, or for plans covering retirees.

We feel that the comprehensive plan is the most desirable, both from the standpoint of the company and the insured. Our field force is concentrating on the comprehensive plan, as may be evidenced by the fact that of the first ninety-three cases on which an amendment has been added to adjust our benefits for the existence of Medicare in each case the employer has purchased the comprehensive Medicare supplement plan.

We have not yet seen any request for increase in benefits on employees under age 65 due to the effect of Medicare. However, we do expect an increase to take place. A change will probably be made in the area of daily room payments. Due to the method of cost allocation required by Medicare, the cost of daily room will probably increase, while the cost for supplementary hospital services will decrease. A further change in the level of services purchased by employers may come about due to the shift in emphasis and the level of benefits provided under Medicare.

One problem which has arisen as a result of Medicare is the experience-rating of cases on which there have been either insured employees or dependents over age 65. It is important that we remove the experience on the over-65 individuals in arriving at the rate increases required on existing business. We are currently subtracting both premiums and claims for those individuals over 65 from the case experience when making an experience-rating review. This is a difficult job and at best can only be done approximately.

We have some policies in which the employer desires to continue the present full coverage on the insured individuals, including those over age 65. Primarily, these are, of course, negotiated plans in which any revision in benefits could cause the entire labor contract to be thrown open to renegotiation. We have, however, had at least one plan where the employer is adamant in demanding that we continue full coverage after age 65.

MR. KNOWLTON: I believe that the effect of Medicare on claims administration can be described in one word—"chaos." The problem that faces us is to reduce the situation to "controlled chaos."

The first element of control is that of problem definition. We have found three major problem areas facing us. These include:

1. Determination of policy liabilities where individuals are covered by Medicare.
2. Determination of Medicare coverage and the extent of Medicare benefits.
3. Changes in hospital billing procedures expected to result from the Medicare Part A/Part B split and increased use of hospital claims-review committees.

Occidental has tried to minimize these first two problem areas by (*a*) terminating medical benefits under our policies up to 100 lives for insureds over age 65, and following the same practice under larger policies where possible, and (*b*) offering supplemental benefits which are simple to administer. Our standard supplemental hospital benefits include only a $5–$10 per day indemnity benefit, with two times benefits after 60 days, and an extended hospital benefit which provides no benefits during the first 60 days. Our Part B supplement pays one-half of the deductible for an insured who satisfies his Part B deductible, plus one-half of the coinsurance for expenses in excess of the deductible. If Medicare benefits are payable under Part B, we will simply pay $25 plus 12½ per cent of the Medicare benefit. We can base settlement entirely on Medicare's explanation-of-benefit form furnished to the insured and will not require duplicate bills, claim forms, or physician statements.

The insurance industry made a good sale to Congress in the need for deductibles and coinsurance and the risks involved in covering out-of-hospital drugs.

Occidental is doing all it possibly can to discourage supplemental benefits, and we will write such benefits only for large policyholders whom we cannot "unsell" on these benefits.

In terminating medical benefits for lives over 65, we have mailed endorsements to most of our policyholders which make such individuals ineligible for medical expense benefits. Some of these endorsements require acceptance, but most provide for acceptance by payment of premium. To date, we have had good success with these endorsements, and our "hard nosed" approach has resulted in far less negative reaction than was anticipated.

We have taken this approach to recognize that our biggest market for health benefits is and has been those people under age 65, and we believe that any additional premium dollars should be spent in expanding their benefits rather than providing supplemental benefits to the individuals over age 65. We do not believe that we should prostitute our principles of deductibles and coinsurance to sell expanded benefits for the persons over

age 65. If we do, we may find ourselves forced to give up the same principles for those under age 65.

We also hope to avoid destruction of the deductibles and the coinsurance in the Medicare plan and to avoid the complex claim-settlement problems connected with supplemental benefits.

Our major problem on integration with Medicare will be determining benefits for those policyholders who will not accept our endorsement or for policyholders who insist, notwithstanding our objections to the contrary, in providing supplemental benefits. In this area we have found that the reduced benefits under our policies, payable to individuals covered by Medicare, fall into one of four general categories, largely dependent on the age of the group case.

Our oldest policies have no provision for integration with government benefits, so we are liable for full policy benefits in addition to Medicare payments. This presents no claims problem but does present an underwriting problem.

The next series of policies have wording which will, we believe, allow us to integrate with Part A hospital benefits but not with Part B benefits. The effect of integration on the hospital benefit presents only minor problems. Aside from picking up the Medicare hospital deductibles, our benefits will be available to cover (*a*) the 20 per cent coinsurance and any deductible on the professional services rendered in the hospital—anesthesia, radiology, pathology (the question of which expense made up the $50 calendar-year deductible complicates settlement); and (*b*) hospital room-and-board surcharges for private rooms. With our full daily-room-and-board benefit available to cover the excess of private over semiprivate charges, an insured will be able usually to receive full payment for the most expensive accommodations available.

A third policy series provides for integration with both Plan A and Plan B, complicated by the fact that (*a*) integration of hospital and medical benefits will be handled separately and (*b*) to avoid arbitrary allocation of the deductible, we will assume that the Part B deductible is satisfied by areas of expense which we cover. This will result in the maximum benefit payable under our policy terms.

Our most recent policies include the COB or co-ordination-of-benefits provision, and under these policies we will, to the extent of our normal benefits, be liable for virtually all items of medical expense not covered by Medicare under policies which include major medical benefits.

In determining who is covered under Medicare, we plan to assume initially that all persons are covered under both Part A and Part B. If an

insured is not covered under Part B, we will have to modify our settlement.

If charges for professional services appear reasonable, we will also initially assume that the Medicare Plan B will pay 80 per cent of such charges. If the Medicare administrator considers only 90 per cent of the charge as "reasonable," we will have to adjust our benefits, but the direction of adjustment will depend on whether or not benefits are assigned. If benefits are assigned, the physician has agreed to accept the Medicare determination of "reasonable" as full payment, and we would have overpaid our insured. In the interest of good policyholder relations, it may be prudent not to attempt to obtain repayment of small overpayments.

If no assignment has been made, we may be liable for additional benefits. In determining our benefits, we will make an independent determination of reasonable and customary charges and will not blindly follow the Medicare determination of "reasonable." The major unanswered question is how we will verify that an individual who says he is not covered under Part B is actually covered. In policing double-coverage restrictions, we have generally had co-operation between insurance companies and employees, and it is hoped that we will also have the co-operation of the Social Security Administration. Without such co-operation, verification will be much more complex and could involve postclaim review with hospitals, physicians, and other purveyors of medical care.

These areas of integration of benefits for retired lives are complex, but happily they will apply only to a small percentage of our claim problem. The major impact of Medicare on the claim area will be the effect on claims for persons under age 65.

In the hospital area, we have historically paid for professional radiological and pathological services billed by the hospital, but will not, under our current policy terms, be liable for such expenses if the hospital changes its practices as the result of Medicare. Our insureds will suffer a reduction in benefits if we follow policy terms; yet, if we allow payments for these services by administrative procedures, we will probably pay out more dollars and may even be liable for benefits in excess of our policy limits as a result of issuance of hospital-administration forms. Also, the fact that our claims examiner will have to handle and review two or three additional bills will add to settlement time and costs. Medicare may also result in a change by the hospitals to a flat per diem billing rate rather than separate charges for room and board services. This flat per diem rate would both change our future benefit structures and simplify claims administration.

The increase in utilization-review activities as a result of Medicare should be extremely beneficial to the group health business generally.

Closer review of utilization should result in both fewer claims being presented and in fewer claims being questioned by examiners with respect to necessity of hospital confinement or services performed.

Medicare will add greatly to our claim-settlement costs and the time required to process claims, and the greatest problem is education of our claims personnel so that they will anticipate problems before being buried in them. The only possible silver lining in this black cloud is the possibility that with COB and Medicare to cope with, our policyholders may say, "Nuts! You settle these claims," and we will see an increase in the return of claim functions to insurers.

MR. FARMER: We anticipate no real problems under our standard Medicare supplement plans, since any individual who is covered under the supplement enters this plan with no pre-existing condition exclusion, no actively at work provision requirement, and with new medical maximums, regardless of the maximums and amount of claims that existed in the under 65 plan.

The Medicare supplement plans, however, that are written to be integrated with Medicare will be continual sources of problems. We intend to pay claims under these plans based upon the payments normally made by Medicare without waiting for the actual payments to be made. These claims then will be adjusted, if necessary, once the actual Medicare payments have been made.

On the basis of past experience, we see a problem area on any plan on which there is a Medicare supplement in force on retired employees. The fact that the supplement is somewhat complex plus the fact that these people have time available to make telephone calls and to write letters mean that part of the claim examiner's time must be spent in examining the method used in calculating benefits. (A further claim problem brought about by Medicare is the fact that there is expected to be a shortage of qualified claims examiners.)

For plans integrated with Medicare, a very important consideration is the method of paying claims in integrating with Medicare. Three members of our staff recently arrived at seven different ways of paying the same claim in cases in which the benefit was integrated. Management must decide upon the approach that is to be used, so that the benefit is priced, sold, and paid on the same basis.

Almost certainly there will be a problem in deciding if certain claims are medically necessary. For example, there is some fear among doctors that persons who are in convalescent hospitals at the time Medicare becomes effective will demand to be put back into a hospital for at least

three days in the hope that they will be eligible for extended medical care coverage under Medicare.

Most of our present plans have no differentiation of benefits based on age. However, under Medicare, the age of the individual becomes important, since an over-age 65 claimant has a different set of benefits.

MR. BURTON: The administration of claims in this area is expected to be time-consuming and difficult, particularly for supplemental plans of the "maintenance" type. For example, how do we ascertain or check on whether an individual actually has coverage under Part B of Medicare in instances when he is covered under a supplemental plan in which the benefits vary depending upon whether the individual is covered by Part B of Medicare? At present, it appears that the Social Security Administration will not be willing to provide information regarding coverage under Part B, and it may not be willing to provide reimbursement to fiscal intermediaries for expenses incurred in co-operating with other carriers and employers in the administering of supplemental Medicare plans. In fact, we do not yet know whether they will permit any form of information dissemination to complementary carriers.

Another problem is how we will determine what the hospital's regular itemized charges would have been for the hospital care given to a Medicare beneficiary in order to administer plans written on a "maintenance" basis? At present, it seems certain that the individual Medicare beneficiary will receive a bill from the hospital which indicates the amount of expenses not paid for by Medicare and, therefore, owed to the hospital. A separate billing will be made by the hospital to the Part A fiscal intermediary, and this bill will probably show the hospital's regular itemized charges. However, again, there is no indication that the fiscal intermediary or the hospital will be either permitted or willing to make this information available to other parties.

How do we determine the benefits of Part B of Medicare for a particular bill rendered by a physician, such as a surgeon's bill? Under Part B, the deductible of $50 applies jointly to the many different kinds of expenses covered under this portion of Medicare. Therefore, in order to determine the actual amount of Medicare benefits payable for a given physician's bill, it is necessary to make some assumption regarding the application of the Part B deductible. One approach being used by my company—and which is being included as a policy provision in supplemental plans—is to apply the deductible of Medicare first to the expenses covered by the employer's medical expense program with no portion of it being applied to other expenses which may be covered under Medicare but

which are not covered under the employer's plan. This approach maximizes the benefit payment under the supplemental plans. Then the deductible would be applied to the expenses covered by the employer's plan in the order in which these expenses are received by the insurance carrier. If two or more bills are received simultaneously, the deductible would be applied to the largest bill presented by any provider of service, then to the next-largest bill, and so forth. The policy provision will also provide that no recalculation of benefits will be made with respect to expenses included in a prior claim.

How do we determine the actual deductible under Part B for an individual? The deductible under Part B may differ from $50 on account of the carry-over provision and also because the hospital diagnostic outpatient services deductible under Part A can be applied against the Part B deductible. One approach which would be liberal from the standpoint of the covered individual would be to determine Medicare benefits on the assumption that the proper deductible was the full $50, unless evidence is presented or available to the contrary. If this is done, it would permit prompt determination of Medicare benefits and, therefore, reasonably prompt payment of the claim. Another approach would be to require the individual to submit the explanation of benefit-payment form expected to be developed for Part B intermediaries to send to Medicare beneficiaries. This form would show the amount of Part B deductible at that time applicable to the charges presented to the Part B intermediary, and this deductible could then be used by the supplemental-plan insurance carrier. However, depending upon the promptness of claim payment by the Part B intermediary, this approach may result in a considerable delay in claim payment.

How do we determine whether the charges presented are "reasonable" in accordance with Medicare standards so that a calculation of Medicare benefits can be made? For prompt claim settlement, one practical approach would be to assume that all such charges are reasonable in accordance with Medicare standards unless the charge is one where the carrier, by its own standards, would consider the charge unreasonable. Another approach would be to rely upon the explanation of benefit-payment form referred to above and use the reasonable-charge figures shown on that form. However, it is not yet known whether the explanation of benefit-payment form will contain sufficient detail to permit readily an identification of the reasonable charges for the particular kinds of expenses covered under the employer's medical plan.

Under supplemental plans in which the benefits depend directly upon the amount of Medicare benefits payable, there may well be a consider-

able problem involved in education of claim personnel to the precise scope and extent of coverage under Part B of Medicare. In order to provide prompt claim settlement, it would generally be necessary for the supplemental-plan carrier to determine itself what the Medicare benefits are for the kinds of expenses covered by the employer's medical plan; this could prove to be a difficult task in many of the areas to be covered by forthcoming social security regulations.

MR. FARMER: In the area of group conversions on hospital-surgical and medical policies, our problems are probably similar to those faced by many other companies. For the past few years, upon conversion of the group health coverage, we have been issuing policies that are guaranteed renewable for life. At the present time we have more policies in force on this basis than we would like. Recently we changed our group conversion rules so that we are currently issuing to any applicant under age 60 a policy that is guaranteed renewable to age 65. We are currently getting insurance department approval of policy forms that are renewable at the option of the company, and we will use these forms to issue all applications where the insured is between the ages of 60 and 65. We have more flexibility in this area than many companies, since our conversion privilege is not contractual and is not required by law.

After July 1, 1966, if an employee who would otherwise be eligible for a conversion policy is over 65 and has a spouse under 65, a conversion policy will be issued upon the employee's application to cover his insured dependent spouse and any dependent children.

Also effective July 1, 1966, if an employee eligible for conversion is under age 65 and has a spouse over age 65, he may apply for a conversion policy upon himself and any dependent children who are insured. However, if both the employee and his insured spouse are over age 65, under a conversion request the policy will be canceled and not reissued to cover the children only. There will, of course, be some administrative exceptions on our group conversions—for instance, cases outside the United States where there is no Medicare coverage. Also, we can see, looking ahead, that after January 1, 1968, if the present Medicare law should continue, there will be some persons who are not eligible for Medicare. However, we are not at this time formulating any rules that will apply in that situation.

On the group conversion policies that we have outstanding that are not guaranteed renewable for life, we plan to terminate these policies when the insured attains age 65 but will continue coverage for persons under 65 as long as at least one adult remains.

For those group conversion policies in force on a guaranteed renewable

for life basis, where some member is over age 65, we have written a letter to those insured indicating that they will probably not need this coverage after Medicare becomes effective, urging them to sign up for Parts A and B of Medicare, and offering to reissue the policy to cover the spouse to age 65 if he or she is now under age 65.

For those policies on a guaranteed renewable for life basis, where the insured and spouse are now under age 65, we intend to offer them a guaranteed renewable to age 65 policy with a decrease in premium.

MR. BURTON: It appears that most companies will modify their existing conversion privileges to provide that there is no conversion privilege when insurance coverage is terminated for an individual eligible for Medicare. To the extent permitted by existing conversion policy provisions, most companies will also terminate an existing conversion policy for individuals over 65. It would appear that most companies have taken the position that the conversion privilege is no longer a proper vehicle for making coverage available to retired employees and dependents. With the advent of Medicare, supplemental benefits on a group basis are modest in cost and involve relatively little risk to the financial experience of the employer's "under 65" plan insofar as substantial-sized claims are concerned. Therefore, it would seem better to provide whatever coverage is desired for individuals over 65 on the more economical group basis than by means of an individual conversion policy, even where the coverage must be offered on an employer-pay-all basis.

In addition, because of the optional nature of private-duty-nursing coverage and the problem of chronic drug-users among the aged, it would seem likely that any individual conversion plan offered in this area would be subject to substantial antiselection of the type observed in connection with the underwriting of state 65 plans. It would also appear somewhat inconsistent to make available major medical type Medicare supplements in an individual conversion policy for persons over 65 while, at the same time, continuing to severely restrict the scope of benefits provided in conversion policies for persons under 65.

MR. KNOWLTON: Medicare has already had its impact on our group conversion provisions and policies. To date, we have

*a*) Notified present holders of group conversion policies who are over age 65 that we will cancel their policies on the next renewal date following July 1.
*b*) Endorsed most existing group policies to remove the conversion privilege for insureds who are age 65 at date of termination of employment.
*c*) Changed our conversion policy to a policy renewable only to age 65.

In those cases where a group policyholder refuses to accept our endorsement, the only conversion policy available will be an indemnity policy providing $10 per day while hospital-confined for 180 days. This policy will exclude coverage for pre-existing conditions until it has been in effect for more than six months, so we do not expect to sell many as group conversions.

MR. GORDON R. TRAPNELL: Are the regulations concerning the determination of "reasonable charges" one of the major factors discouraging integrated plans?

MR. KNOWLTON: No. A reasonable charge is not the reason that we are against supplementing Part B. We think that the 20 per cent coinsurance is a good thing and we should not discourage it.

MR. DAVID S. ANDEREGG:* We queried our various carriers with regard to the effect of Medicare on our premium rates. We received a rather interesting answer from one of our carriers, who stated that their increase in rates this year would be decreased on account of Medicare. They also anticipate that their future increases in rates will be reduced even further because of Medicare.

MR. KNOWLTON: I have a question for Mr. Burton. You said that you wrote your over-age 65 group conversion policyholders and 70 per cent said that they would drop their policies. What will you do with the 30 per cent who indicated that they would like to keep them in force?

MR. BURTON: We will cancel them on their anniversary following July 1, 1966. However, we told them that we thought it was in their best interest to voluntarily cancel as of July 1, 1966.

MR. JAMES F. A. BIGGS: In integrated pension plans we sometimes have a provision which says that benefits will be paid on the assumption that the individual is receiving social security benefits unless and until he comes in with proof that he is not. Is this a possible solution for the problem Mr. Knowlton outlined concerning the determination of whether or not an individual has coverage under Part B?

MR. KNOWLTON: I think that this is one approach for new contracts and for contracts if the provisions are changed in the future. On our old contracts, it is hard to do this administratively and make it stick.

* Mr. Anderegg, not a member of the Society, is associated with Retirement Plans Administration, Henry J. Kaiser Company, Oakland, Calif.

MR. MURRAY PROJECTOR: I am reminded of the "anticipation privilege" which is used in the case of paid-up insurance on a retired employee. The employer gives the retired employee the privilege of anticipating his death claim for the purpose of paying medical bills not covered by health insurance. What experience has any of the panel members had with this approach to the problem in integrating with Medicare?

MR. BURTON: This, of course, has been done for many years prior to Medicare. There have been a number of these anticipation or draw-down plans with the medical benefits generally being payable in accordance with a specific plan structure and with all the medical benefits being charged to the life insurance benefit. I do know of one case at present in which we are going to do the same thing with respect to a Medicare supplemental plan.

My impression is that this approach does not work very well from the standpoint of all concerned, inasmuch as the persons covered by the benefit just do not want to reduce their life insurance benefit. Very often they simply meet their medical expenses out of pocket so that the plan does not fulfil the purpose for which it was intended. On some of these medical plans, we have had loss ratios on retired employees of less than 10 per cent.

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MR. ROBERT E. SHALEN: Medicare's effect on benefit structures for group medical expense insurance is already very much in evidence. Among base-plan-only policyholders, nearly all are terminating their coverage of employees and dependents over age 65. In fact, of 157 such groups at the Equitable that have made a choice so far, all have elected termination.

For policyholders with major medical benefits, most insurers have developed special major medical type plans to supplement Medicare, with covered charges limited to those expenses not covered by Medicare. Typical of these plans is the Equitable's, which pays 80 per cent of covered charges after a $50 or $100 calendar-year deductible, subject to a $5,000 lifetime maximum benefit. Covered charges include the various Medicare deductibles, $10 per day for the 61st through 90th day of hospital confinement and full semiprivate charges thereafter, private-duty nurses and out-of-hospital drugs. The monthly premium for this plan ranges from $4 to $8 per person, depending on such factors as the size of the group and the geographic area.

Charges incurred outside the United States are a special problem as

Medicare does not generally cover them. The Equitable's plan provides expanded benefits for those who travel abroad for less than six months but no benefits whatever for those who establish residence abroad or who travel abroad for more than six months.

Of the Equitable's 253 regular group policyholders with major medical benefits who have so far made a choice, 75 per cent have elected the above supplemental plan or a variation of it for their over-65's. Among our 10–25 life standardized groups, only 47 per cent of those with major medical benefits have elected the supplemental plan.

The following are some of the approaches being used by other insurers to integrate group benefits with Medicare for persons over age 65:

1. The so-called benefit offset approach, under which contractual benefits are reduced by the amount payable under Medicare. Net benefits payable will, of course, depend on whether the offset is done for each type of expense or, as is done more frequently, for all expenses in the aggregate, and on the period over which the offset calculation is made, with the calendar year the period most frequently used.
2. A flat indemnity benefit, such as $10 or $15 for each day of hospital confinement. This benefit is simple to administer but has the disadvantage of not being related to need, providing some beneficiaries with too much benefit and others with too little.
3. The nonprofit nonduplication approach, which treats Medicare like any other benefit plan and assures simply that the beneficiary will not make a profit from the sum of his Medicare and his group health benefits.

Medicare can also be expected to have an impact on benefit structures for employees under age 65. We have already seen some interest in benefit plans based on "reasonable and customary" charges with no inside limits or schedule and in coverage for confinement in a nursing home or other extended-care facility. We expect this interest to increase and to see some interest in coverage for home health services and possibly additional medical social services as Medicare gets under way and additional facilities come into being for providing such services to the over-65's.

The effect of Medicare on claims administration will be felt very quickly by our base plan groups and by those of our major medical groups that decide to terminate coverage for over-65's. For these people, all claims-administration problems will be eliminated. For groups that choose to supplement Medicare either with a "baby major medical" plan or a flat hospital indemnity benefit plan, claims-administration problems should be minimal. However, for those groups that choose either the benefit offset or the nonprofit nonduplication route, claims administration will be more complicated and benefit payments considerably slower. This will

be readily apparent to those who have been administering the standard nonprofit nonduplication provision, when they remember that *every* employee and dependent over age 65 will automatically require nonduplication handling.

May I offer one comment on the subject of benefit offset plans for over-65's? It seems clear at this point that Medicare is here to stay. Rather than designing plans which *subtract* Medicare benefits from benefits presently provided, it perhaps makes more sense to design benefits which can be *added* to Medicare.

The most important long-range effect of Medicare on our group health business is likely to be its impact on the nature of medical practice in the United States. Medical care for those under age 65 as well as those over age 65 is bound to be affected in a dramatic way in the years ahead by such factors as Medicare's establishment of standards for qualified providers of medical service, its requirement that medical care facilities set up utilization-review boards, and the increase that we can expect in the number of nursing homes, home health service agencies, and other facilities for which Medicare provides coverage.

Finally, I wish to make a brief observation about Medicare's effect on conversion policies in New York State. Section 162-5 of the New York Insurance Law requires that an individual conversion policy be offered an employee whose group benefits terminate because of termination of employment. The department's guidelines for these conversion policies now specify that no conversion policy need be issued on the life of an employee or dependent who is eligible for Medicare benefits and that new conversion policies may provide for termination when an employee or his dependent becomes eligible for Medicare benefits.

With respect to existing conversion policies, the guidelines permit an insurer to refuse renewal on overinsurance grounds to anyone covered by Medicare or to limit renewal to the period ending with the day he becomes eligible for Medicare benefits.

MR. ROBERT S. ROUFFA: I would like to ask Mr. Shalen to clarify his statistics in which he said that 75 per cent of 253 major medical policyholders have elected the supplement. Are these 253 policyholders only those who have replied to date and, if so, would you care to hazard a guess of the final proportion?

MR. SHALEN: Yes, these are the first 253 out of a total of about 2,000. Most of these early replies are from our groups with less than 250 lives that were contacted by mail. The larger group accounts are being con-

tacted personally. We found in the past that it was the larger groups who tended to be more concerned with retired persons over age 65, so we think that the final percentage may not be far from 75 per cent.

MR. CHARLES E. PROBST: I would like to caution that there are some situations in which an exact benefit offset plan cannot be administered. These occur where the benefit period of the existing plan (such as major medical) does not agree with either the Part A of Medicare "spell of illness" or the Medicare Part B calendar-year benefit period. Also, if the span of time over which the major medical deductible accumulates under the existing plan is different from that of Medicare, there will be additional complications. The benefit period and the deductible accumulation period may have to be changed to agree with Medicare. A second solution is to establish an arbitrary period, such as a calendar year, during which the benefits payable from the existing plan and the benefits payable under Medicare will be used to determine the offset benefit.

MR. MORTON D. MILLER: I have several comments pertaining to claims administration. First, there may be some tricky problems at the July 1 cutoff date (or ongoing cutoff date for someone who reaches 65 in the future), in that, at least in our amendments, we plan to operate the Medicare offset or Medicare deduction with respect to continuing claims—something we have not done in group insurance. There is a question whether this will really be understood by the claimants despite the fact that Medicare is going to take care of the medical expense of a person who is already in the hospital on July 1 and we pick up only those expenses prior thereto.

The second item is that, under some of these arrangements, it will be necessary for regular insurance carriers to get information on Medicare payments. Apparently, there will be two ways in which this is possible. First, each claimant will be given a statement of account by the administering agency. This statement of account itemizes in considerable detail the charges that have been taken into consideration, how much was covered under Medicare, and how the Medicare payment was arrived at. The regular insurance carriers should be looking to their claimants to furnish a copy of this form to them. Alternatively, I understand, although it is not clear to me how this will work, that the Medicare carriers themselves are under obligation to make claims information with respect to Medicare payments available to other carriers.

CHAIRMAN DANIEL W. PETTENGILL: My present understanding is that the Part A carrier may not be furnishing the claimant with a statement but rather that it may come from social security itself. In any event, you can rest assured that your industry representatives have made it clear to the Social Security Administration that the carriers do need this claim information in order to pay their complementary benefits. The Social Security Administration has been most attentive to this request, and they are certainly working toward the end that each one of us will be able to administer complementary coverage.

MR. JOHN M. BRAGG: As we all know, in the past when a hospital has submitted a bill for an X-ray, it has included the charge of the doctor or radiologist who examined the X-ray and this has been reimbursed under the miscellaneous extras provision in base plan coverages. After July 1, this doctor is going to start charging for his services separately. My question is, How are companies going to change their base plan wording to pay for the cost of this doctor's bill? If no change in language is contemplated, are the companies going to pay it anyway?

MR. SHALEN: In the past, when anesthetists have submitted separate bills, we have administratively paid these bills through the hospital extras provision up to the limit specified therein even though there was no specific provision for payment of these separate bills under any of our base plans. Perhaps the same approach should be used for radiologists, pathologists, and others.

MISS JOSEPHINE W. BEERS: Occidental Life intends to go on doing what we have been doing until and unless forced to do otherwise. If this gets to be too large a problem, I suppose the industry will change its practice; but, for the immediate future, we intend to pay what we would have paid before.

CHAIRMAN PETTENGILL: This is what the Aetna Life will be doing also.

MR. MILLER: Do you envisage that this new basis of billing will become uniform and will also apply to the under-65 claimants as well?

CHAIRMAN PETTENGILL: If a hospital-based physician is going to assign benefits to the hospital on a blanket basis, I would hope this would be done only with respect to his over-65 patients. On the other hand, if a

doctor wants to take advantage of this new law to bill on his own behalf, he will undoubtedly do it for all his patients. Apparently the doctors are divided with regard to just what they want here.

MR. PETER M. THEXTON: I understand that, at one hospital in New Jersey, the specialist doctors do intend to bill separately for over-65 claimants and to continue to be included with the regular hospital bill for the under-65 group. The one small, independent hospital service plan that I have a moderately tenuous connection with does not intend to cover these doctors' fees, for instance, when it writes a supplemental plan over the Medicare Part A only. They do intend to interpret their contract fairly strictly.

I am sure that everyone realizes that there is not only this question of how to handle the hospital miscellaneous fee benefit, but, if you have a diagnostic X-ray and laboratory benefit, the X-ray and diagnostic extra charges are and will be a real problem both over and under age 65. For those over 65, the difficulties are compounded by the special Medicare outpatient diagnostic benefit with its own $20 deductible every 20 days.

MR. MILLER: Is there any evidence of activity with respect to the liberalization of benefits for those under age 65?

MR. A. HENRY KUNKEMUELLER: One American International Life policyholder is using the Medicare effective date as occasion to make general revisions in its benefit program.

CHAIRMAN PETTENGILL: This is coming because the employer has asked you rather than as a deliberate sales policy of your company. All of us are faced with the same situation. If our policyholder wants us to, we will unquestionably go along with him. If we do not, we will not be his carrier very long.

MR. SANFORD W. SCOTT, JR.: Since we at Connecticut Mutual Life are not in the health business, my contact with this area is extremely limited. It seems to me that, when Medicare was first drawn up, the idea was to continue with the deductible and coinsurance limits. Now I find that the insurance carriers are either replacing the deductible and coinsurance entirely with their coverage or at least they are covering a very substantial portion of it. I would like to ask Bob Myers whether this came as a surprise to them when figuring their cost estimates or whether it was actually taken into consideration.

MR. ROBERT J. MYERS: This is a little difficult to answer. I would have liked to see these underwriting safeguards more zealously guarded than they are going to be. My staff and I, of course, were aware that the service plans would probably try to fill in a lot of the coinsurance and deductibles, but we had hopes that there would not be too much of this. At least as far as the others are concerned, there is much more of it than we had anticipated. It will be of great interest to see just how much of these supplementary coverages the public will be buying.

MR. SHALEN: While we have seen a great deal of replacements of the Part A deductibles, we have not seen many carriers who are replacing the coinsurance element of Part B. We think that it is important to retain the coinsurance as an incentive not to overuse facilities. There were apparently two reasons for including the deductibles and coinsurance in the Medicare benefit program, and it is not too clear at this time which was the more important. The first was the need to keep the price at a reasonable level, and the second was to stop overutilization. In the case of the deductibles, I would judge that price was the big factor, and it seems reasonable to allow the employer to pick up the tab for the deductibles. Doing this should not encourage people to go to hospitals more frequently, particularly with the kind of utilization reviews that we anticipate and with the crowded conditions of the hospitals that we can expect in the near future.

MR. MYERS: I recently saw one Blue Cross plan that did this whole job very simply as far as the medical part is concerned. The claimant will continue to pay the $50 deductible, and the Blue Cross plan will pick up the 20 per cent coinsurance on all claims that are covered under their supplementary plan. Their premium rates for one-fourth of our coverage was something like $2 per month. Multiplying this by four gives them an equivalent $8 premium rate for that for which we are charging $6, which does not seem too much out of line.

I have always believed that, by incorporating a deductible in the hospital plan, we have derived good control over utilization. The saving in cost due to the deductible was about .1 per cent of payroll, but this saving was not the primary purpose of the deductible. On the other hand, I have a little fear of what I call the "parent sitter" problem, which means that over weekends or holidays, when the hospital might not be full, it may welcome an older person's staying there while the son or daughter goes off on a few days' vacation. The $40 deductible should be a deterrent to this.

CHAIRMAN PETTENGILL: New York State will permit group conversion policies to be nonrenewed by reason of duplicate coverage under Medicare. It would appear that most insurance companies are going to take advantage of this permission.

MR. THEXTON: I would like to make an observation which may not be very original, but I have not heard anyone else say it. We do not seem to have learned anything from the bath many companies took when major medical was sold primarily on price. Broad-scale major medical coverage is now about ten or fifteen years old, and it has taken us this period of time to get into discussions about the detailed provisions and benefits of major medical insurance with price a secondary consideration. This is in contrast to the highly general discussion that we are having today about long-term disability, although it has at least as many problems with respect to details of coverage, exclusions, benefits, and specific provisions. The employers, brokers, and companies are treating long-term disability in exactly the same way in which they treated major medical ten or fifteen years ago, that is, "I want some; how cheap can I get it?" We are ignoring all the rest of the details about quality of the coverage and what the significant differences between companies are. It would seem to me that we ought to know a little better by now how these things should be sold and serviced so that we can do a better job with long-term disability.

CHAIRMAN PETTENGILL: May I say, as a personal remark, that the health insurance business really is at a crossroads with Medicare. I feel that if there is to be private health insurance other than just a token writing of special policies for top executives as you have in England, we had better get busy and fill the remaining gaps, because government will do it for us if we don't.

*Separate Accounts and Variable Annuities*

What are the volume and rate of growth of this business? What technical problems have arisen? What regulatory problems have arisen? What investment approaches have been taken? What is the investment experience?

*San Francisco Regional Meeting*

MR. HOWARD H. HENNINGTON: In order to present some information on the volume and rate of growth of business involving separate accounts and variable annuities, I compiled some statistics from twelve insurance companies. The twelve companies selected included the larger companies operating in the group annuity field, but they do not include all companies with separate account business. The statistics are interesting even though only twelve companies are represented, because the largest companies were included. The following information has been compiled from the answers that I received.

| | |
|---|---|
| 1. Separate account assets, December 31, 1965 | $235,000,000 |
| 2. Payments to separate accounts during 1965 | $142,000,000 |
| 3. Number of contractholders participating in separate accounts | 244 |
| 4. Variable annuity assets, December 31, 1965 (included in item 1 above) | $ 3,438,000 |
| 5. Number of contractholders participating in variable annuities (included in item 4 above) | 6 |

It is apparent from the above information that there are already substantial assets in separate accounts and that the rate of growth is very large. The separate account assets are primarily in common stock investments accommodating group annuity policyholders with qualified pension plans who wish to participate in the insurance company common stock investment facility. Only one of the insurance companies had variable annuity business in force at the end of 1965, but several other companies have since begun to offer or expect soon to offer variable annuity contracts.

Most companies writing separate accounts business offered a pooled separate account and also nonpooled separate accounts for specific large contractholders. Of the total assets at the end of 1965, $149 million was in pooled separate accounts and $86 million was in nonpooled separate accounts.

MR. WALTER L. REYNOLDS: The response to the separate account and variable annuity product has been very good. Prudential already has fifteen contracts under which we are providing for variable annuities. The

annual rate of variable annuity contributions under these contracts is $20 million. This figure represents purely variable annuity contributions. Our total variable contract account investment fund, including both equity funding and variable contributions, was $76 million at the end of February, with an additional $100 million expected to be added by the end of the year.

The tempo of new variable annuity activity is fairly fast. In the western home office alone we have nine additional contracts, including amendments, which are in the process of being prepared to provide variable annuities, with seven more "very probables." The company as a whole has twenty-three new contracts or amendments in process. In the western home office we have thirty contractholders who have requested that the equity funding facility be made available to them but not all of whom have commenced to contribute.

It is quite difficult to quote meaningful figures with regard to the volume of variable annuity business. The extent to which variable annuities may be provided by a plan can vary considerably. On one extreme, the plan may provide for current accrual of variable units throughout the working lifetime of the employee, with perhaps 50 per cent going into variable. These units must, of course, be backed by equity investment. This type of plan would be participating rather completely in variable annuities and, consequently, have quite sizable variable annuity contributions. On the other hand, a plan may provide for fixed dollar annuity, with an option to have a portion of the fixed dollar annuity converted to variable annuity over a number of years after retirement. We recommend no less than five years. Unless there is a large number of retirements under the second plan, the amount of contribution required to provide variable annuities is quite small.

The volume of variable annuity activity does not bear a direct relationship to the volume of new business—new work, yes; but new business, no. Aside from those situations in which we have provided variable annuity on a maturity funding basis for profit-sharing plans, we have not yet realized too much "new" business. Much of the activity is merely in providing variable annuities under already existing fixed dollar contracts.

Although the SEC extended Rule 3C-3 in July, 1964, to permit insurance companies to issue group variable annuities for qualified plans, the major breakthrough in getting the necessary state clearance occurred in 1965, and there are still some twenty states in which clearance has not been received.

As an indication of employee acceptance, here are some figures on the Prudential's plan and two other plans providing variable annuities on a

career accrual basis. Of the 53,000 employees under the Prudential's plan (present employees could elect the 50 per cent variable accrual), 98 per cent elected the option. Of the 300 eligible employees of a hospital, 75 per cent of whom are women, 93 per cent elected the variable annuity option. Under a third plan, covering 2,500 lower-paid employees of an atomic-energy installation, 77 per cent elected the option.

MR. DANIEL F. McGINN: Before beginning my discussion of these topics, I think that it would be helpful to state that, even though the "separate accounts" label generally refers to common stock investments for fixed dollar annuity plans, most (if not all) insured "variable annuity" type plans will be funded through a "separate account." In fact, at Occidental we expect to employ a single "separate account" investment fund for both types of plans. Now, to the questions up for discussion.

We have had a separate account fund available for a very short time, and so currently we do not have very much business in force. We probably will have about a dozen cases investing in our separate account fund by the middle of this year.

Since we have recently lowered our requirements for underwriting this type of business to $50,000 of annual deposit, we expect to have an acceleration in the number of group annuities that will be investing in our separate account fund. There is no question in my mind that separate accounts will provide a great impetus to the growth of insured pension business, but it will take considerable time for the results to really show.

Except for special circumstances, we expect to offer variable annuities as part of a "balanced" retirement plan. With this "balanced" approach to retirement planning, we think that variable annuities may prove to be the only practical means for an employer to provide retirement benefits which are adequate at retirement and which remain adequate after retirement. Since there seems to be a strong correlation between the long-term trend of common stock values and the changes in the cost of living and improvement in the general standard of living, I think that variable annuities will play a progressively more important role in pension plans.

Until now the final average salary plans appeared to be the only practical approach to insuring an adequate retirement benefit. Because of the difficulty of making adequate cost estimates for such plans (since no one can predict the levels of salaries far into the future and IRS regulations prohibit any provision in cost estimates for an inflationary trend), many employers balk at final average salary plans. Now, with the variable annuity feature built into a career average salary plan, costs are much more

determinable, and the basic objective of final average salary plans can be achieved.

We have no contracts in force which have the variable annuity feature, but, during the next five years, I believe that there will be a great growth in such plans. As a matter of fact, if the United States Supreme Court holds that the SEC has no jurisdiction over insured variable annuity plans which guarantee the principal of a substantial portion of the invested contributions, there could be a phenomenal growth of such plans for small employers.

MR. REYNOLDS: Any new product will involve new problems. Variable annuities are certainly no exception. Most of them, we hope, have been met and taken care of, but some we are still working on and others, almost certainly, have not yet become apparent. I will not try to present the problems in any particular order; nor will I try to give the solutions. It will be enough just to try to list them.

One general area is that relating to plan or contract documents. For the contracts, new concepts had to be provided and terms developed. This applied to a lesser extent to the plans and employee booklets also. Contracts are sometimes difficult to write (or read) when they cover only fixed dollars benefits. The introduction of variable units did not improve matters. Fortunately, the unit value concepts, as used by Prudential, had been already developed for equity funding and required only minor changes for variable annuity. The tables of purchase rates had to be restated so that both the benefit and cost were stated in units and then converted to dollars. Aside from deferred annuity contracts, which always have their own peculiar problems, there were no other great structural changes in the contracts. Our contract men, however, are continually running into small nuisance problems when modifying the wording to include variable annuities. Care must be taken, for example, that payments are guaranteed in units only, where appropriate, and not in dollars.

Employee booklets in the past needed only to describe the plan. Now, in addition, they must describe the variable annuity features and give enough information so that the employee can make an intelligent decision about electing the variable annuity option.

Another area relates to the establishment of procedures for determining annuity units and unit values and the related record-keeping. At Prudential, we currently permit the choice of assumed investment results at 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, and $5\frac{1}{2}$ per cent, so it is necessary to maintain six different unit values. Also, the change in unit values is reflected in each monthly payment, so this is a continual operation and not just a once-a-year job.

A problem which could easily be overlooked is that of training and providing information. This applies not only to home-office personnel but to the salesmen and representatives in the field as well. It carries further, of course, to clients and covered employees.

The last problem area—and this is oversimplified, as the others have been—probably requires the actuary's talents more than the others that I have mentioned. There is obviously an element of cost involved, depending upon the assumed investment result chosen. This must be explained in such a way that a contractholder can understand and make a proper choice. We also provide four types of annuity, each of which requires its own set of rates:

1. Fixed dollar annuity.
2. Convertible fixed dollar annuity (convertible to variable over a period of years).
3. Variable annuity.
4. Convertible variable annuity (convertible to fixed over a period of years).

There is also an element of cost involved in the method of conversion of annuity. This must also be fully explained so that a client will not enter into an arrangement, thinking it will cost nothing, only to learn that there are hidden costs arising in future years. Under a monthly conversion arrangement, the conversion is accomplished by substituting an equivalent number of variable annuity units on the fixed dollar annuity, based on current values, so that there is no additional cost involved—at least not in the sense of an additional cash outlay. Under an annual conversion to variable, if based on average values for the past year, there would be a cancellation of fixed dollar annuity and purchase of variable each year. Depending upon the change in unit values, there could be an added cost, or a credit if the change were downward.

MR. HENNINGTON: There are a number of technical problems in connection with both separate accounts and variable annuities. In connection with separate accounts, an insurance company has a choice of operating the fund records of the respective participants in terms of dollars or in terms of units. A company must also decide how frequently to value the separate account.

In my company, we started the separate account operation on a dollar basis with monthly valuations. We have not, however, been fully satisfied with the monthly valuation. With variable annuities in prospect, we are planning to change to a daily valuation basis with records in terms of units rather than dollars.

Some contractholders wish to make annual contributions to their pension plans with a more gradual investment in the pooled separate account. In order to accommodate this objective, we have taken the initial payment into our general investments and set up allocation agreements providing for a monthly transfer of regular amounts from the general account to the separate account. These allocation agreements have flexibility for changing the allocation if the investment situation changes.

In connection with separate accounts, it was necessary to decide whether to set up a new pooled separate account for variable annuities or use the existing pooled separate account that had been started before entry into the variable annuity business. My company has decided that for the present we will use our existing pooled separate account for investments associated with variable annuities. However, we plan later to separate the pool so that the variable annuity funds will be handled independently. We believe that some of our clients who do not have variable annuities will prefer the separation, and we can see the possibility that variable annuities might ultimately have investment objectives different from our other separate account business.

Other problems associated with variable annuities involve deciding what frequency of variation will apply to variable annuity payments and what base rate of return should be offered. The base rate is the assumed yield rate that is necessary in connection with variable annuities. The actual investment rate of return is compared with the base rate of return. If the investment return is greater than the base rate, the variable annuity payment is increased. If the investment return is less than the base rate, the variable annuity payment is decreased. The base rate may be considered as part of the plan design and should be chosen after careful study of the employer's objectives. The base rate may be selected after an appraisal of the long-term expected investment result in comparison with the long-term trend in the cost of living with the objective that the combined fixed dollar annuity payments and the variable annuity payments to pensioners should follow reasonably well the trend in the cost of living. Some proponents of variable annuities would recognize not only the trend in the cost of living but also the trend in the standard of living and attempt to design the plan so that payments to pensioners would keep pace with both trends.

There are some very interesting plan-design questions associated with variable annuities. Should the variation apply before retirement date as well as after retirement date, or is it better to have a final pay pension plan before retirement with a variable annuity operation occurring only after retirement date? Should the variable annuity portion apply auto-

matically to all employees, or should employees have an option to take a benefit on a fixed dollar or on a variable basis? Many other questions occur in connection with a transition from a conventional retirement plan to one involving both fixed dollar and variable annuities.

MR. McGINN: The only problem that we have faced with our separate account business has been in the area of allocation of expenses. In arriving at a decision as to how to allocate expenses, there is a question of whether separate account investments constitute a marginal investment facility or a true operating line of business. Since we have not as yet offered variable annuities and the only separate account activity is in the area of investments, we have decided to charge only investment expenses to the separate account and to charge all other expenses to the group annuity line of business. Our investment department handles separate account investments essentially on a fee basis. In other words, our investment department considers our pooled separate account investment portfolio as one of many portfolios which it manages for Occidental and our affiliates.

The only other area of "problems" has involved the designing of reports to our contract holders. To make our reports more readily understandable, we have used the "share accounting" principle. All contributions to the separate account are converted into units; we then merely have to determine unit values. The market value on valuation dates is simply the product of the number of units of a contractholder's account times its then unit value. Since this is similar to the operation of a mutual fund, most clients find this approach simple and satisfactory.

Choice of the actuarial cost method to use with variable annuities seems to be one of the most important considerations. Although many actuaries generally have preferred a level-premium cost method for funding pension plans, with variable annuities the unit credit cost method seems to involve the least number of complications.

First of all, everyone should be aware that the kind of variable annuity I am discussing is one under which the value of pension credits earned during an employee's active lifetime is increased or decreased periodically (probably monthly or annually) according to the relationship of a common stock fund's investment earnings to the assumed earnings rate in the actuary's calculations (or insurance company's premium rates under a deferred group annuity contract). For example, if the annual earnings rate of the fund is $j$ and the assumed interest rate of the cost calculations is $i$, accumulated benefit credits are adjusted by the ratio $(1 + j)/(1 + i)$. This factor can be called the "benefit change factor." If variable funds are allocated according to the unit credit cost method to provide variable

accumulation units, the factor may be called an "accumulation change factor." After retirement, an "annuity change factor" applies in determining the benefits paid out of the investment fund. This factor will be determined in the same manner as the "benefit change factor," but, in the case of an insured program, the denominator will always include the interest-rate component of the purchase rate.

Regardless of the actuarial cost method used, if variable annuity benefits are at all times *fully funded*, many problems are greatly simplified. Problems are further simplified if variable annuity funds are allocated to all participants either by a defined contribution (or "money purchase") pension plan or by application of single-premium rates under a defined benefit formula. However, most plans do involve unfunded liabilities at their inception, and unfunded liabilities cause complications.

One solution which has been proposed is to treat the unfunded liability as an asset earning the fixed interest rate employed in the plan valuation, so that the resulting earnings rate which determines benefit variation is a melded rate. To the extent that the unfunded liability is large compared to the common stock assets of the plan, there is a dampening effect on benefit variation, whether future service or past service. Another solution where past-service benefits are made a part of a variable benefit plan is to attempt to commit the employer to a program of funding past-service benefits over a relatively few years.

There are good reasons for limiting the variable annuity plan to future service benefits and for treating past-service benefits as fixed benefits, until such time as these benefits are 100 per cent funded. Such a course makes sense both for the employer and for the employee participants.

If the employer contributions toward past service are invested in a common stock portfolio of a separate account fund, the presumably higher earnings enjoyed thereby will directly reduce the employer cost of funding past service. Thus, the employer has a powerful incentive to fund past-service benefits rapidly so as to maximize the separate account earnings and to minimize his cost.

For the participants, the considerations which make a fixed past-service benefit as described desirable include the following:

1. Full funding of these benefits (induced by separate account earnings on the employer contributions) assures their eventual realization, independent of the continuance of the plan or later employer contributions to it.
2. Early, full funding permits the transformation of past-service benefits from fixed to the variable type at an early date.
3. Only those participants close to or actually of retirement age when the variable annuity plan is installed for future-service benefits will actually receive

fixed past-service benefits. And by the time that the other employees reach retirement age, the entire plan may well be fully funded and on a variable basis.

4. For those participants receiving all their past-service benefits on a fixed dollar basis until the past-service liability is fully funded (participants who retire shortly after the installation of the plan), their benefits probably will have been little affected by inflationary or productivity changes.
5. For the employees with longer periods to retirement age, their past-service benefits will constitute a relatively small proportion of their total retirement benefit, and this relation will become smaller through the effects of inflation or productivity changes occurring before their retirement.

Before I comment on further technical problems, I think that it would be worth pointing out an apparent "rule" which applies under all variable annuity plans; that is, the effectiveness of the variable portion of the plan depends upon the extent to which variable benefits are *fully funded*. If an employer wishes to have complete flexibility in meeting plan costs, he will defer the time when the variable portion of his plan is fully effective unless he maintains a preset schedule for amortizing the unfunded liability for variable benefits. Of course, one practical solution for the employer is to reduce (or eliminate) any contributions for fixed dollar benefits to achieve a rapid elimination of the variable benefit unfunded liability.

Another apparent practical "rule" applies when there are unfunded liabilities; that is, only those actuarial cost methods which "freeze" the liability should be employed. Otherwise, determination of "benefit change factors" on an equitable basis would be extremely difficult. As a practical matter, the unit credit cost method seems to involve the least number of complications.

There are several additional technical problems:

1. *How frequently will "benefit change factors" or unit values be determined, and how will they be applied?* Although it is possible to vary "change factors" or unit values monthly, it seems more practical to fix unit values annually. If unit values are established in advance, then all the regular activity affecting a pension plan can be accommodated with a variable fund in a manner similar to that of a fixed dollar fund. Certainly it simplifies the calculation of annuity units at retirement, the values attributable to vested terminating employees, and so forth.

From the retired employee's viewpoint, an annual change in the annuity unit value would be helpful for his "budgeting" purposes. If his checks vary monthly, the retired employee never knows how many dollars he can expect to receive.

2. *How are variable annuity benefits determined, and is it possible to have a defined benefit type of formula?* There does not seem to be any reason why the typical

type of career average benefit formula cannot apply under a retirement program incorporating the variable annuity feature. As I see it, each year's pension credit would be determined in the usual manner, and a portion of that year's credit would be funded by investment in the variable account fund. The funds would be invested to provide benefits which would be adjusted periodically by the "benefit change factor" or to provide variable accumulation units with unit values which change similarly. Past-service benefits would be funded on a fixed dollar basis with either periodic purchases of variable units as past-service funds are accumulated or single-premium purchase of variable units when the unfunded liability has been completely amortized.

3. *What happens to the "change factors" or unit values of a variable annuity plan under which the employer makes contributions late in the plan year? Since the contributions could not earn interest until they are invested, would not such a late payment "dilute" or reduce the change factors—at least for current service pension credits?* Not necessarily. If the plan were established so that variable accumulation units were provided at the end of plan years, the amount transferred to the variable fund from the fixed dollar fund could be determined as the *required employer contributions plus required interest*, so that the employer cost would be increased by interest loss if he made late contributions. On the other hand, the employer could have his cost reduced if he made contributions early and the fixed dollar assets earned investment income at a rate greater than assumed in the actuarial cost calculations.

4. *Since plan benefits are a function of the interest factor of the funding cost calculations, what latitude should there be in choosing this interest factor? Should the employer or investment counselor (if any) be consulted?* The assumed interest rate factor is extremely important because it has a significant effect on variable benefits. For example, if the assumed interest rate is set at 3 per cent per annum, there is little likelihood of variable benefits ever seriously decreasing. Of course, if a 5 or 6 per cent interest rate is assumed, there could be many years when the variable benefits would decrease because of low common stock dividends and little, if any, capital gains.

Since most plans which will be established will probably incorporate a "balance" of variable and fixed benefits, it seems that the same interest factor should be used for valuation of both fixed dollar and variable benefit liabilities.

The IRS Regulation 63-11 has already established a "minimum" interest requirement of 3½ per cent per year for valuation of fixed dollar benefit plans, and so this would seem to establish the "floor" for the interest factor.

The "ceiling" for the interest factor should represent the maximum long-range interest rate to be expected, and it should be chosen in such a manner that there is little likelihood of variable benefits' being decreased by the fund's inability to increase at a rate equal to the interest rate assumed. Probably an interest rate in the range of 3½–4½ per cent per annum should be used. As long as the employer and/or investment counselor (if any) understand the impact on variable benefits of *too high a required interest rate*, there should not be any problem in coming to a reasonable choice of interest factor.

MR. HENNINGTON: The next question concerns regulatory problems. As far as separate accounts are concerned, we have clearance in all but four states for our separate accounts contracts. The four states are Arizona, Kansas, Louisiana, and North Dakota. The New York Insurance Law prevents an insurance company from permitting employee contributions under separate accounts and variable annuities. Certain SEC exemptions do not apply if employee contributions are involved. Many employers will wish to set up the variable annuity portion of a retirement plan on a noncontributory basis in any event, so these complications with employee contributions will be academic in such cases.

MR. REYNOLDS: With a new product like variable annuity, it is natural that the regulations by the SEC, the IRS, and the state insurance departments are still in the formative stage.

Rule 3C-3, of course, was the one which, when amended in July, 1964, gave us the go-ahead sign on issuing variable annuity contracts to qualified plans. This rule contains, among others, two restrictions which we must continually be aware of to avoid violation of the rule. The first requires that the contract "prohibits the allocation to the separate account of any payment or contribution made by any employee." It is not possible, therefore, on a contributory plan which provides 50 per cent variable and 50 per cent fixed dollar annuity, to assume that the amount purchased by employer money is always more than the amount to be in variable annuity. On a deferred annuity contract with a high retirement age, or high employee-contribution rate, it is possible that the employee contribution might purchase over 50 per cent of the benefit at lower ages. Nor is it possible to assume that a profit-sharing plan represents employer contributions. The possibility of constructive receipt must be considered. The second restriction under 3C-3 is that the contract "covers at least 25 employees at the time of its execution."

Rule 156 determines what may and may not be done in connection with the offering of group variable annuity contracts. Much time has been spent by legal staffs in determining just what is and is not permitted, and I am certainly not going to attempt to paraphrase the rule in the two or three minutes I have to discuss this subject. Suffice it to say that we at Prudential are well aware of this rule and its implications. We have had to make some modifications in established procedures to comply with it, but we accept it as a fact of life and have learned to live with it.

In connection with a variable annuity plan, there is a problem of interpreting IRS requirements concerning the integration of the benefits with social security benefits. This problem is not unique to the insurance in-

dustry but also applies to trusteed variable annuity plans. One indication of a possible approach is given in Revenue Ruling 60-337. However, this ruling was not made in connection with a regular variable annuity plan of the type that I am discussing here, and therefore, in our opinion, does not reflect a thorough consideration of all aspects.

The last item that I will mention concerning regulatory problems is that of state clearance. Before we can issue a variable annuity contract in any state, we must ascertain that the laws of the state permit us to issue a variable annuity contract in that state. Then we must file the necessary contract documents. At the present time, Prudential has received clearance in about thirty states plus the District of Columbia.

MR. McGINN: As with most (if not all) other companies, due to SEC requirements, separate account group annuities are available only for qualified pension or profit-sharing plans for groups involving at least twenty-five lives. In addition, employee contributions cannot be invested in our separate account because of both the SEC regulations and the limitations of Section 10506 of the California Code. Until or unless the SEC exempts H.R. 10 and tax-sheltered annuities for public school employees from their restriction against employee contributions' being invested in a separate account, these groups appear to be eliminated from the life insurance company market for either regular separate account group annuities or variable group annuities.

Regarding the filing of separate account contracts with insurance departments, we file our contracts on a case-by-case basis and we have had no problems whatever in receiving approvals. Of course, until we have filed in all the states in which we operate, we will not know what types of problems will arise. Since the legislation in California which authorizes separate accounts is quite similar to that of most other states, I personally do not expect any significant problems in this area.

Since variable annuities also involve the use of a separate account for common stock investments, the same general SEC restrictions and legislative limitations apply as for regular separate account group annuities.

However, because of the unsettled status of state requirements for qualification of agents to sell variable annuities, we anticipate for the immediate future that all variable annuity business will be handled by home-office personnel. Ultimately, when state examination requirements of agents are settled, we expect to handle the sale of variable annuity business in the same manner as regular pension business.

It seems to me that the only other area in which regulatory problems may arise will be in the determination of legal reserves for insurance com-

pany guaranteed benefits. Fundamentally, the traditional reserve-calculation techniques should apply with only a few slight modifications. For example, numbers of annuity units and annuity unit values will replace the fixed dollar annuity benefit, and the reserve basis will generally be based on the premium-rate basis.

Another point relative to the calculation of reserves which should be considered is the effect on the reserves of changes in annuity unit values. If annuity unit values are changed monthly, there should not be any problem whatever. But, if annuity unit values are changed annually, it seems that the most appropriate time for changing unit values would be at the end of calendar years, so that there would be a direct tie-in between the investment fund and the newly determined unit values used in the retired life-reserve calculation.

MR. REYNOLDS: Quite probably, there will be about the same number of investment approaches as there are insurance companies offering variable annuities. I can speak only of Prudential's approach.

At Prudential, we use only one segregated account, which we refer to as our variable contract account. This is used to provide both equity funding and variable annuities. We do not provide separate accounts within our variable contract account for any purpose. I believe that some other insurance companies take a different approach to this than we do.

As to the actual investment of variable contract account funds, the approach for variable annuities cannot be separated from that for equity funding, since we do use a common fund. We at Prudential were fortunate in having in existence a common stock division, within our bond department, which had been handling a fairly sizable portfolio in common stocks and doing it very successfully. It was necessary only to make internal arrangements so that the separate account funds could be handled by the same group. These internal arrangements can be rather demanding, since it is necessary to get the separate account funds invested as soon as received. In practice, we try to have several days' advance notice for every amount being added to the separate account, so that our investment people can get it invested promptly.

As to the formal investment policy, this is set forth in a resolution adopted by the board of directors. The resolution is obviously too long to read, but the first sentence of paragraph number one in the resolution reads as follows:

> The composition of the investments held in the Investment Fund will be determined from the long-term view of a prudent investor concerned primarily with the preservation of his capital and with the growth of his capital in relation to the growth of the economy and the changing value of the dollar.

A portion of another sentence reads:

. . . the assets of the Investment Fund usually will be invested in a diversified portfolio of equities which, for the foreseeable future, will be primarily common stocks.

I do not believe that it would be proper for me to try to paraphrase the entire policy, but I do believe that these excerpts are rather indicative.

Considering a series of regular deposits made from the opening of Prudential's separate account on November 1, 1962, to the end of 1965, and measuring the results at the end of 1965, an effective annual result of about 15½ per cent was achieved for the period.

MR. HENNINGTON: In connection with the investment approaches which have been taken, it has already been mentioned that most companies offer both a pooled common stock fund and a nonpooled fund for large clients. Two companies offer other kinds of pooled funds. One company offers a pooled common stock fund, a pooled bond fund, and a pooled mortgage fund. Another company offers a pooled common stock fund as well as a pooled balanced fund incorporating both common stocks and bond investments.

In connection with investment results, it is important to define terms very carefully. Proper mathematical techniques should be used to calculate an effective annual rate of return. If the rate of return includes the effect of market-value changes, this point must be made very clear in the quotation. One type of rate of return can be calculated by quoting the investment experience with respect to an investment of a lump sum at the beginning of a period and a withdrawal of the accumulated amount at the end of the period. Another rate of return can be calculated by quoting the effective annual rate with respect to a constant amount placed into the fund monthly and a withdrawal at the end of the period of the total accumulation. A third possible calculation could reflect the actual cash flow of the pooled separate account. This annual rate would then depend on the degree to which various employers made contributions at different periods of time. Most separate accounts which have operated to date show high rates of return for the short period within which they have operated. Longer periods of time will be required before reliable comparisons can be made.

MR. McGINN: We are taking the position that a single separate account fund will be used for regular separate account business and for variable annuities. We feel that this will benefit all clients by obtaining a greater diversification of assets and improved cash flow.

Our investment philosophy is to invest exclusively in common stocks for our separate account fund just as we do for our general account common stock investments. We have always invested in common stocks for our general account with the main purpose of obtaining capital gains. Our experience has been extremely favorable, with a ten-year average earnings rate close to 15 per cent, compounded annually, when both dividends and capital gains are included. We have not had sufficient experience with our separate account fund to make any statements about its experience, but there is no reason to believe that it will be any different from the future experience of our general account common stock investments, since they are operated essentially as "running mates."

MR. WILLIAM F. MARPLES: It is my understanding that you may use an interest rate lower than $3\frac{1}{2}$ per cent provided that you use a mortality table less conservative than G*a*-1951 set back one year. In other words, if you are using a less conservative mortality table, you can use a more conservative interest rate.

MR. JAMES F. A. BIGGS: You indicated that there is a restriction on the separate accounts because employee contributions cannot be included and that this creates problems in the H.R. 10 plans and annuities purchased under Section 403[b]. I had thought that the contributions of the self-employed individual under an H.R. 10 plan were considered employer contributions and, similarly, that contributions under these 403[b] plans were considered employer contributions. I think that they are, for tax purposes. Isn't that true for SEC purposes as well?

MR. McGINN: You are correct so far as tax purposes are concerned, but, from the SEC position, they are still employee contributions.

MR. REYNOLDS: That is the way we are looking at it.

MR. McGINN: I believe that Prudential has filed a petition with the SEC for exemption for these two broad classifications of business, but I do not believe that they have gotten it.

In the California Code governing separate account investments, we specifically provide that no employee contributions may be invested in a separate account, except for tax-sheltered annuities, nonprofit organizations, and H.R. 10. All that we need now is to have the SEC co-operate, and we will have a little different market.

MR. DAVID G. GODDARD: Mr. Reynolds, it has been brought out that the rate of return to an individual, on a variable annuity, will vary considerably, according to the interest rate that he chooses as a base. Do you intend to permit individual selection by employees, or would it all be done by the employer, and, if there is any individual selection, may you not be exposed to antiselection as far as mortality goes?

MR. REYNOLDS: When the plan is set up, the employer determines what the assumed investment result is. The assumed investment result either flattens out or heightens the difference between the flat benefit and the variable amount.

The variation, because of the investment fund, is greater on a small or a lower assumed investment result.

MR. GODDARD: Yes, of course. Does the employer make one decision for his whole organization?

MR. REYNOLDS: That is right. It is his decision, the contract.

MR. GODDARD: That is fixed for all time, unless the contract is amended?

MR. REYNOLDS: That is right.

MR. J. FREDERICK BITZER: In our second separate account, we do not take the money as soon as we get it and put it into common stocks. We do in our first separate account. But, in the second separate account, the investment department decides when it wants to put it into common stocks and when it wants to shift it into notes, in order to improve the results, as compared to blind dollar averaging. We are not trying to tell the employer how much he ought to have in fixed dollar investments and how much in stocks. But he has asked us to try to improve on automatic dollar averaging in this common stock account.

MR. FREDERICK P. SLOAT: Mention was made of the desirability of the unit-credit method for variable annuity funds and, also, of the problem of irregular amounts' becoming available for investment. We have found that it is quite workable to have the employer contributions to the total retirement plan made under any actuarial cost method, including a projected benefit cost method, and computed for all benefits on a fixed annuity assumption. From the funds accumulated from such contributions, amounts computed on the unit-credit basis are transferred at

regular intervals into a separate fund to support the variable annuity portion of the plan. This answers both of the above problems, in that it uses the unit-credit method and makes regular payments available for investment under the variable annuity portion.

MR. MARPLES: Nobody has touched on the question of integration problems in variable annuities, particularly where part of your benefit is variable annuity and part of it is fixed. If you do not get some of the variable portion of your benefits under the social security limit, you will have your variable benefit, as it increases, just not integrated.

There is another problem. Suppose that you are distributing a number of units per year. What are you going to do when you have a mortality gain or loss? You are short, or you have too many units. You will have to provide for the orderly cancellation or supplementation of those units in your accounting system.

Have you had the problem that arises where the variable units are on a money purchase or savings bank basis and the Treasury allows 1 per cent adjustments in lieu of turnover? In these cases, the value of the balance of the canceled units in excess of the 1 per cent has to go back as an offset to the employer contributions of the next year.

There are basically two methods of organizing a variable annuity benefit. One of these is the savings bank process, and the other is the deferred annuity approach. If the deferred annuity approach is used, the units are declared benefit units, as distinct from accumulation units. The value of that is that you can use a rate of interest and it becomes a first charge on the annual increase in unit value. If accumulation units are used, there is no assumed rate of accumulation; the question is, first, how to translate accumulation units and, second, how to maintain equities between accumulation units and annuity units in the determination of unit values.

In other words, if the annuity units after retirement are going to be allowed 3 per cent interest or $3\frac{1}{2}$ per cent interest, what is going to be done for the accumulation units? A balance has to be held between the two, so that adjustments in their unit values are developed equitably.

*Washington Regional Meeting*

MR. RAYMOND W. BENDER: The discussion of this topic is organized into five questions. My contribution will be to answer these five questions on behalf of the Prudential. The Prudential's separate account business is entirely on a group basis, offering equity accumulation and variable annuity facilities to qualified pension and deferred profit-sharing

plans. It is hoped that other speakers will supply answers on behalf of their own companies.

Prudential opened its separate account on November 1, 1962. Under current New Jersey law, we have been able to have only one separate account, and this account, invested primarily in common stocks, is used for both equity accumulation and variable annuity business. At the end of 1962 we had assets of about $225,000; at the end of 1963, $925,000; at the end of 1964, $19 million; and at the end of 1965, almost $55 million. We expect to exceed $150 million by the end of 1966. As of the end of 1965, thirty-six contractholders were participating in the separate account. Six of these thirty-six customers had contracts providing for variable annuity benefits. The Prudential's own plan did not begin to participate in the separate account until 1966, when its plan was modified to provide variable annuity benefits.

The technical problems can be grouped in a number of ways. There are contract-drafting or product-design problems. Also, new accounting procedures and modified procedures for doing pension fund actuarial valuations must be developed.

Initially, we prepared separate contracts for existing and new customers participating in the separate account. After some experience with this approach, we have decided that it is preferable, where possible, to write contracts on an integrated basis. Many provisions are applicable to both the general account and separate account features and must be repeated if two contracts are written.

Because we are using a single account for all variable business (both equity accumulations and variable annuities), we have found it convenient to express participation in the account in terms of units. Many companies do not use units for equity-accumulation purposes. When, and if, they venture into variable annuities, they may find a unit approach useful. Thus, we have accumulation type units for individual account and deposit administration situations and benefit units for variable annuity payouts. The accumulation unit changes as the result of dividend income and changes in the value of the assets in the account, realized or unrealized. One-quarter per cent per annum of the assets is subtracted to provide primarily for investment expenses. This is experience rated to reflect the actual rate of investment expense. Benefit units are computed in a similar manner except that they are adjusted for the assumed investment result, about which the variable benefits vary. This assumed result is a feature of the pension plan and is selected by the customer just as he would select the normal form of retirement annuity. A separate benefit unit series must be maintained for each assumed investment result. Currently, we main-

tain unit series for assumed investment results ranging from $3\frac{1}{2}$ to $5\frac{1}{2}$ per cent.

A separate annual statement is required for separate account business. Several accounting questions arise. Should separate account business be treated as a separate branch or merely as an adjunct of the other branches? Should it show a gain or loss from operations and a surplus? Although all of Prudential's separate account business is currently related to group annuity operations, it has been treated as a separate branch with the allocation of insurance expenses to it and the emergence of gains and losses. Several other companies seem to be following a zero gain-or-loss approach. This may be more difficult as operations become more complex. Perhaps someone else will comment on the problems encountered where several separate accounts are operated. Of special interest would be the asset valuation problems where separate accounts are operated for direct placements and mortgages.

Another technical problem relates to the actuarial work done on pension plans. A contractholder's equity accumulation is measured on a market-value basis through the operation of the unit values. Many customers prefer not to use the market value of their assets in the actuarial valuations of their plan. For this reason we maintain a secondary record which shows the "book value" of the contract's equity accumulation. Essentially, this book value is the amounts added to the accumulation plus the dividend income on the accumulation. For book-value purposes, a realized gain or loss occurs only when a customer liquidates some portion of his accumulation. This is consistent with our understanding of how collective trusts determine a cost basis. Of course, the consulting actuary can set some other definition of cost basis, and we will attempt to keep a record for him on the basis specified.

Another actuarial valuation problem occurs when variable annuities are introduced into a plan. It seems desirable, although not absolutely necessary, to avoid having unfunded liabilities for variable annuity benefits. If possible, funds should be accumulating in equities as fast as liabilities related to equity results are growing. Also, there is some relationship between the assumed investment result on which the variable annuity benefits are based and the assumed yield to be used in the valuation. Still another factor is that, if certain liabilities are being expressed in terms of the market value of equities, the corresponding assets should also be at market value. (This would be a good subject for a paper to be presented to the Society.)

Regulatory problems arise at the state level and with the SEC. There is an excellent paper on this subject by Arthur L. Blakeslee in Volume

XIV of the *Proceedings of the Conference of Actuaries in Public Practice.*

There is considerable variety in the state regulatory situation. Some states permit separate accounts, both for equity accumulation and variable benefits, without specific separate account legislation. Of those that have separate account legislation, some specifically permit variable benefits, some are silent on the subject, and others specifically prohibit or limit variable benefits. Thus, each state's limitations must be studied before discussions are held with the supervisory authorities.

The Prudential is now able to offer equity accumulation of employer funds in almost all of the United States fifty-one jurisdictions. It is able to offer variable benefits in about thirty states, but the number is gradually increasing. An initial filing, especially of variable benefit material, frequently requires a visit by representatives of our legal and actuarial staffs. In one jurisdiction we have encountered some problem with the offering of a variety of assumed investment results. We have not yet convinced the authorities that this is a feature of the pension plan and not an aspect of Prudential's underwriting of risks.

The SEC's Rule 3C-3, and the related Rule 156, are major forces in shaping the separate account business of the group annuity companies. I have assumed that anyone interested in separate account activity is familiar with these rules. If not, I recommend a reading of Mr. Blakeslee's paper, already mentioned. The rules have the effect of limiting Prudential's separate account activities to group contracts covering at least twenty-five lives under plans meeting IRS qualification requirements. One aspect of Rule 3C-3 which is particularly troublesome is the limitation that employee money cannot be placed in the separate account. On deferred annuity business, it is usual to have half the accruing benefit on a variable basis. At the younger ages on contributory cases, the employee may be contributing more than half the cost of the benefit. Compliance requires a modification of the 50 per cent provision at these ages.

In general, compliance with the SEC rules, especially Rule 156, which puts restraints on promotional activities, requires very careful attention to how sales activity is conducted. The sales aids that we prepare and instructions in their use are reviewed by our SEC experts, as well as by the other group annuity technicians.

The Prudential has been permitted to issue one type of variable benefit contract which does not fall within Rules 3C-3 and 156. This contract is for H.R. 10 plans and requires the use of a prospectus in compliance with the Securities Act of 1933. The preparation and maintenance of this prospectus are new and time-consuming parts of our work. We had hoped that this contract could also be used for tax-sheltered annuity business,

but this has not been possible to date. We understand that such business has become very important to the companies which specialize in variable annuities and are registered under the Investment Company Act of 1940.

An IRS qualification problem sometimes occurs where variable benefits are provided, since it is not clear what the integration requirements are when such benefits are present. It seems reasonable to test for integration only at the time benefits accrue. If subsequent changes in benefit unit values have an effect on integration, it may be necessary to place a limitation on the variable benefits payable on earnings above the social security wage base in some situations, making the test on each employee's retirement date.

The Prudential's single account is a common stock fund and has been kept fully invested in a diversified portfolio. A broad statement of objectives and policy has been adopted by our board of directors. Copies of this statement are made available to contractholders and persons considering using the separate account. This statement indicates that other than common stock investments may be held under certain circumstances.

Such a simple question as what the investment experience is does not have a simple answer. There is some agreement that investment results should be expressed as an effective annual rate over the period of measurement. However, the result is affected by the timing of amounts introduced into the portfolio being measured and the dates chosen as the beginning and end of the period of measurement. Considering a series of regular deposits made from the opening of the account to the end of 1965 and measuring the result at the end of 1965, an effective annual rate of about 15.5 per cent was achieved.

We have found it necessary to develop programs for preparing figures of the type just mentioned in order to answer questions from our contractholders, some of whom follow investment performance very closely.

MR. HOWARD H. HENNINGTON repeated the discussion which he had presented at the San Francisco meeting.

MR. DONALD S. GRUBBS, JR.: The entrance of major insurance companies into the field of variable annuities has considerably stimulated the growth of trusteed variable annuities as well as insured variable annuities.

All the variable annuities issued by insurance companies, to my knowledge, have pension payments that fluctuate monthly with the market

value of common stocks. This type of plan can also be handled on a trusteed basis.

But I would like to point out five other situations in which you can have a variable annuity plan on a trusteed basis where, to my knowledge, it has so far not been possible to have an insured plan: (1) if the employer desires to have the fluctuations annually rather than monthly, as CREF does, in order to eliminate some of the short-term fluctuations, this can be done on a trusteed basis; (2) if the employer wants to utilize some smoothing process—as was discussed in James Clare's paper of a couple of years ago and other discussions on that subject—to smooth out the short-term fluctuations, this can be done on a trusteed basis; (3) if the employer wants benefits which are adjusted with the cost of living or with the wage index rather than with equity prices, this too can be done on a trusteed basis; (4) variable annuities can be put into effect in the twenty states in which insured variable annuities still cannot be sold; and (5) variable annuity plans can be designed for smaller clients.

I do not know of an insurance company—and I may be wrong—which will put in a variable annuity plan with an annual premium of less than $25,000.

There are some smaller companies, certainly, where there is still a need to offset the problem of inflation for employees who want to meet this with a variable annuity plan; some of these are doing it with a trusteed variable annuity plan.

There are no regulatory problems that I can think of for trusteed variable annuities, except for the integration problem previously mentioned. Thus a trusteed variable annuity can be used in all states.

United Benefit Life has an equity-funding individual contract. This is a contract which has a fixed dollar payout, but, during the accumulation stage, it is an equity accumulation. There are guarantees as to cash values and death benefits prior to retirement.

The SEC challenged their use of this plan, and the case was fought through the court. United Benefit Life recently won this in a decision in the Federal District Court, which ruled that the SEC did not have regulation over this, because there are significant insurance elements in the cash values and death benefits.

MR. BENDER: I believe that the insurance companies can provide variable annuities where payments are adjusted annually instead of monthly. Also, I believe that "smoothed" and cost-of-living benefits can be handled on a nonguaranteed basis by direct disbursement from the separate account.

MR. GEORGE F. M. MAYO: I was also going to comment on Mr. Grubbs' five differences.

My own company is in the rather unusual state of having issued variable annuities before the separate account legislation. This is in Canada. The account legislation came out in 1961, and we came out late in 1960.

To do this, we had to work out an arrangement with a trust company. But the approach which was designed by our president, Mr. Lawson, well known to all of you, is easily adaptable to your own separate accounts if you want it. It is quite a delightful piece of actuarial mathematics, and it will cope with practically all the five points that Mr. Grubbs mentioned.

While I am on my feet, perhaps it might interest people here to compare the situation in Canada, where the legislation was introduced in 1961. We started one separate account in May of 1961—an equity fund. We started a bond and mortgage fund in November of 1962. There are one or two points on which we have followed exactly the same approach as the Prudential and one or two points upon which we have differed.

The first point that we do differ on is the expense charge. If I understand Mr. Bender correctly, the Prudential takes off $\frac{1}{4}$ of 1 per cent of the assets. Rather than do this, we bill the individual clients with an expense charge, by which we can recognize the size of the client and the size of his particular fund. We feel that is more equitable than a straight percentage out of the whole fund. Then, unlike the Prudential again, we operate on virtually a zero gain-and-loss position, in that the expense charge is compared against the actual expenses and any profit or loss is transferred to or from our shareholders' fund.

The Prudential is using what we call an "accumulating unit." Now, in Canada, the trust companies operate mainly on what they call a "non-accumulating unit," in that dividends increase the number of units. We have run into trouble with consulting actuaries who are used to this approach, because it gives them a better book value, as they call it. As a rough offset to this, we adopted the approach of quoting a book value, which was the contributions accumulated at the valuation rate of interest, thereby assessing what the fund should have grown to had the actuarial assumptions actually been realized. That gave at least one yardstick for comparison, but even that did not go down terribly well. We are doing our best with it, but it is still not meeting with very great success.

Again, on rate of return, we followed the approach of the Prudential in assuming so many dollars every month invested, and, of course, their figures look a lot better than ours because in 1962 we suffered a stock exchange slump. So a fund starting in 1962 would look a lot better than one starting in 1961.

Our over-all rate for the five years was a little over 13 per cent.

MR. KENNETH ALTMAN: Two years ago, variable annuities were offered on an optional basis to the 6,000 employees of the State University of New York, who participate in one of the New York State retirement systems. More than 90 per cent of them elected to participate in the program with TIAA-CREF. This year a bill was introduced in the state legislature under which teaching employees of the education department would also be given the opportunity to participate in a variable annuity program. It has passed the senate, but action is still pending in the assembly. In other legislative action this year, a law has been enacted which would make variable annuities available to members of the New York City Teachers' Retirement System.

We conducted a survey among the 300,000 employees participating in our system to evaluate interest in variable annuities. We found considerable interest among professional and management people in variable annuities, while those in clerical and laboring categories generally were not interested in the proposal.