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GROUP LIFE AND ACCIDENT EXPERIENCE

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This forum provides the opportunity to discuss findings of the recent Group Life Experience Study, the first in ten years.

MR. JAMES E. DRENNAN: I'm from the St. Louis office of Towers Perrin Integrated HealthSystems Consulting (IHC). Our other panelists are Dick McNeill and Michelle Fulmer. Mike Rasmussen is our recorder. He's also from the St. Louis office of Towers Perrin IHC. The subject is the Group Life Experience Report. We'll go over the material but, just to make it interesting, we will not hand out the report. You'll have to wait for a while to get that. The Society is producing the experience report. I'm told it should be done sometime in July.

None of the people who actually worked on it could come to the meeting. We were recruited to discuss it and we want your input and questions. Some of you may have actually seen a draft copy if you were involved in submitting the data. So please share any observations or additions, or tell us if you agree with us or disagree with us.

The experience period of the prior report was 1975 through 1979. In the current report, the data were requested for a ten-year period, 1980 through 1989. But when the data arrived, the committee was only able to use the data from 1985 through 1989. The earlier data was not used at all in the final report for various reasons.

There are some differences between this report and the prior report. The current one includes experience by both insured amounts and lives for all of the various exhibits. The prior one only included experience by lives. In the disability categories there were several new definitions. Dick will get into that a little more in his presentation. The actual-to-tabular analysis was done using the prior report as the tabular. So the 1975 through 1979 data, which was by lives, was used for the tabular, or the expected, for both lives and amounts for the new report. Of course the prior study used the 1960 Commissioner Standard Group and Basic Tables as the tabular.

The contributing companies were Aetna, CNA, Confederation Life, ManuLife Financial, Metropolitan Life, Minnesota Mutual, Mutual Benefit (Fortis Benefits), Mutual of Omaha, Pacific Mutual, Phoenix Mutual, The Principal Financial Group, The Prudential and State Mutual. There were several others that submitted data that was not useable for various reasons. The total exposure in lives was 19 million and in dollars was almost 602 billion. The exposure was not evenly distributed between the companies. Some companies had large submissions and some were relatively small.

The committee had some data concerns. They attempted to resolve them by contacting each contributor directly. At the end, they sent the data back to each contributor in the final format for review. I think the submitting companies actually got copies of the full report as well. During this time, they made some changes and some enhancements. Even at the end though, the committee still had some concerns. They still did not feel

comfortable with some of the items, but they decided to go ahead and publish it anyway. Because of time constraints, they wanted to go ahead and get it out, so it's being published essentially in a draft form with the committee's concerns expressed. One of the concerns, for example, is that the disability ratios are extremely low.

FROM THE FLOOR: What were the other concerns? We received the data back three times and each time assured them that what we had submitted was our experience.

MR. DRENNAN: I do not know. The material we received did not go into specifics. It just said that they had concerns about the data. I suspect that some of those were answered as they went along. The disability concern was obviously one that was not fully answered.

Table 1 is a summary of the actual-to-expected results. We will break this down in future slides. As you would expect, the ratios by amounts are lower than those by lives. You can also notice that the disability ratios are quite low. Chart 1 gives you the mortality ratios by company. Of course the companies are not listed by name. I am not even sure that the order has any significance. I do not know which company is Company A or B or so forth. In general, the ratios by lives and by amounts track one another for each company. Companies H and L seem a bit unusual in that their mortality ratios by lives differ substantially from their mortality ratios by amount. Another important point to notice is that there is a large variance in the ratios. The lowest ratio and the highest ratio are companies that did not submit disability information. So the disability rider does not necessarily effect this. There are just some wide variances. This probably could be the result of different types of business or different mixes of business. However, it's much wider than I would have expected.

TABLE 1
RATIO OF ACTUAL TO EXPECTED (A/E)

| | Death | Disability | Accident | Total Claims |
|---------|-------|------------|----------|--------------|
| Lives | 89.5 | 36.1 | 80.3 | 84.7 |
| Amounts | 71.5 | 39.6 | 77.2 | 68.1 |

Chart 2 shows the percentages of total exposure by company. These are the same companies, but they are not in the same order as in Chart 1. Again, I do not know which company is which, but they are definitely not in the same order as in Chart 1. You can see that there are a couple of companies that contributed over 30% each to the total data. It shows that a few companies could skew the information quite a bit.

Hopefully, this gives you an overview of the material. Now, we will go into more of the specifics: first to the actual tables on death claims and then to the tables for waiver of premium and accidental deaths. To discuss the death claims, we have Michelle Fulmer from United of Omaha. United is an affiliate of Mutual of Omaha and their data is included in the study. She is an assistant actuary in the group life area. She is an associate of the SOA and her practice area is life, group life, rating, pricing and valuation. She is also a graduate of the University of Nebraska.

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CHART 1 MORTALITY RATIOS

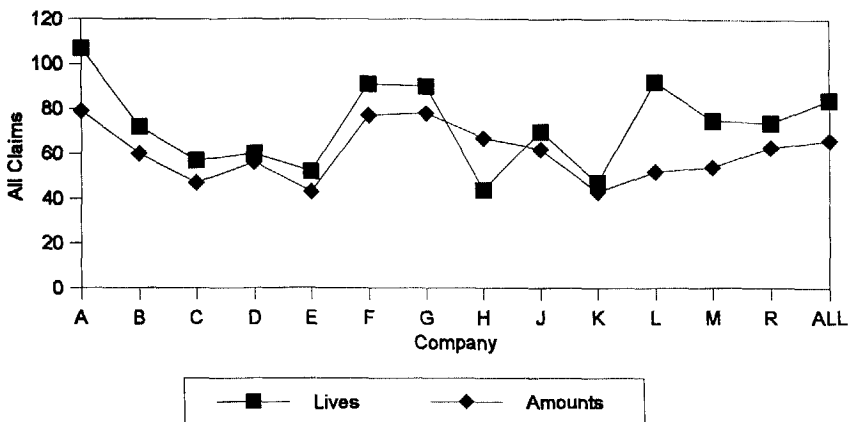
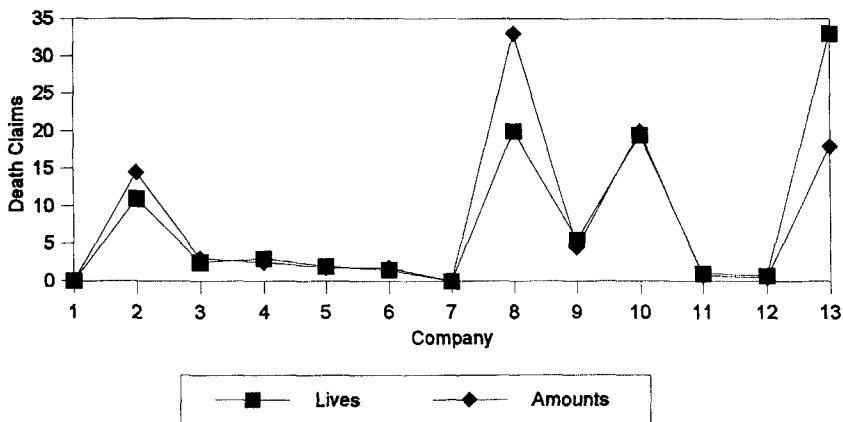


CHART 2 PERCENTAGE OF TOTAL EXPOSURES



MS. MICHELLE J. FULMER: What kind of groups were included in the last two studies and how have they changed? (See Chart 3.) They are made up mainly of single employer groups and other groups that were not specified. Then we had union membership and mass marketing. Mass marketing was either not separated out or not included in the late 1970s study. Then there were multiple employer groups, professional association groups and Taft Hartley Trust groups. The most obvious thing about Chart 4 is how the exposure by lives has decreased from over 80% for the employer/employee groups, down to less than 50% and how the "other" group has grown. I am not sure if companies were not labeling the types of groups or if some other odd types of groups are out there that just do not fit into existing categories. All of my graphs, except the last one, will be comparisons based on employee/exposure instead of volume exposure. Once again, Chart 4 shows actual to expected by type of group and also by disability provision. On this graph, 100%

is your baseline actual to expected. All of the different type of groups seem to follow a similar pattern.

CHART 3
EXPOSURE BY TYPE OF GROUP

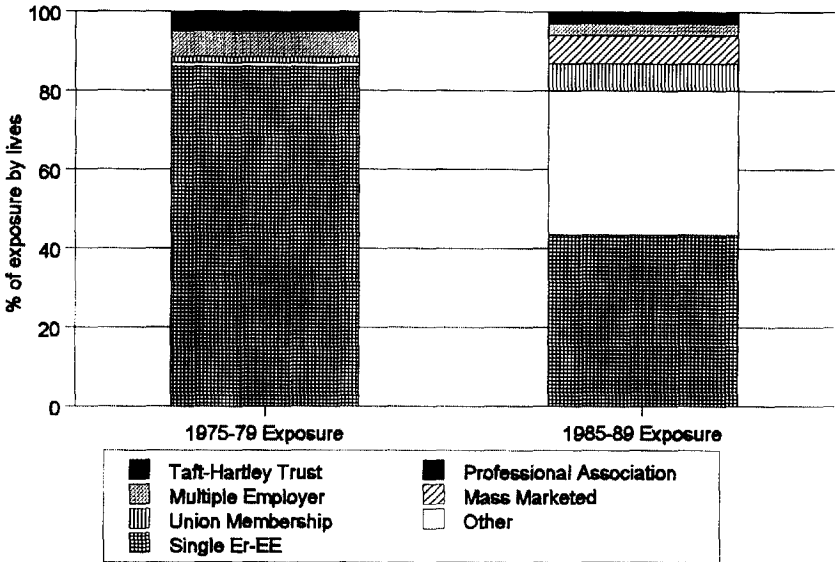
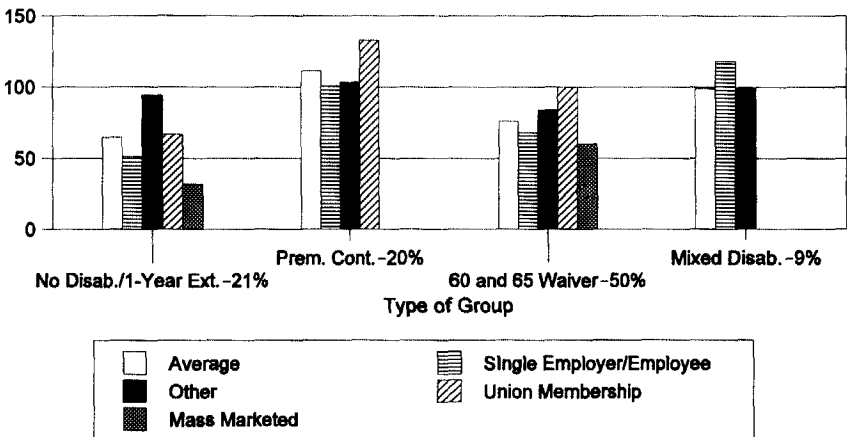


CHART 4
ACTUAL (1985-89) TO EXPECTED (1975-79)*



*actual to expected baseline = 100

The left-hand bar on the actual to expected is just an overall average of the companies. By far the most experience came from groups that had a waiver before age 60 or 65. That

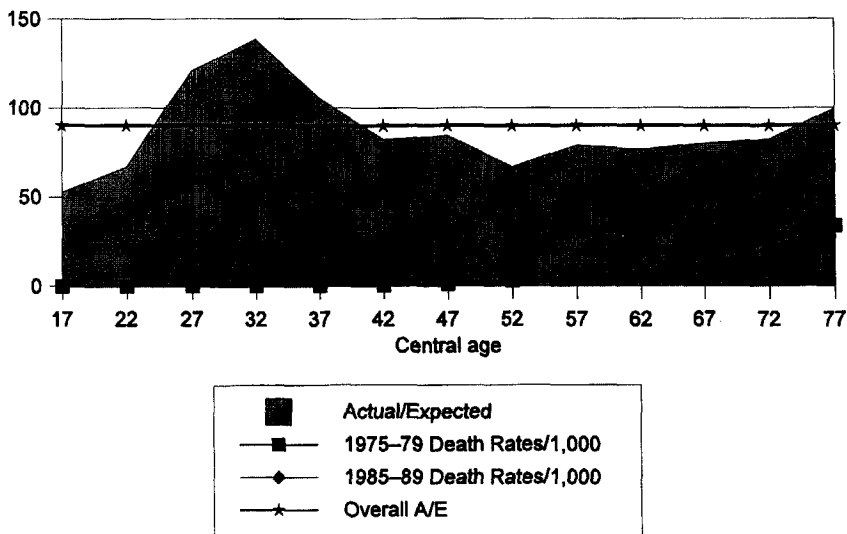
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made up 50% of the exposures for this study. Roughly 9% of the groups had a mixed disability provision. For groups with the premium continuance provision, deaths were not split out by active lives versus disabled lives. The actual-to-tabular ratios for this disability provision are above 100% for all types of groups. While the groups with no disability provision and groups with the waiver of premium (WOP) provision all showed improvement from the last study. In a future study, it would be nice to have the premium continuance deaths split out in order to determine if they are closer to the no disabilities or to the WOPs.

MR. DAVID NUSSBAUM: I am with Swiss Re Life Company America. When you compared the actual to the expected, were the expected for employer/employee groups, for instance, compared to the actual for an employer/employee group?

MS. FULMER: I assume that they had actually compared each of those sections to each other, but since the exposure did change, that could lead to some of the differences. Chart 5 is a comparison of quinquennial ages for females and the actual to expected from the studies. Along the bottom are the crude death rates per thousand. They really reinforce what is being seen in the actual to tabular. The starred line shows the overall actual to tabular for females. What is happening here? You can see a spike from ages 27 to 42. The experience has actually worsened in those age groups for females. Some of that may be due to AIDS. But you might think that would have shown up more in the males than in the females. So a spike is there and maybe there are some other reasons that it is showing up. The overall tabular on the females was about 90%.

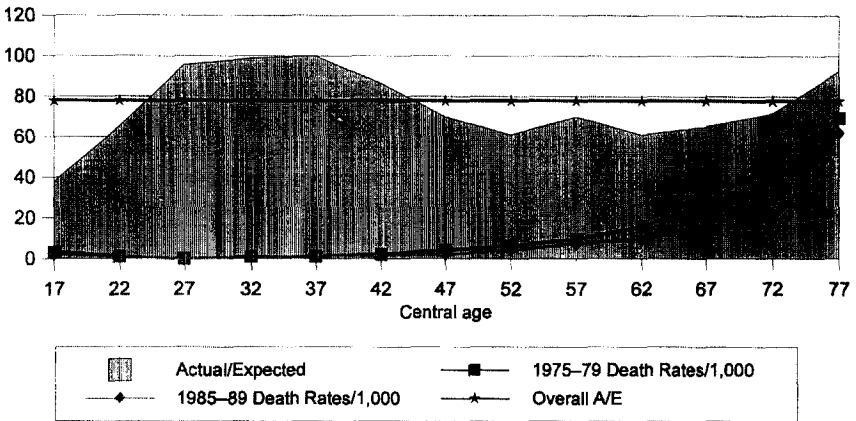
CHART 5
FEMALE ACTUAL (1985-89) TO EXPECTED (1975-79)*



*actual to expected baseline = 100

For males, the overall tabular drops down to about 77% overall (Chart 6). This might show that since the male crude death rates at the older ages are up to twice as high as the females, maybe the males have a lot more room for improvement while the females may actually have been hitting a plateau or even a decrease for some reason. Again the actual-to-expected (A/E) for males is very similar to the A/E for females. There is a peak in the AIDS range. The males, however, haven't gone above 100% for the A/E, but the peaks and the valleys are all very similar to what the females are experiencing. The males are just showing more improvement than the females.

CHART 6
MALE ACTUAL (1985-89) TO EXPECTED (1975-79)*



* actual to expected baseline = 100

Chart 7 is a comparison of the last three studies. One was done in the early 1970s, one was done in the late 1970s and the most recent one was done in the late 1980s. It shows the average annual improvement or worsening in the crude death rates. The females really seem to be a mixed bag here. The light bar shows the change between the early 1970s and the late 1970s and the dark bar is the change between the late 1970s and the late 1980s. As you can see, women in their 20s to late 30s and early 40s show quite a difference. On the far right is the average for all of the female ages. Chart 8 is the companion graph for the males. The males seem to be a little more consistent. Over the past ten years they have generally improved more than they have between the early and the late 1970s. There is quite a peak in the younger age group that may be due to a big improvement in the accidental death rate. Looking at the ratio of the accidental death to total death between the last two studies, it appears that accidental deaths, as a percentage of the total deaths, have decreased by 40-50%. It was the same type of thing for the females as for the males. So I would say that there is a general improvement in the male mortality not attributable to just the improvement in the accidental death rate.

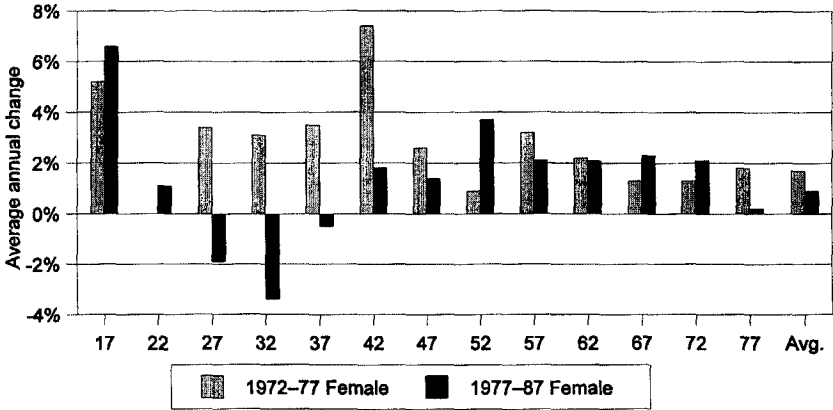
MR. DRENNAN: Despite this level of change in accidental deaths, there is an improvement.

MS. FULMER: Yes, in this case these are all improvements. The exception is if it's below zero, then it was an actual decrease. Chart 9 is a comparison of the average annual

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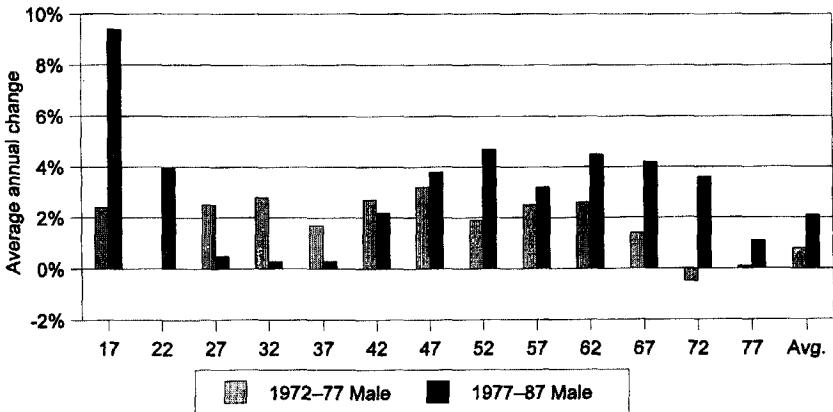
change in crude death rates over the past ten years between the males and females. Once again, the females and the males seem to share the same general patterns of ups and downs with more improvements in the older ages and in the 50s and then really minimal improvement or even worsening in the 20s and 30s.

**CHART 7
CHANGE IN FEMALE CRUDE DEATH RATES**



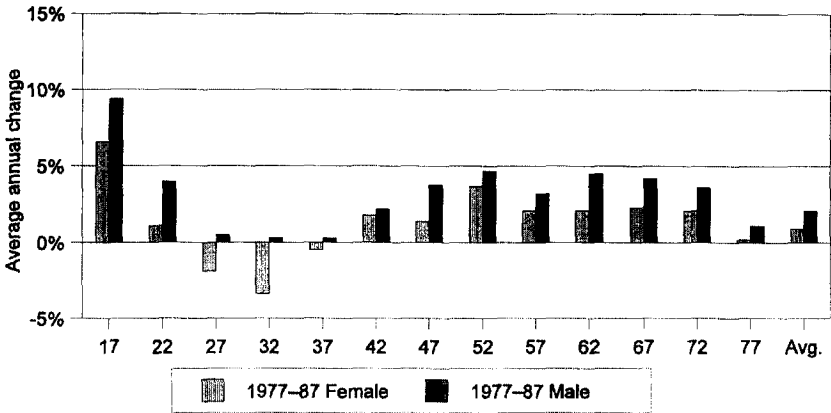
| | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | Avg. |
|----------------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1972-77 Female | 5.2% | -0.0% | 3.4% | 3.1% | 3.5% | 7.4% | 2.6% | 0.9% | 3.2% | 2.2% | 1.3% | 1.3% | 1.8% | 1.7% |
| 1977-87 Female | 6.6% | 1.1% | -1.9% | -3.4% | -0.5% | 1.8% | 1.4% | 3.7% | 2.1% | 2.1% | 2.3% | 2.1% | 0.2% | 0.9% |

**CHART 8
CHANGE IN MALE CRUDE DEATH RATES**



| | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | Avg. |
|--------------|------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|
| 1972-77 Male | 2.4% | -0.0% | 2.5% | 2.8% | 1.7% | 2.7% | 3.2% | 1.9% | 2.5% | 2.6% | 1.4% | -0.5% | 0.1% | 0.8% |
| 1977-87 Male | 9.4% | 4.0% | 0.5% | 0.3% | 0.3% | 2.2% | 3.8% | 4.7% | 3.2% | 4.5% | 4.2% | 3.6% | 1.1% | 2.1% |

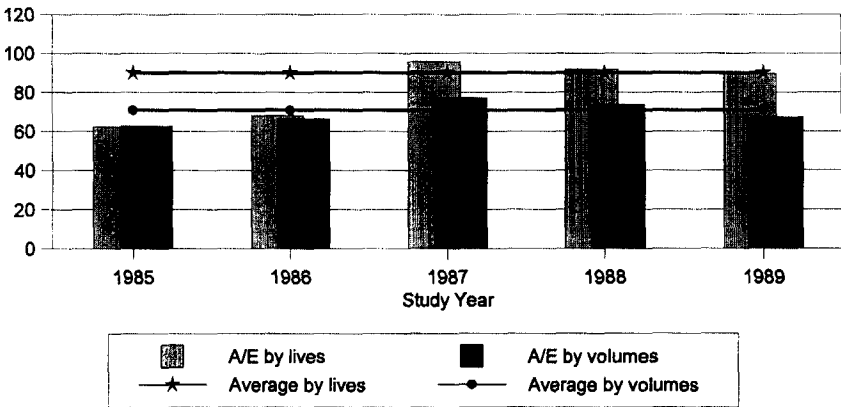
CHART 9
CHANGE IN CRUDE DEATH RATES 1975-79 VS. 1985-89



| | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | Avg. |
|----------------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1977-87 Female | 6.6% | 1.1% | -1.9% | -3.4% | -0.5% | 1.8% | 1.4% | 3.7% | 2.1% | 2.1% | 2.3% | 2.1% | 0.2% | 0.9% |
| 1977-87 Male | 9.4% | 4.0% | 0.5% | 0.3% | 0.3% | 2.2% | 3.8% | 4.7% | 3.2% | 4.5% | 4.2% | 3.6% | 1.1% | 2.1% |

Chart 10 shows the comparison, by years of the study, of the A/E by lives and the A/E by volume. It shows, once again, that the experience by volume is coming in better than by lives. This parallels some earlier Canadian studies. I have to caution you about the years 1985 and 1986. Each of those years made up about 8% each of the exposures in the study. So you might put a lot more emphasis on the general trend of improvements in actual to expected over the last three years, rather than what you're seeing in those first two years.

CHART 10
ACTUAL (1985-89) TO EXPECTED (1975-79)*



*actual to expected baseline = 100

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There was one more section of the report that compared actual to tabular for the standard industry codes. The graphs of that just got too busy. However, I did notice a couple of things. There are three industries where the actual-to-tabular by lives was much less than your actual to tabular for the volumes. So it appeared that there were some people out there who were very good at selecting against the insurance companies. These areas seem to be legal services, the apparel industry and social services. For legal services, the actual-to-tabular by lives was about 51% and by volume it was 62%. For apparel, it was 95% versus about 108%, and for social services, it was around 80% versus 107%.

MR. DRENNAN: Our next speaker is Dick McNeill from Northwestern National in Minneapolis. Dick is the vice president and CFO of the employee benefits division. He is responsible for Northwestern National's life, health and disability areas. Dick has been with Northwestern National for 26 years, 20 of which was in the group area. Dick will talk about the disability and the accidental death sections.

MR. RICHARD MCNEILL: As Jim said, I am going to talk about the disability data and also the accident data. On the disability data, the committee really had concerns as to what they were dealing with. You saw from one of Jim's charts and you'll see from mine, the actual-to-expected ratios on the disability were really low. In the case of number of lives, it came out at 36%. Looking at it by amount, it came out at 40%. This is a dramatic difference from the 1975 to 1979 study. In terms of the companies that contributed data to the disability part of the study, the A/E ratio ranged from 8% to 96%. There were a number of companies that were down very, very low. There were three companies that contributed about 75% of the data for the disability. I guess one thing to keep in mind as we go through this, because there is a question about the overall validity of the data on the disability, is that there were only 3,300 claims on the disability side. On the death side, it was almost 100,000. It was 99,000, so disability is only contributing about 3% to the total. When I get into accident, there was about 4,700 claims in the accident side, so there was a little over 4% there. The disability may be questionable, but it is a relatively small part of the total.

The disability data was basically split into eight provisional categories. Of these eight, the first one had no provision for disability. The second one was a continuation of the premium, and as Jim mentioned earlier, both of those were not in the earlier 1975-79 study. Then there was a category for total and permanent disability (TPD), for the payment of the face amount, either in a lump sum or an installment, as long as it was total and permanent disability. The fourth one was a one-year extended death benefit. The next two are similar. The fifth one is an age-60 waiver. In other words, the person is disabled before age 60 and the benefit continues to 65 or beyond. The sixth is an age-65 waiver. In other words, the person becomes disabled before 65 and the benefit continues to 65 or beyond. The seventh category was where there was a mixture of the previous six categories. The final is for other forms of disability not already listed. In order to limit the number of different tables of data, the no provision for disability and the one-year extension were combined as were the age-60 and age-65 waiver. The continued payment of the premium was left in its own separate category, and the other three were combined.

Now we are going to look at the disability experience in various forms. Naturally, there are all sorts of different combinations you could pick out. But I just picked out a few things to peak your interest for when the actual report comes out. In looking at the actual to expected by year in Table 2, there is very little information for 1985, 1986 and 1987;

most of it was for 1988 and 1989. There were very low actual-to-expected ratios for the first three years. The last two years had higher ratios. If there is a trend that is showing better experience now than in the 1975-79 period, you would expect to see this data flipped. So that is certainly one question in terms of what kind of pattern exists.

The disability experience by group size was broken down into three categories (Table 3). For the groups with up to 500 lives, the actual-to-expected ratios were extremely low, ranging from 12% to 33%. The 500 through 5,000 life groups had experience similar to the 1975-79 study with 80% and 113% A/E ratios. The ratio drops back down to 29% for 5,000 or more. Now being good actuaries, we can all come up with reasons why the data make sense when we have to explain various things. The reasons for this particular pattern, however, are just not intuitively obvious to me.

TABLE 2
DISABILITY
ACTUAL TO EXPECTED BY YEAR*
(BY NUMBER OF LIVES)

| Year | Claims | A/E |
|------|--------|-----|
| 1985 | 134 | 14 |
| 1986 | 144 | 14 |
| 1987 | 184 | 17 |
| 1988 | 1,214 | 49 |
| 1989 | 1,691 | 45 |
| | 3,367 | 36 |

*Expected based on the actual experience of the 1975-79 study

TABLE 3
DISABILITY
ACTUAL TO EXPECTED BY GROUP SIZE*
(BY NUMBER OF LIVES)

| Group size | Number of groups | Claims | A/E |
|--------------------|------------------|--------|-----|
| Less than 10 lives | 33,058 | 20 | 14 |
| 10-24 lives | 18,974 | 38 | 13 |
| 25-49 lives | 12,828 | 32 | 12 |
| 50-99 lives | 71,946 | 302 | 12 |
| 100-249 lives | 16,722 | 233 | 16 |
| 250-499 lives | 2,650 | 203 | 33 |
| 500-999 lives | 2,257 | 494 | 80 |
| 1,000-4,999 lives | 1,913 | 1,454 | 113 |
| 5,000 or more | 152 | 591 | 29 |
| | 160,500 | 3,367 | 36 |

*Expected based on the actual experience of the 1975-79 study

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Table 4 looks at the actual to expected by age. Here the A/E ratios start out high and decrease. There are a very limited number of claims at the younger ages. The decrease is fairly uniform as you move through the ages. The result is an extremely low A/E ratio for the older ages. The "overall" for this analysis happens to be for ages 0 through 65. This produces an A/E ratio of 21%, rather than the overall total of 36%. Somebody earlier asked why the committee was questioning these results. I'm sure they were very concerned and nervous about the reasons behind the dramatic differences they were seeing. I just got the report a week ago. I did not go back and look at the 1975-79 report, but that would be where you would start when you begin using this data and working with them. Just comparing the actual claim rates from the 1975-79 study to the 1985-89 study, you can see dramatic differences, particularly as you move out to the older ages (Chart 11).

TABLE 4
DISABILITY
ACTUAL TO EXPECTED BY AGE*
(BY NUMBER OF LIVES)

| Age | Claims | A/E |
|-------|--------|-----|
| 17 | 3 | 117 |
| 22 | 34 | 61 |
| 27 | 59 | 53 |
| 32 | 99 | 45 |
| 37 | 140 | 43 |
| 42 | 134 | 26 |
| 47 | 206 | 28 |
| 52 | 273 | 25 |
| 57 | 396 | 19 |
| 62 | 215 | 10 |
| 17-62 | 1,559 | 21 |

*Expected based on the actual experience of the 1975-79 study

Now for the accident side. You will see in Table 5 that the numbers seem to make more sense. It shows improvement in a range that you might expect to see. First, just looking at it by year, there's a little more exposure and claims in 1985, 1986 and 1987 than what we had in the disability side. But again, a lot more of the exposure comes in the later years of 1988 and 1989. There's somewhat lower actual to expected in 1985 and 1986 and then it jumps up for the past three years. Again, this is sort of counterintuitive. If experience is improving, you would think you would see a decreasing actual to expected as you move through the years. So it does not particularly make sense. Up until now we have been looking at experience by lives.

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CHART 11
DISABILITY
AGE 60 AND 65 WAIVER CONTINUANCE

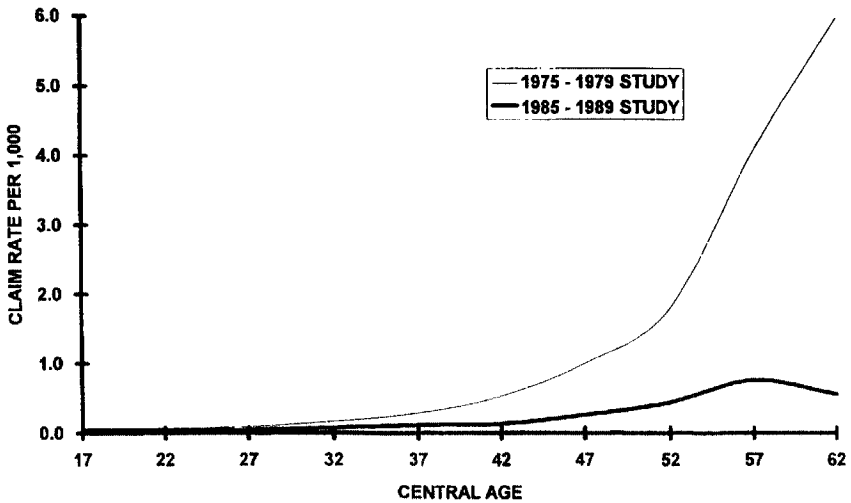


TABLE 5
ACCIDENT
ACTUAL TO EXPECTED BY YEAR*
(BY NUMBER OF LIVES)

| Year | Exposure | Claims | A/E |
|------|------------|--------|-----|
| 1985 | 1,505,731 | 268 | 56 |
| 1986 | 1,457,600 | 270 | 58 |
| 1987 | 4,293,705 | 1,273 | 98 |
| 1988 | 4,682,547 | 1,234 | 86 |
| 1989 | 7,125,135 | 1,713 | 76 |
| | 19,064,718 | 4,758 | 80 |

*Expected based on the actual experience of the 1975-79 study

When we look at accident by amount, we see the overall actual to expected 77% (Table 6). It was 80% by number of lives. So there's a little lower A/E by amount. The exposure is dominated by the single employer business and then the other and unknown category. A significant amount of the other is probably employer business as well. But those two categories dominate the exposure. The single employer actual to expected is fairly low at 60%. The other category with a significant amount of claims is the union business which had an A/E of 234%.

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TABLE 6
ACCIDENT
ACTUAL TO EXPECTED BY TYPE OF GROUP*
(BY AMOUNT IN \$1,000,000)

| Type of group | Exposure | Claims | A/E |
|--------------------------|-----------|-----------|-----|
| Single Employer | \$285,462 | \$45.736 | 60 |
| Union | 41,184 | 20.585 | 234 |
| Taft-Hartley | 1,134 | 0.517 | 329 |
| MET | 23,722 | 3.300 | 64 |
| Professional Association | 9,929 | 3.492 | 98 |
| Mass Marketed | 11,073 | 2.543 | 80 |
| Other/unknown | 225,752 | 53.757 | 75 |
| | \$598,256 | \$129.930 | 77 |

*Expected based on the actual experience of the 1975-79 study

Looking at the accident experience by group size, with the same break out as for the disability benefits, we see a more mixed pattern exists than the one seen for the disability experience (Table 7). In general, below 500 lives, the actual-to-expected ratios are very good and fairly low. They increase for groups with over 500 lives. A little higher actual to expected occurs as you move up to the larger size employer groups. A significant amount of the exposure comes from this last category. In total, I think the committee felt that an 80% actual-to-expected ratio was a reasonable drop and reflective of what the companies felt they had seen in their accident experience. I think many of you, working with the categories with large enough exposure sizes, can probably use some of this data and find it very helpful.

TABLE 7
ACCIDENT
ACTUAL TO EXPECTED BY GROUP SIZE*
(BY NUMBER OF LIVES)

| Group size | Number of groups | Exposure | Claims | A/E |
|--------------------|------------------|------------|--------|-----|
| Less than 10 lives | 33,058 | 200,227 | 50 | 59 |
| 10-24 lives | 18,974 | 396,027 | 123 | 75 |
| 25-49 lives | 12,828 | 453,113 | 112 | 59 |
| 50-99 lives | 71,946 | 4,466,910 | 1,072 | 61 |
| 100-249 lives | 16,722 | 2,195,252 | 393 | 45 |
| 250-499 lives | 2,650 | 922,143 | 170 | 52 |
| 500-999 lives | 2,257 | 1,131,759 | 300 | 79 |
| 1,000-4,999 lives | 1,913 | 2,563,830 | 641 | 84 |
| 5,000 or more | 152 | 6,735,458 | 1,897 | 137 |
| | 160,500 | 19,064,719 | 4,758 | 80 |

*Expected based on the actual experience of the 1975-79 study

The exposure gets a little lower in the accident experience by age. (See Table 8.) However there are still more than 3,500 claims and almost 16 million lives. And on this, the actual to expected, is a little bit better than what it was in total at 74%. The results are also somewhat mixed. Under the age of 35, the actual-to-expected ratios are fairly low. They increase from the ages of 35 on through 65.

Let's look at the claim rates per thousand. You can see much flatter claim rates in the most recent study compared to the prior study (Chart 12). The prior study had significantly higher accident death rates than what the current study is showing. When you get to the older ages, the two come very close to the same level with the 55-59 age group in the more recent study actually being higher. The accident rates we're looking at here are the rates for policies that also have disability coverage with waiver of premium benefits of either waiver age 60 or waiver age 65.

TABLE 8
ACCIDENT
ACTUAL TO EXPECTED BY AGE*
(BY NUMBER OF LIVES)

| Age | Exposure | Claims | A/E |
|-------|------------|--------|-----|
| 17 | 107,064 | 23 | 25 |
| 22 | 1,246,110 | 278 | 38 |
| 27 | 2,266,444 | 447 | 55 |
| 32 | 2,418,126 | 516 | 67 |
| 37 | 2,348,991 | 528 | 88 |
| 42 | 2,141,916 | 436 | 95 |
| 47 | 1,747,348 | 376 | 88 |
| 52 | 1,395,491 | 285 | 91 |
| 57 | 1,235,255 | 387 | 132 |
| 62 | 1,043,290 | 312 | 99 |
| 17-62 | 15,950,035 | 3,588 | 74 |

*Expected based on the actual experience of the 1975-79 study

Looking at the accident claim rates when the WOP category is of either the no-disability benefit or the one-year-extension benefit, you see a little different pattern (See Chart 13). The 1985-89 study claim rates are slightly higher than the 1975-79 study rates. Over the age of 30, the claim rates are not as flat either. You see a very different kind of pattern. As you start breaking down the data into more and more categories, you must use caution. The exposures begin to become fairly small. When you start to break it up really fine, you're looking at a single age group and you're looking at a certain disability provision combined with the accident. But the data will allow you to look at it in many different ways. I did not break up the data by male and female, but, that is possible. Also, there are

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categories for various industries. But the exposure gets to be fairly small when you start breaking up the data in that much detail.

CHART 12
ACCIDENT
AGE 60 AND 65 WAIVER CONTINUANCE

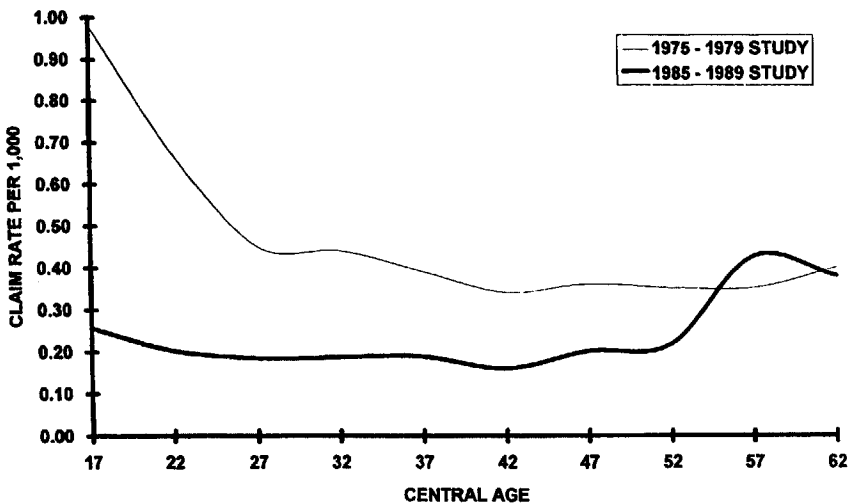
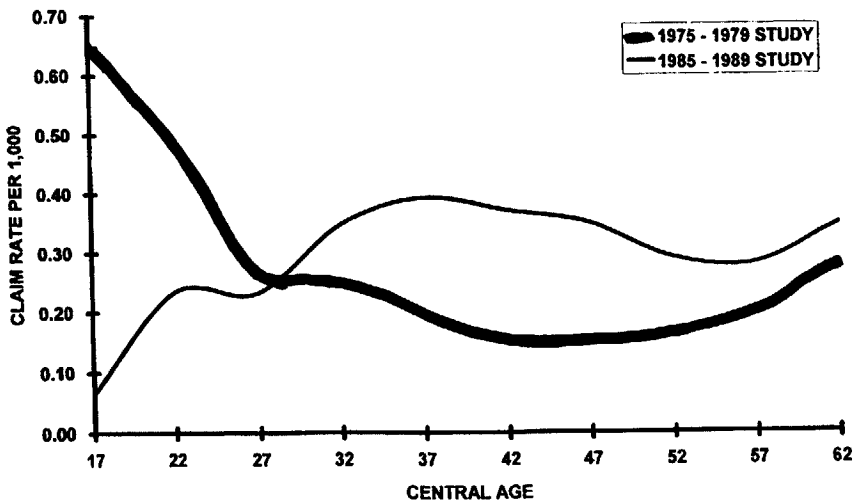


CHART 13
ACCIDENT
NO DISABILITY BENEFIT AND 1-YEAR EXTENSION



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Hopefully, the report we have all been waiting for will be coming out soon. I think you will find that certainly on the disability side, you need to use some caution.

FROM THE FLOOR: I just want to know if there was also a breakdown of experience by anything other than basic coverage?

MR. DRENNAN: No, I do not think there was.

MR. WILLIAM L. BROWN: I am from Fortis Benefits. I just want to comment on the disability experience. We submitted experience for this study. Lag times on the disability claims are very long and the deadlines for submitting the data were close enough to the end of the incurral years that you would expect to see these kind of low disability numbers. It's probably no exaggeration to say that we may still be getting disability claims from this experience period. So you have data, that is not quite worthless, but should be used with extreme caution.

MR. MCNEILL: So you're saying that we really do not have the complete run out.

MR. BROWN: No and the run outs you see are probably very consistent for the time period used for submitting data. The time period was too short for submitting data.

FROM THE FLOOR: I know you did not identify the companies and in fact went to some length to make sure that the companies' loss ratios and their amount of data were mixed. Do you know whether the outliers were the ones that had the smallest amount of data?

MR. MCNEILL: I do not know. The data I received was exactly the way I presented it. In one table it was alphabetical and in the other one it was numerical. I could look at the two and knew that they were not in the same order because those that had no disability were not in the same spot. But I do not know which spot the others were in.

FROM THE FLOOR: Another question, if I may? When my company submitted data to this, we use it to examine our pricing and one of the things that we did was change our assumption on female versus male mortality. We had been using 50% before we submitted the data and 60% after. What is the overall result going to show as far as female-to-male mortality?

MS. FULMER: Okay, for the actual to expected on the females, I think there were 90%.

FROM THE FLOOR: Well you mentioned it was 90% and 70%, but what was the ratio in the base table, which I guess would be another way of asking the same question.

MS. FULMER: Are you saying the accrued death rate?

FROM THE FLOOR: Yes.

MR. DRENNAN: We would probably be willing to let you have a quick peak at the report at the end of the session. Let's go ahead to the next question.

MR. GARY D. MCDONALD: I am with United Insurance Company of America. One of the things that I noted there as you were showing the breakdown of the exposure data by

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type of group was that the 1985–89 data showed about 40% being employer groups, versus about 85% of the data in the 1975–79 study, which is quite a dramatic difference. The other category that really showed a difference that was 35% in the 1985–89 category was labeled as other, which was almost a nonexistent category earlier. I think it would be important to identify what was in that other category because that might contribute some of the differences in some of the ratios that are showing up.

MR. MCNEILL: That's a good point, and we'll pass that along to the committee. They may have follow-up responses.

MR. GARY A. S. AHWAH: I am from Guardian Life. Did you do any analysis by selection period to get a sense of after what period of time selection wears off? Would active at work, or anything like that contribute?

MR. DRENNAN: I don't believe there was anything in the information I saw that would get at that.

MR. RODNEY ROYCE BROWN: I am from Principal Mutual. You showed the results by industry. Were there any industries that were worse or better in regard to actual to expected as compared to the previous study?

MS. FULMER: No, I did not note any.

