LONG-TERM CARE (LTC) DATA FROM INTERCOMPANY STUDY

Moderator:	MARK D. NEWTON
Panelist:	LINDA C. BALL
Recorder:	MARK D. NEWTON

Subcommittee members will present key findings of a 10-company intercompany study and status of a 20-company intercompany study under way.

MR. MARK D. NEWTON: Linda Ball, my panelist, and I were members of the committee that did the experience work on this intercompany study.

We'll talk about the background of the report. We'll talk about incidence, specifically. We'll also talk about continuance, claims, and home care. The next study coming up and the data that we need to get that going will also be covered.

There are many thank-you's that go out with this report. The other members of the committee were Greg Van Slyke from Aetna, and our fearless leader was Gary Corliss from Duncanson & Holt. I'd also like to acknowledge some technical help from Jim Robertson of Coopers & Lybrand in Milwaukee and Frank Knorr from Duncanson & Holt. They contributed to the technical parts of the study and helped us design the actuarial parts and get them correct. I also thank John Avery, Leo DiAngelo, and Bill McDonald from the Center for Medico-Actuarial Statistics at Medical Information Bureau near Boston.

How do you get the study? It's published in the *TSA 1993–94 Reports* (pp. 43–122).

There were ten insurers that contributed data from 1984 through December 1991. We followed claims incurred during that entire span of time through their termination or through June 30, 1992. We looked at the claims past the end of 1991 so we could catch as much incurred but not reported (IBNR) claims as was possible at the time we were working on the study.

There are different sections to the report. There are sections on morbidity, claim characteristics, persistency, and home care. Each of those sections is self-contained in the report. You may find some of them more interesting than others. Certainly some are more complete in terms of data than other ones are.

The results are broken down in a variety of ways. Wherever possible, we tried to break things down by attained age and elimination period. The reason for that is if you start mixing up or aggregating data in lots of different categories, you tend to get something that's meaningless in the end. Results are broken down separately by sex, issue age, policy duration, and issue year.

We looked at records for more than 850,000 insureds. Ninety-nine percent of the claim experience came from individual and underwritten business. Only 1% of the claims or records that we have came from employer experience, although that should largely be fixed in the next study when we expect to get quite a bit more employer experience.

Let's just take a brief look at the exposure distribution. Chart 1 details the exposure by age and sex. The largest exposures are in the 60s and 70s, as one might expect. The male exposure in the 60 age group is about 150,000 and the female exposure is 250,000. Male exposure in the 70s is about 110,000 and female exposure is approximately 180,000.

CHART 1
EXPOSURE BY AGE AND SEX
LONG-TERM CARE INTERCOMPANY STUDY
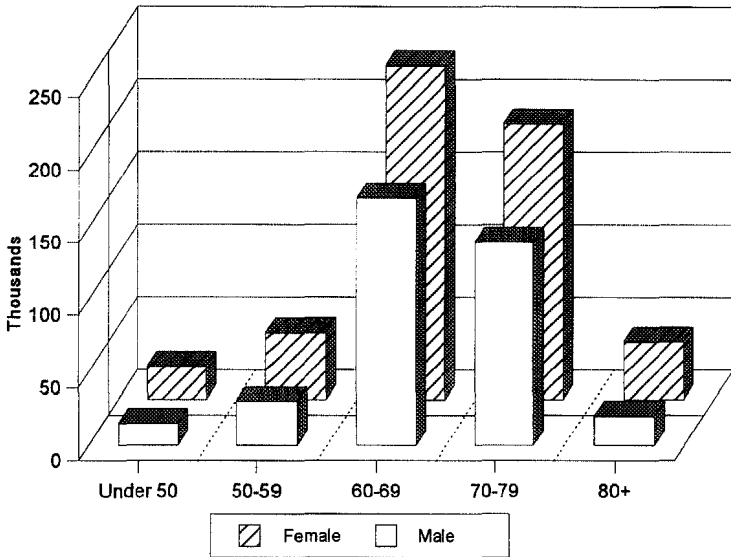
We also broke the exposure down by elimination period. Table 1 shows the exposure in elimination period groups. There were several elimination periods offered by the participating carriers; anywhere from a zero-day elimination period to a 150-day elimination period. But generally they broke down into a few categories which we have grouped. The zero-day elimination period is a category by itself. That was about 24% of our exposures. The second group is the category of 15-, 20-, and 30-day elimination periods. Most of the exposure in this group was in the 20-day elimination period group (33%). The last group comprises elimination periods from 60 days to 150 days. Generally these consisted of 90-day or 100-day elimination periods and you can see that 41% of the exposure was in that group.

Most of the data had small daily benefits. Sixty percent of all the exposures were in the $50–69-a-day range. Another 20% were in the $70–89 range, 15% were at $100, and the rest were distributed over all the other daily benefit ranges.

Data is broken down by issue year in Chart 2. LTC really started to take off in the late 1980s, and our exposures from our ten carriers show this. Largest exposures began in 1987.

LTC DATA FROM INTERCOMPANY STUDY

TABLE 1
EXPOSURE BY ELIMINATION PERIOD

Elimination Period in Days	000's of Policies	Percentage of Total
0	199	24%
15	0	
20	259	33%
30	14	
60	7	
90	150	41%
100	178	
150	4	
N/A	18	
All	829	

CHART 2
EXPOSURE BY ISSUE YEAR
LONG-TERM CARE INTERCOMPANY STUDY
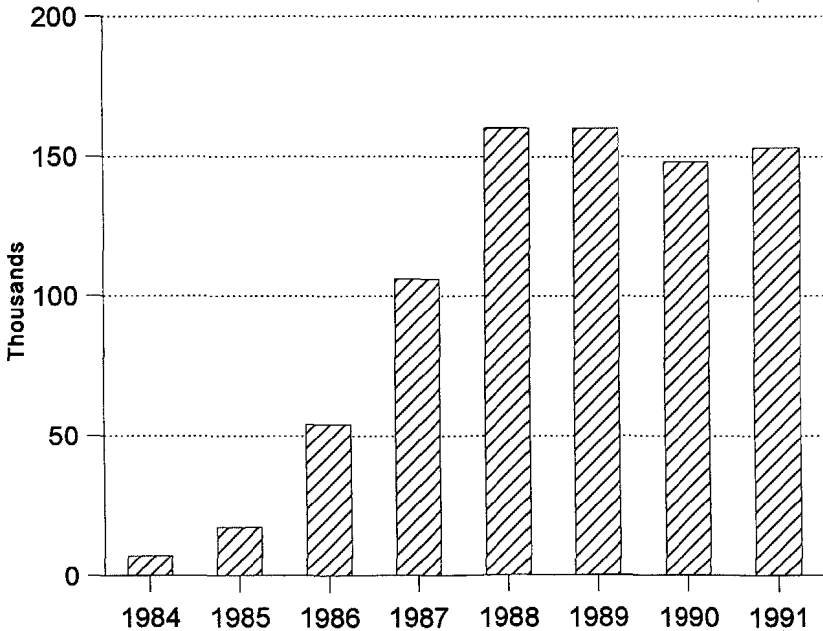
From 1988 through 1991 issue-year exposures are 150,000–170,000 each year (for the 10 participating carriers). Many of the carriers added in the next study will give us data going back to 1984 or as far as possible. We'll try to add those exposure years into the next study.

We looked at almost 14,000 claims during this time period. We looked at institutional care and separated it from home care. For institutional care we looked at 3.9 million days of care in nursing homes and benefits paid of almost $200 million. For home care we looked at 83,000 home care visits and benefits paid of about $2 million. Home care numbers are small numbers but we expect to add to those greatly in the next study.

Let's talk about some of the conclusions that we reached. Claim incidence rates rise steeply by attained age. Lapse rates generally decreased as duration increased. The average number of home care visits each week was about 3.5. So, people are having home care about every other day. Males need special care at home more often and longer than females; something which probably applies whether you're old enough for LTC or not.

We found some unexpected things, too. Male and female incidence rates, durations of claim, and persistency were actually quite similar. The issue ages and attained ages and the male and female incidence rates are almost the same. Sometimes male incidence rates are greater and sometimes females' are greater. Claim continuance increases as the age of the claimant increases. Only 17% of the claims that we know are closed were ended by death. Virtually all of the rest of these were recoveries.

Claim incidence rates have fallen as the issue year increases. This has got to be good news to all insurers who are writing LTC these days. In the early years of issue, let's say 1986–87, the claim incidence was higher, and, as you get closer to the present time, the claim incidence decreases. This is even true when you look at similar durations. So, it's not because the new claims were underwritten more recently.

Over a period of the first five durations, the claim incidence rates appear to peak and then start falling in durations four and five. This probably masks some of the underlying problems we had when putting the study together. First, the claims may be underreported because we don't know about all the IBNR claims. That would tend to reduce the incidence rates in the latest durations. Second, the exposure formulas are such that if you make it into any duration, let's say your duration is two-and-a-quarter years, that actually counts as three durations in the exposure formulas. That would tend to underestimate the incidence rates at later durations. So be careful when you look at that.

Persistency improved over time. Maybe we're doing a better job at keeping people and their policies together, or maybe it's just a function of LTC being more accepted in the marketplace. Maybe there are other reasons. But as insurers are gathering experience with their LTC policies, more and more people are keeping their policies.

Company-by-company lapse and morbidity rates vary greatly. The differences are quite striking. Incidence rates for the zero-day elimination period are 85% or 95% of the admission rates of the general population as reported in the 1985 National Nursing Home Survey. Continuance rates on claims are 25% higher and more than the 1985 survey. Alzheimer's and nervous system claims are the most frequent and the most costly by a wide margin. Cancer and injury claims are frequent but inexpensive.

Incidence rates by sex are shown in Chart 3. Male and female incidence rates are strikingly similar at all the attained-age ranges. The incidence rates increase rapidly by attained age, of course. The ratios of female-to-male incidence rates by age vary from a low of 90% to a

high of about 115%. These ratios bounce around by issue-age group so no trend by age is apparent.

CHART 3
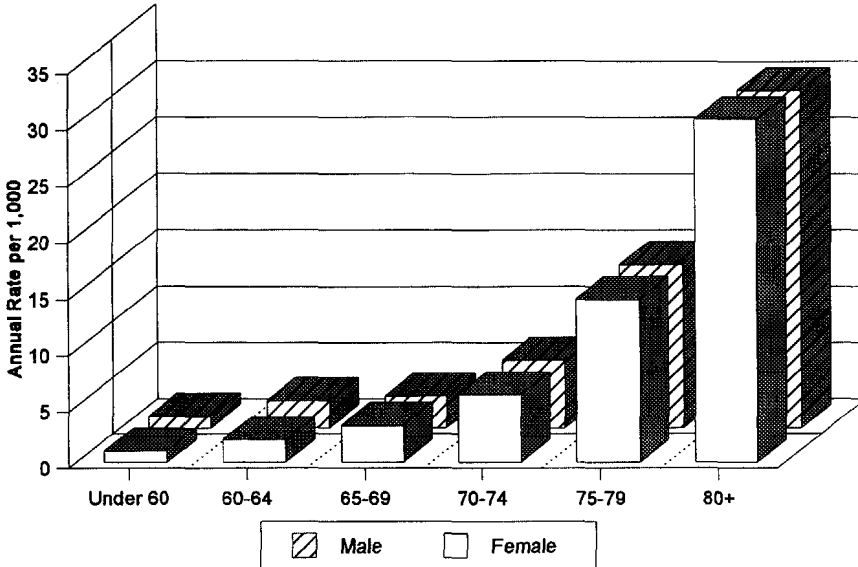INCIDENCE RATES BY SEX
LONG-TERM CARE INTERCOMPANY STUDY

Chart 4 shows incidence rates by attained-age and elimination-period category. Zero-day elimination period incidence rates go from a low of 0.84 per thousand to a high of 98 per thousand at ages 85+. Incidence rates for the 60–150-day category go from a low of 0.3 claims per thousand to 16 claims per thousand at age 85+. Sometimes the incidence rates across elimination periods fluctuate, meaning that you might see a 60–150-day incidence rate at a particular attained age become bigger than the 15–30-day incidence rate at the same age. Largely that's due to sparse data. Please be careful when you're using some of the exhibits in the study.

Chart 5 shows the ratio of the highest to lowest incidence rates between companies. Incidence rates vary widely and not because of the distribution of business by company. I looked at the incidence rates by elimination period and attained age, and took out all the companies that really had insufficient data. That left me with three or four companies in each of the elimination period and attained-age categories. Almost without exception, one company always has all the high incidence rates and another has all the low. This may be due to different underwriting standards among the companies.

CHART 4
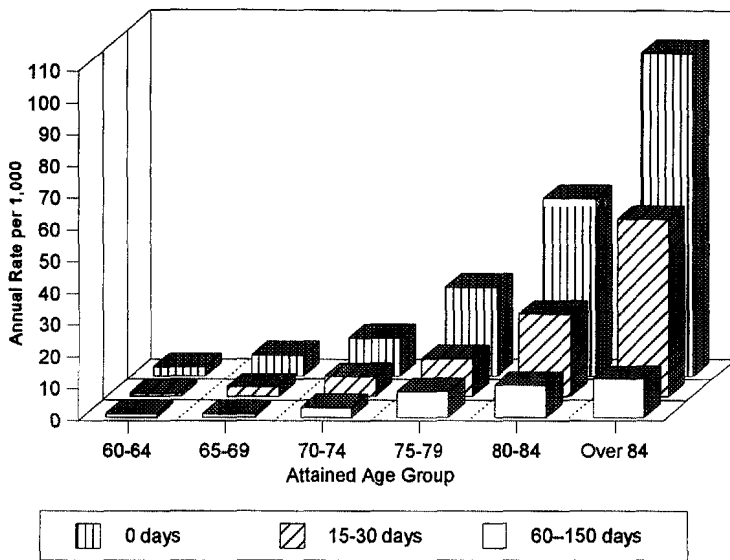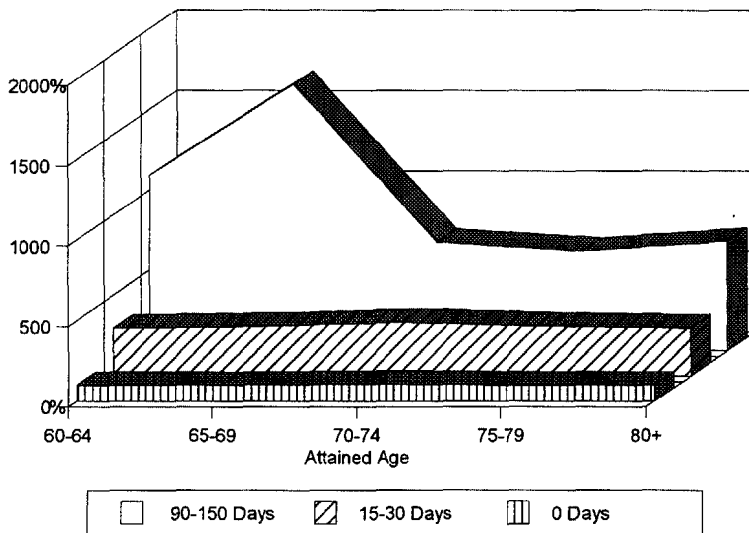INCIDENCE RATE BY ATTAINED AGE
LONG-TERM CARE INTERCOMPANY STUDY

CHART 5
RATIO HIGH/LOW INCIDENCE RATES BY COMPANY
LONG-TERM CARE INTERCOMPANY STUDY

Chart 6 shows incidence rates by issue year and duration (in months). Looking at this chart you can compare the incidence rates at the same duration across issue years. Incidence rates are decreasing. In 1986, the incidence rate is about ten per thousand for the first duration, and it's about four per thousand for the 1989 issues. So, the incidence rates by issue year appear to be getting better and better all the time. I haven't finished this chart out one more duration, but it appears that the trend is also continuing for the next year's data as well. Companies are doing better underwriting. Or perhaps LTC is becoming much more accepted in the market and we're getting a better class of risks than when LTC was in its infancy. There may be other reasons as well which you can speculate on.

CHART 6
INCIDENCE RATES BY ISSUE YEAR
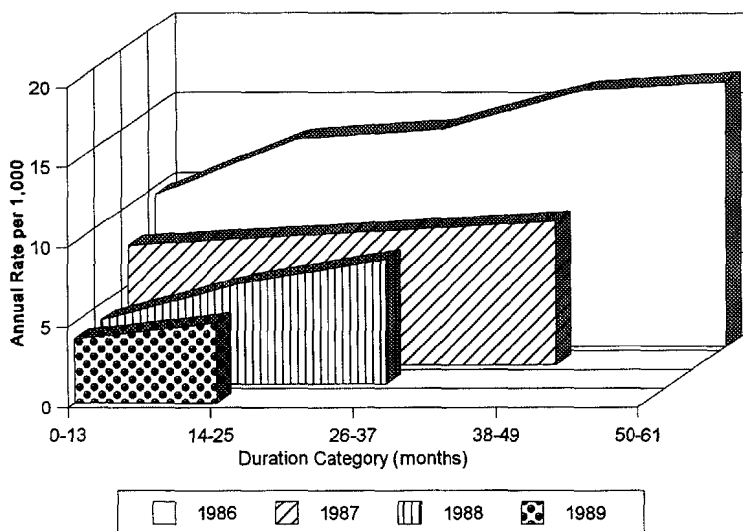LONG-TERM CARE INTERCOMPANY STUDY

Chart 7 shows incidence rates by duration and attained-age group. In the third duration the incidence rates appear to peak and then drop off in durations four and five. Some of this is due to underreporting of claims, and some of it is due to the exposure formula itself. The exposure formula is detailed in the study. Look at that and make your own judgment about how that might affect the rates here. As the committee collects another year's worth of data, we'll update this chart to try to understand whether this phenomena of incidence rates rising and then decreasing is real or a temporary part of the data.

Chart 8 shows select factors by attained age. I ignored durations four and five in order to look at durations one, two, and three specifically. Duration three incidence rates are normalized to 100%, and the incidence rates for durations one and two are compared to the third duration incidence rates. This shows a select curve. The lowest point on the chart is 70% and the highest point is 110%. The select factors appear to vary by age in this chart.

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CHART 7
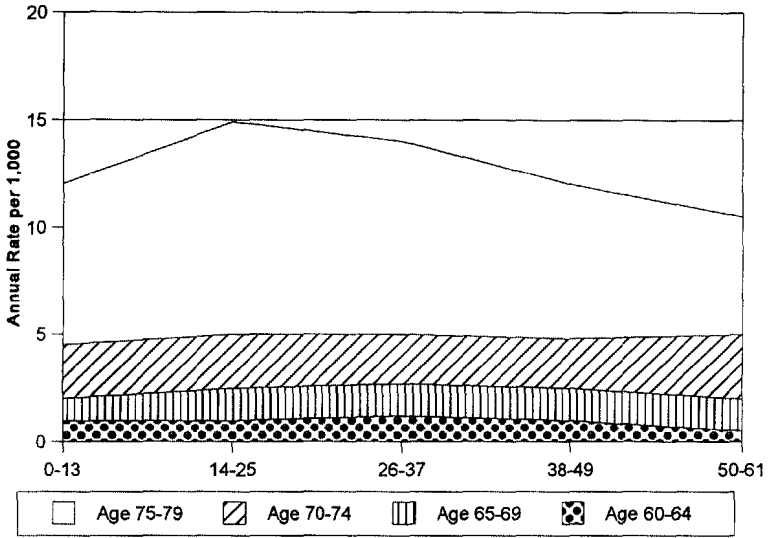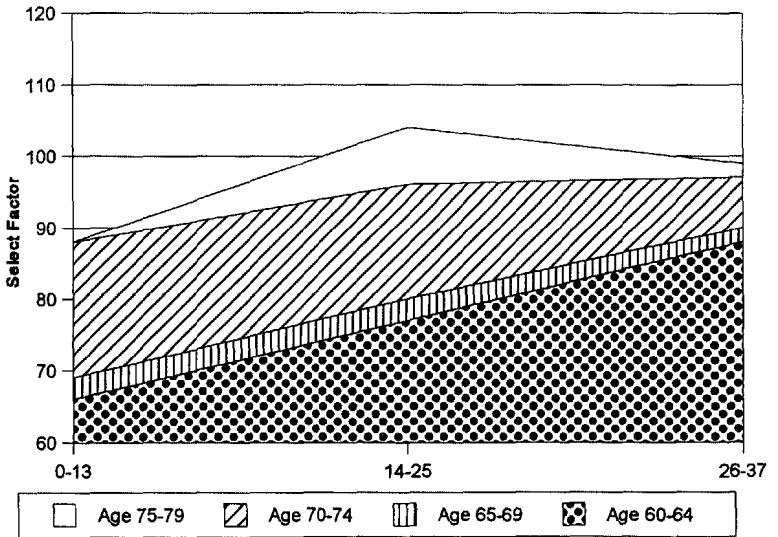INCIDENCE RATES BY DURATION IN MONTHS
LONG-TERM CARE INTERCOMPANY STUDY

CHART 8
SELECT FACTORS BY ATTAINED AGE
LONG-TERM CARE INTERCOMPANY STUDY
DURATION BY MONTHS

Chart 9 looks at claim continuance by sex. The chart covers roughly a five-year period on claim. The chart is based on days from the end of the elimination period, not the days from the incurral date. The chart is also broken up into pieces. The curve on the top left, which basically looks like a straight line, is days 1–20. Then it runs from 25 through 150 days in five-day increments and finally from 150 to 1,800 days in 30-day increments. That's why it looks like there are three distinct sections of a curve. The data in the actual study is listed in single-day increments if you want it in that level of detail. This chart just shortens the view so you look at 5- or 30-day increments when termination rates are small.

CHART 9
CONTINUANCE BY SEX
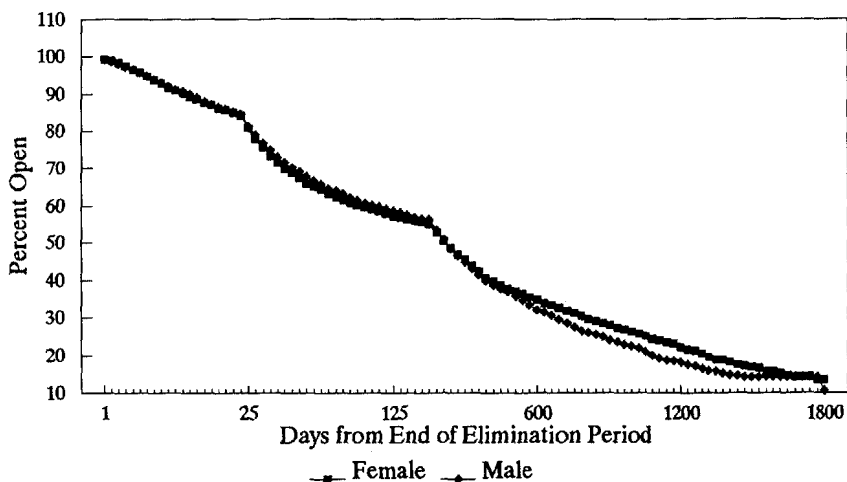
Continuance by sex is not that different. The curves are close together for most of the days. Who's staying longer tends to vary. Males seem to stay longer in the early durations, and females stay longer in the later durations.

Chart 10 shows continuance by age. This shows that the older the claimant is, the longer that claimant can be expected to stay out on claim.

Chart 11 looks at continuance by elimination period category. All groups start out 100% open. Each curve is broken into three sections again. The first section is for the period 0–20 days. The middle section is 20–150 days in five-day increments. And the third section is 150 days to two years in 30-day increments. The three curves look as they should. Because each of the curves is the percentage of open claims from the end of the elimination period, you would expect someone in the 60–150-day elimination period group, who has already been on claim for perhaps, 100 days at the beginning of this curve, to persist longer. This is represented by the curve at the top. The curve in the middle is the

15–30-day group and the bottom curve is the zero-day group. All curves measure persistency from the end of the elimination period.

CHART 10
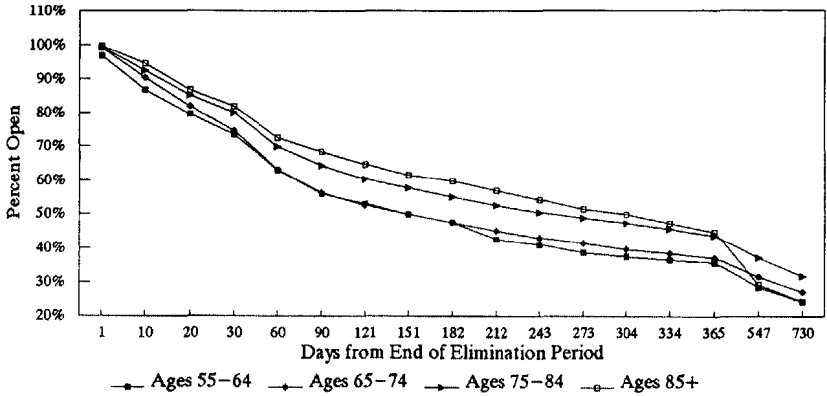### CONTINUANCE BY AGE
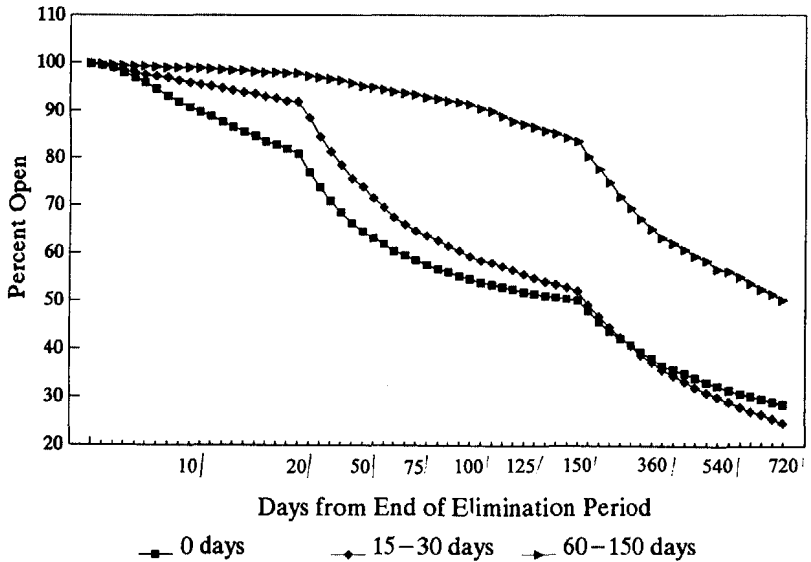### LONG-TERM CARE INTERCOMPANY STUDY

Days from End of Elimination Period

Ages 55–64   Ages 65–74   Ages 75–84   Ages 85+

CHART 11
CONTINUANCE BY ELIMINATION PERIOD CATEGORY

Days from End of Elimination Period

0 days   15–30 days   60–150 days

Chart 12 shows continuance curves beginning at the date of incurral. This chart covers the period from one day to roughly two years. There are actually three curves here. One curve is the zero-day curve and it covers the period from 1 to 20 days on claim. The second curve picks up at 20 days and shows how the 15–30-day elimination period group runs off. The third curve picks up 100 days later. It shows how the 60–150-day group runs off. Interestingly, the zero-day group and the 60–150-day group run off similarly. The 15–30-day group has a little better experience. The data gets somewhat sparse after 150 days. When we pick up new data from the next study, we should learn much more about the continuance curves for different kinds of claimants and different elimination periods.

CHART 12
CONTINUANCE CURVES
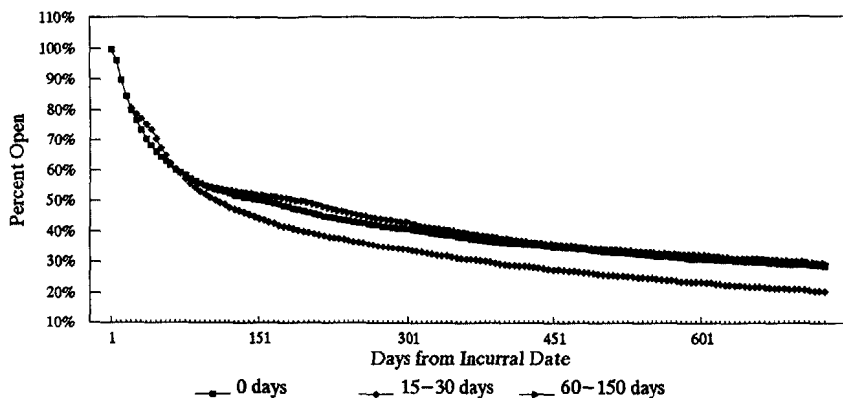
FROM THE FLOOR: You said before that continuance increases by age, and that wasn't an unexpected result to you. I would think old people tend to die faster and have higher mortality. So they should go off claim earlier than a younger claimant. Why do you expect that continuance should increase by age?

MR. NEWTON: I was surprised that so few claims ended in death. There are two ways to end a claim (other than reaching the end of the benefit period). One is death, and the other is recovery. But only 17% of the claims reported closed were closed by death. That was a surprise. If you start on claim when you're 85 years old, and you're in a nursing home, you have some serious problems, so your claim is not likely to recover. Recoveries generally come from people who go into a nursing home or get home care at much younger entry ages.

Many companies couldn't tell us whether a claim was open or closed. Because of this, much of the data behind these continuance curves reflects our judgment as to whether a claim should be coded open or closed. To determine that, we looked at the last date for which information was submitted on a particular claim. Sometimes we knew about a claim up until, let's say, September 1991 but hadn't heard anything for the next nine months. We ended up assuming that kind of claim was probably closed (although we didn't know why). Maybe the reason was because of a death or maybe not. We selected 180 days as a reasonable interval for defining the time period after which we would close a claim if no data was available. So, if we had no data for an open or an unknown status for the last 180 days, it was presumed to be closed. If the last data available was within 180 days, it was coded open. This is a fairly big assumption because a large percentage of the claim data that goes into these continuance curves was open or unknown.

Not many of the claims ended due to the end of the benefit period. Most of the people terminating claims were labelled recovered, dead, still open, or unknown. A minority of claims ended due to the end of the benefit period.

Companies apparently lose track of what happened with their claims and we were unsure about what to do about that. When 50% or 60% of your claims are labelled open or unknown, you have to make judgments about the data because you can't go back to the companies with questions about that many claimants. What we'd like to do next time around is really go back and look at this original bunch on whom, hopefully, more data will be submitted. Also we don't want to have a new group of these unknown people coming in. That should improve our results and improve the quality of the claim statistics that we have.

The study details the formulas and coding practices we used. The technical appendix section explains how the 180-day interval worked to separate open and closed claims. It also explains how these continuance tables were built by separating open and closed claims. It's an interesting formula that would be useful for those who really want to look into the data.

Ninety-nine percent of the data is based on individually insured policies, and most of them were underwritten. Many of the exposures and claims were from people who were recently underwritten, and that might taint the results for your purposes. Be careful when applying this data to employer-based plans.

We have quite a bit more female experience than we do male. Probably 60–70% of the experience we have is female and only a third is male. We didn't really compare much of the data against the 1985 nursing home survey. We took some results as they came and compared them to the raw numbers that came out of the nursing home survey, but we didn't look behind the numbers to see if there were any cells that were particularly credible or not credible or whether there was any other kind of explanation or difference in population that would lead us to some sort of conclusion about the 1985 survey data versus our data.

MS. LINDA C. BALL: As Mark told you, we had about 13,000 nursing home claims. The claim payments totaled $196 million and covered 3.9 million days of nursing home care. The average amount paid was about $15,000 per claim for an average length of stay

of 300 days. Sixty-four percent of the nursing home claims were for female insureds. We compared the average length of stay and the average amount paid for females and males, and we found no significant differences.

We just discussed the open and closed issue. Fifty-five percent of the claims were coded as closed. Eighteen percent were coded as open and 27% were coded as unknown. We went ahead and assigned an open or closed indicator based on the last known service date for the claim. If the last known service date was more than 180 days before the end of the study, we considered the claim closed. If the last known service date was less than 180 days before the end of the study, we considered the claim open. For consistency purposes we applied the same logic to open claims, so that an open claim that had a last known service date that was more than six months old was considered closed for purposes of our study. After this adjustment, 23% of the claims were open and 77% were closed. On the open claims we had paid an average of $30,000 for 550 days, and on the closed claims we had paid an average of $11,000 for 230 days.

We looked at claims by elimination period. Claims on policies with elimination periods of 60 days or less had an average length of stay of 263 days, while claims on policies with longer elimination periods had an average length of stay of 505 days. Chart 13 displays the average nursing home length of stay by attained age at the time of claim. In general, the average length of stay decreases by attained age. For ages less than 65, the average length of stay was 400 days. This represents about 2% of our claims file.

I averaged the next three groups. Ages 65–79 had an average length of stay of 325 days, and ages 80–84 had an average length of stay of 285 days. Claims for ages 65–84 represented about 92% of the claims filed. The remaining 6% of the claims file was from attained ages 85 and up, and those ages had an average length of stay of 215 days.

We had primary diagnosis for about 37% of the number of claims, but these claims represented about 50% of the amount paid. Chart 14 shows the number of claims by primary diagnosis. The most common claims were injuries, circulatory conditions, strokes, and nervous system conditions. The chart also shows the breakdown of open and closed claims by diagnosis code.

Chart 15 shows the nursing home length of stay by primary diagnosis. Let me call your attention to the Alzheimer's claims. More than 50% of the Alzheimer's claims remained open at the end of our study. About 50% of the nervous system claims and mental conditions claims remained open at the end of our study. Just looking at the nervous system claims, the Alzheimer's claims, mental claims, and the circulatory conditions claims, the nervous system claims overall had an average length of stay of 656 days. But remember that 50% are still open. Alzheimer's claims overall had an average length of stay of 548 days, with more than 50% still open. What is striking in this chart was the wide difference in open and closed claims for many of the diagnoses, for example, hypertension. We had very few hypertension claims, but the total average length of stay was 522 days. For open claims that average length of stay was 881 days.

CHART 13
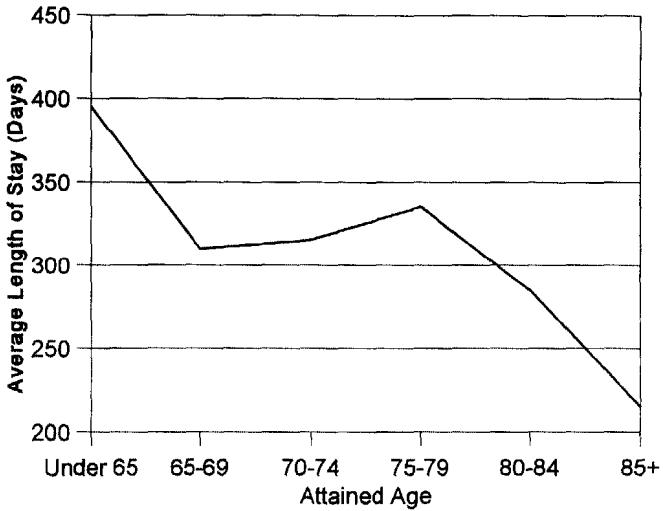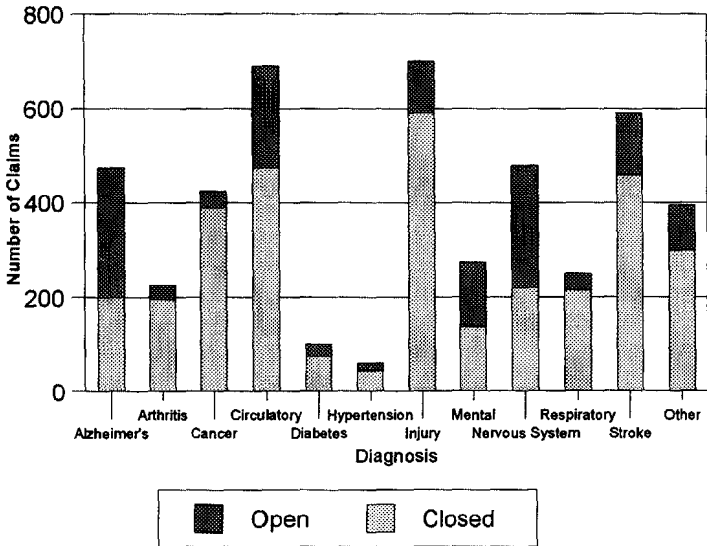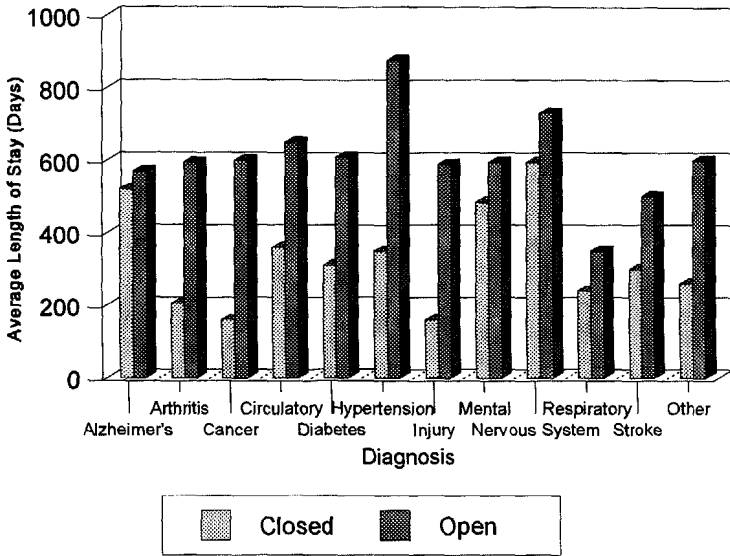AVERAGE NURSING HOME LENGTH OF STAY BY ATTAINED AGE
SOA LTC STUDY (1984-91)

CHART 14
NURSING HOME CLAIMS BY DIAGNOSIS AND STATUS
SOA LTC STUDY (1984-91)

CHART 15
NURSING HOME LENGTH OF STAY BY PRIMARY DIAGNOSIS
SOA LTC STUDY (1984-91)

Overall, injury claims had a 225-day average length of stay, but an open injury claim is 479 days. What happens here is people that have an injury and go into the nursing home very often have other conditions, and those conditions become more prevalent as the person remains in the nursing home. Our study looked at primary diagnosis at the time of claim. So, a person who went in for a hip injury but remained in because he was cognitively impaired or for other reasons would still be considered an injury claim. It would be interesting to go back and look at the history of primary diagnosis on some of these claims. The diagnosis with the shortest average length of stay was cancer claims. They had an average length of stay of 202 days, but, as you can see, the open cancer claims have a current average length of stay of about 600 days.

Chart 16 shows home health care visits by attained age and Chart 17 shows home health care visits by diagnosis.

Two other notes with respect to diagnosis. As I said earlier, on the total file we saw very little difference in female claims versus male claims, but when we look at diagnosis female claims had a noticeably longer length of stay for nervous system conditions, Alzheimer's, and circulatory conditions. The length of stay for male claims with a mental diagnosis was noticeably longer than the female claims. Also, 19% of our female claims were for injuries but only 7% of the male claims were for injuries.

CHART 16
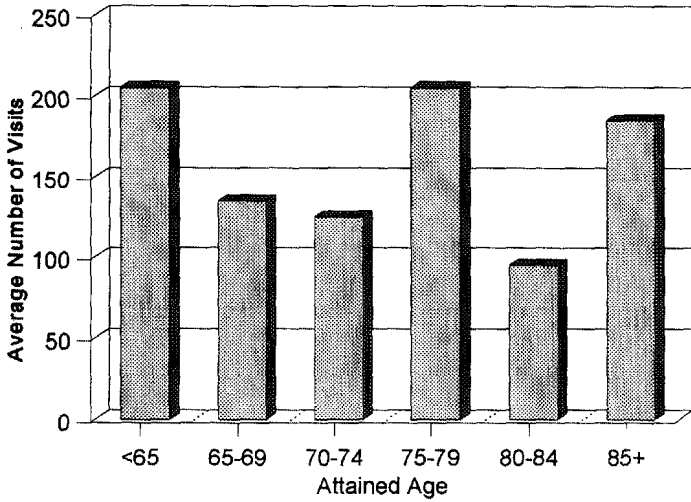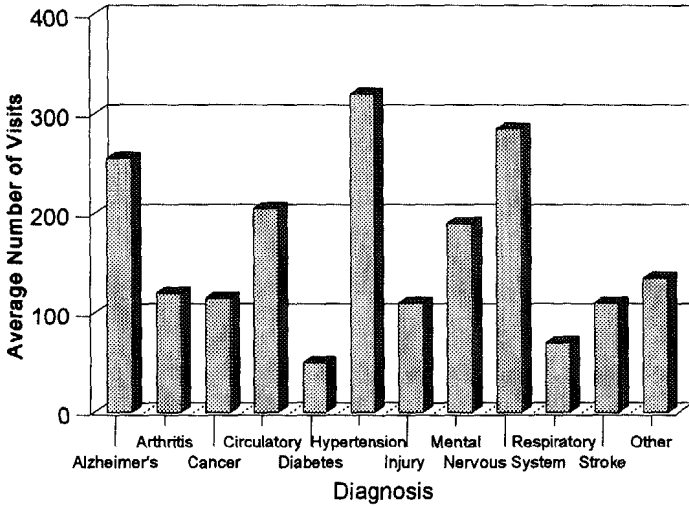HOME HEALTH CARE VISITS BY ATTAINED AGE
SOA LTC STUDY (1984–91)

CHART 17
HOME HEALTH CARE VISITS BY DIAGNOSIS
SOA LTC STUDY (1984–91)

We also looked at attained age with respect to diagnosis. When you're looking at 12 diagnosis categories and six age ranges, you have 72 cells and many of our cells had very few claims. We did look for some general observations and one we were most comfortable with was that the average length of stay tends to decrease as age increases for Alzheimer's and circulatory conditions and other mental conditions.

The persistency portion of the study included more than 677,000 insureds covered under policies issued between 1984 and 1990. For purposes of determining lapse rates, we considered a lapse to be any policy termination except death. Chart 18 shows durational lapse rates for the total file. The first duration lapse rate was 17%. This decreased in the second and third durations to 13% and 12%, respectively. It then increased to 14% in the fourth duration. This might have increased because, for purposes of our study, we didn't ask for any special coding or upgrades of conversions. By the time a policy is in its fourth duration, many companies have introduced a new generation of policies, and they've allowed their policyholders a chance to upgrade. In our study upgrade, policies may well be considered lapses with respect to the original policy. The second reason is that some of our contributing companies did not give us enough data to differentiate between death and lapses, and for those companies, all policy terminations are considered to be lapses. So, you may have some mortality effect sneaking in here.

CHART 18
LAPSE RATES BY DURATION
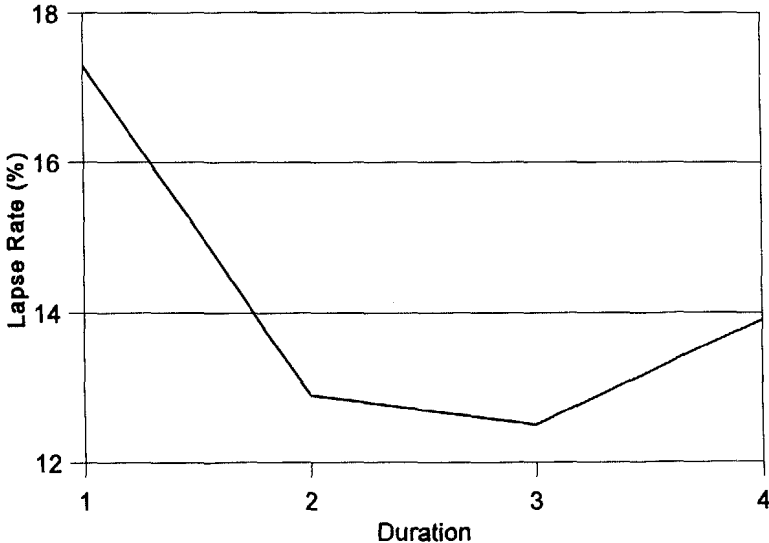SOA LTC STUDY (1984-91)

Chart 19 shows lapse rates by issue age. Lapse rates tend to increase as the issue age increases. For ages 50–59, the first-year lapse rate was 12%, while for ages 70–79 the first-year lapse rate was 21%. Again, you may have some mortality effect here from those companies that did not differentiate between deaths and lapses.

CHART 19
LAPSE RATES BY ISSUE AGE AND DURATION
SOA LTC STUDY (1984-91)
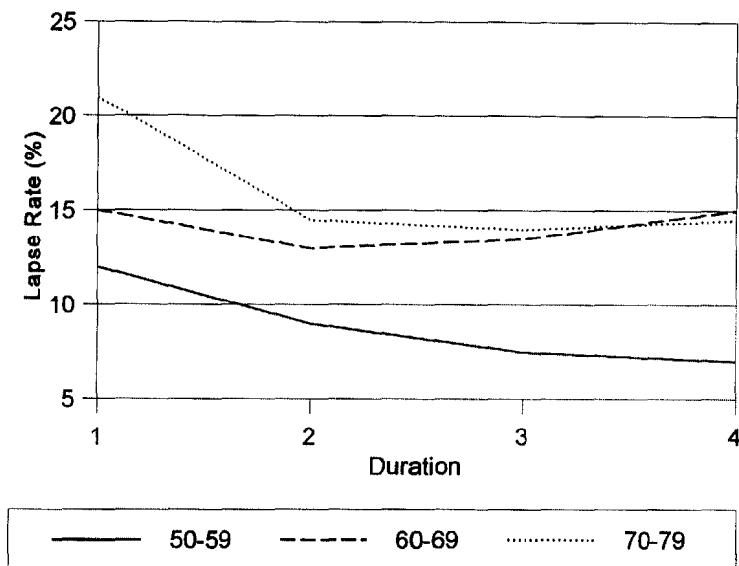
We also looked at elimination period and lapse rates. Chart 20 shows that lapse rates tend to decrease as the elimination period increases. Lapse rates for policies with zero-day elimination periods are approximately two times the lapse rates for policies with elimination periods of 60 days or more, and the total lapse rates for zero-day elimination policies are about 70% higher than policies with 15-30-day elimination periods.

As Mark indicated, we saw improvement in lapse rates by issue year. For policies issued in 1986, the first-year lapse rate was 21%. For policies issued in 1990, the first-year lapse rate was 15%. That's about a 30% drop. We also compared the second-year lapse rates for policies issued in 1986 to policies issued in 1989. The numbers were 14% for 1986 issues versus 10% for 1989 issues; about a 25% drop in lapse rates. We think a couple of reasons have contributed to this improvement. One, we hope we're dealing with a better-educated consumer; one that knows more what kind of a policy they're buying and the reasons for purchasing it and maybe can relate a little better to the type of benefits that they're buying. Also, the 1986 policies tended to contain more restrictive provisions. For example, many of those policies had a three-day prehospitalization requirement before nursing home care would be covered. There were also some policies that had Medicare skilled nursing facility requirements so you had to be in a special facility in order to have your benefits paid. Also, there were variations in the level of care that would be paid. Skilled care would be paid the highest rate, and then intermediate, and custodial care, if paid at all, would be paid the lowest rate. The other note with regard to lapse rates is a comparison between lapse rates for female insureds versus male insureds. Female insureds had lapse rates that were about 1% higher than male insureds' lapse rates at all durations.

CHART 20
LAPSE RATES BY ELIMINATION PERIOD AND DURATION
SOA LTC STUDY (1984-91)
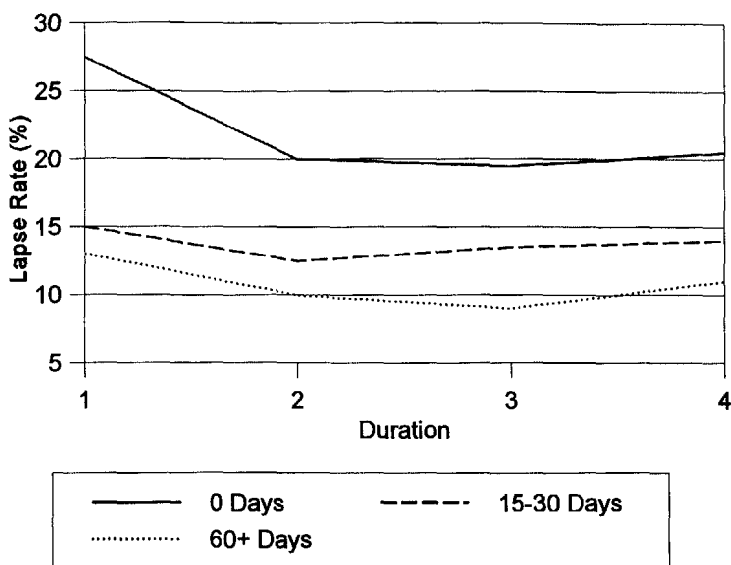
Last, we looked at the mortality rates (see Chart 21). To calculate mortality rates we excluded those companies that did not give us enough information to differentiate deaths and lapses. Obviously, since we treated all policy terminations for those companies as lapses, they're not included in the deaths, but we also didn't include them in the exposures for this part either.

We had 13,000 coded deaths in the study. This equated to about a 1% mortality termination rate, and, as you might have expected, the mortality termination rate increased as age increased and as duration increased.

MR. FRANK E. KNORR: I have a question relating to the lapse rates that decreased for three years and then in the fourth duration increased. You mentioned there may be some company variations, upgrades and also the coding of them by different companies. Have you looked at that type of a graph company-by-company to verify the information?

MS. BALL: I have not. Gregory Van Slyke did that portion of the study and I will be happy to pass that question along to him.

MR. KNORR: My second question relates to the mortality that you're showing here. Is there any variation there between males and females?

MR. NEWTON: Since much of the time we don't know whether a policy termination was an actual death or a lapse, any apparent differences between male and female mortality

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rates from the data that is coded might be not worth much. Because of that, we did not look at male versus female rates. We have much more female exposure than male exposure. Women seem to have higher lapse rates from the data but a 1% difference in the lapse rates is not a real big difference.

CHART 21
MORTALITY RATES BY ISSUE AGE AND DURATION
SOA LTC STUDY (1984–91)
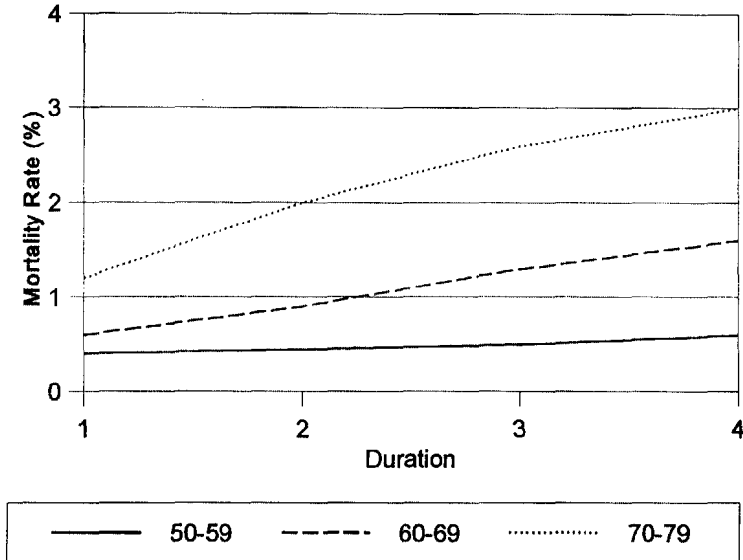
MS. KIM H. TILLMANN: I was interested to see the slim exposure for the ages 85 and above. What information does that give and how might that improve? In the next study will that group be bigger then?

MS. BALL: That was about 6% of our claim file. I would expect that group to grow when you look at this on an attained-age basis since people will just age. Six percent of the file is not a statistically credible number. I think you'll see big changes in the next version of the study. Most of the claims should come from ages 85 and up, but it depends on your exposure. It also depends on survivorship—how many people actually make it to age 85?

MR. ROBERT M. DUNCAN, JR.: Did you have any significant differences, depending on the benefit structures, as to whether people had nursing home care only or they had a comprehensive plan that involved home care that would make these statistics relatively different in terms of utilization?

MS. BALL: You're referring back to the claims portion of the study. We did not do any calculations with comprehensive benefits versus, say, a person that had home health care only or nursing home only.

MR. DUNCAN: Did you have sufficient data here to see if any of these statistics were different regionally?

MS. BALL: We looked at several states to some degree, but I don't think there was sufficient data to tell.

MR. NEWTON: Although we have data from almost every single state, four states probably contributed 60% of the data that we have. Where we do have information by state, Ohio probably has 20% of the data. Illinois, Indiana, and Michigan are the other big three. So, of all the exposure where we know the state of issues, those four states probably account for 60% of the data that we have. The rest of the data are hardly credible.

MR. DUNCAN: You have the highest number of home care visits and the highest length of stay in people under 65. Is this an anomaly in the data?

MS. BALL: Moving on to home health care, as I said, we had $2 million paid on 512 claims. That was an average amount paid of about $5,000, and it covered 159 visits. Some 64% of the home health care claims were female claims. We noticed that males required 14% more visits than females required. Chart 13 shows the average number of visits by attained age but, because of the paucity of home health data, I'm not sure that you can make much out of it. The one place I would caution you specifically is that claims for ages 85 and up is one claim.

We had primary diagnosis on about 78% of the home health care claims. The most common claims were for cancer, circulatory, and nervous system disorders. The highest average number of visits by diagnosis is in hypertension, then nervous system disorders, Alzheimer's, and circulatory conditions. Hypertension claims had only three claims and no diagnosis has more than 100 claims. With only 512 claims, we just don't have enough home health care data to really draw firm conclusions from it.

For the next study, 21 companies have agreed to participate. So far we've received data from nine for 1992 and from two companies for 1993. I had hoped to look at the responses we received so far and tell you what kind of improvements you might see in the next study. Based on just this small response, I would say that we might have marital-status-at-issue information. We might also have more people reporting primary diagnosis, and it looks as though we might have some information on number of activities of daily living (ADLs) satisfied at the time of claim as well as cognitive impairment. I don't expect to have smoker/nonsmoker status. That's based on a very small response, and it could change if different companies and different exposure levels come in.

If you're one of the 21 companies that have agreed to participate, please send your data soon. If you're not one of those companies because you think the data requirements are too much, I'd remind you that we have marked the instructions for the data that we consider to be minimal, so perhaps you can satisfy the minimal data requirements. If you'd like to consider participating and discuss it further, call Gary Corliss at Duncanson & Holt, and I'm sure he'd be happy to add more companies to our study.

MR. JAMES M. ROBINSON: I was just curious if there has been any discussion of releasing the information in a data file that we might be able to explore. Looking at the

report, there are many factors that influence morbidity and the report tends to concentrate on one-dimensional analyses of the data. There are many other factors that are hard to get a handle on by looking at these one-dimensional tables. It might be more helpful in certain situations to actually be able to get a handle on the data themselves. I know there are confidentiality concerns, but has there been any discussion about cleansing the data in some way and making it available for an appropriate fee?

MR. NEWTON: I think each of us on the committee has thought about that as we've gone through and actually had to work with the data ourselves. I will bring it back to the next meeting to see what concerns there may be.

[As a postscript, the contributing companies submitted data under the condition that it not be reproduced in any format that might allow the data for any company to be ascertained or deduced in any manner. Due to the small number of companies submitting data in the first study, the data are presented in the study format only and will not be available in electronic formats.]

MR. DAVID M. WALKER: One reason for the study's length of stay to be longer than the Wilkin Tables may be the mix of claim conditions early on during the apparent select period. Traditional underwriting can effectively screen out "obvious" uninsurable conditions, such as histories of heart disease or strokes. These conditions could also be characterized as life-shortening. Where LTC underwriting may be weak is in conditions of mental deterioration—like Alzheimer's or dementia—which result in an LTC claim they might not shorten the person's lifetime. These can also develop fairly quickly without leading indications, making underwriting that much more difficult.

If this is true, then the average length of stay in later durations would decrease as the effects of underwriting wear off. We would still see prevalence of mental deterioration conditions, but with a larger proportion of claimants with life-shortening conditions. This would bring down the average length of stay relative to the experience in early durations.