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SIMPLIFED UNDERWRITING-GUARANTEED ISSUE

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Use in pension plans, quasi-groups, and regular individual issues. Offers of additional insurance to existing policyholders.

--Underwriting rules
--Mortality experience
--Expense savings
--Future trends

MR. HAROLD G. INGRAHAM, JR.: Guaranteed Issue--over the years, I have come to the conclusion that there are few subjects that seem to inflame the imaginations of agents more than this one. This is at least partly because many of the agents' clients, previously rated for insurance, strenuously resist being medically underwritten, perhaps out of fear of being rated again or rejected outright.

This morning, this panel will explore four distinctly different guaranteed issue approaches--all apparently successful in the marketing of individual insurance products. Leading off this morning will be Peter Chapman, Second Vice President and Actuary of Mutual Benefit Life. Peter's company in recent years has done some interesting and innovative things with respect to the creation of underwriting pools for agencies and agents in the individual non-pension insurance sales area, and in particular, I believe, with respect to business insurance. The second presentation will be made by me. My name is Harold Ingraham and I am Senior Vice President and Chief Actuary of New England Mutual Life. I will attempt to reveal some of my company's guaranteed issue mortality experience in the individual policy pension trust area--an area where my company is the acknowledged leader in the industry. The third presentation will be made by Jack Ladley, Actuary, at Colonial Penn Life of Philadelphia. Jack's company is heavily oriented to direct-response marketing and he will tell us how guaranteed issue underwriting is used in some of their marketing programs. Our anchor man is Dick Cumming, Associate Actuary of Midland Mutual in Columbus, Ohio. Dick represents a company that has developed some experience in the offering of additional insurance on a simplified underwriting basis for certain classes of existing policyholders.

MR. PETER F. CHAPMAN: Mutual Benefit, in 1978, wrote approximately 25% of its permanent, non-qualified individual life insurance without evaluating conventional evidence of insurability. That stage was not reached overnight; it evolved step by step from a very modest beginning in the late 1950's. At that time, some of our agents had discovered what they perceived to be a promising market--selling supplementary life insurance to participants in uninsured qualified profit-sharing trusts. This, of course, was supplementary insurance with the insureds paying the entire premium. Since it was being sold as a semi-related fringe benefit emanating from participation in a profit-sharing plan, there were certain marketing advantages, or so the agent maintained, to wrapping the underwriting of such insurance in the mantle of automatic, or at least semi-automatic, issue. Now, there were only two problems with this, but they were big ones.

The amounts of insurance requested were not determined by an established formula and were well in excess of our then applicable limits. And, equally important, the applicants for supplementary insurance were generally fewer than the required 75% of the insurable plan participants. I was not with the company at the time, but historically I have learned that the agents were either unusually persistent, or the company's resistance was temporarily at a low point, but, for whatever reason, the company took its first step down the road towards its present pooling arrangements.

The very modest beginnings twenty years ago were limited to using a short form non-medical as the basis for the underwriting action. Their eyes were fixed on a target of roughly group mortality, as approximated by the 1950-1954 Group Experience Table, which was compiled from the experience of non-rated industries. No commitments were made as to whether or not a policy would be issued and the company reserved the right to supplement the application by such devices as MIB inquiry, attending physician's statement, inspection reports and anything else whenever circumstances indicated the need for supplementary information.

There was also an acute awareness that even if the underwriters did succeed in hitting their target, the result would be a class of business with mortality higher than the rates assumed in our regular ordinary dividend formula, even giving full weight to the savings in the cost of selection. At that point a decision was made. The cost of the excess mortality, net of expense savings, was to be apportioned between the agent and the insured. For this sub-class of business, the regular premium was charged, but first year commissions were reduced and so were dividends in the early policy years.

The limited experiment was a success. Experience stayed well within the intended range and the availability of the program proved to be popular with both the agents and the public. Over the last twenty years the program expanded cautiously, step by step, each carefully controlled.

The term "group" was essentially redefined as all the insureds of an agency, or, in special cases, even of a highly productive individual agent. Lack of common affiliation was no longer a barrier to pool participation. Issue became "guaranteed" in the limited sense that a policy would always be issued as long, and only as long, as the pool to which the risk is to be added is in good standing with the company.

This latter statement, the standing of the pool, is absolutely essential for successful administration of the program. Each risk issued in the pool is individually assessed by whatever technique short of medical or para-medical examination appears to the underwriter to be most appropriate. A tentative rating is imputed to each risk. The underwriter carefully scrutinizes each pool for both its potential aggregate extra mortality and for its issue age distribution. Because of the greater cost of adverse fluctuation at the higher issue ages, we are as much concerned about the issue age distribution as we are about the potential excess mortality ratio. The ultimate discipline, and consequently, the ultimate control, is suspension or termination of pool privileges for the offending agent or agency. Successful pool administration clearly depends upon issuing any required notice of possible or remedial action even-handedly and in sufficient time to take the necessary steps to restore the balance. The administration must not only be firm, equitable and effective, it must be perceived as such by the field and the policyowners. This is more than the first line of defense--it is the only line. If mortality

experience deteriorates beyond the limits of the guidelines, the only two available options are dividend reductions to the pooled risks and subsidy of the pooled risks by the individually examined risks. Since the latter is totally inconsistent with any concept of equity, the only viable alternative is dividend reduction for the pools which will lead to diminished participation by the better agents for the better lives, increased selection against the pools, further deterioration of the pool experience, further dividend reductions, and inexorably, abandonment of the program with heavy losses.

Having heard the obvious disaster scenario, it should be clear that Mutual Benefit's continued commitment to the pools indicates that our mortality experience has been satisfactory. We review it annually for the five most recent anniversaries. In the most recent four years, based on claims ranging from $2.4 million to $3.4 million, our actual to expected mortality ratios have been less than 100% measured against the 1950-1954 Group Table. When compared against the 1965-1970 Intercompany Select Ultimate Tables for male lives (the guaranteed issue business appears to be predominantly male), the actual to expected ratios have run between 117% and 151%.

We have been unable to detect any significant variations from these averages by issue age group, nor can we explain the exceptionally favorable results apparently concentrated in the early select years (since guaranteed issue has been a rapidly growing segment of our business, the exposure is loaded heavily with more recent issues). While we may reasonably expect pendulum swings in the opposite direction, we are relatively confident that we are living, and can continue to live, within our self-imposed limits. We see no immediate threat to our pool dividend scale which, incidentally, merges with the dividend scale for regularly underwritten policies during the 10th and subsequent years.

How do we see the future of guaranteed issue as our pools are popularly, if not quite accurately, called? We think that our twenty years of trial and error, slow but steady evolution, and practical administration have provided us with capabilities that will be invaluable assets in the future, as more and more companies will be drawn into what we are doing, or some variation of it.

Unless persistency, especially at the younger ages, stages an unexpected turnaround, and unless the rate of increase in the cost of individual underwriting even more unexpectedly decelerates, the guaranteed issue pools will make more and more sense in terms of equations of present value at issue for more and more ages and amounts of insurance. The difficulty of locating reliable examining physicians will inevitably make its contribution to the cause. And finally, the increasing tendency of state legislatures and insurance commissioners to intervene in the underwriting process will cause more and more companies to develop underwriting techniques with altered balances between equity and equality.

Are there any problems associated with guaranteed issue? Yes, there are a lot of problems. The vigilance that proper administration of the program demands is expensive. Much time is spent by many highly compensated people. The reduced dividend scale in the early policy years has additional expense implications for computer systems and for rate book preparation and printing. Concern about anti-selection is never far from the surface despite the apparently favorable data to date. As pool limits are driven up by inflation and other considerations, more issues will occur at amounts where competitive cost

considerations become increasingly material in making the sale. Will the pool continue to get a balanced distribution of risks when a sale may hinge on the agent's ability to minimize the illustrated net cost?

Finally, there is ultimately the cui bono question. The agent benefits from the absence of delays and uncertainties inherent in the medical examination process. He pays for his benefits with a reduced first year commission. The popularity of the pools with the public indicates that many people do not like doctors, or at least they do not like going out of their way to see them. They pay for their convenience with early year dividend reductions. We see nothing wrong with this as long as the cost alternatives are fully disclosed. We are convinced that they are in the overwhelming majority of situations. We have given considerable thought to increasing still further the effectiveness of our disclosure requirements. But, we are realistic enough to realize that no disclosure system can be 100% effective. Any company offering "guaranteed issue" has to be vitally concerned about those issues which represent the difference between total effectiveness and the actual effectiveness of the disclosure system.

MR. INGRAHAM: Peter, it would appear that a Mutual Benefit case may be priced and underwritten differently depending on which agency or agent is involved; in other words, high pool credits vs. low pool credits or depending on whether the agent sells on a price competition vs. an underwriting convenience basis. Does not this result in a kind of selection against the customer where the treatment is a function of the presence or the absence of competition? How thoroughly do you really monitor your agents to see whether or not the trade-offs are fully disclosed?

MR. CHAPMAN: As thoroughly as we can. The net costs are illustrated separately in the rate manual. There is a statement in the application to the effect that the insured acknowledges that because of the special underwriting procedures involved, the dividends will be lower, for a period of time, than they would otherwise be. We have very seriously considered preparing two sets of illustrations in all cases; one on a guaranteed issue basis and one at a regular basis, so that when an illustration is presented, the prospect will have an opportunity of evaluating the cost indices. The problem with that, of course, is that it is difficult to implement a sales illustration program which will effectively distinguish between requests for illustrations within and outside the pool limits. It would be burdensome to include a guaranteed issue cost illustration which would be unavailable. We also know that illustrations are not requested in all cases. I guess the answer to your question, Harold, is yes, we have to acknowledge that from time to time, there will be a disclosure that won't be as complete as we would like, but no system is perfect.

MR. RICHARD W. CUMMING: Peter, if the experience of a pool or pools starts to turn sour, would you contemplate a dividend adjustment for the deteriorating pools only or would the adjustment be applied across the board?

MR. CHAPMAN: Dick, there is no way we could single out an individual pool for a dividend adjustment. Now, we would expect that our early warning system would enable us to take some action before the pool has deteriorated. However, the review would be of the pools in the aggregate and we would treat the results much as the group actuary would experience-rate a group. If it were necessary to adjust the dividend for guaranteed issue, it would be adjusted prospectively in light of what we had learned about the risk and it would be for the entire category of pool dividends. We review the experience each year,

as I've said, and every time we look at our dividend scale, we are looking at the pool dividend formula for the entire separate dividend subclass in the aggregate.

MR. JOHN D. LADLEY: Peter, you stated the dividends would be lower on this coverage than on your normal type. Have you had any difficulties with consumerists or regulators considering insureds might have obtained better cost results had they chosen to be underwritten?

MR. CHAPMAN: Jack, we are very concerned about it. The answer up to now has been no. We have a system of disclosure that we feel is largely effective. It is not as effective as we would like it to be. We know that it could never be as effective as we would like, which would be 100% effective. As of now, at least, both the agency force and the public seem to be satisfied with the program.

MR. STEPHEN N. STEINIG: Peter, I did not quite understand what underwriting requirements are involved. You described this as guaranteed issue, and you also made reference to the underwriter still getting some type of simplified statement and reviewing it and possibly assigning a rating to it. Could you explain that? The other thing is I wonder how often you have removed privileges from a particular agency and what the internal pressures are to restoring that privilege.

MR. CHAPMAN: May I take your last question first? As far as I know, we have never had to--we may have had to issue warnings, but, to my knowledge, no pool privileges have ever been removed. I would guess if they had been removed, they would have been removed for a good long while. Now, the answer to your first question is that the ratings are theoretical, and are assigned in order to monitor the pools. If we did not get this information, at least on a random sample basis, we would have no way of knowing that we are getting risks in our pools which are within the range we are seeking. The policies are issued as long as the agency or agent pool is in good standing. The ratings are our leading indicator of standing. We are looking for the averages, we are looking for issue age distribution, but we are looking especially hard at the risk distribution. In many cases, it is a post-issue review, but we cannot operate without enough information to enable the underwriters to monitor compliance with the pool regulations.

MS. DOROTHEA D. CARDAMONE: What is your maximum amount on the pools?

MR. CHAPMAN: We have raised it recently. Not all agencies are treated equally. The limit varies with age in a rather complicated progression. I would be glad to speak to you about it afterwards. Generally, we have one age break at age 40 and another age break at age 60.

MR. JOHN E. HEARST: Is there any difference in the persistency between this business and underwritten business?

MR. CHAPMAN: That is a very good question. So far, at least, guaranteed issue appears to have appreciably better persistency. I do not know how to account for it. I am not sure that it is real. But it is definitely no worse and there are indications that it is somewhat better. I make that latter statement very hesitantly; the data simply are not mature.

MR. INGRAHAM: New England Life (NEL) since the early 1950's has been the recognized industry leader in the individual policy pension trust market. As of year end 1978, the company had almost $3.4 billion in pension trust insurance in force representing almost 300,000 policies. In 1978, about 40,000 pension trust insurance policies were written at New England Life amounting to $520 million of insurance. 75% of this represented new business on existing trusts. 91% of this $520 million by number of policies and 82% by amount was written on a fully guaranteed issue basis which we call automatic issue.

A large share of NEL's pension trust marketing success can be attributed to its pioneering of automatic issue underwriting as an ease of enrollment facility starting in 1955. At that time, the company had already a substantial volume of underwritten pension and profit sharing business in force and the pension trust paid-for business was running about 17% substandard as against about 10% for non-pensions including non-takens and declines. The reason for that difference is the much higher age distribution of the pension trust business, in the high 40's rather than the low 30's.

The company's first automatic issue products involved the same premium rates for comparable non-pension products, but with substantial reductions in first commissions and reduced dividends. Since 1962, the company has used a special pension trust series of ordinary life, retirement income and term policies priced specifically to reflect the experience factors applicable to the pension trust market, and with a commission scale unaffected by the type of underwriting used.

In particular, the company's pension trust insurance policies issued since 1967 have been priced to reflect automatic issue mortality experience. Reduced premium scales, but with the same cash value and dividend scales, apply to underwritten coverage as opposed to automatic issue. Policies were issued either on an all automatic basis or fully underwritten basis or blended basis, depending on the amount being issued relative to the employee's automatic issue entitlement. Rated underwritten coverage is invariably provided on a graded death benefit basis. Under New England Life's approach for underwritten coverage involving ratings higher than 350% of standard, including normally declinable risks, graded death benefits based on an assumed 500% of standard mortality are provided.

It should always be kept in mind that the basic purpose of guaranteed issue underwriting is to provide ease of enrollment for the agent and client including simplified administrative procedures for the servicing agency and the Home Office. The guaranteed issue limits should be simple to calculate and administer and should be easily understood by the field force. The limits should not be so liberal that they lure the placement of pension trust business principally because of the limits. In other words, the limits and rules should continue to focus on ease of enrollment rather than as an invitation to anti-selection.

NEL's automatic issue underwriting rules and case limits essentially remained unchanged from 1962 to the spring of 1978. We were probably the first company to extend automatic issue to cases involving less than ten participants, providing $5,000 for 2-4 life cases and $12,000 for 5-9 life cases. For cases involving ten or more lives, the rules in retrospect were probably unnecessarily complex, based on parameters such as covered lives, total volume, average volume and ceilings. But the rules worked well. The company's mortal-

ity experience applicable to pension trust business has significantly improved over the past ten years as exposure has progressively expanded.

The critical guaranteed issue requirements needed to avoid mortality anti-selection on pension trust cases are these:

(1) Guaranteed issue should be mandatory for clients who qualify--no picking and choosing.

(2) Guaranteed Issue should not be made available if a particular plan appears to have the potential for unfavorable experience. This would involve industries with hazardous occupations or where there are expectations of relatively poor persistency.

(3) Employees should be actively at work on a full-time basis.

(4) The employee must apply for insurance at the time he becomes eligible under the terms of the plan.

(5) There should be high plan participation requirements such as in our case, 100% for under ten lives plans, 90% for plans with 10-24 participants and 80% if there are 25 or more covered lives.

(6) Require that the company receive all guaranteed issue business underwritten in any given year. We do not split guaranteed issue coverage with other companies in the same employee group (known in the trade as "stacking").

(7) Do not make available guaranteed issue without some reasonable maximum issue age. In our case, it is 65. Perhaps the best insulation against mortality anti-selection on guaranteed issue of pension trust cases is that the employer pays all or almost all of the premiums.

Two other New England Life automatic issue rules of interest are, (1) once an employee's aggregate automatic issue coverage reaches the current limit of the plan, the limit will be reinstated for that employee if he or she subsequently qualifies for standard insurance of New England Life on either a medical or paramedical basis, issued either under the plan or outside the plan, and (2) to avoid the expense of insurability evidence when the total amount of insurance on an employee exceeds the plan's guaranteed issue limit by $5,000 or less, we provide the additional coverage on an all-automatic basis. This is known as the "spill-over" rule.

We recently updated our pension trust automatic issue mortality experience. The study was based on male and female issues from 1962 through 1976, exposed to 1977 anniversaries. Death claims for the study involved about 6,100 policies for $38.4 million of insurance. Actual-to-expected mortality ratios were based on the 1965-1970 Intercompany Select Table. Ratios were determined both by number and amount for durations 1-2, 3-5, 6-10 and 11-15 for issue age groups under 30, 30-39, 40-49, 50-59 and 60-64. A complete array of these mortality ratios is set forth in the following table.

NEL AUTOMATIC ISSUE EXPERIENCE

Males and Females Combined

Actual-to-Expected Mortality Ratios Based on 1965-1970 Select Table

Issues of 1962-1976 Exposed Between 1972 and 1977 Anniversaries

Issue Age	Policy Years	By Number	By Amount	Issue Age	Policy Years	By Number	By Amount
-29	1- 2	130%	108%	50-59	1- 2	184%	191%
	3- 5	132	117		3- 5	137	125
	6-10	178	164		6-10	114	110
	11-15	128	151		11-15	74	85
	All	142%	127%		All	129%	126%
30-39	1- 2	112%	130%	60-64	1- 2	168%	185%
	3- 5	124	107		3- 5	126	124
	6-10	116	112		6-10	128	126
	11-15	117	104		11-15	102	134
	All	119%	113%		All	136%	138%
40-49	1- 2	152%	150%	All	1- 2	162%	162%
	3- 5	135	128		3- 5	134	123
	6-10	119	123		6-10	118	117
	11-15	105	93		11-15	99	95
	All	124%	122%		All	127%	123%

From this table, here are some of the highlights of our study. For all ages and durations combined, the ratios were 127% by number and 123% by amount. For all ages combined, the ratios by amounts were 162% for durations 1-2, 123% for durations 3-5, 117% for durations 6-10 and 95% for durations 11-15. For all durations combined, ratios by amounts were 127% for ages under 30, 113% for ages 30-39, 122% for ages 40-49, 126% for ages 50-59 and 138% for ages 60-64. The age group 60-64 was the only age group where the ratios by amount exceeded the ratios by numbers (185% vs. 168% for durations 1-2, 138% vs. 136% for all durations combined). That is the only age group that there is any evidence of that kind of anti-selection.

Medically underwritten standard non-pension business, currently displays about an 85% mortality ratio to the 1965-1970 Select Table for all ages and durations combined. What this means is that our automatic issue mortality experience translates to about 150% of the company's standard experience (i.e., Table B).

In 1978, we decided to conduct a detailed analysis of the mortality costs and underwriting expense savings trade-offs associated with possibly increasing our automatic issue limits. This was provoked by increasingly strong field complaints that our limits, in their opinion, were no longer liberal and the rules for calculating them in any given case involving ten or more lives were excessively complicated. Our mortality analysis tracked every policy issue, both initial and add-on, under 50 split-funded defined benefit plans placed on the books in the past ten years, all involving between 8 and 15 initial participants. Of the portion of the coverage in the study that was underwritten, we found that 19% was rated and the weighted average rating for all the underwriting business in the study was 127%, a result quite consistent with that emerging from our comprehensive mortality studies.

We also determined, for each policy issued under these plans in the study, what the underwriting action would have been, if a simple and liberal automatic limit rule, $5,000 per life to a ceiling of $100,000, had been in effect since the inception date of the 50 plans studied. What this showed was that:

(1) 55% of the business by volume that was underwritten would not have been underwritten under the $5,000 per life rule.

(2) It showed that 67% of the underwriting actions would have been eliminated, with respect to the initial and the add-on policies issued.

(3) Of the business that was underwritten, but which would not have been underwritten under the $5,000 life rule, 17% by volume was rated and the weighted average rating for that business was 127% of standard--exactly the same as for the entire amount of underwritten business under scrutiny in the study.

With respect to the expense savings part of the study, we started with a detailed analysis of 1977 company "per policy" costs of medical fees. In other words, APS, medical exams, EKGs and X-rays and also Retail Credit reports--split by standard, substandard, issue age groups, and by size groups. We further developed a detailed model office of our recent years' pension trust issues split by age groups, size bands, and percentage substandard. We also demonstrated that our case sample used in the mortality study had essentially the same size band distribution as that in the model office.

From all of this, we determined weighted per policy costs of medical fees and retail credit reports for pension trust policies for all ages, sizes, and ratings combined. This worked out to be about $49 consisting of $40.50 for medical fees and $8.50 for the retail credits.

The end result of all of this was the implementation on May 1, 1978 of the $5,000 per life rule, subject to a $100,000 ceiling. Our study seemed to show that this new rule would save us $150,000-$175,000 per year in underwriting expenses based on current levels of expenses. It resulted, we felt, in no worse mortality than if the previous limits had been continued, and we felt it significantly simplified the rule calculations, both in the Home Office and in the field. We did not try to measure that in terms of costs. We saved time and aggravation and that is certainly worth something.

Needless to say, these new limits were well received by the field force. However, and happily, their introduction did not presage a wild sales surge, using the rules as seductive bait. As a matter of fact, our paid-for sales of new pension trust insurance on new cases for the year 1978 were 13% less than the comparable figure for 1977. But that is a result reflecting a host of ERISA-related issues having nothing to do with automatic issue rules and limits.

MR. CHAPMAN: I am curious about the rate structure. Underwriting savings, as we know, are more or less independent of age. They tend to be flat; additional mortality, on the other hand, tends to go up sharply with age. How do you keep the present values in balance and keep the younger insureds from subsidizing the older insureds?

MR. INGRAHAM: We do that through an asset share profit analysis, which requires each issue age group to provide surplus contributions after specified periods

for amortizing excess initial expenses--similar to our requirements for non-pension insurance. This approach explicitly produces internal consistency so that no one age group in either our pension or non-pension lines is forced to subsidize another.

MR. CUMMING: Harold, your new guaranteed issue rules appear to represent some significant liberalizations. Are there other companies moving in this direction? Secondly, do you see any dangers of leap-frogging here, similar to what has happened with disability income and yearly renewable term rates?

MR. INGRAHAM: Well, there is already up-to-date evidence of leap-frogging. It was not four months after we announced our new rules that we found that two or three companies introduced comparable (and slightly more liberal) limit changes.

Here is what one eastern mutual company did for its insured IPPT business. On 2-9 life cases, they now have a maximum individual limit of $5,000 times the number of eligible lives and require short form health statements on the top three lives. For 10 to 19 life cases, the maximum individual limit is the lesser of $6,000 times the number of eligibles or three times the group average. There are no short form health statements required. For 20 life or over cases, this company has a maximum individual limit of the lesser of $6,000 times the number of lives or four times the group average of the top 25 lives up to a ceiling of $150,000.

There is another mutual company, also in the northeast, using newly liberalized guaranteed issue rules and limits. Under their program, participants in any of their pension and profit sharing plans are eligible for $25,000 of life insurance each year if the participant can meet certain requirements. Those requirements are actively at work on a full-time basis, or not having been treated or hospitalized for the past three years for cancer, stroke or heart disease. That simplified underwriting approach applies regardless of the number of participants in the plan. It can even apply to a one-life plan. Their $25,000 limit is not cumulative; in other words, it applies each and every year, so an employee could come into a plan in one year and qualify for $25,000 for simplified underwriting and then qualify for another $25,000 under that program the next year and the next year and so on.

MR. LADLEY: Harold, can you tell us how you grade benefits under these plans and something about the results?

MR. INGRAHAM: What we do is conventional. We equate costs of insurance based on the tabular reserve basis using the following formula:

$$q_{x+t-1}\,(1000 - {}_tV_x^{Plan}) = R \cdot q_{x+t-1}\,({}_tGDB_x - {}_tV_x^{Plan})$$

where,

${}_tV_x^{Plan}$ = plan reserve for issue age (x), duration (t)

q_{x+t-1} = tabular mortality rate

R = *substandard table rating ratioed to standard*

${}_tGDB_x$ = Graded Death Benefit to solve for - varying by (x) and (t)

$$\therefore\ {}_tGDB_x = \frac{1000}{R} + {}_tV_x^{Plan} \cdot \left(1 - \frac{1}{R}\right)$$

Thus, on an ordinary life policy, there is a staircase of death benefits only reaching the intended face amount at the limiting age of the mortality table. For a "decline" case, under our approach, R=5 and:

$$_{t}DDB_{x} = 200 + 0.3 \cdot ({}_{t}V_{x}^{Plan}),$$

MR. LADLEY: Colonial Penn originated and continues to be a leader in offering guaranteed issue, graded benefit life insurance. Conceptually, this type of plan is one which has substantial appeal for our target market, which is persons age 50 and over, and our marketing method, which is direct response. We have found that guaranteed issue, graded benefit coverages are purchased primarily as final expense insurance. Face amounts typically average around $2,000 per policy. Most of those purchasing this type of plan have little or no insurance currently in force. Many are widowed persons who were under-insured or uninsured prior to their spouse's death. To give you some idea of the popularity of the coverage, we currently insure roughly 270,000 older persons and the total number ever issued has been 400,000.

We also know that many of our insureds have not been visited by an agent in some time. The last visit has been, on the average, from four to five years prior to purchase. This is undoubtedly due to some post-retirement dispersion of this population group and also to the unattractiveness of selling small amounts of insurance through today's agency system. This meshes well with the points of view of both the insured and insurer. That is, many of our insureds do not wish an agent to call, as they also express a desire not to have a medical examination (and prefer to consider their prospective purchase on their own). As the insurer, we would have serious reservations about attempting the sale of this type of plan through the agency distribution system. Although there are insurers currently marketing guaranteed issue coverage through agents, we feel the potential anti-selection in this situation is too great. On the other hand, the simplicity of the product makes it appealing for direct response sale.

The original version of the plan, 55+, was first sold in 1967. Issued to ages 55-87, it is a whole life, level premium coverage where the face amount varies by age and sex. Anti-selection is controlled by:

(1) making the policy available only during limited enrollment periods which are roughly two months in length. These enrollment periods are always separated by at least three month's time. Beyond the close of an enrollment period, applications are underwritten; and

(2) grading benefits during the initial two or three years depending on the issue age.

For 55+, the benefit in the early years is the return of premium paid with interest at 5%. In addition, an accidental death benefit is payable during the initial years. Provision of this benefit assumes some inability to anti-select, which might be an incorrect assumption particularly for this age group. However, we have seen negligible ADB anti-selection.

In 1974, we began offering a different version of this plan, 50+, to the 50-80 age group. This product altered the ultimate face amounts somewhat and provided flat benefits of $100 in the first policy year and $250 in the second policy year, per unit, for all ages and both sexes. Up to four units are sold,

so that guaranteed issue, initial benefits of $400 from the first day during the first year and $1,000 during the second year are available. The accidental death benefit was no longer offered on 50+. A number of insurers now offer similar products.

We have found that we can write these coverages at rates which are comparable to those for small amount ordinary insurance and superior to those for industrial insurance. We attribute this to our specialization in such plans, and expense savings realized through our marketing method and administration.

The direct response mass sale approach enables us to enjoy economies of scale in printing, media purchase, and processing of issues. Our advertising tends to be unsensational and low key. We have very little copy variation by state. The direct response method also provides us with some flexibility. For example, we can change the advertising thrust or the marketing medium we are using relatively easily. We are not locked into situations demanding extensive re-training programs or commitment to unproductive market segments. Direct response also affords some opportunities for front-end actuarial, and other, controls over the solicitation process. For example, we can predict response, persistency, or mortality experience of the given segment and make decisions on how we plan to market it.

Our administrative operations are heavily EDP oriented, which together with simplicity of underwriting and policy structure, keeps issue and policy maintenance costs relatively low, and to some extent helps avoid inflationary pressures. The workflow, because of our limited enrollment campaigns, tends to have its peaks and troughs. This can be ameliorated to some extent by integration with campaigns for other lines of insurance and other administrative functions.

Since we have no true field force, nor agency offices, all administrative work is done in the home office. We handle more than the typical volume of correspondence because of our specialization in the older age market. We must carefully control the work flow because it is so removed from the insureds. We feel we provide service comparable to that of an agency company and that our maintenance expenses are similar to those of an agency company.

It may be of some interest to discuss briefly some of the difficulties we have run into in the regulatory area. Over the past four or five years, particularly with our 50+ plan, we have had to do considerable liaison work with a number of key states. I suspect we share this problem with a number of direct response writers. The only feasible explanation for the roadblocks we have encountered is the novelty of the product. In hindsight, we feel we have been entirely justified in backing the concept of graded benefit, guaranteed issue whole life because every state now approves this type of product in one form or another. To give you some idea of what we have run across; one state specifically requires the ADB benefit in the early years and another state specifically prohibits it. One state requires that we underwrite the product and another state requires open enrollment; that is, there are no open and close dates. One state felt our product could be excessively profitable and one state was so concerned about it being self-supporting that they limited the sale to certain market segments. A more generalized problem has been the increasing volume of standard regulations or guidelines which do not account for all the peculiarities of direct-response sales.

Persistency on this product has been good, or better than industry standards (as expressed in LIMRA studies), considering the type of plan, which is Ordinary whole life, and the age group. We are not sure why. On the one hand we do not have the agent who is motivated to make the direct conservation effort, particularly in the critical first year; on the other hand we feel that the original purchase decision in our case is not a pressure one and this may lead to an ultimately more satisfied customer.

Our mortality experience has been at acceptable levels overall but has exhibited wide variation by segment. We study our mortality experience annually by age and sex group using an expected standard of population mortality. In offering a product which is truly guaranteed issue, there is clearly a wide potential range of insureds from the preferred or standard risk, through all substandard classes to the normally declinable risks. Prevalence of chronic conditions alone at these ages suggests caution in assessing the composition of the insured group. We have strong indications that the composition of the insured group changes dramatically with change in issue age. That is, heavy anti-selection among the younger age purchasers means they are generally less representative of the population group than at the older ages. It is suspected that the pre-retired person has very different motivations in buying this coverage than the older purchaser.

The insured group as a whole has demonstrated some ability to anti-select relative to the ultimate benefit period. Some anticipate and take advantage of the third or fourth year increase to the ultimate benefits. This point, coupled with my prior observations on age patterns causes me to wonder whether insurers who are dropping their minimum guaranteed issue age below 50 and offering higher face amounts there have benefit of sufficient experience to gauge this risk.

In our analysis we are concerned about both the level and pattern of mortality. We have indications that both are strongly influenced by the length of the grading period, age, sex, and market segment.

We have recently done two supplemental mortality studies based on very limited data which may be of some interest. In one we looked at the experience by solicitation medium and some very wide differentials have been noted, but it is much too early to establish a reliable pattern. The second study observes the effect of mandated open enrollment periods. Preliminarily, as one might expect, we have found that there is some increment in mortality because of prohibition on the use of limits in the enrollment periods. Again, our data are very scanty at this point and we will be watching both these situations closely.

In summary, we feel the guaranteed issue, graded benefit coverage is an innovative response to the needs of an underserved market. Development of other new and simple direct response approaches which would fulfill those needs not met by the agency system presents a significant actuarial challenge for the future.

MR. CHAPMAN: Jack, have your experience studies indicated a significant trend in the actual to expected mortality ratio that is a function of duration?

MR. LADLEY: Yes, they have. For the original version of the plan, 55+, we now have a fairly mature experience up to about 9 or 10 durations and we found that the actual to expected ratios, based on population mortality, have coursed monotonically downward and have now returned to a population

mortality basis. For the newer version, we are just getting mature experience in the ultimate benefit period; we have indications the pattern is somewhat flatter. You could view this trend, lying somewhere on a contiuum, where your grading period and the benefits you offer during that period provide some underwriting equivalent. Your experience may lie anywhere between standard and the worst case which might possibly be something like group conversion (where you essentially provide a full first day benefit and you get a heavily anti-select group). So this result would be about as expected, relatively.

MR. CUMMING: Jack, you expressed some concern for anti-selection when guaranteed issue coverages are marketed through agents. Could you go over some of the specific trouble spots that you see with this approach?

MR. LADLEY: What we foresee is that if the product were not sold exclusively, and if it were sold in conjunction with other life products, it could become a catch-all type product. We would have great difficulty pricing it, if it could be priced at all. (Affordability is important for this age group.) Thus, we cannot see it being sold in conjunction with a portfolio. We also cannot see it being sold as a primary product of an agency force simply because of the type of product. If we had a captive agency force and the same kinds of controls and careful monitoring that Peter Chapman was talking about, then perhaps there is a situation where it could be sold by an agency force. We do not have that kind of set-up. I was looking at it from that perspective.

MR. INGRAHAM: Jack, you mentioned the anomaly of having one state say that this product appears to be excessively profitable and another state say it was so concerned about the product being self-supporting that they limited its sale to certain market segments. What criteria were used by each of the states in arriving at their opposite conclusions?

MR. LADLEY: The answer is that I do not know. To give you an example of what can happen, of the two states that were on either side of the ADB issue, one state, in drafting its regulations requiring ADB, supposedly used the regulations as a model from another state which prohibits it. I cannot follow their logic there. We demonstrated when the states raised these issues that it fell into neither category.

MR. INGRAHAM: What was your expected standard of population mortality?

MR. LADLEY: We use the 1959-1961 U.S. White Males Population Mortality Table which we started using in 1967, and we have continued to use that for consistency. Actually, right now we are looking at other possible standards of expected mortality, but we have not found any that work any better than what we have now. We do assume that there is a durational element and of course there is not, but we use it in that manner.

MR. ROLAND A. DIETER: First, have you made any lapse studies in terms of attained age? In other words, has there been any increase in lapse rates at retirement when income has ceased? Have you made any studies using population distributions by age in terms of seeing what the tendency is to purchase your coverage based on the age? Are people buying the coverages at 55 and 60 or do they wait until later before making their purchase?

MR. LADLEY: I would add to the purchaser profile I described earlier that insureds are generally purchasing right around retirement or right after retirement. We have not done an attained age study, but I doubt that it would show much increase given this age-purchase pattern.

MR. ROBERT L. RUDERMAN: Colonial Penn has come in for some negative criticism by the media. Have you found that to affect your response rates?

MR. LADLEY: That would be a very difficult thing to trace. By the time we would have been able to actually trace it, a large portion of the effect would have worn off; the initial impact of, say, a news program would not be as great at a later date. We did look at our Life lapse rates and we did not find much apparent effect at all. We like to think that our existing insureds are satisfied and may know better than the non-insured group more of the true story.

MR. G. STEPHEN SILVA: Can you give us some idea of what your response rates are?

MR. LADLEY: Response rates vary widely and I am not prepared to give you the entire spectrum of response rates. It would be difficult to duplicate response rates unless one duplicated the procedures, the copy, and the product that we use. It is not just a product-dependent thing--it has become much more sophisticated than that. There is a very wide variation and a high degree of internal control over the process.

MR. ERNEST J. MOORHEAD: I am beginning with a supposition--that may be erroneous--I would like to take the supposition first. That is, that most or all of the statistics that you have been speaking about represent substantially the results on American Association of Retired Persons business?

MR. LADLEY: That is erroneous. Whereas our health insurance is substantially or almost entirely American Association of Retired Persons business, that is not the case on the life insurance business.

MR. MOORHEAD: So, therefore, the persistency that you refer to, I gather you said was similar to that of industry and you have meant the Brzezinski LIMRA tables?

MR. LADLEY: That is correct, but I do have other information that supports that. In fact, that information shows that, considering the mode (almost all of our business is monthly), our experience is probably superior to the industry in general.

MR. MOORHEAD: So that persistency then, based on your remark, is based heavily on business that comes in through newspapers and television?

MR. LADLEY: No, I did not say heavily. It is roughly evenly-weighted. It is not heavily AARP.

MR. MOORHEAD: It is another category that I am not familiar with. You spoke of solicitation medium. You were talking about AARP.

MR. LADLEY: One "medium" would be what we call direct mail, which would be the AARP medium and AARP business would be pretty much confined to that, rather than newspapers, radio or television.

MR. MOORHEAD: So you do not have any data to suggest a strong difference in the persistency results of those two major classes?

MR. LADLEY: There is a fairly substantial crossover between the two; so it would be very difficult to make any analysis of that. Certainly, the AARP is essentially direct mail but many AARP members might see this product only through a more visible piece of media.

MR. CUMMING: My company, the Midland Mutual Life Insurance Company, has conducted some three special offers of individual life insurance for existing policyholders. We are presently engaged in the fourth such offer. The current project was originally set up to run for twelve months. It has been fairly successful and has now been extended for a second twelve month period. The offer draws on existing insureds under both individual life and individual health policies. It works like this. Shortly before the second policy anniversary, an offer policy is assembled for selected insureds. The cases selected meet the following criteria. First, the insured is standard and regularly underwritten (either medically or non-medically). Second, the policy is premium-paying. Third, there is no significant health claim history or waiver of premium claim history. Fourth, the insured's attained age is from 15 through 45 inclusive. If the original policy is less than $15,000 or a health policy, the offer policy is our whole life. Otherwise, the offer policy is a high minimum type plan. The amount of the offer policy is the same as the originating policy including term riders, but not less than $5,000 nor more than $25,000. In any event, the offer policy is a standard plan with the same rates and the same values and the same compensation as a regularly underwritten issue.

A very simple application form is sent out to the agent along with the policy. It has been filled out in the Home Office except for two questions--the replacement question and a question that asks if the insured is now actively at work. The latter question, along with the fact that the insured was recently regularly underwritten, constitute the underwriting for the offer policy. It is emphasized to the agent that he, in effect is the underwriter. An attempt is made to make the agent feel responsible for establishing the proposed insured is in fact actively at work or actively engaged in his normal activity.

The success of a special offer project such as this, in terms of satisfactory unit costs and satisfactory mortality experience, depends upon a good level of acceptance and persistency. So far, the persistency on the special offer policies has been quite comparable to that of regularly underwritten business. It would appear to be on the order of 98% of regular business.

The principal difficulty is maintaining a good level of acceptance. The initial special offer project conducted in 1971 had an acceptance ratio slightly above 20%. The second and third projects had acceptance ratios on the order of 15%. These first three projects were all one-shot programs of limited duration. The current special offer, a program now in its 19th month, started out at around 15% but has fallen off somewhat in recent months.

Some care has been taken to analyze the acceptance ratios with the following results. First, no significant difference results from the originating policy being a health policy as opposed to a life policy. Second, policies place better at the higher and lower issue age groups. The worst group has been issue ages 25-29. Third, smaller policies' acceptance ratios are significantly better than larger policies' ratios. Fourth, the pre-authorized check payment mode and the monthly payment mode acceptancy ratios are better than other payment modes. Finally, acceptance ratios vary greatly by agency. Mortality experience on the special offer policies has been well within the mortality rates

used to price the policies. The aggregate rates are approximately 70% of the pricing mortality rates. While the volume of exposures and claims is not sufficient to develop statistically credible results, the results are nonetheless comforting.

On the whole, the special offer program has produced a significant quantity of good quality business at an acceptable cost. Future efforts will be primarily directed at improving the acceptance levels such as: a limited duration program to maintain field enthusiasm; enhancing the offer policy with a distinctive feature; increasing the percentage of eligible policyholders who are actually contacted (currently less than one-half of those eligible are approached); and finally, special efforts in those agencies where past programs have had minimal success.

MR. CHAPMAN: Dick, I notice that in your offer, you have an attained age cut-off. Do you also have a duration cut-off from the time of the most recent examination beyond which the offer will not be made?

MR. CUMMING: Yes, the cut-off is two years from the time of regular underwriting. We look at all the originating policies which will have a second anniversary, say in the month of April. The offer policies are then assembled sometime prior to April and shipped out to the appropriate agency offices.

MR. INGRAHAM: Dick, you apparently have been using a maximum age of 45. I know the Occidental had a program called Opportunity 72 in 1972 and they used age 50. They also went up to $50,000 rather than the $25,000 you are using. Could the program be expanded beyond issue age 45, to 50 or even to 55, with reasonable safety, and without significant mortality anti-selection, by using a couple of simple additional questions on a short form application?

The questions might be something like this. First, in the past three years, has life or disability insurance on your life been declined, postponed or modified as to plan, amount or rate? The second question might be in the past three years, have you been treated for, or had any known indication of, high blood pressure, heart attack, chest pain, stroke, diabetes or cancer? Would that introduce any significant administrative complications, and do you think there would be different mortality or persistency?

MR. CUMMING: When the offer that we are working on right now was put together, there was some consideration about increasing the highest attained age from 45 to 50. We decided that there would be some extra costs there and that we would not embark on it. The experience, though, has been very good, and the idea of increasing the highest attained age will be given more weight if and when there is another special offer from The Midland. The idea of increasing it from 50 to 55 with the inclusion of some simple medical history questions has some merit. The drawback there is, of course, that it requires more paperwork between the field and the home office and increases some time delays, causes some extra hassles and creates more costs. There is a trade-off there that will just have to be analyzed. The idea of being able to increase the issue age from 45 to 50 or 55 would generate enough field enthusiasm that we might get a better acceptance level and have a more successful program.

MR. INGRAHAM: I might also point out that in that same Occidental non-medical offer to certain existing policyholders, it also experienced a 15% "taken" rate. Is that the best that can be done in these programs?

MR. CUMMING: Fifteen percent is a successful effort. When it falls into the 12% or 11% area, at least for us, we would have special concerns.

MR. CHAPMAN: It is interesting that at 15% it would correspond to the range that most companies report their guaranteed insurability purchase option election rates. It appears to be some sort of upper limit that you cannot exceed.

MR. LADLEY: Dick, do you limit the time period during which a prospective purchaser must respond to your offer?

MR. CUMMING: Yes, there is a specific limit there. Policies usually arrive in the agent's hands from 15 to 45 days prior to the policy anniversary. He then can place the policy immediately but cannot go any longer than 31 days after the policy anniversary. Roughly speaking, there is a 60-day period in which a policy can be placed, from 15 to 45 in front of the anniversary to 31 days after the anniversary. We charge $10 against the General Agent if a policy's data page has not been returned within 41 days after the policy anniversary.

MR. DIETER: Has anyone suggested an aggressive approach to perhaps raising that 15% and picking up the healthier lives by offering a discount of some sort on premiums forever--maybe something nominal like 5% or less because they are a valued customer, a proven customer? Persistency would be better on that customer versus a fresh customer.

MR. CUMMING: Yes, the suggestion was made that there be a special discount. It was that the normal modal factors would not apply. For example, a monthly would be an annual divided by 12.

MR. DIETER: I would think an agent would rather take reduced commissions if he can get a 25% acceptance rate rather than regulars at 15%.

MR. CUMMING: Yes, but we decided not to go the route of offering any kind of a premium advantage to the customers who had these special offer policies. We were leery of regulatory problems. In one of the prior special offer projects, the company did use a lower commission rate and decided not to do that again. It was not too successful for us.

MR. WILLIAM ACTON: Did you notice any effect on your persistency even among policies where the customer did not pick up the extra policy just because an agent has contacted him?

MR. CUMMING: That is an interesting point, but we have not studied that.

MR. CHARLES GREELEY: Did you say that the original program was a one-shot program at 15% acceptance and later on you have an other than one-shot program which had a lower acceptance? Can you explain what you mean by other than one shot?

MR. CUMMING: Yes, the one-shot program could be explained like this. All the originating policy owners who are going to be eligible for the program are tabulated. An offer policy is assembled for them and these offer policies are sent out to the agency offices. There is one month to place the policy. Instead of spreading the activity out over a longer period of time, we would take all the originating policies which would have a second anniversary in a given year, assemble the offer policies, and send them out to the agency of-

fices. Then the field would have the specified period of time to place those policies. The way we are doing it now is that as each month comes up, we take the originating policies that are going to reach the second anniversary in that month, put the offer policies together and those are the ones that are placed that month. The reason the effort has been spread out is that there were complaints that the field people were inundated with the special offer policies and it interfered with their other activities.

MR. GREELEY: Did the second method turn out to be less successful?

MR. CUMMING: Yes, but the intangible thing is that we do not know whether a big one-shot affair would hinder normal production. The agents claim that it would. The longer duration program has had a lower acceptance rate.

MR. GREELEY: Did you find resistance from customers with the offer coming only two years from original date of issue? Did you ever consider three years after original issue even if it would cost more in mortality?

MR. CUMMING: Yes, and in fact, just for the purpose of these remarks, I glossed over the way the program that we are currently working on was set up. During the first year of its operation it pulled out year-two people and year-three people. Now in its second year, it is only pulling out year-two people. We did look at and did use third anniversary customers originally. The fact that only half of the customers are approached seems to indicate that the agents have a feeling that a significant number of people do not want to be approached again.

MR. GREELEY: I consider 15% to be a terrific acceptance rate. Would you be willing to share with us your promotion techniques to achieve such good results?

MR. CUMMING: I would be glad to show you some of the promotions we used after the session. There were quite a few things done: some special contests, a personalized letter from the president, periodical posting of the results. There was a coordinated, well-organized campaign to get it out to the field and it was conducted at fairly high levels within the company.

MR. LARRY R. ROBINSON: I have a question regarding your repeat business that you were getting prior to the program. In connection with that, do agencies have an opportunity to opt out of the program? One of our concerns with a program like this is that repeat policies that we might get would be a much smaller amount than they would be otherwise. Or do you feel an agent should contact the individual and then present the alternative?

MR. CUMMING: The agent can always opt out by simply not doing anything with the policy and sending it back to the home office. Our feeling was that there was a substantial market out there that our agents were not developing to its fullest. We were willing to lose some higher amount sales and in some rare instances but be able to pick up some smaller sales in the main. From time to time though, there is circulated in the field magazine accounts of how the agent was able to place a $100,000 policy because he had gone to the customer with his $15,000 special offer policy. We do get that additional sale and the agency people try to promote that or recognize it.

MR. INGRAHAM: Dick, do you have any trouble applying the actively-at-work condition to housewives and self-employeds?

MR. CUMMING: None, so far.

MR. JOHN F. MCMANUS: You allow about 60 days to deliver your policy. How do you define actively-at-work?

MR. CUMMING: I do not know the specific wording. When the agent calls on the customer, he is there at one moment in time and the question is probably are you currently engaged in normal activities. An unscrupulous agent or one who is not too concerned about the underwriting aspects could say, well you are not feeling too well right now; I will come back in a month to see how you are. He does have that manipulative advantage. So far, we have not seen any consequences of that. All the claims under this program are individually examined.

MR. FRANCIS X. CODY: I would like to ask John Ladley if he plans to publish his mortality results in the RECORD.

MR. LADLEY: No, I do not. Not in the same fashion as for New England Mutual's pension trust experience.

MR. CODY: May I ask why not?

MR. LADLEY: This is company policy, developed for competitive reasons.

MR. CODY: I have noticed a few states are making noises about whether or not the policies are overpriced. I am just wondering if it would be a good idea to publish those kind of statistics and demonstrate that the price is fair or perhaps justify a more competitive pricing structure.

MR. LADLEY: To my memory, we have only had one state that has done that. We have been able to demonstrate reasonability adequately to them.

MR. CODY: Was that California by any chance?

MR. LADLEY: I really do not recall which one it was. I think it was a mid-western state, though.