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UNDERWRITING OF LONG-TERM CARE (LTC)

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- Types of underwriting
 - Multicompany survey
 - Tools and intensity
 - Premium impact
- Ages 80 and above
 - Special requirements
 - Special thoughts
- Intercompany experience
 - Incidence rates
 - Causes of claim

MR. GARY L. CORLISS: This is the first time that the subject of underwriting has been discussed. Underwriting for long-term care (LTC) is in a highly evolutionary process. I suggest that the quality of LTC underwriting is roughly equivalent to that of life underwriting in 1950. Over time, different company underwriting results will occur due to marketing strategies, underwriting practice, and claim expertise. In fact, differences have already been witnessed. Some companies have had unfortunate results; some are in liquidation. Others are out of that line of coverage; some are doing quite well. However, at every company, there is a lot of learning ahead for underwriters in this evolution. This session will cover certain aspects of the underwriting process, different generic types of underwriting, evaluating results and taking action, and initial intercompany insured lives claim results.

MS. MARGARET S. CZELLE CZ: The approach that companies take in underwriting LTC insurance can be sorted into three types: medical, disability, or the LTC (whole-person) approach. A survey of 53 insurance companies that sell LTC insurance was conducted to compare both underwriting guidelines and application forms. Of these companies, 42% look solely at medical history. These are companies that have often sold life or medical-expense insurance in the past. Other companies expand their underwriting criteria to include activities of daily living (ADL). They look at whether the person is restricted in bathing, dressing, eating, toileting, or transferring, and they also look at whether the person uses any kind of medical appliance (i.e., a cane, a walker, or a wheelchair). These are typically companies that have a disability income background, and they put more emphasis on whether the proposed insured is at an increased risk for LTC services. This underwriting philosophy was used in about 43% of the companies surveyed. There are a handful of companies, the remaining 15%,

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that go a step further in the underwriting process. They evaluate the applicant's ability to remain self-sufficient and be independent. Besides looking at the individual's medical history, they also evaluate the person's physical abilities, mental acuity, home environment, and whether the person is receiving any social support. The proposed insured's outlook of life is also considered by these LTC underwriting companies.

Table 1 illustrates the different results in the type of underwriting decision made, depending on the approach to underwriting and given the same impairment. I put Alzheimer's disease on there just to emphasize, regardless of the company's approach to underwriting, that there are certain conditions in which the risk of LTC services is just too great. They would be declined by all companies. An insulin-dependent diabetic, taking 40-45 units of insulin a day, fully controlled and with no complications, would be a decline in companies using the medical approach. If you look at the disability approach to underwriting, diabetics were either issued with a rating or were declined. The companies with the whole-person philosophy of underwriting consider the diabetic's degree of control, whether there are any complications, and whether the person is restricted in any way from the diabetes. A diabetic, under this underwriting approach, will be accepted the majority of the time.

TABLE 1
Comparison of Underwriting Decision by Approach

Impairment	Medical Approach	DI Approach	LTC Approach
Alzheimer's	Decline	Decline	Decline
Diabetes (insulin dependent)	Decline	Rating/Decline	Accept
Arthritis (5 mg steroids)	Decline	Rating/Accept	Accept
Cancer, breast (4 years ago, fully recovered, no metastasis)	Decline	Rating/Accept	Accept

Applicants with rheumatoid arthritis on a low dose of steroids would be declined by the medical-approach underwriting departments. The disability income (DI) approach companies will evaluate whether arthritis is restricting activities in any way; how the person is getting along and whether any appliances are needed. They'll either issue an arthritic with a rating or will accept the history standard. The LTC whole-person approach will issue to people with rheumatoid arthritis on low doses of steroids if the person is not restricted in any way and is fairly active.

Breast cancer applicants can either be declined or accepted, depending on the underwriting approach. Also, depending on the approach, there are a number of differences in the underwriting requirements that are ordered. Attending physicians' statements are ordered on all applicants in about 40% of the companies surveyed or on applicants at a specific age (i.e., over age 70 or under age 79) in 37% of the companies. The remaining companies will order an attending physician's statement at the underwriter's discretion.

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Most companies surveyed have added some type of a telephone interview to their underwriting criteria. There are various ways this is handled and there are various levels in the type of information obtained. Some companies utilize an outside inspection company to conduct the telephone interview. There are various ways this can be done. The inspection company may create the script with no input from the LTC underwriting department. Another format has the inspection company reiterate every single question that was on the application. Other companies will focus more on developing medical history that was not on the application by asking about additional medical history. The remaining telephone interviews done by inspection companies will ask a number of questions related to the applicant's activities, height, weight, whether there is any other LTC coverage in effect, activities of daily living, appliances, any recent confinements in a hospital or a nursing home, or about overall medical history and medications. These interviews provide the underwriter with a good overview of the applicant.

A second way a company can set up a telephone interview is by establishing a telephone unit within the company. There are two ways I've seen this done. The first way has the application going to the underwriter's desk. The underwriter will review it to determine if there are any other medical questions for which the underwriter would like answers. The application is then routed to the telephone-interview unit. The interview is conducted and a report is returned to the underwriter. In those cases, the underwriter is having some input on what is asked of the applicant. The second way sends every application upon receipt directly to the telephone interview unit. The interview is conducted and then the application is routed to the underwriter. The underwriter has all the pieces needed to evaluate the risk.

The main limitation to having an inspection company or a separate unit within an insurance company do the telephone interview is when additional information is divulged over the telephone that is not on the application. The interviewer may or may not know what questions to ask to fully evaluate the risk. Another limitation is that the underwriter really doesn't have a hands-on feel for the individual's cognitive abilities or attitude about life. So usually the companies that have the whole-person outlook for LTC will have the underwriter conduct the telephone interviews. Besides asking about medical history, the underwriter will inquire about restrictions in either activities of daily living or instrumental activities of daily living. What's important, is while the underwriter is on the telephone, he or she is getting personal insight into the insured's physical and cognitive capabilities.

Of the companies surveyed that use a telephone interview as an underwriting tool, 40% used the telephone interview on all ages. Forty percent used the telephone interview at a specific age (i.e., everyone under age 75 or over age 70 are interviewed). The remaining 20% use the telephone interview at the underwriter's discretion. When there is something on the application that needs to be developed, the underwriter will pick up the phone and contact the applicant.

Another underwriting tool that is being developed and added to LTC underwriting requirements is the face-to-face evaluation. This involves having a registered nurse, either from a paramedical company or a case-management firm, physically visit the proposed insured's home and converse with the person to determine the cognitive functions of the applicant, whether the applicant has any current medical problems,

and what type of medication he or she is using. The abilities to perform the activities of daily living and the instrumental activities of daily living are also assessed. A properly conducted face-to-face assessment is able to provide information that is not on the application or on an attending physician's statement. The assessor will determine how those current problems have affected the applicant's ability to function.

I've seen face-to-face examinations ordered at the older age groups (i.e., over age 75). For those not using them routinely, they are used at the underwriter's discretion. For example, if something showed up on the attending physician's statement or during the telephone interview that didn't make sense, or there is a question about the cognitive abilities of the insured, then a case manager will do the face-to-face evaluation.

There is a difference in face-to-face assessments ordered from paramedical companies and case-management companies. The paramedical companies will go over recent hospitalizations, medical histories, medications, whether the individual uses any assistance, and get into what the insured does on a normal day. Activities of daily living are assessed. There is usually a shortened version of a mental-status exam that gives the proposed insured a list of ten words and instructs him or her to put them in a sentence. Ten minutes later the applicant is asked to repeat the words that he or she used. Case-management companies can also review the applicant's instrumental activities of daily living: Who does the cooking and shopping, who drives, who balances the checkbook, etc? A full-blown, mini-mental-status exam is conducted, and there will be hands-on measurement of the proposed insured (i.e., height, weight, blood pressure, gait analysis, or vision exam).

There typically is a difference in the charge between exams performed by paramedical examiners and case managers. The paramedical face-to-face exams are often between \$60 and \$75, and the case management assessments are typically between \$125 and \$200.

Duncanson & Holt actuaries have developed an expected necessary premium, depending on the underwriting approach, the insurable event, and whether the policy has managed care. Based on a 70-year-old policyholder who is applying for a 90-day elimination period and a five-year benefit period, the premium is reduced 25% by companies that use the activities of daily living or a cognitive insurable event, managed care, and that have the underwriters conduct the telephone interview (Table 2).

Besides different tools used in underwriting, there are different intensities between underwriting an individual application and a group application. Individual applications usually are subject to full underwriting. With group cases, the size of the group and the level of participation are considered. Typically, larger employers, those over 1,000 eligible employees, may offer LTC on a guaranteed-issue basis. The underwriter is usually interested in whether the person has met a minimum time of employment and if he or she is working full-time. Applications for guaranteed issue will ask about employment and will not ask any medical questions. If minimum requirements are met, the policy is issued without any evaluation of medical history or conditions.

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TABLE 2
Comprehensive LTC Pricing Models by
Type of Underwriting^a

	Medical	Disability	LTC
Insurable event	Medical necessity	ADL/cognitive	ADL/cognitive
Preexisting condition	6-month full	6-month full	6-month full
Managed care	No	No	Yes
Telephone	None	Service person	Underwriter
Premium	\$2,216	\$1,840	\$1,650
Reduction	—	17%	25%

^aAge 70, 90-day Elimination Period, 5-year benefit period – \$100 Daily Benefit Amount

Short-form underwriting is conducted on medium-sized groups (i.e., between 50 and 1,000 employees). There is often a six-month employment requirement and the person must be working full-time. There is a limited amount of underwriting on short-form group cases. A number of medical questions are usually asked that would put the applicant at an increased risk for LTC (Alzheimer's, Parkinson's Disease, acquired immune deficiency syndrome (AIDS), multiple sclerosis, muscular dystrophy, and cirrhosis of the liver). If these questions have a negative response, then the underwriter will look at whether there has been any recent hospitalizations, any nursing home confinements, any recommended surgery, or any medical appliances required. Most of the tools for underwriting on the short form are used at the underwriter's discretion. If everything is favorable, then the applicant will be issued a policy.

Group long-form underwriting is identical to individual selection. Most companies will use long-form underwriting on smaller groups, on individuals who have been working for a company for less than six months, on part-time employees or retirees, on parents and spouses, and on employees after the initial enrollment. Antiselection is minimized by underwriting these groups fully.

The LTC insurance industry has come a long way in a short period of time of underwriting this coverage. With unfolding claim results, companies are continuously refining their approach to underwriting. Tools that were used ten years ago may not necessarily be appropriate.

MR. MICHAEL J. MURNANE: Mutual Protective/Medico Life has sold individual nursing home policies since 1974. Beginning in 1987, we first offered a comprehensive LTC product. I would like to specifically trace how we started out underwriting the 80-year-old-and-above applicants. Then I will talk about the changes we made, where we're at, and where I think we're headed in the future.

Initially, we offered our comprehensive product to people through age 85. We did the same thing most companies did. If the applicant was aged 80-84, there was a reduced commission, unless a 100-day elimination was applied for. We limited the daily benefit amount. We limited the lifetime maximum. We ordered attending physician statements on certain medical conditions for every applicant.

For all applicants including those over age 80, we charged a higher premium for certain medical conditions. If a person had diabetes, cancer, or heart trouble, and the attending physician's statement gave us enough information that we felt the person was an insurable risk, we charged a higher rate for those conditions. We did a tremendous amount of business utilizing this underwriting approach at all ages, including those above age 80. We tripled our underwriting staff by hiring experienced medical underwriters. After a period of time, we found that there were some problems. We were successfully eliminating the medical risk, but we were not being successful in eliminating the adverse cognitive condition. A review of our initial claims experience showed that our actual-to-expected ratio was 133% on the 80+ applicant. Almost 60% of the early claims showed some type of a cognitive impairment as either the primary or secondary diagnosis. It was obvious that we were being selected against by the field force. Our application source is strictly with broker agents. As you well know, broker agents will drift from company to company as they discover where they can get certain diseases or conditions approved.

Back in the mid-1980s, the general public wasn't widely educated as to the need for LTC insurance. The people aged 80 and over who were really interested in buying LTC insurance were the people who knew they were at risk. If they could jump through the medical hoops, we insured them. That's when we ran into the problem with the cognitive impairment. When we realized the situation, we changed our whole underwriting philosophy. We got away from the traditional medical underwriting and went to a functional assessment underwriting. We changed our application. We zeroed in on lifestyle characteristics. In fact, we offer a preferred rate that incorporates certain lifestyle situations in our current LTC products. We developed an agent's report. We asked the agent to give us additional information. Does this applicant live alone? List any additional activities that he or she participates in. We had a problem with agent education as you do with anything that's new. The agents tended to look at the report as a negative, and we wanted it to be a positive. We tried to get them to understand that they would have an increased credibility factor if they helped us through completing the reports.

We began doing personal health interviews or face-to-face assessments about four years ago. Initially we did it on selective applications at the underwriter's discretion. Our underwriters personally conduct the health interviews. They have done these from the start. Initially, on a husband and wife application, we would let one spouse respond for both people. We no longer do that because we've incurred some bad experiences.

To create a service-oriented environment with the broker agents, we established an underwriting hot line into our underwriting department. Agents can call an 800 number from an applicant's home and talk directly to an underwriter. If they like, an interview can be performed at that time with the agent present. We began recording the interviews about two years ago. Initially, we did this with the idea that this would help us in any type of litigation. That litigation is not really a factor anymore because we just don't rescind LTC policies. You just can't do it and be successful at it. But the recorded interview has elicited a much more accurate response from the applicant. When we inform the person that we're going to record the interview, a much more truthful response is obtained. The taping also gives the other supervisors and myself a chance to review how the underwriters are conducting these interviews.

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We try to spot trends based on responses given during the interviews. Currently, a recorded personal health interview is conducted for every LTC application we receive.

About 1.5 years ago, paramedical exams with face-to-face assessments were required for all applicants who were aged 80 and over. Because the results were so valuable, that requirement was lowered to all people aged 75 and older. We've had excellent results with the paramedical exam. The examination incorporates a delayed word-recall test and lifestyle questions. The person's gait is observed. Blood pressure readings and height and weight are measured and recorded. There have been hardly any claims where there has been a paramedical exam. It's been a very successful tool. It's a struggle to keep the cost of the exam down, but yet we obtain a quality result that we can live with. Implementing the paramedical exams also required agent education so that the field force would know what to expect. When an agent didn't prepare the applicant as to what would happen, problems occurred. We continue to work on this aspect and as more companies require assessments, I think that problem will solve itself.

After reviewing our own experience, a great deal of emphasis has been placed on securing applicants over aged 80 who have a spouse. Our own experience indicated that loss ratios were twice as good when there was a spouse as opposed to a single individual.

Looking to the future, I believe more companies will be regularly doing face-to-face assessments. I think more attention will also be given to additional lifestyle questions and activity levels. I think that there will eventually be bonus points given to people, depending on the facility they might live in. I have a personal example. My wife works for a retirement home in Omaha and the average age of its residents is 84. Its statistics show that over the years, it has provided increasing amounts of home care. The average stay of a resident in a nursing home has decreased and is now only 27 days. Now I realize that's one retirement home in the middle of the country and it may not be indicative of the trend, but I think it is an item worth watching, and it may eventually be an underwriting tool that will be used. As the population ages, I don't think we can set arbitrary underwriting limits and automatically exclude people above a certain age. Obviously, there's an age in which you have to exclude people, but I think it's up to us, as underwriters and actuaries, to try to find a way to keep pushing back the age at which we can insure applicants.

MS. LINDA C. BALL: The data submitted to the Society of Actuaries intercompany LTC experience study have been compiled to produce the information that I am presenting. These results are preliminary as we are still refining the data. I do want to emphasize two points before we review the results. First, the data I'm presenting are only for nursing home claims. Although the data in the study do have some information on home health care claims and will be included in the written report, it was too small to consider. Second, the graphs and the data that I am presenting are primarily based on the number of claims, rather than by amount. Underwriters traditionally need to consider results more by number of insureds and less by amount of insurance in determining their actions.

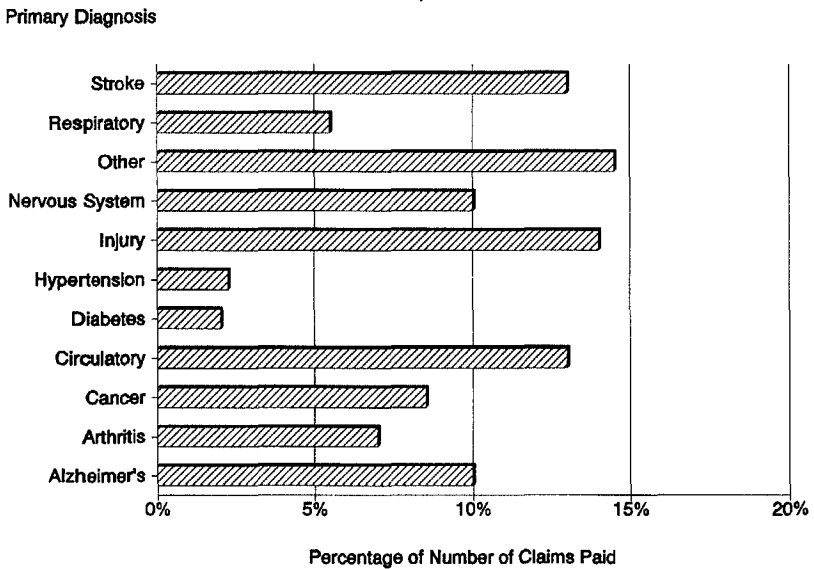
I'd like to describe the characteristics of the database. There are almost 100,000 claim-payment records for approximately 10,000 claimants. These claims were

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incurred in the years 1984-91 on policies issued in the same time period. We received primary diagnosis codes on approximately 50% of the records. We received little in the way of secondary diagnosis codes. The total amount of nursing home payments on the file was \$170 million. Sixty-five percent of the claims were for female insureds. The average attained age at claim was 72 years, and the average age at the time of issue was 68 years. The average claim was incurred 27 months after the policy was issued. The most common elimination period was 20 days. The most common benefit maximum was the three-year benefit period. The exposure records include policies that were issued in all 50 states plus the District of Columbia. The claim records also included the District of Columbia and 49 states. Alaska was the only state for which there were no reported claims. More than 99% of the claims were attributable to individual and association group business. Less than 0.5-1% of claims were attributable to the employer group market.

The claim records were grouped into ten diagnosis categories which were chosen so that we might compare these results with two other studies. In addition, we had a catch-all "other" category for those conditions that didn't fit in with our ten categories. The ten categories were Alzheimer's, arthritis, cancer, circulatory disorders, diabetes, hypertension, injury, organic nervous system, respiratory conditions and strokes. As Chart 1 indicates, the Society's study shows that 56% of the claims are equally distributed among circulatory, injury, stroke, and other diagnoses. Alzheimer's represents approximately 10% of the number of claims.

CHART 1
Distribution of Claims by Diagnosis
SOA LTC Study (1984-91)



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Chart 2 shows the relationship of the amounts paid to the number of claims. The largest differences between number and amount are seen in injury claims, which account for 14% of the number of claims versus 8% of the amount of payments. Nervous system claims account for 10% of the number of claims versus 15% of the payments. Alzheimer's claims account for 10% of the number of claims and 14% of the payments. And cancer claims account for 8% of the number of claims but only 3% of the amount paid.

CHART 2
 Number of Claims Paid Versus Amount Paid
 SOA LTC Study (1984-91)

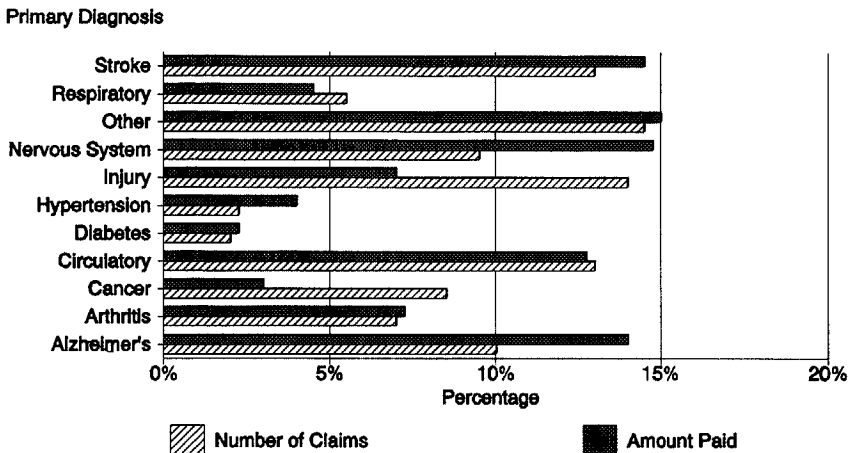
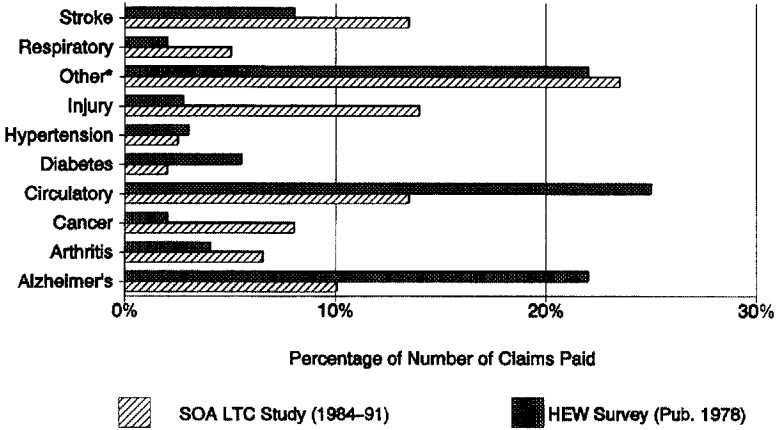


Chart 3 compares the Society's study results with a survey published by the Department of Health, Education and Welfare (HEW) in 1978. The HEW survey is a snapshot of the conditions existing in the general population over age 65 at a specific point in time, whereas the Society's study is an insured-lives study. The Society's study showed noticeably more injury, cancer, and stroke claims and less Alzheimer's and circulatory claims. In addition, Chart 4 compares our results with the Connecticut Nursing Home Longitudinal Patient Survey, which studied general population confinements from 1977 to 1985. As in comparison with the HEW survey, circulatory claims were much lower in the Society's study. However, in contrast to the HEW survey, the number of Alzheimer's claims in Connecticut were slightly less than the Society's results.

Of the claims used in the Society's study, 23% were incurred in the first duration. There were 24% in the second duration after issue, 23% in the third duration, 16% in the fourth duration, and 14% in durations five and later. Chart 5 has a comparison-by-diagnosis category of the claim distribution in each year of incurral. In general, as a percentage of claims incurred, Alzheimer's claims and stroke claims decreased by duration, and circulatory claims and respiratory claims increased by duration.

CHART 3
 Diagnosis Comparison
 SOA LTC Study Versus HEW Survey

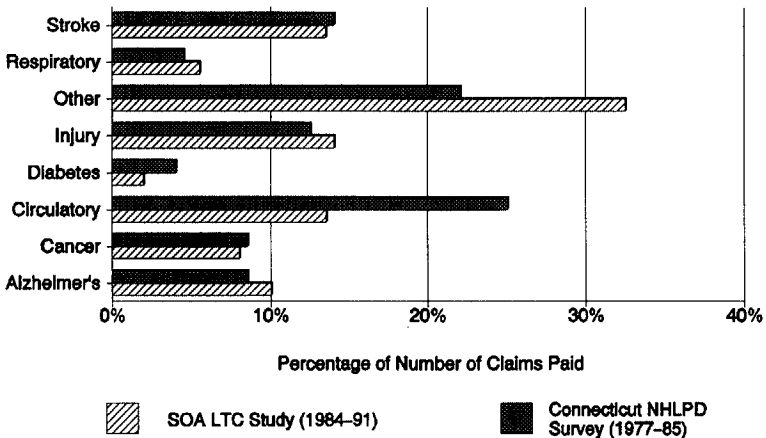
Primary Diagnosis



*Other includes nervous system claims

CHART 4
 Diagnosis Comparison
 SOA LTC Study Versus Connecticut NHLPD Survey

Primary Diagnosis



*Other includes nervous system, hypertension, and arthritis claims

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CHART 5
Diagnosis Comparison by Duration Incurred
SOA LTC Study (1984-91)

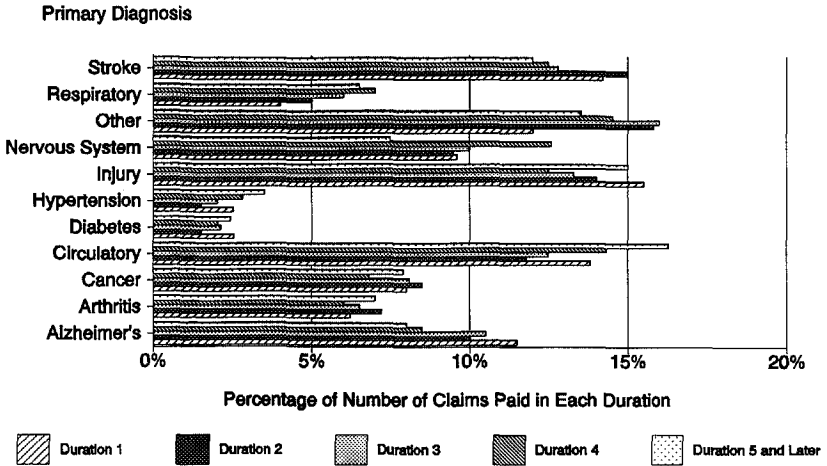


Chart 6 compares the diagnosis results by sex. Males showed higher claims in cancer, circulatory, nervous system, and respiratory categories. Notice the high number of injury claims for females compared with males. We broke down the injury claims a little bit to look at this. More than 90% of the injury claims were attributable to fractures. This raises the question of whether we are getting osteoporosis claims that are given diagnosis codes of fractures. Two other comments have been made to me. One was that perhaps alcoholism was a cause of accidents and injury. Another was that prescription drug interactions in this age group could be causing noticeably more injuries.

The Society's study is made up primarily of claims at attained ages of 65-84. Chart 7 shows that 30% of the claims were from the age range 65-74. Thirty-three percent of the claims were from the age range 75-79. And 32% of the claims were from the age range 80-84. The remaining claims were 5% over age 85 and 1% for ages under age 65.

We completed a comparison in the diagnosis categories for ages under 65 versus ages over 65. I'd like you to look at the ages under 65 (Chart 8) just for a moment. Note that nervous system claims account for 28% of the claims for ages under 65. Other leading causes are cancer, injury, stroke, and all other. When you compare this age range to the over-age 65 group (Chart 9), cancer claims are more numerous for ages under 65 and Alzheimer's, circulatory, and respiratory claims are more numerous for ages over 65.

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CHART 6
 Diagnosis Comparison by Sex
 SOA LTC Study (1984-91)

Primary Diagnosis

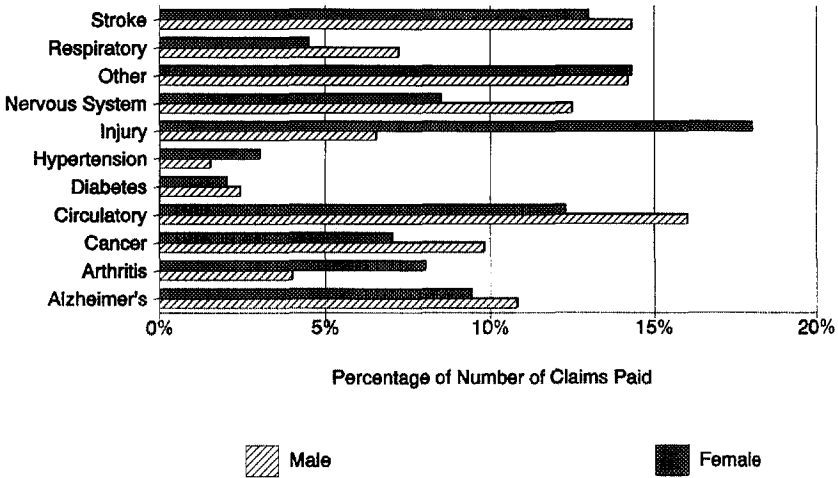
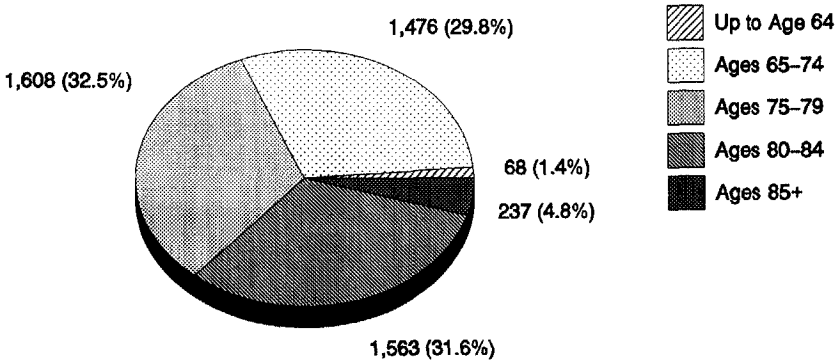


CHART 7
 Number of Claims From Each Age Group
 SOA LTC Study (1984-91)



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CHART 8
 Primary Diagnosis for Ages Under 65
 SOA LTC Study (1984-91)

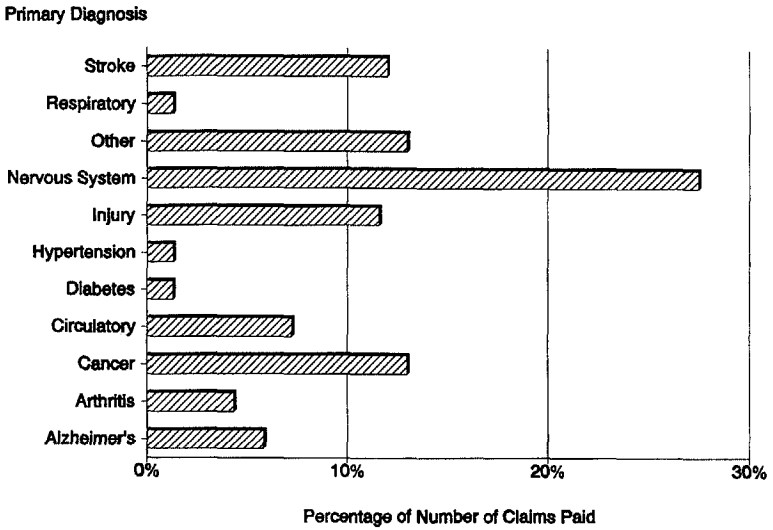


CHART 9
 Diagnosis Comparison by Age Range
 SOA LTC Study (1984-91)

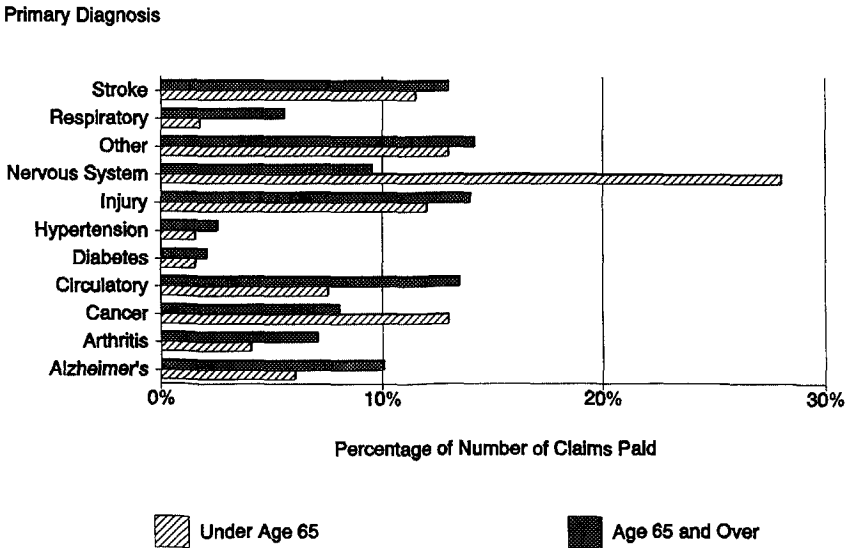


Chart 10 breaks down the age range 65 and over into three ranges; ages 65-74, ages 75-84, and ages 85 and over. Note the increase in the trends by age in the injury, circulatory, and arthritis claims. Decreases with age are seen in nervous system, cancer, and Alzheimer's claims.

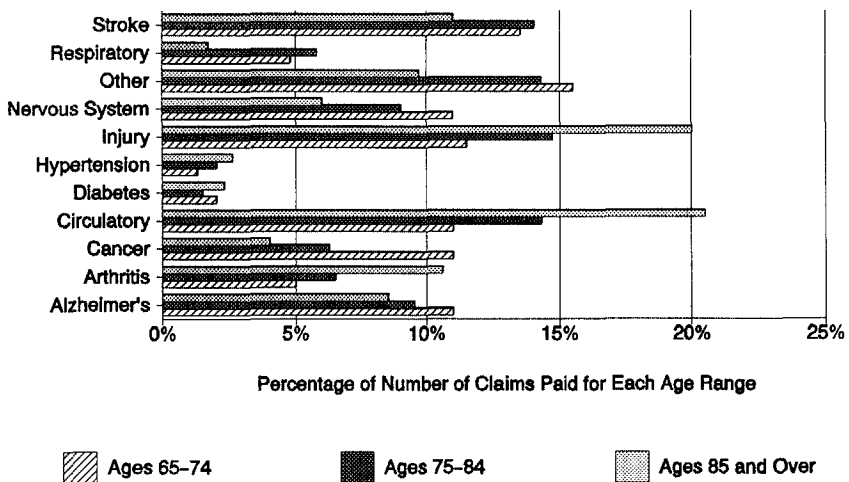
Chart 11 demonstrates diagnosis information by age range using the HEW survey data. This chart compares the Society's study claims for ages 65-74 with the same age range in the HEW survey. The Society's study showed fewer claims in circulatory, diabetes, and hypertension. The higher claims are found for Alzheimer's, cancer, injury, and stroke.

Chart 12 has the next age range, which is 75-84, and it's a comparison of the same two studies. Again, note the low circulatory claims in the Society's study. But note that the Alzheimer's claims in the HEW survey are higher for this age range. Is underwriting catching Alzheimer's at the higher ages and perhaps not catching Alzheimer's at the lower ages? Or is this a result of antiselection? Also, note that the injury and stroke claims remain much higher in the Society's study than in the HEW survey.

Chart 13 has this comparison for ages 85 and over. Alzheimer's is, again, much lower in the Society's study. We also wonder if the decreasing trend by age in Alzheimer's claims versus the HEW survey is due to an earlier diagnosis because the HEW survey is a number of years old.

CHART 10
Diagnosis Comparison by Age Range
SOA LTC Study (1984-91)

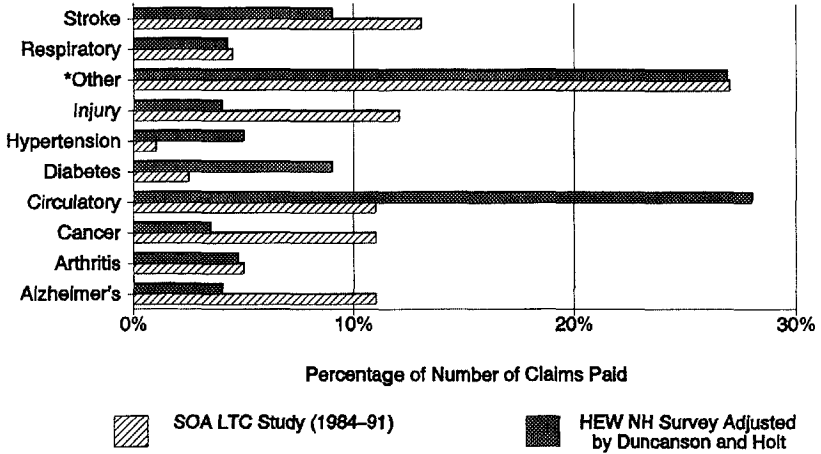
Primary Diagnosis



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CHART 11
 Diagnosis Comparison for Ages 65-74
 SOA LTC Study Versus HEW Survey

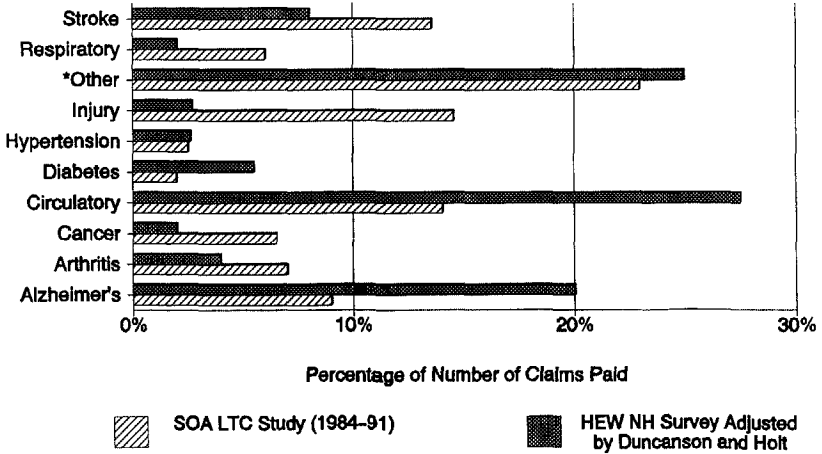
Primary Diagnosis



*Other includes nervous system claims

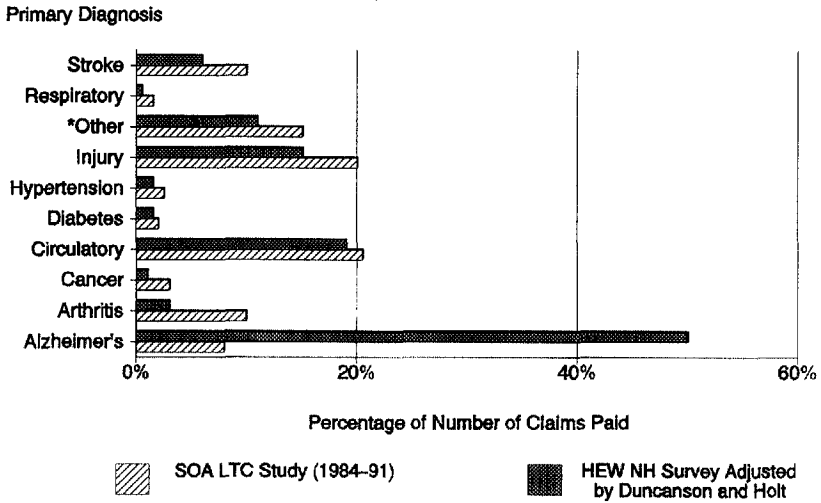
CHART 12
 Diagnosis Comparison for Ages 75-84
 SOA LTC Study Versus HEW Survey

Primary Diagnosis



*Other includes nervous system claims

CHART 13
 Diagnosis Comparison for Ages 85 and Over
 SOA LTC Study Versus HEW Survey



*Other includes nervous system claims

Chart 14 is my favorite. I've referred to it as my picture. It has a diagnosis comparison by issue year. I'm not sure what good information we obtained from this. I can tell you that no Alzheimer's claims were reported for policies that were issued in 1984. In fact, Alzheimer's claims are increasing by issue year. It's possible that this could be a result of miscoding in the early years of the study. It's also possible that some antiselection is manifesting itself.

We also looked at the length of claim by diagnosis in Chart 15. The first column on the left is the total average length of claim for the claim file, which is 404 days. Alzheimer's, hypertension, and nervous system claims were the longest. Hypertension and nervous system claims have lengths of claim of approximately 600 days. Note that injury and cancer claims are much shorter and are only about 200 days each.

The last comparison (Chart 16) compares the average daily benefit amounts. The column on the left is the entire exposure file, which showed that the average daily benefit amount was \$61. The next column is the total claim file. The average daily benefit amount was less than \$60. And for each of the diagnosis categories, the amounts ranged from \$55 to \$59. We concluded that antiselection by amount is currently not a problem.

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CHART 14
 Diagnosis Comparison by Issue Year
 SOA LTC Study (1984-91)

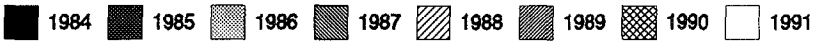
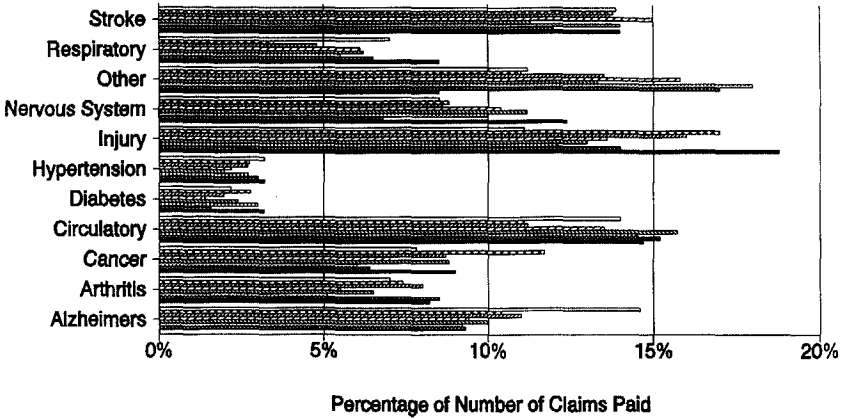


CHART 15
 Length of Claim by Diagnosis - SOA LTC Study (1984-91)
 Total Claim File Versus Diagnosis Categories

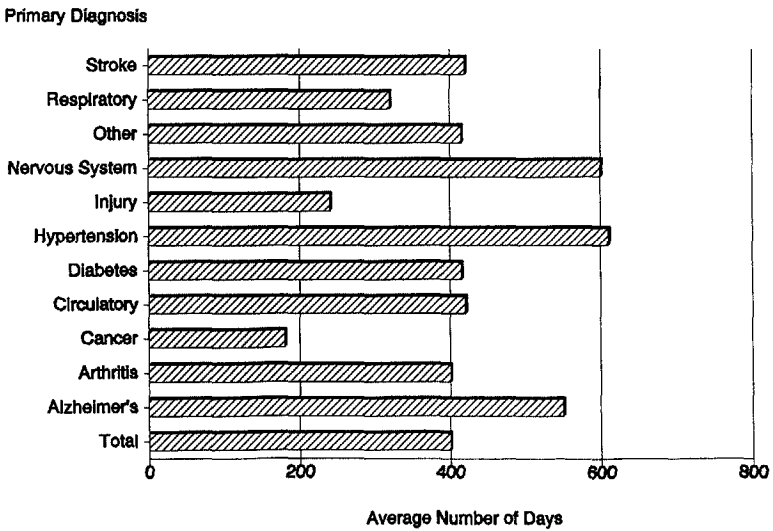
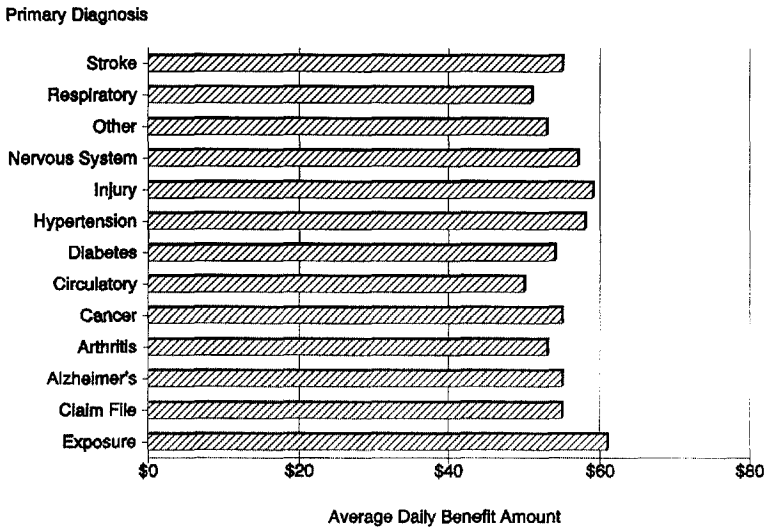


CHART 16

Comparison of Daily Benefit Amounts - SOA LTC Study (1984-91)
Exposure Versus Claim File Versus Diagnosis Category



In conclusion, we believe that Alzheimer's claims are important. There may be some antiselection in the early years and, in particular, at ages under 75. We note that circulatory claims increased by duration, so underwriting may not be particularly effective yet for that condition. Stroke claims hit fast and decrease by duration. Injury claims are consistently large in all durations, particularly for females. Are there ways for an underwriter to protect against these types of early claims? Much work remains to be done in analyzing the results of the Society LTC experience study. We hope to add additional information into the written document for release.

MR. CORLISS: There was a theme running through the three presentations. Margaret commented on the three approaches found in underwriting LTC applicants. The third and more recently developed one concerns itself with evaluating activities and cognition as well as medical conditions. Mike commented about their approach originally having a medical orientation and then moving toward inclusion of cognitive and activity factors. Linda's comments indicate from the SOA study that Alzheimer's is a condition that has been taken into consideration, but there appears to be plenty of room to do a better job relative to underwriting potential Alzheimer's clients with Alzheimer's disease.

MS. MARY ANN BROWN: I was a little surprised at the average length of claim being 404 days. It sounded a little low to me. Do you think that this study is a bit biased on the short end? Are there enough durations of claims in there to feel we have the ones with the long tail? Is it possible to break out any of the data by type of underwriting?

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MS. BALL: The study does include open claims at the end of the exposure period. A fairly high percentage of policies were issued in 1989, 1990, and 1991. So, certainly, we do not have the entire claim record or claim length at this point in time. I don't have the maximum number of days paid for any one policy, but I do know that the maximum amount paid so far has been \$182,500.

The reporting form does ask for information by underwriting type on the study. Many companies have not been able to give us that information. A significant amount of requested data comes in without complete coding.

MR. CORLISS: As Linda mentioned, the exposure for this study is in the early policy durations and therefore so are the claims. One normally would expect claims to be shorter when they occur early in the policy life, unless there's severe antiselection associated with the claim. Over 40% of our file is in the first policy year. As the policy exposure gets out into the longer durations and claims are able to run for their full term, we should see longer claims.

For the Society study, claims were incurred between 1984 and December 31, 1991. Relative to the claims themselves, the cut-off for all these claims, whether they're open or closed, is December 31, 1991 followed through June 1992. Open claims are included in the study and the 404-day average includes open claims.

We do have information about open claims versus closed claims, closed claims by death, closed claims by recovery, and closed claims by completion of the benefit period. All of those delineations will be included in the final study when it is documented.

MR. ANDREW DAVID SMITH: In light of the adverse relative experience at young ages due to Alzheimer's, I'm wondering if companies are considering placing a limit on the maximum benefit periods that they will issue to policy applicants under a certain age as some sort of cap. If Alzheimer's is hard to diagnose for the young, insurers can be taking on quite a risk. Someone could stay on a claim for a long time with more and more lifetime benefit periods are becoming available.

MS. CZELLECCZ: No. The company changes that I've seen have restricted coverage just to those applicants at the older ages. I haven't seen anything at the younger ages.

MR. MURNANE: We don't. But I certainly understand your point, and I think it's something we're going to have to deal with at some point. We're trying more and more to find that person with the early cognitive problem, but we are learning as we go along. Long-term cognitive claims is one of the reasons that I'm comfortable with having our underwriters conduct the telephone interview.

FROM THE FLOOR: You talked about underwriting lifestyle and use of personal face-to-face interviews. How close are you getting to possible discrimination problems?

MR. MURNANE: Underwriting, by its very nature, is discrimination. However, what we mean by lifestyle is activity level. We want to insure the more active person.

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This is the person who drives the person who works outside the home, the person who is able to balance his or her checkbook. It hasn't been a problem to this point, and I don't see where that type of underwriting would be discriminatory. Although somebody probably will.

MR. JAMES M. GLICKMAN: I want to make a couple of observations on some of the charts. In particular, I'd like to focus my comments around the issue of underwriting under 75. For applicants who are under 75 years of age, there is an attempt to underwrite with both expediency and expense savings. Therefore, there is a heavy reliance on the use of the application and the telephone interview. There is much less utilization of medical-record and face-to-face assessments. I think these reasons will explain many of the anomalies that you see in the under-75-versus-over-75 claimants.

One of Margaret's charts dealt with three different types of underwriting: medical, disability, and LTC underwriting. With the more complex methods of underwriting, we were able to get better underwriting results of the most common impairments. The chart that had the premium charges required for three types of underwriting indicated that the more underwriting and the more complex and marginal conditions that were being allowed, the lower the premiums. Now those would seem at first to be totally anomalous to each other. But I believe that a lot of what's really the difference between these three sets of underwriting is the implication that medical underwriting is being used as a method to select out these conditions.

But if medical underwriting isn't being used with pulling of medical records just the application on the telephone interview are being used, you're dealing with either the things that aren't on the application or are deemed by the agent or the applicant not to be important. Or, for that matter, just dealing with human nature, applicants downplay the seriousness of their own conditions. All you can get out of a telephone interview by its very nature, at best, is what the person honestly believes about himself or herself. And somebody who is in a permanently declining condition is going to minimize its general effect. I noticed that the durational claim rates were very level by duration. Now the underwriting process would imply that would be a very steep pattern moving up, and it wasn't at all, which leads me, again, back to the same conclusion. What underwriting changes have you seen in terms of pulling medical records or using face-to-face assessments at all ages?

MR. CORLISS: I will respond to your comment about the chart relative to the premium differential. Underwriting was not the only differential. Another differential is that there was a managed-care approach – a care coordinator on site who is involved in the provider process. Not all the 25% differential comes from underwriting.

My second comment is relative to the durational comments of the study. What we're able to show is just a split of claims that did happen. That's different than looking at the incidence rate by policy duration. With that further analysis, we hope to see, when we get that part of the process in place and published, whether there is any effect due to underwriting to cause a select period.

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MR. MURNANE: We've looked at requirements from the high end. We tend to be more restrictive to applicants who are aged 75 and older. One of the things we've done is require a personal health interview for every applicant. We require a face-to-face assessment of anybody aged 75 or older, regardless of his or her situation. We require a face-to-face assessment of anybody aged 70 or older if he or she lives alone. Our loss experience is twice as good on people who live with spouses who can take care of them. My own personal thought is that we're going to continue to drop those requirements. At some point, we're going to be doing a face-to-face interview with everybody aged 70 or older, or aged 65 and older if they don't have a spouse.

MR. GLICKMAN: The main part of my question was oriented toward what you're seeing now. You started to indicate what you think the trends are. Almost all of the information that's behind the numbers and the presentation are from 1984 to 1991, which doesn't even bring us to the advances that have been made in the last two years. Where were we then, where are we now, and where we will be, particularly for applicants under age 75, when we want to get those applications out as quickly as possible?

MR. CORLISS: Linda had one chart that tried to look at that just based on the claims. That was her picture. But remember, all we're considering are claims. Alzheimer's, as a percentage of all the claims, was going up by policy-issue year, and that does not make sense. This seemed to imply that, as we are getting more current and more sophisticated, we are getting more Alzheimer's claims. But that does not address the real issue of underwriting, which is the incidence of claims. We didn't present anything on incidence rates.

MR. GLICKMAN: I was trying to get at the issue-age element more than either the duration or the issue year. I think there are other explanations associated with that.

MS. CZELLECCZ: Typically I've seen companies doing what your company does. They are tightening requirements for over-age-75 applicants and just want to get it issued under age 75. I haven't seen much of a change from company to company industry-wide in that respect.

MR. GLICKMAN: As an underwriter, how are you trying to do a better job of underwriting those under age 75?

MR. MURNANE: We tend to use the judgment of the underwriters when they do the personal health interviews as to what to do and when to take it a step further.

MS. CZELLECCZ: That's where my prejudice is, also. I want the underwriters to conduct the telephone interviews and then use their discretion about whether to order any additional requirements.

MR. WOLFE SNOW: The study indicates that women tend to have more injuries than men. And by age, it also shows that older people have more injury claims. Could it be that the two are interrelated because women tend to live longer? Possibly these are not two separate findings, but one.

MS. BALL: It certainly could be just one finding. We haven't done any two-tier analysis by age and sex. But I think you're right. I think we'll see the older insureds being women and they'll have more claims and more injury claims.

MR. ANDREW M. PERKINS: I applaud the Society of Actuaries study. It strikes me that with respect to the industry's tendency to move toward preferred versus standard types of underwriting, this kind of information will be extremely useful. My guess is that many companies are doing that based on competitive pressures and less hard data than they'd like to have. Will all the detail about the results for specific types of medical problems and claim types be published along with the general results on incidence?

MS. BALL: The exact format of the report hasn't been set yet. I certainly would expect that more detail will be published than what we've covered. I don't expect that we'll change the diagnosis categories.

MR. CORLISS: We will define conditions as close as we can to the International Classification of Diseases – 9th Revision (ICD-9) coding and in as much detail as we find meaningful.

I should comment on the format for SOA intercompany study reports. It is anticipated that there will be two phases. The first phase will have five different sections: incidence rates, continuance tables, persistency, cause of claim (which you've heard some parts of), and home health care. Within each of these, the first report will include information on age, sex, benefit period, and elimination period. The second and later report will have about ten different breakdowns associated with each of these topics, where there is enough meaningful data.

MR. DENNIS V. MCKEOWN: Mike, how long did it take for you to realize that you were selected against on the cognitive impairments? Were they coming in two or three months after issue or was it a longer period of time?

MR. MURNANE: The average length of time between the policy issue and time of claim was eight months.

MR. MCKEOWN: My second question is about the 133% actual-to-expected claim results. Was that due to frequency of claim continuance of claim or total claims?

MR. MURNANE: Total claims.

MR. MCKEOWN: What effect has the use of the new underwriting tools had on the approvals for the over 80 market compared with the rest of the business? Is it twice as high?

MR. MURNANE: Actually, interestingly enough, we've done better. Our not-taken rate has gone down. We are able to approve twice as many applications because of paramedical exams and face-to-face assessments. And because the older ages were the group we zeroed in on, we have a much higher approval rate. Greater approvals is one of the reasons that we are going to expand the requirement to even younger

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ages. It is enabling us to issue more policies and turn down less applications. Of course, there is a greater underwriting cost to this approach.

MR. MICHAEL J. COWELL: I was interested in your comment about the two-to-one ratio of favorable experience for couples, relative to single, widowed, and divorced. You are probably not surprised to hear that there are comparable data coming from a paper that is right now being considered for publication by the Society. It shows the same favorable ratio in mortality: a two-to-one favorable mortality for couples relative to single, widowed, and divorced. It corroborates the experience reporting on a disability basis.

MR. MURNANE: It's always nice to have somebody back up something I've said.

MR. JAMES GALASSO: I'd like to comment on the same issue. You seem to be suggesting more vigorous underwriting on the singles. Does it really matter how much underwriting you do? Possibly we are going to continue to find two people who are comparable through underwriting, with the only difference being that one is single and one has a spouse. But you can still expect perhaps twice the morbidity. I wonder if the solution is as simple as doubling the premium rate as opposed to more vigorous underwriting.

MR. MURNANE: I think there's a competitive factor to consider here. We would prefer to offer spouse discounts and less vigorous underwriting when there is a spouse. The only time that we evaluate marrieds closely is if there is one who does not apply. That is a red flag. It could be a situation in which the couple has decided that they will buy this LTC insurance for the one who needs it more. The other thing is a concern about antiselection from agents who send the standard, clean risk elsewhere and the substandard risk to us.

FROM THE FLOOR: I would like to get your reaction to a particular item related to guaranteed issue to employees, especially in light of federal and state regulations for the employment of the disabled. Couldn't there be situations in which somebody with limited ADL is working 20 hours per week?

The second area, which may or may not be related, is just the ability of individuals to buy policies with low elimination periods at high daily benefit amounts in which the benefit increases by 5% compounded. So, you could get one claim that would really be a very high amount.

MS. CZELLE CZ: It is a concern, but those companies having a guaranteed issue program for employees are willing to and hope that they can secure enough satisfactory risks to cover the few claims that may result in early claims. They're not willing for marketing reasons to deny coverage to an ADL-limited person who is actively employed.

MR. CORLISS: Guaranteed issue in the workplace is one area in which we're going to learn a great deal. Margaret described the whole-person approach to underwriting which has activity as its major thrust. Employees usually are taking care of themselves. They're independent. They're getting around. They're doing something. The assumption is that this situation will make for acceptable results when added together

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with all other lives in the active marketplace. We may find, over time, that we can use that criteria only through a certain age, such as 55. Maybe it will not work at some older ages.

FROM THE FLOOR: Again, in the employee marketplace, is there a concern for getting very large claims? A policy going on claim at the younger ages, with benefit of maybe \$200-300 a day, which is compounded annually by 5% on a zero- or 20-day elimination period basis can generate a large benefit.

MR. MURNANE: We look at the claims that we're receiving by benefit period and by agent. At some point, we'll even look at it by the day of the week that the application is taken. I have my own personal theory, which says that agents start off on Monday wanting to do a good job of field underwriting, but by Friday, the house payment is due. All of a sudden, that unhealthy applicant has become healthy. We try to look at all those things and are constantly making those part of our evaluations.

MR. CORLISS: I will comment on the question about elimination period, benefit period, and maximum daily benefits from information found in our Duncanson and Holt claim database. There is a real issue relative to low elimination periods. We've been able to observe adverse experience at low elimination periods across all age groups. The zero and the 20-30-day periods are not very good. I think they will be the dinosaurs of the business at some point in time. Incidence rates are significantly higher at those elimination periods. We have not evaluated that issue yet from the intercompany study, but that certainly will be part of the analysis.

Regarding the benefit period question, one company with a significant volume of experience reported findings a few years ago. It noticed a dramatic change in incidence rates by benefit period. It was having increased incidence rates associated with longer benefit periods. That phenomenon was before the lifetime benefit really became very popular. Other than cutting back somewhat on those over aged 80, I don't see anybody paying a lot of attention to either of those items right now in their underwriting process. That's one of those areas that I believe people will start paying attention to as underwriting evolves. For example, in life insurance, there are large-amount requirements. If one considers compounded inflation protection on a lifetime plan, you can be talking about quite large amounts. At some point, I would foresee underwriting becoming sophisticated enough to pay attention to the amount issued. There may be more requirements. There may be two paramedical visits.

MR. MURNANE: We don't have any formal standards in which a person with a certain impairment might not qualify for lifetime coverage. We do have an underwriting committee to help an underwriter who does not feel sure about issuing to a certain applicant. For example, the applicant might be applying for lifetime benefits and first-day coverage. We will have two or three different people look at it, and we'll make a counteroffer that we're willing to issue. We might reduce the benefit period. We might raise the elimination period. And, at some point, maybe a year down the road or whatever, we'll give the person the opportunity to come back and reapply for that original coverage. But this is all done on a case-by-case basis.

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MR. MCKEOWN: We have been looking at the issue of nonsmokers versus smokers. I'm curious, in terms of the Society's study, whether that's being broken down, and in terms of the underwriters' view of cases, how they look at nonsmoking status.

MS. CZELLEZ: From what I've seen in the industry, typically there's the nonsmoker discount. There are companies that will decline individuals with certain medical conditions in combination with smoking, but that's about all I've seen. For example, a person with chronic obstructive pulmonary disease (COPD) who smokes, or a person who had a heart attack within the last six months and is a smoker, will be declined.

MR. MURNANE: It has been suggested that we use smoker/nonsmoker rates. We've stayed away from that. We've found in some of our other underage products that a large number of people who apply for nonsmoker rates don't qualify for nonsmoker rates. You find that when you check for nicotine. Unless you're willing to test, I think you're going to be giving a discount to a large portion of the population not entitled to that discount. So, until we're ready to check and spend the money, I personally believe we should stay away from it.

MR. CORLISS: I have one observation I'll make relative to the nonsmoking subject that substantiates Mike's thought. We have looked at the number of clients who are doing business with us and who have a nonsmoker discount, with is different than a nonsmoker, preferred-risk discount. We're finding that most people at older ages don't smoke. If premium-rate setting is a zero of claim costs based on this, there is a very small adjustment to the nonsmoker and a very large increase to the smoker rate. I'm not sure, from a practical standpoint, how meaningful a nonsmoker discount is. Now, maybe if there's enough sales pizzazz, because there's still a 10% or 15% differential, some salesmen will say this is great news and go sell it. If agents perceive it's wonderful and that makes them sell more, well, it's worth it. But I don't think there's a real differential that one can give at this point.

MS. BALL: As far as the Society study goes, we are asking for smoker/nonsmoker information. Most of the records are coming in coded unknown. The smoker/nonsmoker analysis is in our phase-two reporting. When we looked at this information last spring and realized that smoker/nonsmoker simply isn't being coded for the study, we realized that unless we can get more information, we will have nothing on which to report.

MR. CORLISS: Possibly we will find some companies with data relative to the smoking issue, but we haven't as of this point. As a final comment on the Society study, a request went out to those who might continue or commence contribution to the 1992 study. We have an excellent response. We will probably have eighteen of the largest issuers in our 1992 study, and some of them are going back to their 1988, 1989, and 1990 data to contribute. We hope to get more information, such as smoker/nonsmoker data, from the contributors. We should have a very comprehensive industry database when the 1992 report is published.

