SOCIETY OF ACTUARIES

LONG-TERM CARE EXPERIENCE COMMITTEE

INTERCOMPANY STUDY REPORT 6

1984 – 2007

Intercompany Subcommittee

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I1. INTRODUCTION

This document is the sixth intercompany Report prepared by the SOA LTC Experience Subcommittee. Previous Reports were published January 1995, February 2000, September 2002, November 2004 and November 2007. The six Reports of this Committee sponsored by the SOA, as well as the three LIMRA Long-Term Care (LTC) Persistency Experience Reports published in 2004, 2006 and 2010 also sponsored by the SOA, are the only publicly available reports of experience on lives insured under private LTC insurance plans in the United States. This Report, as well as the previous five, is based on data gathered covering a significantly large number of the private LTC policies ever issued. Data in this Report has been submitted by 35 organizations. Eleven new companies submitted data for this report. The years of exposure due to the new companies comprises 7.6% of the total exposure in this Report. All contributing organizations are listed in Appendix A.

Exposure and claim data have been accumulated on policies issued between January 1, 1984 and December 31, 2007. Claims incurred on policies during this same timeframe were followed from claim inception through the earlier of claim termination or June 30, 2008. Allowing a six-month period to report incurred claims (after the close of the exposure period) allows for the capture of most of the incurred but not reported claims as of year-end 2007.

Insurers were asked to provide information on 100% of the policies issued unless their volume would potentially alter the Intercompany nature of the study. Thus, in one instance, a participant submitted a substantially representative portion of their experience such that it would allow an unbiased contribution but still protect the confidentiality of that company's data. The participating company made the selection of the unbiased data for submission.

Exposure records increased over 60% from the 2004 Report, exceeding nine million policy records and 44 million exposure years. General characteristics of the exposure file are found below. Parentheses indicate comparable results from the previous Report. Additional characteristics of the exposure file are found in Appendix B.

- 76% of the exposure was on Individual insureds (69%)
- 24% of the exposure was from Group insureds (31%)
- Female insureds represent 58% of the exposure (59%)
- Average issue age of all insureds in the database is 59 (61)
- Average issue age of Individual insureds is 63 (67)
- Average issue age of Group insureds is 47 (47)
- Average attained age of insureds at their entrance to the database is 63.5 (64)

The number of claimants increased from just over 175,000 in the previous 2004 Report to 310,000 claimants in this Report. Benefits paid more than tripled from $4.1 billion to $13.1 billion. General characteristics of the claim file are found below. Parentheses indicate comparable results from the previous Report. Additional characteristics of the claim file are found in Appendix C.

- 25% of the claim payments were for Home Care
- 17% of the claim payments were for Assisted Living Care
- 49% of all claims (open and closed) lasted one year or less (75%)
- 92% of claims in the data base are closed (87%)
- Average attained age at commencement of claim was 79.0 years (79.9)
- Female claimants incurred 67% of claims and 69% of the benefit dollars (70%)

Each section of this Report covers one or more of several areas listed below:

- Gender
- Issue Age
- Attained Age
- Elimination Period
- Benefit Period (Limited vs. Unlimited)
- Benefit Amount
- Policy Duration
- Individual vs. Group Policy Type
- Coverage Type (Nursing Home Only, Home Care Only, Comprehensive)
- Initial level of Care (Nursing Home, Home Care, Assisted Living)
- Issue Year Cohorts (including Pre and Post HIPAA)
- Experience Year Cohorts
- Underwriting Type
- Benefit Escalator Clause
- Distribution Source
- Premium Level
- Marital Premium Discounts
- Preferred, Standard and Substandard Premium
- Regional Breakouts
- Original Diagnosis

New information in this Report is included for:

- Assisted Living Care Claims
- Regional Breakouts

The compiled data (when compared with the five previous Reports) demonstrates both stabilization of results and continuation of trends:

Stabilization

- Overall Incidence rate of 0.65%
- Overall Mortality rate of 1.0%

Trend Continuation

- Claim Continuance Rates lengthening more than 10% in relation to the 2001 Report, while relatively stable in relation to the 2004 Report

- Overall Voluntary Lapse rate of 5.2% - continues to decrease
- Overall Total Termination rate of 6.2% - continues to decrease
- Initial Cause of Claim of Alzheimer's/Dementia is twice that of other causes

Other general results of interest are shown below. Parentheses indicate comparable results from the previous Report:

Incidence Rates

- Incidence rates appear to decrease as elimination period increases
- Incidence rates increase as policy duration increases
- Females exhibit higher incidence rates than males
- At initial durations, policies issued with marital premium discounts exhibit lower incidence rates than those without a marital discount
- Policies with unlimited benefit periods appear to have higher incidence rates than policies with limited benefit periods

Claim Continuance

- General increases with increasing age at claim until about age 85 through the first two years of claim, and decreases by increasing age thereafter
- Average length of claim increased to 1040 days (914)
- 66% of nursing home claims end in death (68%)
- About half of home care claims end in death and half in recovery

Cause of Claim

- Alzheimer's claims are the most frequent, longest and most expensive
- Alzheimer's is the leading cause of claim from age 65 (70)
- Cancer is the leading cause of claim below age 65
- The largest aggregate amount paid to a claimant has exceeded $3 million

Mortality

- Overall mortality rate is 0.98% (1.0%)
- Mortality for males averages 33% greater than females (40%)
- Mortality is considerably lower than the 83 GAM, A2000 and the new 2001 VBT
- Mortality for Disabled Lives is 25 times that of Active Lives

Voluntary Lapse Rates

- Lapse rates continued to decrease - 5.2% (5.5%)
- Lapse rates decrease for the first eleven (nine) policy years
- Lapse rates for males have identical rates as females in total
- Lapse rates for Group insureds are higher than Individual insureds for nine years, then generally lower after ten years
- Lapse rates for insurance solicited by Enrollers is noticeably higher (lower) than other types of product distribution
- Lapse rates for unlimited benefit plans (compared to limited benefit plans) vary; Individual is lower and Group is higher

Total Termination Rates

- Total Termination rates continued to decrease - 6.2% (6.8%)
- Total Termination rates generally decrease to age 65, then increase thereafter
- Total Termination rates increase by duration faster than Voluntary Lapse rates
- Total Termination rates for males slightly exceed rates for females

Home Care Visits

- Average number of weekly home visits were 3.5 per week
  (higher than 3.2 visits per week in the previous Report and lower than the 3.8 visits per week in the second previous Report)
- Arthritis claimants have generally used the most days of care per week

Home Care Only Policies

- Home Care as the initial claim becomes more prevalent after age 60
- Home Care incidence rate for females is more than double that for males
- Home Care incidence rates are lower for those with marital premium discounts
- Home Care incidence rates are twice as high in the South and West
- Home Care length of claim generally decreases as claimants age increases

I2. CALCULATIONS

Policy Duration

Many tables in this Report are segregated by policy duration. Duration is calculated based on exposure from either active or terminated records. From active records, duration is calculated by using only the latest record in the following formula:

Duration in Months = (1 + Last Observation Date – Issued Date) / Days per Month
(30.42 was used as the Days per Month to account for monthly variations and leap years)

For terminated policy records, duration is calculated by substituting the Termination Date for the Last Observation Date in the previous formula.

Duration in months is shown below. Duration 1 spans 13 months to estimate the effect of the grace period. The application of grace periods in practice varies significantly from carrier to carrier. Generally, a company does not consider a policy "terminated" until at least the end of the grace period. For administrative simplicity, many carriers do not terminate (or lapse) a policy until well after the grace period has expired. The division of duration into these time periods has the effect of counting any active policy currently in its grace period in the previous duration.

Duration	Months	Duration	Months
1	0 to 13	6	74 to 85
2	14 to 25	7	86 to 97
3	26 to 37	8	98 to 109
4	38 to 49	9	110 to 121
5	50 to 61	10	122 to 133

Note: For example, a policy whose duration is 26 months and 7 days will be included and counted as completing duration 3. This methodology will overstate duration by duration group and in total. Claim incidence and lapse rates will be understated as a result.

Claim Duration

For each claim, duration is calculated using the following formula:

Duration in Months = (1 + Incurral Date – Issue Date) / Days per Month. Duration in months is mapped into annual periods using the same mapping as policy duration.

(30.42 was used as the Days per Month to account for monthly variations and leap years)

An incidence rate is found by dividing the number of claims in any cell by the exposure in that cell.

Incurral Date is the earliest incurred date shown on records submitted for each claim. Issue date is the earliest date of issue for each insured.

Claim Incidence Rates

When calculating incidence rates, only claims which satisfy the elimination period are included. Although some companies' submissions include claims without any paid benefits, these claims are excluded from the claim counts (but not the exposure to the risk of claim).

Exposure

The end of the Observation Period is defined as the policy termination date if terminated or December 31st of the last observation year. Each policy is credited with a full exposure year for all completed, annual policy durations (as defined above) up to the end of the Observation Period. The amount of exposure credited for the time between the last completed policy duration and the end of the Observation Period is dependent on whether or not a claim was incurred in that timeframe:

- If a claim was incurred, a full year of exposure is credited;
- If a claim was not incurred, a partial year of exposure is credited.
- Note, therefore, incidence rates are calculated using exposure for both active and disabled lives.

Elimination Period

Elimination period is defined in days. Data was submitted for many specific elimination periods. Thirteen percent (13%) of exposure contained no information on the elimination period. These records are included in the overall incidence calculations. Because the data contained small amounts of experience for several elimination periods that were close to other periods with a large amount of exposure, the elimination period data was segregated in the following manner:

Elimination Periods	Segregated EP Labels
0	0
7-21	20
28-30	30
31-80	60
90-91	90
100	100
>100	>100

Benefit Period

Benefit periods are grouped into three categories defined in years: 1 to 4 years, 5 or more years (but not unlimited) and unlimited. For incidence comparisons, benefit periods defined as pools of money are converted to years by dividing the pool of money by the daily benefit amount for each policy.

Attained Age

This Report, as well as the 2004 Report # 5, determines attained age for each exposure year throughout a policy's tenure. Prior to the 2004 Report, the attained age associated with each year of exposure was equal to the attained age at the last policy anniversary, *for the entire life of the policy prior to any claim.* This meant that while the total exposure reflected the underlying data, all years of exposure (other than those with policies' attained ages as of their last policy anniversaries) were associated with higher attained ages than they should have been. As a result, for the highest ages (above age 80), exposures were overstated. Therefore, it is not advisable to perform comparisons in incidence experience for the highest attained age cohorts with Reports published prior to the 2004 Report.

I3. LIMITATIONS

This Report 6 of the SOA Long-Term Care Experience Committee includes increasingly valuable information. As one considers the findings in this Report, please remember these main points.

- The data has been gathered from different companies contributing over different timeframes. Only two companies have contributed to all six Reports.
- These results have been aggregated over two decades of calendar years, for companies with different distribution methods, types of underwriting, target markets, pricing levels, products and administrative rules. Therefore, distortions may have been introduced. The representation of any one company varies from cell to cell, so results shown are, in part, distorted by a shift in the underlying mix. Much of the exposure and claims data is still from relatively early policy durations.
- About half of the claim experience is based on policies that provide little in the way of home care benefits. Therefore, this Report is still heavily a Nursing Facility Experience Study.
- Many of the contributors wrote either Individual or Association Group policies which were underwritten. Over 95% of all claim experience is based on individually underwritten insureds.
- Experience is reported exactly as calculated herein. There has been no attempt to smooth, interpolate or extrapolate numerical data, unless explicitly described otherwise.
- Historical results are not always indicative of levels at the end of the current experience period. For example, lapse rates have fallen significantly over the twenty-year experience period. Therefore, great care needs to be exercised when applying the results in this Report. Consideration must be given to whether the averages shown are appropriate for use as is, or whether adjustments are needed for any specific application of the data.
- This analysis and all tables/charts are based on raw data within and between each Report which cut across broad variations in company, market and product. Similarly, there has been no attempt to adjust for differences in exposure between one Report and another.
- While analyzing the data, if problems with data submissions were found, they were discussed with the contributors and corrected where possible. However, because this analysis is based on files submitted from a variety of sources, there may be other issues that went undiscovered or are not completely homogenized.

Lapse Rates

The voluntary lapse rates on Individual policies from later durations are sometimes surprising, which suggests improper coding of deaths. This led us to include, in the previous two Reports and in this Report, an entire section entitled Total Termination to assist in understanding the total decrement of all insureds.

I4. Section I – Morbidity Incidence Rates

This section presents information on incidence rates for LTC insureds. An incidence rate is found by dividing the number of claims in any cell by the exposure in that cell. The methodology for calculating claims and exposure is described in the preceding Calculations section.

Throughout this section, trends and relationships in the data are identified so the reader can look for similar/different patterns in his own data. When interpreting these trends and relationships, and when using the data provided in the appendices and pivot table, it is imperative to keep in mind the limitations described in the preceding Limitations section.

Totals are included in the bottom row of some Figures. These represent weighted averages based on the distribution of business for that particular group of policies. Therefore, the totals in each Figure (including ratios and percent differences) may appear out of pattern with the individually broken-out results.

The following pivot tables, which can be downloaded from the SOA webpage, were used to calculate and analyze the incidence rates discussed in this section:

- Appendix D-A: Incidence rates by issue age, policy duration and other characteristics,
- Appendix D-B: Incidence rates by attained age and other characteristics, and
- Appendix D-C: Claim counts by original diagnosis and other characteristics.

Appendix D2-A is an updated version of the pivot table provided in the 2004 report. Also, updated static tables are included in Appendix D at the end of this Report.

Exposure and Incidence Rates by Attained Age and Report Year (Appendix D-1)

Figure 1a shows exposure for each attained age cohort and overall for the current and prior two Reports. In relation to the 2004 Report, exposure increased by nearly two-thirds overall and increased by at least 50% in every attained age cohort. Note that due to the error in calculating the attained age in the 2001 report, only the total exposure is listed for that report.

Figure 1a: Exposure by Attained Age and Report Year

Attained Age	2001 Report*	2004 Report	2007 Report
<40		1,609,793	2,699,912
40-49		2,231,684	3,985,966
50-59		4,189,408	7,774,671
60-64		3,348,867	5,758,542
65-69		4,733,691	7,360,685
70-74		4,702,325	7,089,804
75-79		3,468,448	5,280,606
80-84		1,847,646	2,913,001
85-89		583,482	991,798
90+		104,739	199,990
Total	**12,206,895**	**26,820,083**	**44,054,975**

*Attained age for each year of exposure was equal to the attained age at the last policy anniversary for the entire life of the policy.

Figure 1b shows incidence rates by attained age for the current and prior two Reports. In relation to the prior Report, incidence rates increased across all attained age cohorts as follows:

- Cohorts below attained age 50 increased approximately 30%,
- Cohorts from attained age 50 through 74 increased approximately 10%, and
- Cohorts above attained age 74 increased by less than 10%.

Figure 1b: Incidence Rates by Attained Age and Report Year

Attained Age	2001 Report*	2004 Report	2007 Report
<40		0.01%	0.01%
40-49		0.02%	0.03%
50-59		0.05%	0.06%
60-64		0.10%	0.11%
65-69		0.20%	0.22%
70-74		0.50%	0.55%
75-79		1.24%	1.31%
80-84		2.74%	2.82%
85-89		5.16%	5.30%
90+		7.83%	8.44%
Total	**0.68%**	**0.64%**	**0.65%**

*Attained age for each year of exposure was equal to the attained age at the last policy anniversary for the entire life of the policy.

The reader should keep in mind that significant mix of business changes can occur from one Report to the next, depending on the companies that participate in each study. Consider, for example, that 24 companies contributed to the 2004 Report, whereas 35 companies contributed to the current Report. Industry trends (e.g., issuing to lower ages, tightening underwriting practices and the impact of regulatory changes) can also affect comparisons between Reports.

The remainder of Section I draws attention to incidence patterns in the current study.

Incidence Rates by Policy Duration

Figure 2 shows that overall incidence rates increase by issue age cohort and policy duration. The rate of increase appears relatively smooth, though, in fact, this is highly influenced by the underlying mix of claims and exposure.

Figure 2: Incidence Rates by Issue Age Cohort and Policy Duration

Duration	<50	50-59	60-69	70-79	80+
1	0.03%	0.05%	0.15%	0.77%	2.63%
2	0.02%	0.06%	0.21%	1.00%	3.18%
3	0.02%	0.08%	0.27%	1.26%	3.85%
4	0.03%	0.09%	0.33%	1.54%	4.62%
5	0.03%	0.10%	0.39%	1.79%	5.19%
6	0.03%	0.12%	0.47%	2.09%	5.74%
7	0.04%	0.13%	0.56%	2.37%	6.18%
8	0.04%	0.15%	0.65%	2.65%	6.55%
9	0.04%	0.16%	0.75%	2.89%	7.02%
10	0.04%	0.19%	0.86%	3.12%	6.70%

Gray shading represents cells with less than 25,000 exposure years.

Incidence Rates by Elimination Period (Appendix D-1)

Elimination period is a significant factor in explaining incidence, since policies with shorter elimination periods are more likely to exhibit anti-selection, and claims with shorter elimination periods are more likely to have benefit payments, all else being equal. In aggregate, this relationship is seen across *most* attained age and elimination period categories in this study (see Figure 3).

Figure 3: Incidence Rates by Attained Age and Elimination Period Category (in Days)

Attained Age	Zero	20	30	60	90	100	>100
<40	0.03%	0.09%	0.02%	0.03%	0.01%	0.00%	0.03%
40-49	0.16%	0.03%	0.02%	0.03%	0.02%	0.03%	0.05%
50-59	0.28%	0.06%	0.06%	0.06%	0.04%	0.05%	0.06%
60-64	0.37%	0.10%	0.11%	0.11%	0.08%	0.08%	0.11%
65-69	0.64%	0.22%	0.20%	0.21%	0.14%	0.16%	0.23%
70-74	1.34%	0.56%	0.48%	0.47%	0.36%	0.39%	0.59%
75-79	2.84%	1.35%	1.23%	1.06%	0.84%	0.97%	1.40%
80-84	5.31%	2.98%	2.67%	2.21%	1.66%	2.21%	2.87%
85-89	8.88%	5.56%	6.12%	4.02%	2.97%	4.31%	5.56%
90+	13.36%	8.71%	12.24%	6.78%	5.37%	6.49%	8.28%
Total	**2.19%**	**1.21%**	**0.47%**	**0.32%**	**0.21%**	**0.73%**	**0.45%**

Gray shading represents cells with less than 25,000 exposure years.

Keeping in mind the underlying differences with regard to mix of business (e.g., that each elimination group has different average duration), the following observations can be made about Figure 3:

- With the exception of elimination periods greater than 100 days, incidence rates decrease as elimination periods increase. Two possible explanations for high incidence rates in elimination periods greater than 100 days could be that:
  - Insurers offer longer elimination periods as alternatives for declining an applicant, and
  - Substandard risks (those issued with premium rates greater than standard) comprise a greater portion of exposure for elimination periods greater than 100 days than in shorter elimination periods.

- The decrease in incidence rates is sharpest when going from a zero-day elimination period to a 20-day elimination period.

- The spread between incidence rates for the zero-day elimination period and other elimination periods narrows as attained age increases. Two possible explanations for this could be that:
  - Younger ages are more likely to have short duration claims, and
  - The zero-day elimination period may exhibit more anti-selection at younger ages than at older ages.

- Note: Since most companies in the study do not sell both 90- and 100-day elimination periods, differences between these two categories are more likely attributable to company/policy characteristics rather than lengthening the elimination period by ten days. For example, the 100-day elimination period is mostly comprised of Individual policies, while the 90-day elimination period is comprised of both Individual and Group policies.

Incidence Rates by Benefit Period (Appendix D-6)

This section compares incidence rates by benefit period to ascertain any effect of anti-selection at issue or reduced reticence to begin drawing claims benefits. For this purpose, benefit period is defined as years, and benefit periods defined as pools of money are converted to years by dividing the pool of money by the daily benefit amount for each policy.

When looking at the data in aggregate, differences in incidence rates by benefit periods may be masked by other factors such as policy type (Individual vs. Group), elimination period, coverage type (e.g., comprehensive vs. facility only), etc. To lessen noise from these factors, Figure 4 gives incidence rates for policies with the following combination of characteristics:

- Individual,
- Full underwriting,
- Comprehensive coverage with elimination period equal to 90 or 100 days.

The resulting table illustrates that policies with longer benefit periods have higher incidence rates. Further analysis for this cohort shows that:

- The difference in incidence rates between policies with limited versus unlimited benefit periods may be wider for policies sold by brokers than policies sold by company agents.
    - This is largely driven by the fact that policies with unlimited benefit periods sold by company agents have lower attained age incidence rates than policies sold by brokers.
- The difference in incidence rates between policies with limited versus unlimited benefit periods may diminish at later policy durations, which could suggest unlimited policies exhibit anti-selection at time of issue more so than at time of claim.

Figure 4: Incidence Rates by Attained Age Cohort and Benefit Period Category, Individual, Fully Underwritten, Comprehensive Coverage with 90- and 100-Day EP

Attained Age	Less than 5-Year Benefit Periods	5-Year to Unlimited Benefit Periods	Unlimited Benefit Period
<40	0.00%	0.00%	0.04%
40-49	0.00%	0.01%	0.02%
50-59	0.04%	0.04%	0.05%
60-64	0.05%	0.08%	0.10%
65-69	0.12%	0.14%	0.22%
70-74	0.31%	0.40%	0.56%
75-79	0.79%	1.19%	1.43%
80-84	1.93%	2.97%	3.56%
85-89	3.99%	5.97%	6.75%
90+	6.28%	9.48%	10.27%
Total	**0.63%**	**0.53%**	**0.37%**

Gray shading represents cells with less than 25,000 exposure years.

Incidence Rates by Gender (Appendix D-3)

Figure 5a shows that females exhibit higher incidence rates than males across most attained ages. There does not appear to be any definitive relationship between the ratio of female-to-male incidence rates and elimination period, therefore results are shown in aggregate.

Figure 5a: Ratio of Female/Male Incidence Rates by Attained Age

Attained Age	Ratio
<40	82%
40-49	100%
50-59	133%
60-64	134%
65-69	149%
70-74	142%
75-79	135%
80-84	130%
85-89	124%
90+	113%
Total	**156%**

Gray shading represents cells with less than 25,000 exposure years.

Figure 5b shows that the spread between female and male incidence rates appears to decrease by policy duration. Since there is a higher proportion of recently issued policies in the early durations, Figures 5c and 5d distinguish between policies issued before 1997 and more recent issues (those issued on or after 1997), respectively. For older issues (i.e., policies issued before 1997), the ratio between female and male incidence rates peaked in duration one and remained relatively stable thereafter. For more recent issues, the ratio began high, gradually decreased and may be stabilizing at higher levels than the older issues.

Figure 5b: Ratio of Female/Male Incidence Rates
by Issue Age and Policy Duration, All Policies, All Issue Years

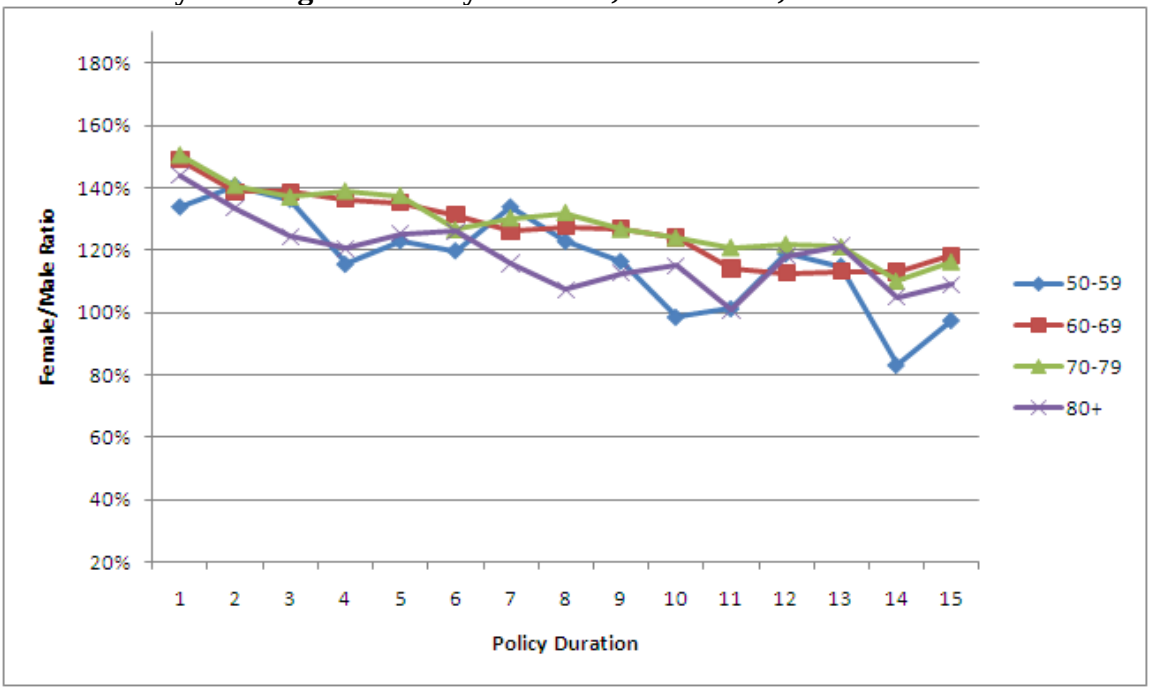


Figure 5c: Ratio of Female/Male Incidence Rates
by Issue Age and Policy Duration, All Policies, Policies Issued Before 1997

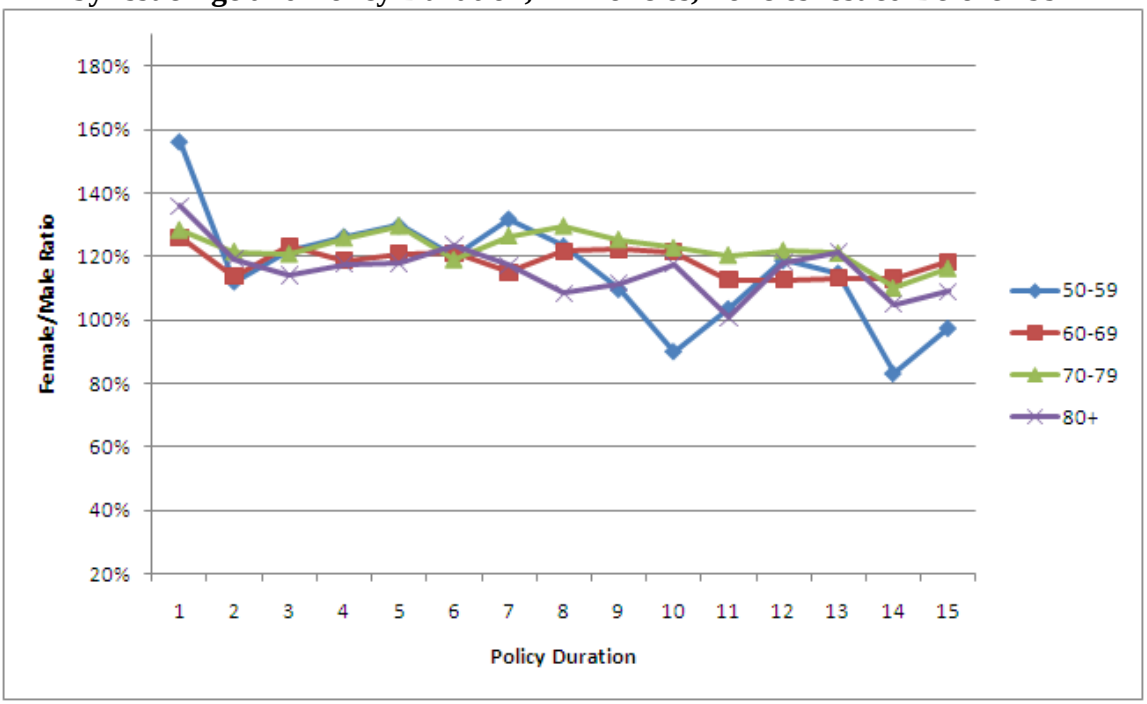
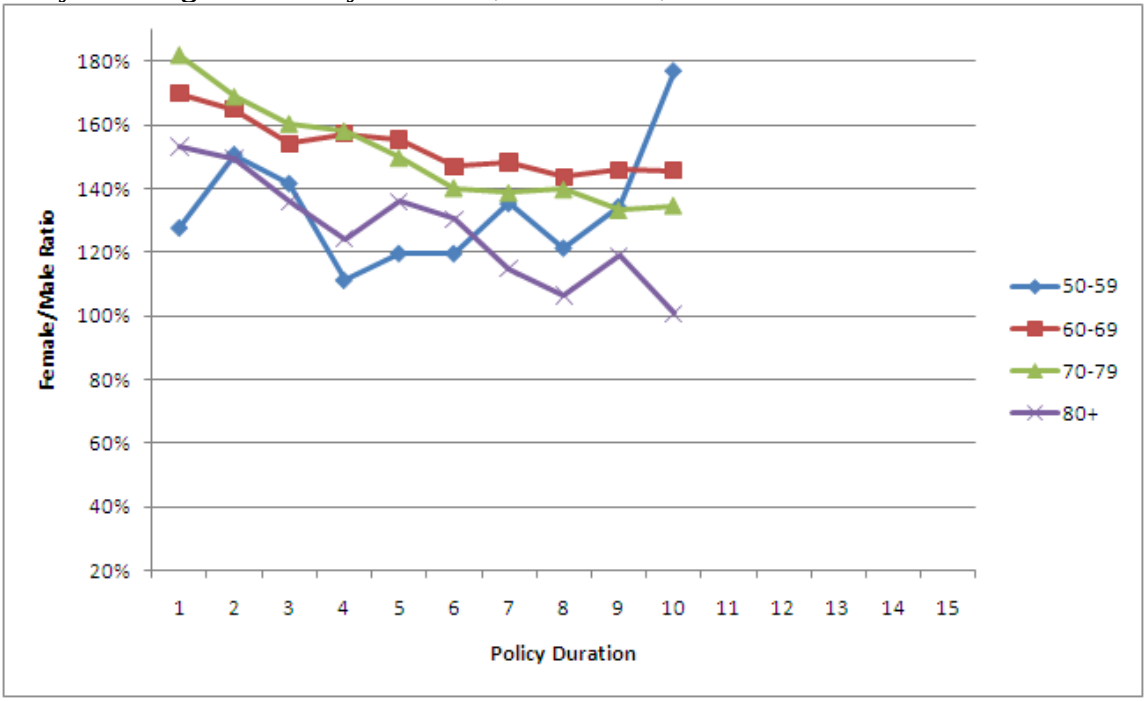


Figure 5d: Ratio of Female/Male Incidence Rates
by Issue Age and Policy Duration, All Policies, Policies Issued on or After 1997



Incidence Rates by Marital Premium Discount (Appendix D-9)

In this section, incidence rates for policies issued with marital discount are compared to incidence rates for policies issued without marital discount. Since the majority of policies with marital premium discount in the data are Individual, fully underwritten policies, the analysis in this section is limited to Individual, fully underwritten policies.

Figure 6a compares attained age incidence rates for policies with a marital premium discount to attained age incidence rates for policies without a marital premium discount for all policy characteristics combined. The results show that the presence of a marital premium discount is associated with lower incidence rates for attained ages below 75. For attained ages 75 and above, the incidence rates are higher for policies with martial discounts than those without.

Figure 6a: Incidence Rates by Attained Age and Marital Premium Discount, Individual, Fully Underwritten Policies Only

Attained Age	Policies with Marital Premium Discount	Policies without Marital Premium Discount	Percent Difference
<40	0.03%	0.04%	-36%
40-49	0.03%	0.05%	-44%
50-59	0.04%	0.08%	-48%
60-64	0.08%	0.11%	-28%
65-69	0.16%	0.21%	-21%
70-74	0.43%	0.45%	-4%
75-79	1.13%	1.05%	7%
80-84	2.76%	2.34%	18%
85-89	6.27%	4.62%	36%
90+	11.67%	8.39%	39%
Total	**0.46%**	**0.91%**	**-49%**

Gray shading represents cells with less than 25,000 exposure years.

To determine whether this relationship holds true in all durations, incidence rates were evaluated by issue age and policy duration. As shown in Figure 6b, initially, i.e., in policy durations 1 through 3, policies issued with marital premium discounts exhibit lower incidence rates across all issue ages. This could be attributable to the tendency for married individuals to receive care from their spouses before relying on their LTC policy. However, this effect appears to wear off over time (partly due to death and divorce), and eventually, incidence rates for policies issued with a marital premium discount exceed that of policies issued without. This could indicate that once spouses reach an attained age at which they themselves need care, both they and the spouse whom they were caring for go on claim.

Figure 6b: Incidence Rates by Issue Age Cohort and Marital Premium Discount, Individual, Fully Underwritten Policies Only

	Durations 1-3			Durations 4-6			Durations 7+		
Issue Age	**Policies with Discount**	**Policies without Discount**	**Percent Difference**	**Policies with Discount**	**Policies without Discount**	**Percent Difference**	**Policies with Discount**	**Policies without Discount**	**Percent Difference**
<40	0.03%	0.04%	-30%	0.04%	0.05%	-19%	0.07%	0.13%	-43%
40-49	0.03%	0.07%	-51%	0.05%	0.11%	-49%	0.09%	0.13%	-34%
50-59	0.04%	0.07%	-47%	0.09%	0.13%	-33%	0.18%	0.21%	-14%
60-64	0.07%	0.13%	-42%	0.18%	0.23%	-19%	0.46%	0.49%	-7%
65-69	0.16%	0.25%	-36%	0.42%	0.43%	-4%	1.01%	0.98%	3%
70-74	0.39%	0.58%	-32%	1.01%	0.99%	2%	2.37%	1.92%	23%
75-79	0.96%	1.40%	-31%	2.30%	2.19%	5%	4.60%	3.59%	28%
80-84	2.07%	2.61%	-21%	4.43%	4.00%	11%	7.49%	5.35%	40%
85-89	5.17%	5.73%	-10%	9.09%	8.47%	7%	12.31%	9.81%	25%
90+	7.93%	7.89%	0%	5.66%	9.32%	-39%	20.74%	13.74%	51%
Total	**0.21%**	**0.55%**	**-63%**	**0.52%**	**0.87%**	**-40%**	**1.18%**	**1.40%**	**-16%**

Gray shading represents cells with less than 25,000 exposure years.

Incidence Rates by Level of Underwriting and Policy Duration (Selection Factors)

This section provides selection factors for Individual, fully underwritten business; Group, fully underwritten business; and Individual and Group, simplified issue business. In practice, selection factors are used in pricing to adjust ultimate claim costs based on the level of underwriting employed by a company. In this report, however, the term "selection factor" refers simply to a ratio between incidence rates for the same attained age cohort at different policy durations. These resulting selection factors illustrate the combined effect of two competing forces – selection from underwriting and anti-selection – at various issue ages and policy durations.

For instance, Figure 7a shows that for Individual, fully underwritten business, selection drives attained age incidence rates of newly issued policies lower for the first three to four policy durations than incidence rates at the same attained ages of policies issued five years earlier.

Thereafter, for a given attained age, the policies that were issued at older ages exhibit higher incidence than the policies that were issued at younger ages. This makes sense given that:

- Persons buying LTC coverage at younger ages may be purchasing it as part of an overall financial plan, whereas
- Persons buying at older ages know more about their health and, therefore, may be more anti-selective.

The factors in this table also suggest these relationships may "level off" at later durations. For example, issue ages 70-74 factors appear to plateau at approximately 120%.

Figure 7a: Incidence Rates and Selection Factors by Issue Age Cohort, Individual, Fully Underwritten Business

Dur(t)	55-59 Dur(t+5) Incidence Rate	60-64 Dur(t) Incidence Rate	60-64 Raw Selection Factor	60-64 Dur(t+5) Incidence Rate	65-69 Dur(t) Incidence Rate	65-69 Raw Selection Factor	65-69 Dur(t+5) Incidence Rate	70-74 Dur(t) Incidence Rate	70-74 Raw Selection Factor	70-74 Dur(t+5) Incidence Rate	75-79 Dur(t) Incidence Rate	75-79 Raw Selection Factor
1	0.15%	0.09%	61%	0.29%	0.17%	61%	0.58%	0.43%	75%	1.39%	1.06%	76%
2	0.16%	0.11%	71%	0.32%	0.24%	76%	0.68%	0.57%	83%	1.55%	1.36%	88%
3	0.20%	0.16%	78%	0.34%	0.31%	90%	0.80%	0.76%	95%	1.80%	1.73%	96%
4	0.19%	0.17%	89%	0.42%	0.41%	98%	0.90%	0.93%	104%	2.09%	2.16%	103%
5	0.20%	0.22%	107%	0.47%	0.48%	101%	1.01%	1.13%	112%	2.26%	2.51%	111%
6	0.22%	0.29%	129%	0.53%	0.58%	110%	1.15%	1.39%	120%	2.44%	2.94%	120%
7	0.27%	0.32%	119%	0.62%	0.68%	109%	1.27%	1.55%	123%	2.59%	3.39%	131%
8	0.29%	0.34%	118%	0.65%	0.80%	122%	1.49%	1.80%	121%	2.98%	3.75%	126%
9	0.32%	0.42%	130%	0.75%	0.90%	119%	1.67%	2.09%	125%	2.96%	4.01%	136%
10+	0.43%	0.47%	109%	0.92%	1.01%	111%	1.91%	2.26%	118%	3.39%	4.32%	128%

Gray shading represents cells with less than 25,000 exposure years.

Further analysis shows that for Individual, fully underwritten policies:

- Policies with marital premium discounts may exhibit a greater degree of selection for more durations than policies without marital premium discounts.
- Policies issued to males may exhibit a greater degree of selection for more durations than policies issued to females.
- Facility-only policies may exhibit a greater degree of selection for more durations than comprehensive policies, while home health policies may exhibit a lesser degree of selection and shorter selection period.

Figure 7b shows Group, fully underwritten business, the majority of which lacks significant exposure. Nonetheless, initial data may suggest that Group experience exhibits the effects of selection longer than Individual experience.

Figure 7b: Incidence Rates and Selection Factors by Issue Age Cohort, Group, Fully Underwritten Business

Dur(t)	55-59 Dur(t+5) Incidence Rate	60-64 Dur(t) Incidence Rate	60-64 Raw Selection Factor	60-64 Dur(t+5) Incidence Rate	65-69 Dur(t) Incidence Rate	65-69 Raw Selection Factor	65-69 Dur(t+5) Incidence Rate	70-74 Dur(t) Incidence Rate	70-74 Raw Selection Factor	70-74 Dur(t+5) Incidence Rate	75-79 Dur(t) Incidence Rate	75-79 Raw Selection Factor
1	0.07%	0.10%	146%	0.15%	0.10%	69%	0.43%	0.34%	78%	0.82%	0.93%	114%
2	0.11%	0.07%	60%	0.21%	0.16%	73%	0.44%	0.46%	105%	1.15%	0.80%	69%
3	0.14%	0.09%	64%	0.24%	0.19%	77%	0.65%	0.35%	54%	1.36%	1.10%	81%
4	0.12%	0.10%	78%	0.24%	0.23%	95%	0.91%	0.46%	50%	1.94%	1.03%	53%
5	0.12%	0.13%	105%	0.33%	0.28%	85%	0.84%	0.59%	70%	2.24%	2.21%	99%
6	0.14%	0.15%	108%	0.46%	0.43%	94%	1.21%	0.82%	67%	2.49%	2.53%	102%
7	0.25%	0.21%	86%	0.62%	0.44%	72%	1.28%	1.15%	90%	2.25%	2.27%	101%
8	0.20%	0.24%	118%	0.66%	0.65%	99%	1.26%	1.36%	108%	3.18%	2.72%	86%
9	0.25%	0.24%	94%	0.78%	0.91%	118%	2.05%	1.94%	95%	3.01%	3.84%	127%
10+	0.28%	0.33%	119%	0.58%	0.84%	146%	1.62%	2.24%	138%	3.55%	3.99%	112%

Gray shading represents cells with less than 25,000 exposure years.

Figure 7c shows that simplified issue business (both Individual and Group combined) exhibits the effects of selection through the first three to four policy durations. Similar to Individual, fully underwritten business, the factors appear to reverse and a "leveling off" pattern may be emerging as the credibility of the data increases.

Figure 7c: Incidence Rates and Selection Factors by Issue Age Cohort, Individual and Group, Simplified Issue Business

Dur(t)	55-59 Dur(t+5) Incidence Rate	60-64 Dur(t) Incidence Rate	60-64 Raw Selection Factor	60-64 Dur(t+5) Incidence Rate	65-69 Dur(t) Incidence Rate	65-69 Raw Selection Factor	65-69 Dur(t+5) Incidence Rate	70-74 Dur(t) Incidence Rate	70-74 Raw Selection Factor	70-74 Dur(t+5) Incidence Rate	75-79 Dur(t) Incidence Rate	75-79 Raw Selection Factor
1	0.21%	0.22%	104%	0.55%	0.37%	68%	1.28%	0.94%	74%	2.73%	2.21%	81%
2	0.26%	0.28%	107%	0.68%	0.56%	83%	1.53%	1.28%	84%	3.40%	2.69%	79%
3	0.29%	0.35%	121%	0.84%	0.75%	89%	1.73%	1.61%	93%	3.77%	3.29%	87%
4	0.38%	0.38%	100%	1.01%	0.92%	91%	2.04%	1.98%	97%	3.97%	3.99%	101%
5	0.35%	0.48%	136%	1.00%	1.02%	102%	2.06%	2.43%	118%	4.16%	4.69%	113%
6	0.41%	0.55%	134%	1.26%	1.28%	102%	2.03%	2.73%	135%	4.12%	5.40%	131%
7	0.54%	0.68%	126%	1.02%	1.53%	151%	2.28%	3.40%	149%	4.05%	6.01%	148%
8	0.79%	0.84%	106%	1.26%	1.73%	137%	2.54%	3.77%	149%	4.80%	6.32%	132%
9	0.44%	1.01%	228%	1.51%	2.04%	135%	2.88%	3.97%	138%	5.15%	6.52%	127%
10+	0.27%	1.00%	372%	1.11%	2.06%	185%	2.85%	4.16%	146%	4.80%	6.61%	138%

Gray shading represents cells with less than 25,000 exposure years.

Incidence by Coverage Type (Appendix D-8)

This section compares incidence rates by type of coverage. To reduce noise from policy duration and issue age differences, Figures 8a.1-8a.3 show incidence rates by policy duration for three issue age cohorts. Keep in mind that noise from other factors (e.g., elimination period) may significantly influence these results. The user is encouraged to investigate further using the pivot tables provided.

Figure 8a.1: Incidence Rates by Policy Duration and Coverage Type, Issue Ages 50-59 Only

Duration	Comprehensive	Nursing Home Only	Home Health Care Only
1	0.06%	0.01%	0.06%
2	0.07%	0.02%	0.05%
3	0.09%	0.02%	0.05%
4	0.11%	0.03%	0.07%
5	0.12%	0.04%	0.08%
6	0.14%	0.05%	0.09%
7	0.15%	0.06%	0.10%
8	0.17%	0.08%	0.15%
9	0.18%	0.09%	0.12%
10	0.21%	0.11%	0.17%

Gray shading represents cells with less than 25,000 exposure years.

Figure 8a.2: Incidence Rates by Policy Duration and Coverage Type, Issue Ages 60-69 Only

Duration	Comprehensive	Nursing Home Only	Home Health Care Only
1	0.14%	0.10%	0.31%
2	0.21%	0.16%	0.34%
3	0.28%	0.20%	0.40%
4	0.35%	0.24%	0.52%
5	0.42%	0.28%	0.54%
6	0.50%	0.36%	0.66%
7	0.59%	0.45%	0.76%
8	0.66%	0.57%	0.91%
9	0.77%	0.66%	1.07%
10	0.89%	0.74%	1.34%

Gray shading represents cells with less than 25,000 exposure years.

Figure 8a.3: Incidence Rates by Policy Duration and Coverage Type, Issue Ages 70-79 Only

Duration	Comprehensive	Nursing Home Only	Home Health Care Only
1	0.67%	0.71%	1.49%
2	0.91%	0.94%	1.75%
3	1.20%	1.15%	2.15%
4	1.50%	1.37%	2.53%
5	1.81%	1.53%	2.86%
6	2.12%	1.83%	3.10%
7	2.41%	2.11%	3.39%
8	2.60%	2.52%	3.69%
9	2.86%	2.75%	4.14%
10	3.11%	3.00%	4.12%

Gray shading represents cells with less than 25,000 exposure years.

Figures 8b.1-8b.3 illustrate the distribution of claims by initial level of care for comprehensive policies. For brevity, only one issue age cohort (60-69) and the first ten policy durations are considered. The resulting distributions exhibit a shift from nursing home claims to home health care and assisted living facility claims in recent years.

Figure 8b.1: Distribution of Claims by Policy Duration and Initial Level of Care*, Comprehensive Policies, Issue Ages 60-69 Only, All Exposure Years

Duration	Nursing Home Claims	Assisted Living Facility Claims	Home Health Care Claims	Other Types of Claims
1	23%	2%	56%	19%
2	26%	3%	55%	16%
3	27%	4%	56%	13%
4	27%	5%	57%	11%
5	28%	7%	55%	9%
6	29%	9%	53%	9%
7	32%	10%	49%	9%
8	34%	11%	44%	11%
9	39%	10%	40%	11%
10	44%	11%	33%	12%

*Blank/unknown claim types are excluded.

Figure 8b.2: Distribution of Claims by Policy Duration and Initial Level of Care*, Comprehensive Policies, Issue Ages 60-69 Only, Exposure Years 1984-1999

Duration	Nursing Home Claims	Assisted Living Facility Claims	Home Health Care Claims	Other Types of Claims
1	28%	1%	52%	19%
2	35%	2%	50%	13%
3	39%	2%	49%	10%
4	39%	2%	47%	12%
5	46%	3%	39%	12%
6	52%	2%	30%	17%
7	57%	2%	22%	18%
8	60%	2%	18%	20%
9	68%	0%	11%	21%
10	69%	0%	12%	19%

*Blank/unknown claim types are excluded

Figure 8b.3: Distribution of Claims by Policy Duration and Initial Level of Care*, Comprehensive Policies, Issue Ages 60-69 Only, Exposure Years 2000-2007

Duration	Nursing Home Claims	Assisted Living Facility Claims	Home Health Care Claims	Other Types of Claims
1	14%	4%	63%	19%
2	15%	5%	61%	20%
3	15%	7%	63%	15%
4	17%	7%	65%	11%
5	18%	10%	64%	8%
6	20%	12%	62%	6%
7	22%	13%	59%	6%
8	24%	15%	53%	7%
9	29%	13%	51%	7%
10	35%	15%	41%	9%

*Blank/unknown claim types are excluded.

Incidence Rates by Issue Year (Appendix D-4)

This section compares incidence rates for policies issued in different time periods. Such comparisons are inherent with the mix of business changes described earlier. Nonetheless, these rates illustrate the combined effect of all the factors described above, plus the impact of other factors, such as tightening underwriting practices, for two different blocks of business – policies issued before 1997 and policies issued on or after 1997.

In comparison to policies issued before 1997, policies issued on or after 1997 exhibit *lower* incidence rates at attained ages below 65 and *higher* incidence rates at attained ages 65 and above (see Figure 9a). This result is somewhat unexpected given decreases in average issue age, tighter underwriting practices, changes in benefit triggers, etc.

Figure 9a: Incidence Rates by Attained Age and Issue Year

	All Policies		
Attained Age	**Pre-1997 Issues**	**1997+ and Later Issues**	**Ratio**
<40	0.02%	0.01%	1.49
40-49	0.03%	0.02%	1.45
50-59	0.06%	0.05%	1.13
60-64	0.11%	0.11%	1.04
65-69	0.22%	0.23%	0.97
70-74	0.54%	0.56%	0.97
75-79	1.29%	1.35%	0.95
80-84	2.74%	3.04%	0.90
85-89	5.06%	6.22%	0.81
90+	8.10%	11.33%	0.71
Total	**0.89%**	**0.42%**	**1.47**

Gray shading represents cells with less than 25,000 exposure years.

However, even Figure 9b, which shows the ratio of incidence rates for policies issued in 1997 or after to policies issued pre-1997 by issue age and policy duration for Individual, comprehensive policies only, shows some support for this result. In addition, these results varied by gender in that:

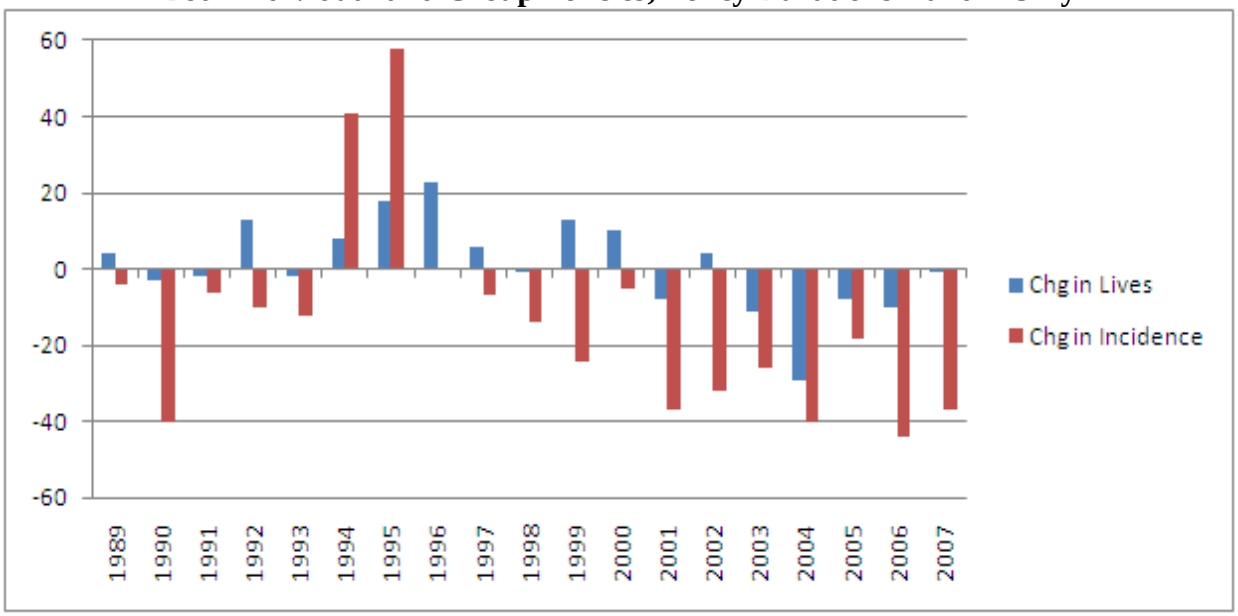
- Male ratios stay below 1.0 longer and finish lower than those in Figure 9b, while
- Female ratios begin above 1.0 and finish higher than those in Figure 9b.

Figure 9b: Ratio of Incidence Rates for Policies Issued 1997 or After to Policies Issued Pre-1997 By Issue Age and Policy Duration, Individual, Comprehensive Policies Only

	Policy Duration									
Issue Age Cohort	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
50-59	0.90	1.12	1.09	1.17	1.23	1.08	1.38	1.40	1.60	1.42
60-69	0.95	0.96	0.97	1.05	1.06	1.27	1.30	1.39	1.54	1.34
70-79	0.94	0.90	0.98	1.03	1.14	1.18	1.33	1.42	1.65	1.59

Figure 9c shows historical year-over-year changes in the overall incidence rates for policies in the first and second duration, as well as the year-over-year change in industry sales dating back to 1989. A loose correlation between the two may be observed. This correlation could illustrate the effects of company sales and underwriting practices on both sales growth and early duration incidence rates.

Figure 9c: Historical Sales Growth and Change in Incidence Rates, Both Individual and Group Policies; Policy Durations 1 and 2 Only



Sources: Sales Growth – LIMRA; Incidence – 2007 SOA LTC Intercompany Study

Incidence Rates by Exposure Period

This section provides information on incidence rate levels for specific time periods. Figure 10a provides incidence rates by attained age and exposure period, while Figure 10b ranks the rates for each attained age cohort.

It appears that incidence rates among attained ages less than 65 have been relatively low over the last six years compared to other exposure periods, while incidence rates for attained ages 65 and older were relatively high between 2005 and 2007.

Figure 10a: Incidence Rates by Attained Age and Exposure Period

Attained Age	1984-87	1988-91	1992-95	1996-99	2000-01	2002-2004	2005-2007
<40	0.00%	0.02%	0.02%	0.02%	0.01%	0.01%	0.01%
40-49	0.00%	0.04%	0.04%	0.03%	0.03%	0.02%	0.02%
50-59	0.04%	0.06%	0.05%	0.08%	0.07%	0.05%	0.05%
60-64	0.08%	0.10%	0.09%	0.14%	0.13%	0.10%	0.10%
65-69	0.23%	0.20%	0.17%	0.27%	0.26%	0.21%	0.22%
70-74	0.57%	0.55%	0.45%	0.58%	0.60%	0.52%	0.57%
75-79	1.40%	1.44%	1.15%	1.33%	1.35%	1.24%	1.46%
80-84	2.96%	3.06%	2.64%	2.95%	2.89%	2.54%	3.14%
85-89	3.93%	5.64%	5.16%	5.76%	5.50%	4.75%	5.40%
90+	2.28%	6.04%	9.18%	10.17%	8.60%	7.43%	8.30%
Total	**0.66%**	**0.66%**	**0.61%**	**0.81%**	**0.74%**	**0.57%**	**0.55%**

Figure 10b: Ranking of Incidence Rates by Attained Age and Exposure Period*

Attained Age	1984-87	1988-91	1992-95	1996-99	2000-01	2002-2004	2005-2007
<40	7	1	3	2	4	5	6
40-49	7	1	2	4	3	5	6
50-59	7	3	4	1	2	5	6
60-64	7	3	6	1	2	4	5
65-69	3	6	7	1	2	5	4
70-74	4	5	7	2	1	6	3
75-79	3	2	7	5	4	6	1
80-84	3	2	6	4	5	7	1
85-89	7	2	5	1	3	6	4
90+	7	6	2	1	3	5	4
Total	**4**	**3**	**5**	**1**	**2**	**6**	**7**

*Rank "1" represents the time period with the highest incidence rate for that attained age group.

Incidence Rates by Region

Figure 11 shows that the Midwest region exhibits the lowest incidence at attained ages below 70 and the highest incidence rates at attained ages 70 and above. However, the table includes all policy and claim types. Significant variations may be seen by coverage type and initial level of care.

Figure 11: Incidence Rates by Attained Age and Region

Attained Age	Midwest	Northeast	South	West
<40	0.01%	0.02%	0.02%	0.02%
40-49	0.02%	0.03%	0.03%	0.03%
50-59	0.04%	0.07%	0.06%	0.06%
60-64	0.08%	0.12%	0.10%	0.11%
65-69	0.20%	0.21%	0.21%	0.20%
70-74	0.53%	0.48%	0.51%	0.46%
75-79	1.31%	1.19%	1.23%	1.05%
80-84	2.94%	2.72%	2.61%	2.30%
85-89	5.56%	5.53%	4.96%	4.07%
90+	8.79%	8.41%	7.18%	6.48%
Total	**0.88%**	**0.60%**	**0.64%**	**0.70%**

Incidence Rates by Other Factors

The following policy characteristics ***do not*** appear to have a significant impact on incidence rates:

- Maximum Daily Benefit (Appendix D-7), and
- Benefit Escalator.

I5. Section II - Continuance

Continuance by Elimination Period (Appendix E-1)

As shown in Figure 1, continuance on claim across all elimination periods lengthened very slightly in relation to the prior report for the first 30 days, but shortened at an increasing rate from the 60-day point through the 730-day points. In relation to the 2001 Report, however, continuance on claim across all elimination periods lengthened at an increasing rate throughout the first two years.

Figure 1: Percentage Persisting at Least N Days, Current vs. Last Two Reports

Duration From Incurral Date (Days)	2007 Report	2004 Report	2001 Report
1	99.79%	99.71%	99.69%
2	99.47	99.41	99.29
3	99.13	99.08	98.89
4	98.78	98.70	98.39
5	98.40	98.31	97.89
10	96.39	96.19	95.04
20	92.60	92.40	90.16
30	89.09	88.93	85.75
60	81.39	81.41	76.46
90	75.77	76.13	70.41
120	70.31	71.68	65.94
180	63.72	65.12	59.58
365	49.97	51.58	46.64
730	33.63	35.43	32.29

Figures 2a and 2b illustrate the conditional continuance curves for 90-day and 180-day persistency, respectively. Once a claim persists for at least 90 days, the current data indicates a shortening of claims through the next 18 months in relation to both the 2001 and 2004 Reports. Extending the conditional claim survival to the 180-day mark shows a more marked shortening in the current Report.

Figure 2a

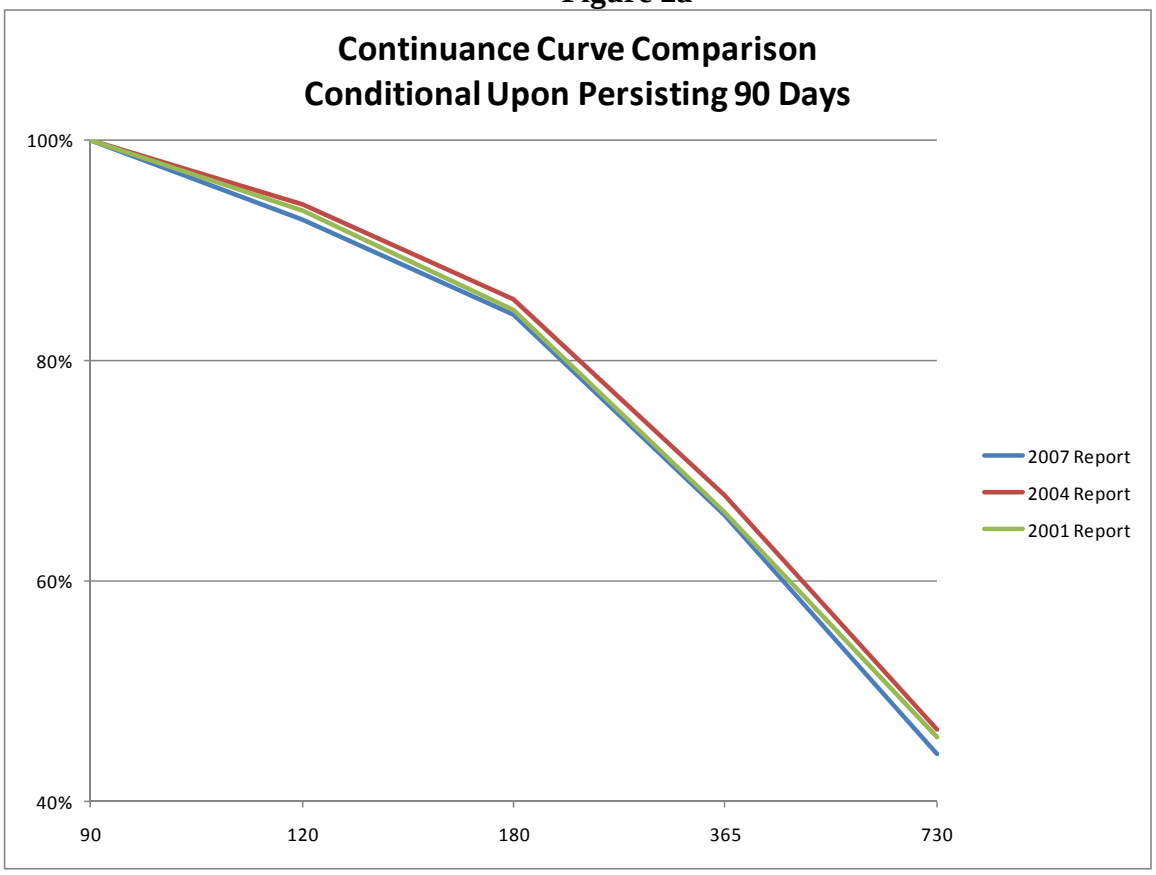
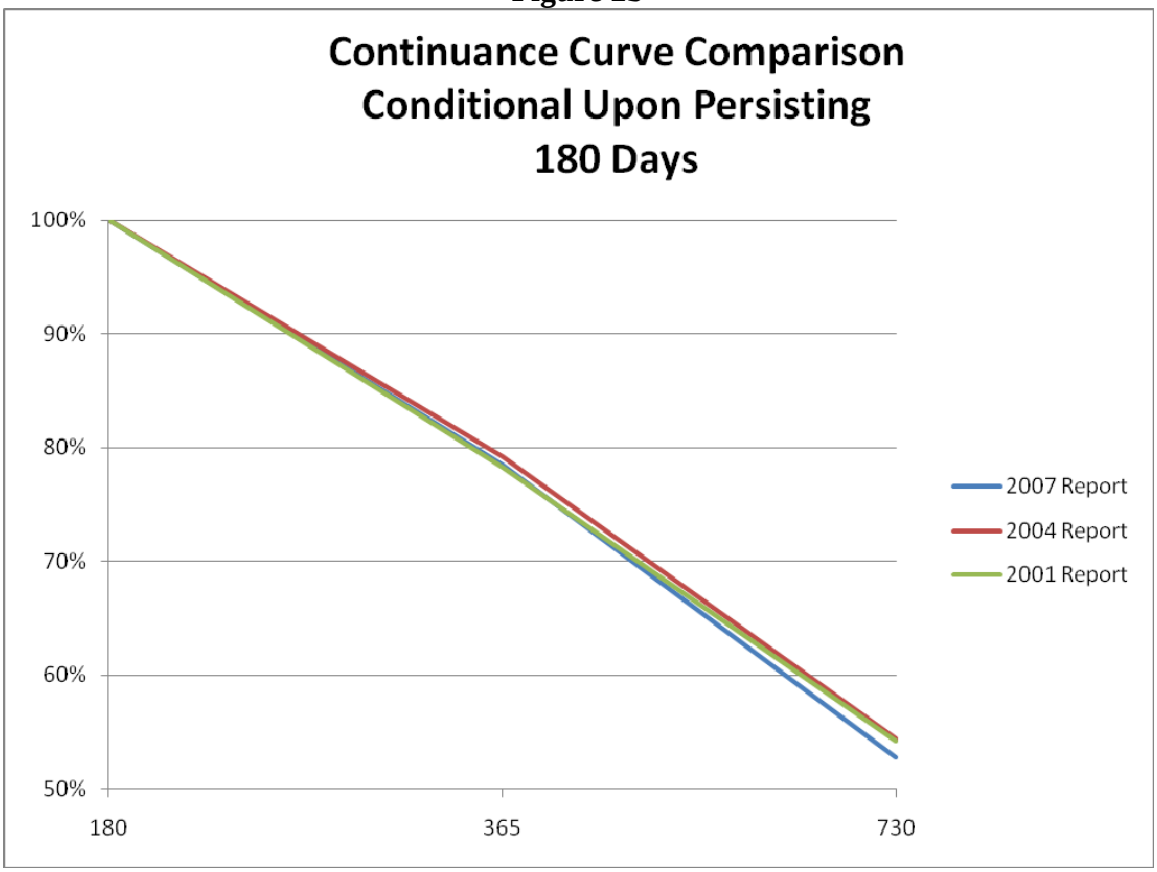


Figure 2b


Continuance Curve Comparison
Conditional Upon Persisting
180 Days
100%
90%
80%
70%
60%
50%
180
365
730
2007 Report
2004 Report
2001 Report

In order to make a meaningful comparison of claim continuance across elimination period categories, the figures should be adjusted to account for differences in elimination period. Figure 3 compares the zero-day elimination period category continuance with that of the other three continuance categories, reformatting the data so that the “7-30 day,” "31-80 day" and "90+ day" continuance data begin at the 20th, 50th and the 90th days, respectively. The percentages indicate the comparison of zero-day elimination continuance to data from each of the other categories. Zero-day elimination period claimants stay on claim longer, based on these approximations for differences in elimination period.

Figure 3: Persistency on Claim Relative to Zero-Day Elimination Period Category

Duration from Incurral	7-30 Days	31-80 Days	90+ Days
20	100%		
25	98		
30	95		
35	93		
40	91		
50	87	100%	
60	83	98	
90	75	92	100%
120	69	87	96
180	62	79	89
365	47	62	72
730	31	42	51

These relative continuance rates were virtually unchanged in relation to the prior Report, with the exception of the 31-80 day elimination period cohort. Figure 4 illustrates that there was a relative lengthening of claims in this category in relation to the zero-day elimination period category.

Figure 4: Persistency on Claim for 31-80 Elimination Period Category vs. Zero-Day Elimination Period Category

Duration From Incurral Date (Days)	2007 Report	2004 Report
50	100%	100%
60	98	98
90	92	90
120	87	84
180	79	74
365	62	56
730	42	37

Continuance by Gender (Appendix E-2)

As shown in Figure 5, the percentage persisting for n days or longer is virtually identical for males and females at claim durations of 20 days or less. At durations from 60 through 120 days, female continuance is slightly shorter than male continuance, but after 120 days, male continuance was modestly shorter than female continuance. The prior report exhibited a similar pattern, with female continuance shorter than male continuance at durations from 20 days through 180 days, with male continuance modestly shorter for the one and two year points. Continuance for both genders shortened in relation to the prior report for claim durations of 90 days or later.

Figure 5: Percentage Persisting at Least N Days by Gender

Duration From Incurral Date (Days)	Female	Male
1	99.81%	99.75%
2	99.48	99.44
3	99.14	99.10
4	98.79	98.75
5	98.43	98.35
10	96.40	96.36
20	92.55	92.69
30	88.94	89.40
60	81.00	82.16
90	75.37	76.55
120	70.04	70.85
180	63.73	63.69
365	50.63	48.68
730	35.04	30.86

Continuance Lengthening
Continuance Shortening

Continuance by Age (Appendix E-3)

In Figure 6, the red shaded areas illustrate that, while initially it is the higher age cohorts with the longest claims, there is a shift to the younger ages that begins after 30 days. Conversely, the shortest claims migrate from the youngest ages to the oldest ages, as illustrated by the green shaded areas. This may be due to fewer recoveries as age increases. At durations past 365 days, the 85-89 cohorts' persistency on claim is lower than those of younger claimants while, for the 90+ cohort, it is at durations past 90 days where this is so. This may be caused by the dominance of terminations by mortality for these age cohorts.

Figure 6: Percentage Persisting at Least N Days by Age at Incurral

	Incurral Age Group				
Duration (Days)	55-64	65-74	75-84	85-89	90+
1	99.21%	99.65%	99.71%	99.83%	99.90%
2	98.89	99.30	99.40	99.57	99.60
3	98.58	98.81	99.07	99.38	99.39
4	98.19	98.30	98.68	99.10	99.19
5	97.81	97.75	98.30	98.85	98.90
10	95.50	94.93	96.13	97.28	97.66
20	91.68	90.52	92.26	94.19	94.34
30	88.09	86.55	88.69	91.29	91.43
60	79.55	77.72	81.29	84.75	84.22
90	72.83	71.85	76.15	80.00	78.59
120	67.73	67.26	71.76	75.71	73.69
180	59.73	60.54	65.44	69.13	66.13
365	45.82	48.28	52.25	54.18	48.89
730	34.12	34.55	36.28	34.98	28.59
1095	26.77	25.23	24.69	21.70	14.52
1460	19.81	17.47	15.72	12.15	6.91
1825	15.05	12.22	10.30	7.42	3.80

Indicates Highest Percentage Remaining
Indicates Lowest Percentage Remaining

Continuance by Initial Diagnosis (Appendix E-4)

Figure 7 shows the distribution of exposure by initial diagnosis. Nearly 1 out of 4 claims was initially attributable to Alzheimer's (18%) or another mental disorder (5%). There may have been additional exposure attributable to cognitive impairment within the 13% of claims that did not have any initial diagnosis associated with them.

Figure 7

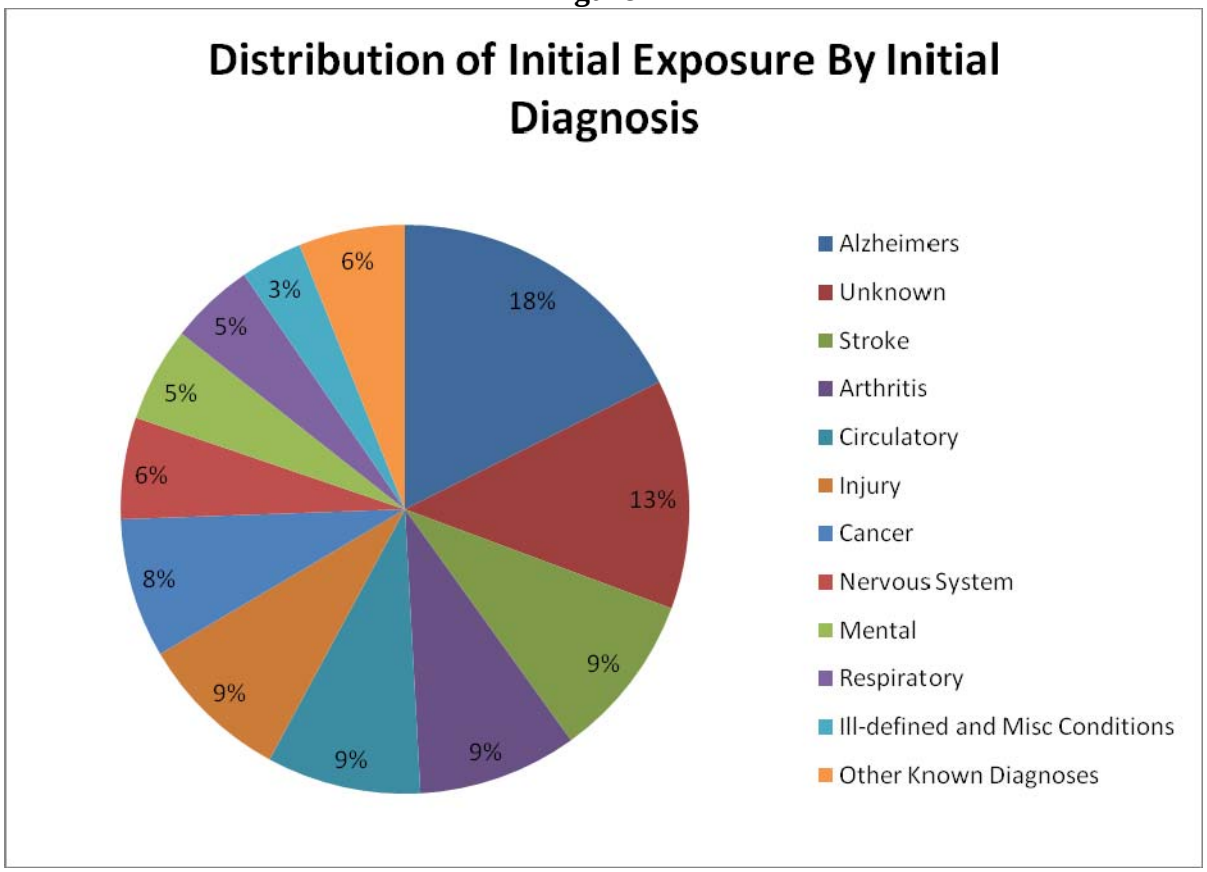
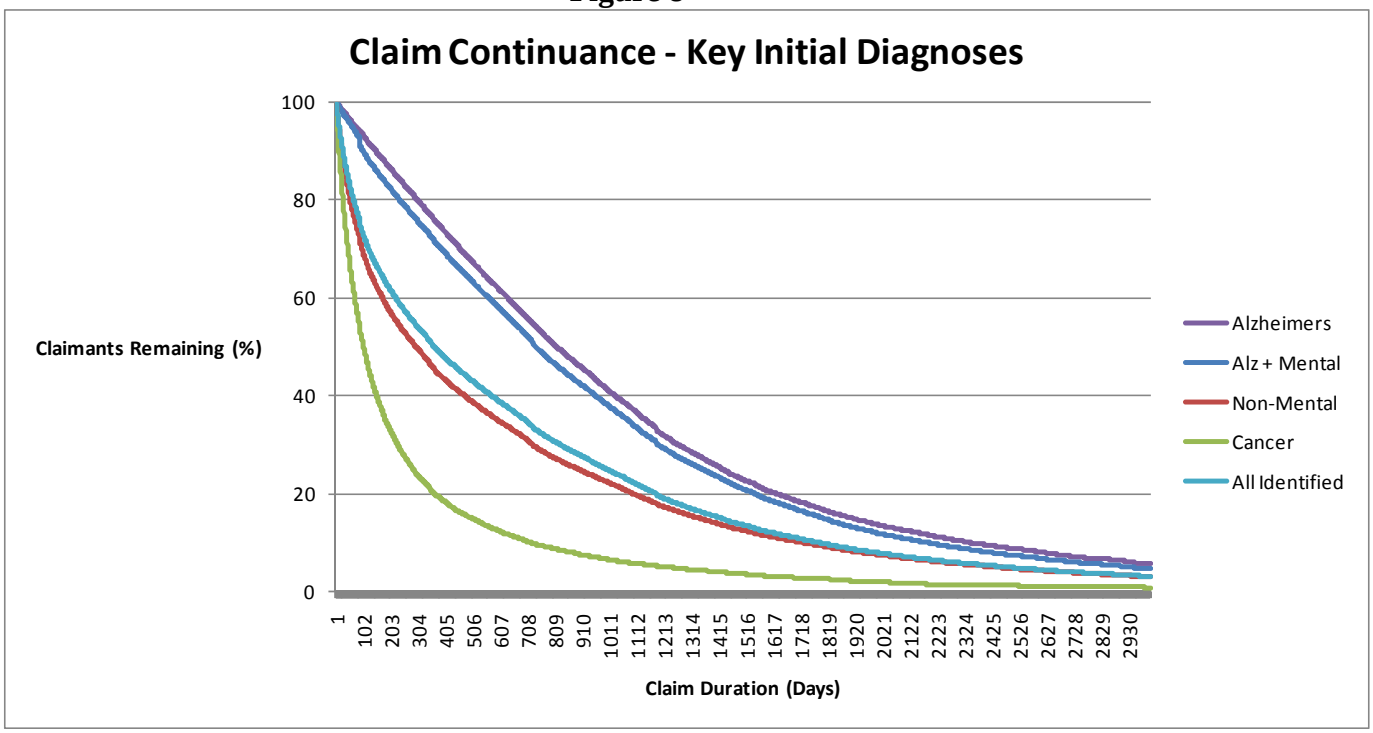


Figure 8 shows that the average length of Alzheimer's claims is the longest, while that for cancer claims is the shortest. The stark difference in continuance is illustrated after one year on claim, where only 20% of cancer claimants were still on claim, while only about 30% of Alzheimer's claimants had terminated on average. This may be attributable to both higher mortality rates for cancer victims and earlier claim ages (with attendant lower mortality) for Alzheimer's patients. Continuance for all other reasons that were identified is comparable to that for non-mental diagnoses overall.

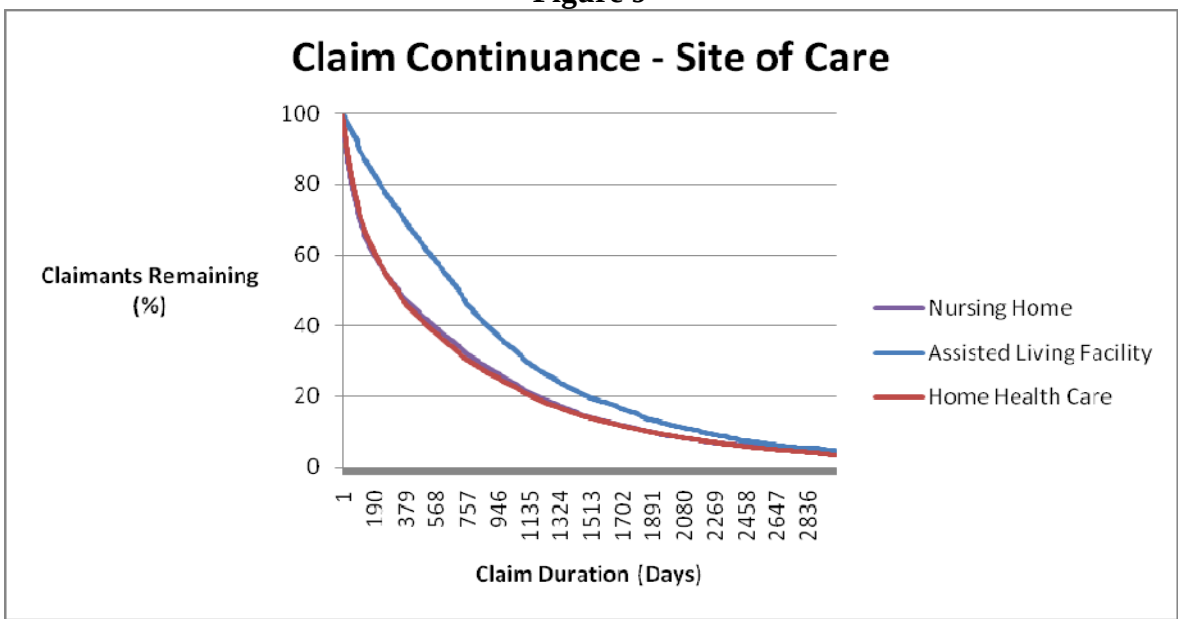
Figure 8



Continuance by Initial Site of Care (Appendix E-5)

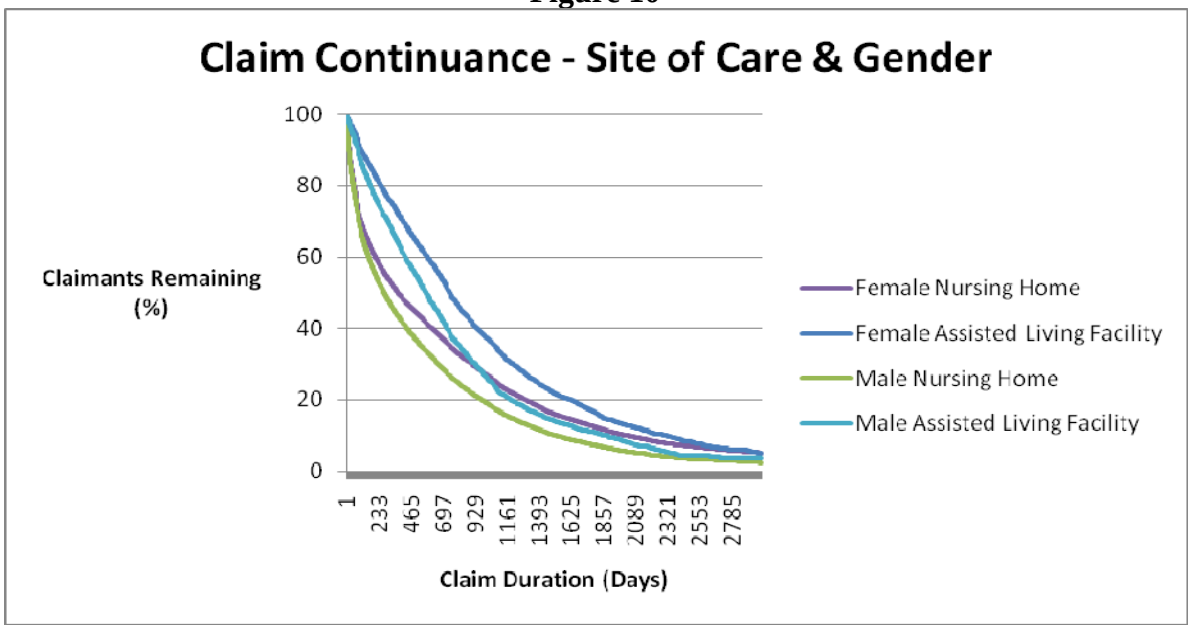
Figure 9 depicts the longer continuance associated with Assisted Living Facility claims in relation to both Nursing Home and Home Health Care claims when both male and female claimants' data are combined. The average length of stay for Assisted Living Facility claims was 958 days, while that for both Nursing Home and Home Health Care was about 700 days. Claims that are initially Home Health Care claims may become extended as the claimant migrates to either Assisted Living or Nursing Home facilities.

Figure 9



For Home Health Care claims, there was little difference in the continuance between males and females. However, as Figure 10 shows, male continuance was somewhat shorter for both Assisted Living and Nursing Home claims. This may be attributable to greater mortality for males.

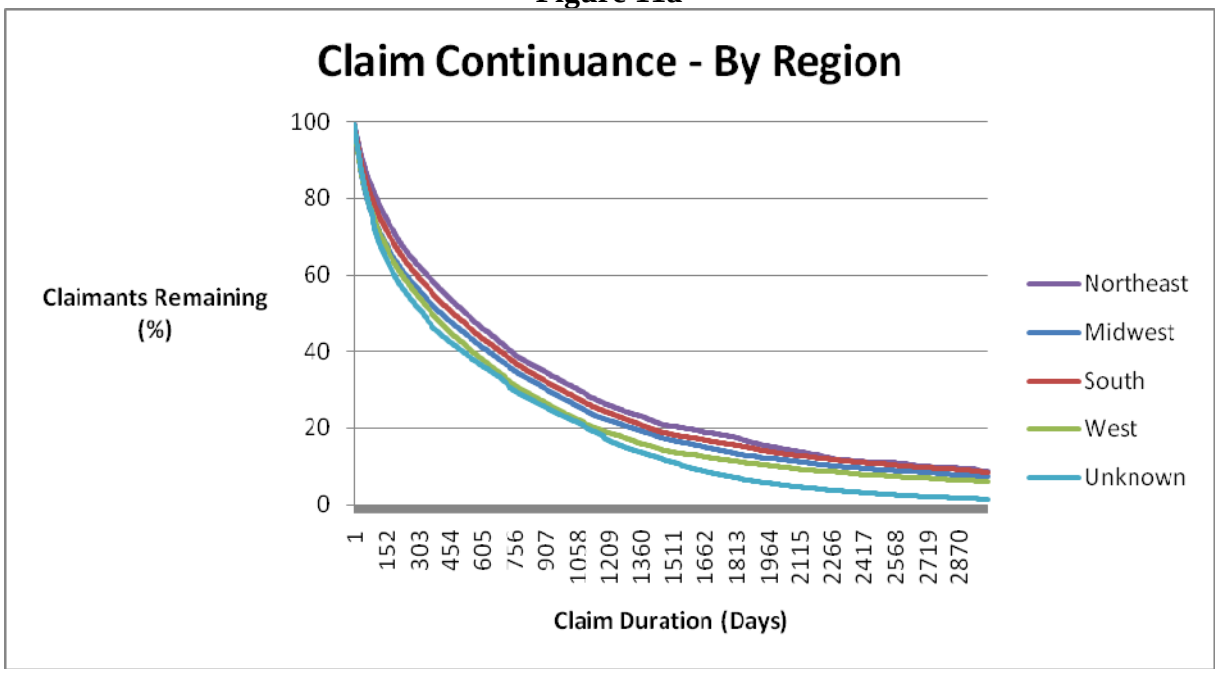
Figure 10



Continuance by Region (Appendix E-6 and E-9)

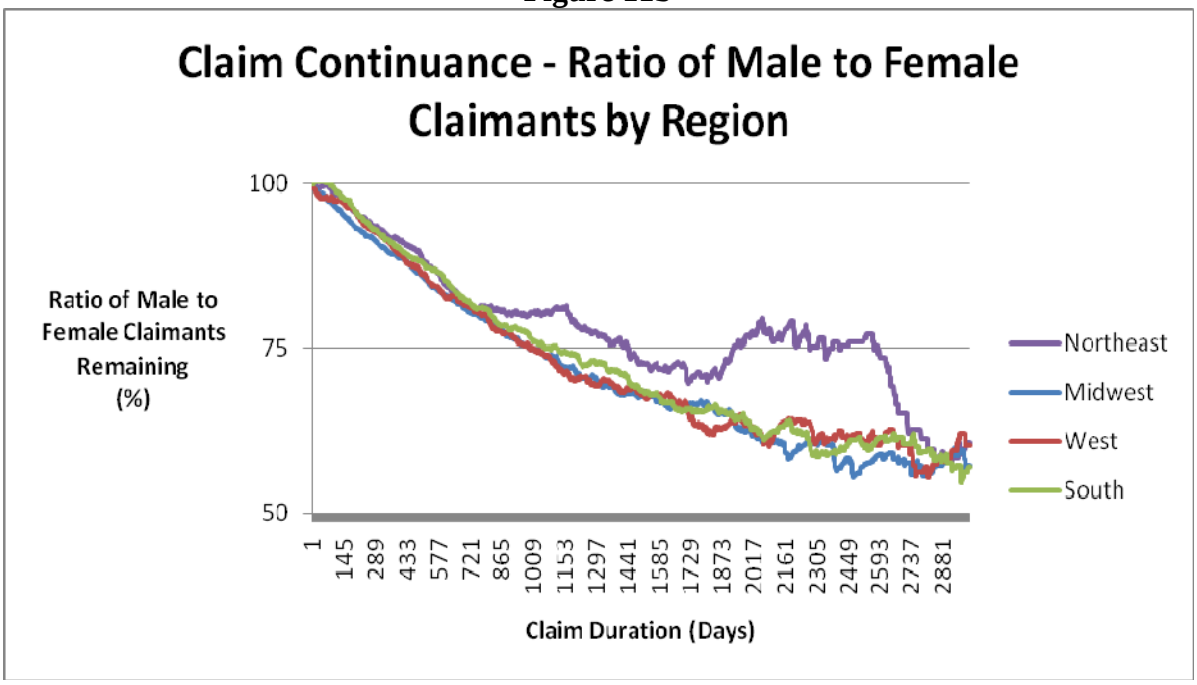
Figure 11a shows that continuance was virtually identical by region until about 100 days, followed by longer continuance for the Northeastern region than all others. Slightly less than half of all exposure was identifiable by region. Where region was unknown, continuance tracked that of the Western region, but terminations were higher than those in all regions after the third year on claim. Because exposure for claims where the region is unknown comprised a relatively stable proportion of all claims across claim durations (from 50 – 60% of all exposures), the distribution of claims across regions is not disproportionally represented by either older or more recent claims.

Figure 11a



Within each region, male claimants had shorter continuance than female claimants. Figure 11b shows that for all but the Northeast region, relative continuance was about the same for males and females. In the Northeast, during the first two years on claim, the relative pattern of male and female continuance tracked those of the other regions. From claim years 3 through 8, however, male continuance, while still shorter than female continuance, exhibited a slower termination rate relative to females. Note that the Northeast region also had the lowest level of exposure among the four major regions, which therefore results in lower credibility.

Figure 11b



Continuance by Marital Premium Discount (Appendix E-7)

Figures 12 and 13 illustrate the differences in continuance between policies with and without marital discounts. As shown in Figure 12, continuance was longer after about 180 days for policies without a marital discount. Figure 13 depicts the relatively large difference in continuance between these two categories. After about three years, there are four claims with a marital discount for every five without. The difference increases considerably by the seventh year, where the marital discount group's continuance is 40% that of the other group. These patterns may be attributable to spousal care that serves to defer the onset of claim and earlier terminations of claims to conserve benefits.

Within the marital discount group, male continuance is shorter than female continuance. As indicated in Figure 13, for the majority of claim durations, there are about eight male claimants for every ten female claimants. This may be attributable to greater mortality among male claimants and a greater propensity of male partners to provide their own care-giving.

Figure 12

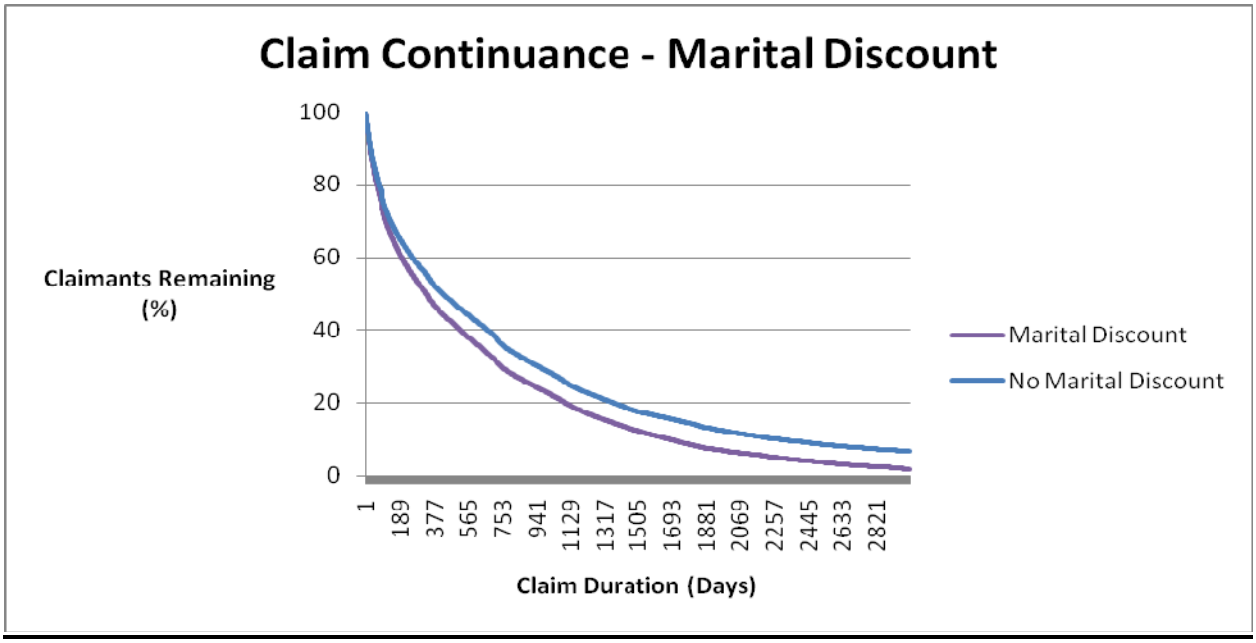
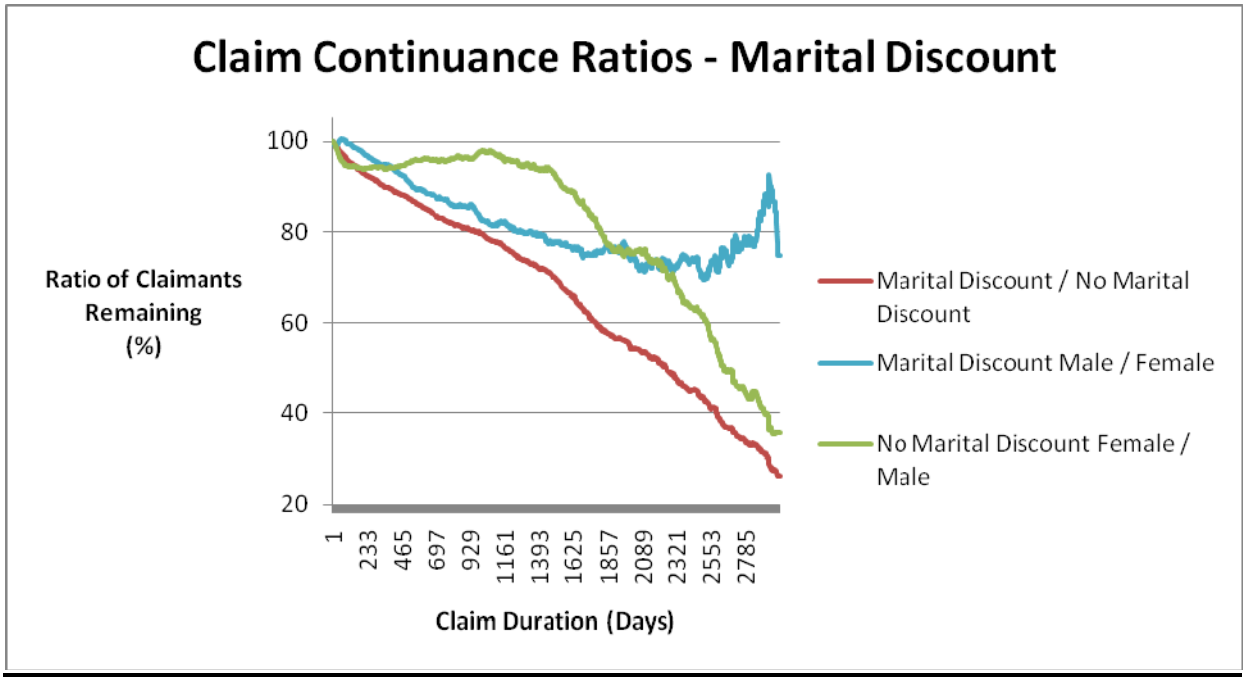


Figure 13

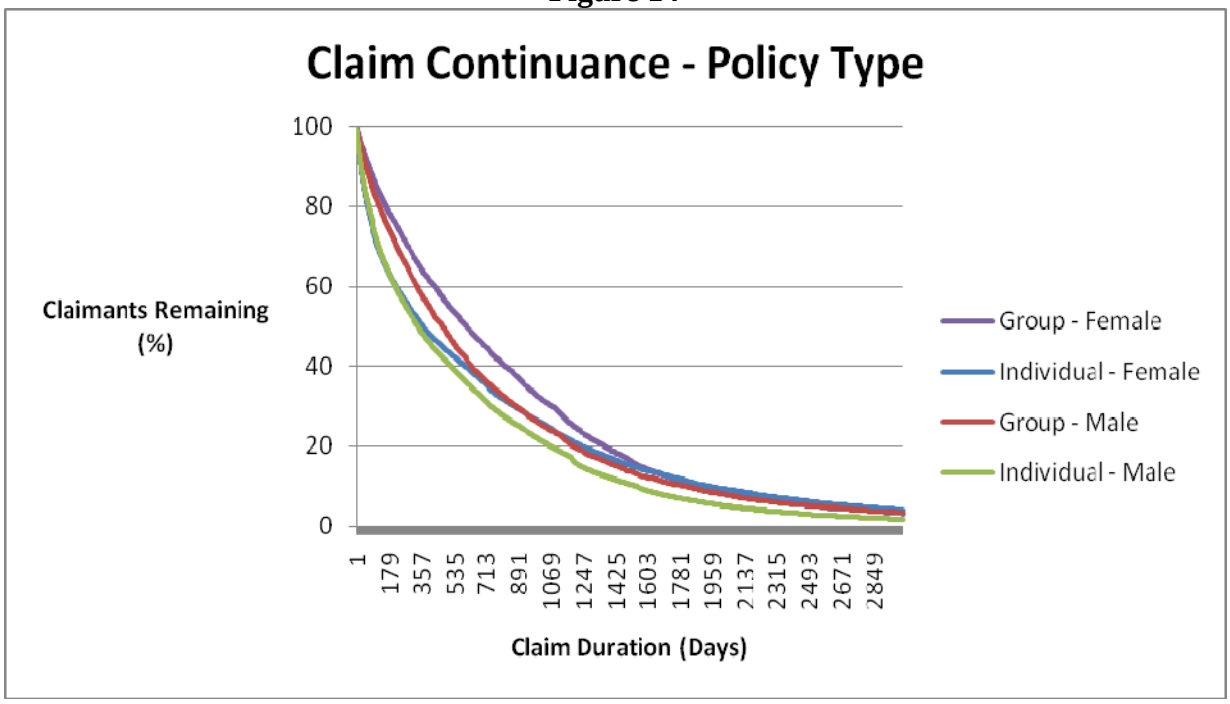


Continuance by Policy Type (Group vs. Individual) (Appendix E-8)

Figure 14 shows the relative continuance by policy type and gender. For both individual and group policies, male continuance was shorter than female continuance, while for both genders, continuance for group policies was longer than for individual policies.

The difference by policy type may be attributable to lower daily benefit amounts for group policies, which may encourage lower benefit utilization each day through home health care instead of institutional care in order to maintain coverage for as long as possible.

Figure 14



Technical Notes on Continuance on Claim

Persistency on claim is measured from the end of the elimination period to the termination of the claim by death, recovery or benefits exhaustion. For elimination periods other than zero-day, claims that terminate before satisfaction of the elimination period are excluded in determining continuance rates, because they are not relevant in continuance measurement.

The continuance tables in this report are based on raw claim data without any adjustments for smoothing or graduation. This section documents the methodology to provide a framework for understanding and developing conclusions about the limitations of the data.

A value of one is assigned to each day a claimant is on claim, beginning with the earliest date on which services began after the elimination period, if any, was satisfied. After the latest date for which services ended, the claim was given a value of zero again. Claims incurred on which no payment was ever made or which show zero benefit days are excluded from continuance calculations.

Data was tabulated separately using different characteristics; elimination period, gender and age. The elimination period categories were set to aggregate data into "like" periods because the data available for some elimination periods was very small.

Data was initially tabulated for claims marked open, closed or unknown as of the end of the observation period. There appears to be wide variation in the labeling of claims by company, so some of the data were adjusted to separate data into only an open or closed status. No adjustment was made for claims initially marked closed. For each claim initially marked open or unknown, if the latest service end date was different than the observation date by more than 180 days, the claim status was adjusted to closed. Claims marked closed due to benefit expiry were removed from continuance calculations as of the date of the last payment.

Bifurcation of claims between those open and closed as of the end of the observation period enables an effective study of continuance behavior. Open claim data can be used to support continuance curve research, but its usefulness is limited to the time of the observation period. The persistency-on-claim data reported here combine the experience of the open claims (from inception to the observation date) and closed claims.

"Number of claims open" is the number of claimants marked open with a value of 1 for that particular duration. For example, 749 claims open means that there were 749 claimants which were open as of the end of the observation period, and persisted until at least that duration.

"Number of claims closed" is the number of claims that closed on or before the end of the observation period that persisted until at least that duration.

In measuring persistency from one duration to the next, only the claims that are observable at the next duration can be counted. Claims closed because of benefit exhaustion are included in the exposure calculations through the end of the duration in which they are closed, but are not included in the number of terminating claims for purposes of determining claim continuance. In order to obtain this result, the claims exposed at the beginning of a duration are adjusted for the claims closed because of benefit exhaustion during the prior duration.

The beginning exposure for duration t is derived from the number of observable claims as of the next duration, t+1, plus those claims that were closed for reasons other than benefit expiry at some point in time between duration t and duration t+1.

Symbolically,

Beginning exposure$_t$ =

All observable claims$_{t+1}$ + All Claims Closed$_t$ - Claims Closed Due to Benefit Expiry$_t$

The number of claims terminating during a duration, for purposes of computing claim continuance, is equal to the number of claims closed during that duration for reasons other than benefit exhaustion. Thus, the number of claims terminating during duration t is determined by subtracting the total number of claims that were closed during duration t because of benefit exhaustion from the total number of claims that terminated during that time. Symbolically,

Terminating$_t$ = Closed$_{t+1}$ - Closed$_t$ - Closed EOB$_t$, where

Terminating$_t$ = Claims terminating between duration t and t+1,
Closed$_{t+t}$ = Claims closed on or before duration t+1 for all reasons,
Closed$_t$ = Claims closed on or before duration t for all reasons,
Closed EOB$_t$ = Claims closed during duration t because of benefit exhaustion.

The "Percent Persisting n days" is determined by:

Percent Persisting n-1 days * [1- (terminating on day n/beginning exposure n)].

I6. Section III - Mortality

This section presents the mortality experience of LTC insurance in the United States for issue years 1984–2007. The data includes a total of 316,934 deaths, 258,932 deaths from active lives ("non-claim") and 58,002 deaths from disabled lives ("on claim").

The data presented in this section includes only terminations due to death. The data from those companies who did not identify that cause of termination is excluded from this section. Because there is no death benefit on most policies, some terminations due to death may be recorded as lapses and included in the voluntary lapse section. Thus, it is likely that deaths are understated and lapses are overstated.

Total Mortality Rates – Active and Disabled Lives

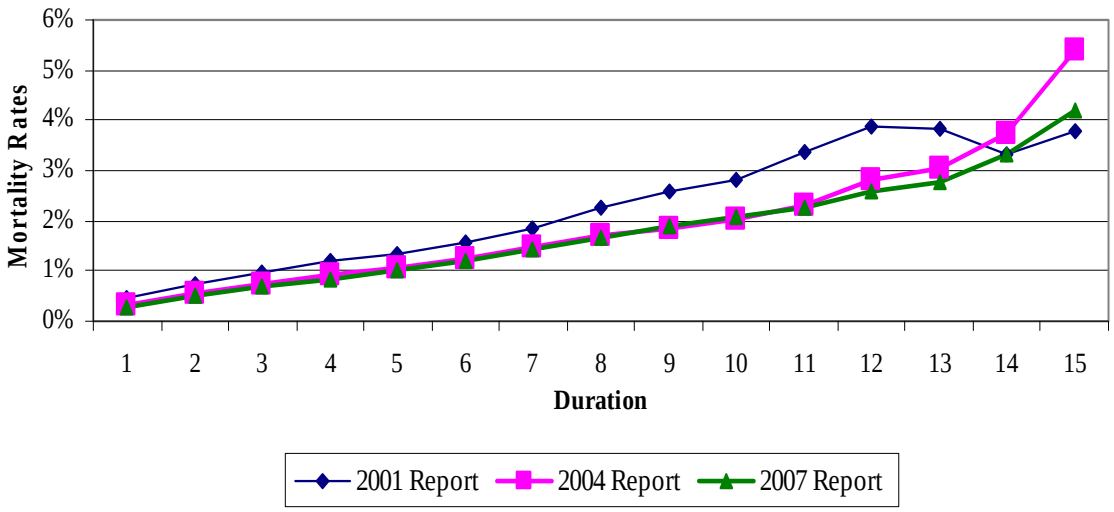
Mortality Rates by Duration: The mortality data for this report includes a significantly larger amount of exposure (by 56%) than was available for the prior report. The data extends to 23 durations, compared to 20 durations in the prior report. The following table shows a comparison of the total active and disabled life mortality data and rates by duration between the three reports. Mortality rates are not reported in the text for cells with less than 100 deaths, but are reported in the appendix.

Figure 1
Mortality Rates Compared to Prior Reports
Active and Disabled Lives

	Exposure			Total Mortality Rates		
Duration	**2001 Report**	**2004 Report**	**2007 Report**	**2001 Report**	**2004 Report**	**2007 Report**
1	3,059,165	4,995,326	6,972,247	0.4%	0.3%	0.3%
2	2,250,352	3,581,793	5,232,800	0.7%	0.5%	0.5%
3	1,685,380	2,800,737	4,304,639	1.0%	0.7%	0.7%
4	1,303,449	2,187,658	3,533,357	1.2%	0.9%	0.8%
5	1,021,243	1,718,591	2,832,961	1.4%	1.1%	1.0%
6	772,324	1,311,043	2,246,635	1.6%	1.3%	1.2%
7	594,370	1,047,574	1,798,269	1.8%	1.5%	1.4%
8	451,612	852,532	1,428,805	2.3%	1.7%	1.7%
9	334,506	673,020	1,093,328	2.6%	1.9%	1.9%
10	251,808	533,112	853,736	2.8%	2.0%	2.1%
11	166,589	409,519	670,676	3.3%	2.3%	2.3%
12	107,416	283,000	498,771	3.9%	2.8%	2.6%
13	54,094	194,794	371,608	3.8%	3.0%	2.8%
14	25,457	132,845	269,489	3.3%	3.7%	3.3%
15	10,239	67,767	178,034	3.8%	5.4%	4.2%
16	3,082	28,624	108,369	3.9%	7.1%	4.9%
17	776	10,465	64,326		9.3%	5.1%
18	14	3,813	23,120		10.5%	7.6%
19		1,255	9,934		11.9%	9.8%
20		389	3,108			12.3%
21			1,016			14.3%
22			373			
23			125			
Total	**12,091,877**	**20,833,856**	**32,495,727**	**1.1%**	**1.0%**	**1.0%**

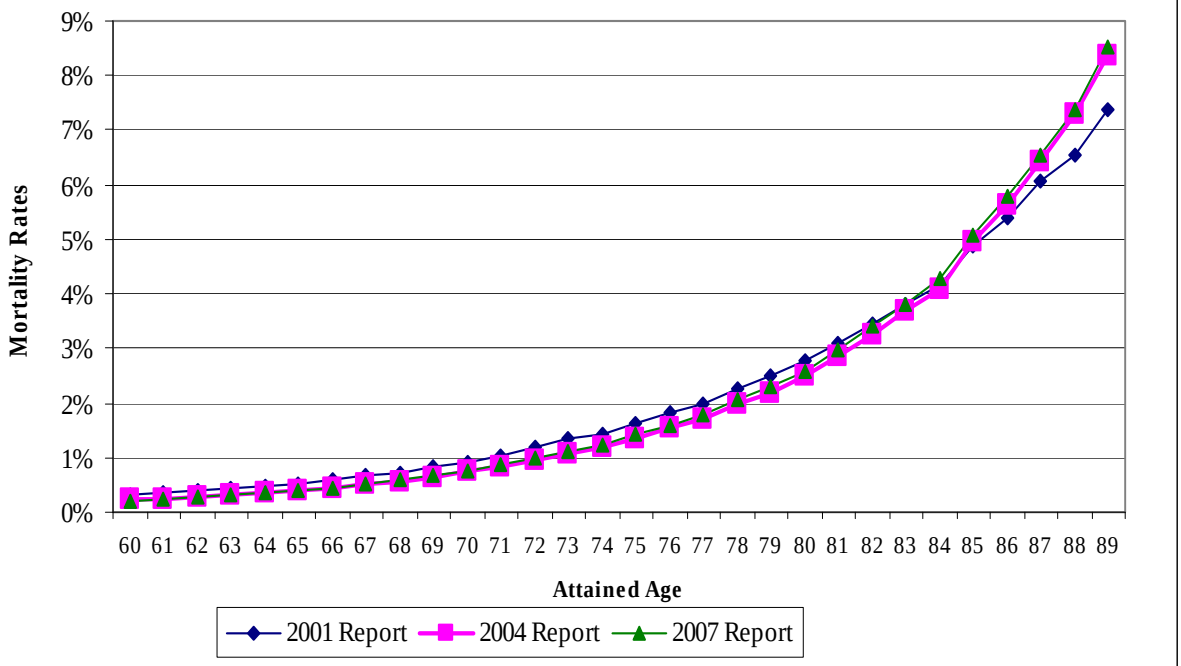
The overall average mortality rate is similar to the 2004 Report, but lower than the 2001 Report. While the mortality rates at the lower durations are similar, the mortality rates at the higher durations (12 and greater) are lower than the prior report. There is more exposure at higher durations, with corresponding higher mortality rates, causing the overall average to remain the same. Data is still limited at durations greater than 15. The change in the mortality rates by duration is shown in Figure 2.

Figure 2
Total Mortality Rates by Duration



Mortality Rates by Attained Age: Figure 3 compares the mortality rates on an attained age basis between the three reports. Compared to the prior report, the mortality rates in the current report appear to be similar for attained ages between 60 and 89. Appendix J-1 has detailed mortality data and rates by attained age for the 2004 and 2007 Reports.

Figure 3
Total Mortality Rates by Attained Age



Mortality Rates by Gender: The following table shows the overall mortality data by gender as well as in total. The total mortality rate is about 1.0%, with a female rate of about 0.9% and a male rate of about 1.1%. The female rate has increased slightly, while the male rate has remained the same as the prior report.

Figure 4
Total Mortality Rates by Gender
Active and Disabled Lives

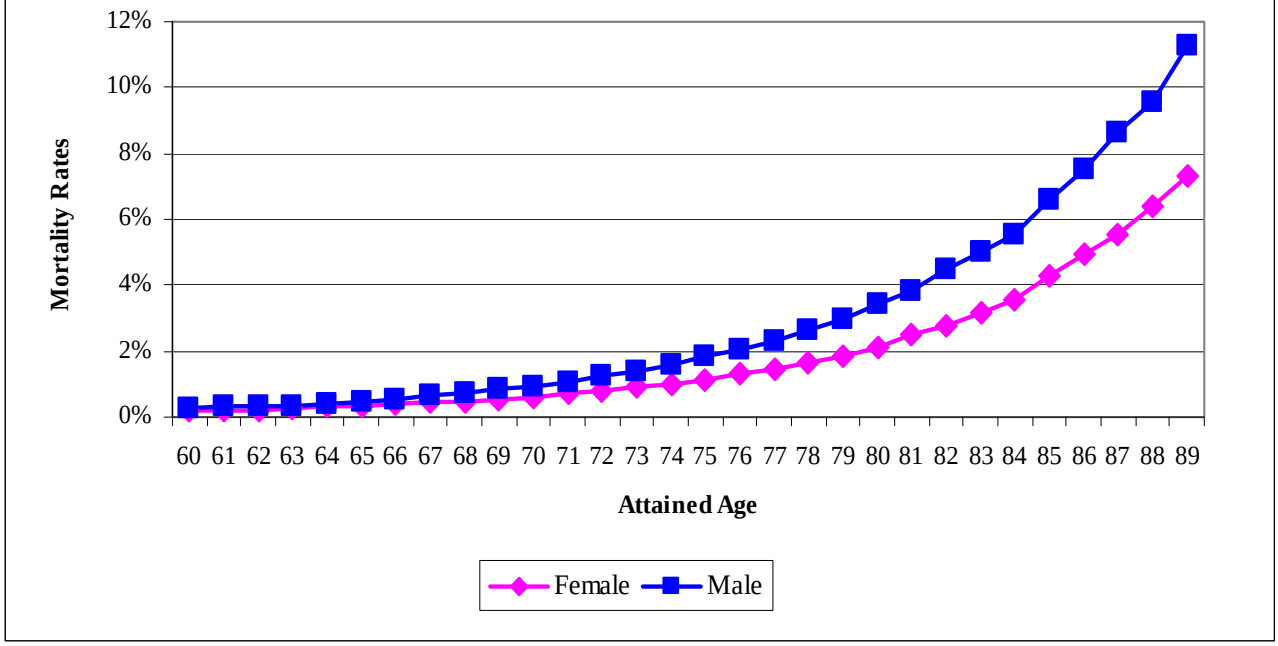
	2004 Report			2007 Report		
	Exposure	**Deaths**	**Mortality Rate**	**Exposure**	**Deaths**	**Mortality Rate**
Female	12,354,459	104,168	0.8%	19,069,514	164,077	0.9%
Male	8,479,397	94,465	1.1%	13,426,213	152,855	1.1%
Total	**20,833,856**	**198,633**	**1.0%**	**32,495,727**	**316,932**	**1.0%**

Mortality by Gender and Attained Age: Figure 5 shows the mortality by attained age cohort and demonstrates that mortality rates are lower at younger ages and increase at older ages, as would be expected. There are very few deaths under age 40, leading to mortality rates of about 0%. Mortality rates for males are slightly higher than females for all attained age cohorts. Figure 6 is a graph that shows the female and male mortality rates from attained ages 60 to 89.

Figure 5
Mortality Rates by Attained Age
Active and Disabled Lives

Attained	Female		Male		Total	
Age Cohort	Exposure	Mortality Rate	Exposure	Mortality Rate	Exposure	Mortality Rate
0-29	296,169	0.0%	238,961	0.0%	535,130	0.0%
30-39	779,693	0.0%	713,122	0.0%	1,492,815	0.0%
40-49	1,534,374	0.1%	1,215,783	0.1%	2,750,158	0.1%
50-59	3,197,390	0.1%	2,250,779	0.2%	5,448,169	0.1%
60-69	5,599,681	0.4%	4,027,716	0.5%	9,627,396	0.4%
70-79	5,599,789	1.1%	3,858,794	1.7%	9,458,583	1.3%
80-89	1,954,395	3.4%	1,081,996	5.1%	3,036,390	4.0%
90+	108,022	10.9%	39,063	15.7%	147,085	12.2%

Figure 6
Active and Disabled Lives Mortality Rates by Attained Age



Experience Compared to Industry Mortality: Figure 7 shows a comparison of the combined active and disabled life LTC mortality to four industry tables – the 1994 Group Annuity Mortality Static Table (1994 GAM), the Annuity 2000 Table (A2000), the ultimate portion of the composite nonsmoker / smoker 2001 Valuation Basic Table (Ultimate 2001 VBT) and the ultimate portion of the composite smoking unknown 2008 Valuation Basic Table Ultimate (Ultimate 2008 VBT). The 2001 VBT table is commonly used as the expected mortality for inter-company life insurance mortality experience studies. The 2008 VBT tables were recently developed for individual life insurance products that reflect standard and preferred underwriting criteria.

Figure 7
Ratio of Total LTC Mortality to Industry Tables
Active and Disabled Lives

Attained Age Cohort	1994 GAM	A2000	Ultimate 2001 VBT	Ultimate 2008 VBT
0-29	32%	32%	22%	26%
30-39	45%	51%	34%	39%
40-49	49%	47%	34%	38%
50-59	42%	42%	29%	36%
60-69	38%	52%	34%	42%
70-79	49%	64%	46%	49%
80-89	61%	77%	59%	61%
90+	83%	101%	85%	84%
Total	**52%**	**67%**	**49%**	**53%**

Overall, LTC mortality is 49% to 67% of the industry tables, but ranges from 22% to 101% by attained age cohorts. Appendix J-2 has more detailed information by gender and shows that female LTC mortality is 49% to 67% of industry tables and male LTC mortality is 48% to 67% of industry tables.

Male vs. Female Mortality: Figure 8 shows the male versus female mortality ratios for the LTC experience, as well as the four industry tables. Male experience mortality is about 50% higher than female, while male industry mortality is approximately 20% to 40% higher than female mortality. The difference between female and male mortality generally appears to decrease with increasing age for both experience and industry mortality.

Figure 8
Ratio of Male to Female Mortality
Active and Disabled Lives

Attained Age Cohort	LTC	1994 GAM	A2000	Ultimate 2001 VBT	Ultimate 2008 VBT
0-29	184%	228%	184%	216%	297%
30-39	163%	177%	155%	137%	203%
40-49	147%	163%	183%	139%	166%
50-59	150%	187%	180%	122%	128%
60-69	147%	171%	164%	143%	132%
70-79	153%	162%	157%	151%	125%
80-89	152%	145%	128%	156%	121%
90+	144%	126%	105%	152%	136%

Individual vs. Group Mortality: The table below examines the mortality for Individual and Group business.

Figure 9
Mortality Rates by Policy Type
Active and Disabled Lives

Attained	Individual			Group		
Age Cohort	Exposure	Deaths	Mortality Rate	Exposure	Deaths	Mortality Rate
0-29	20,881	6	0.0%	514,249	76	0.0%
30-39	105,645	40	0.0%	1,387,171	420	0.0%
40-49	569,500	344	0.1%	2,180,657	1,411	0.1%
50-59	3,101,640	3,801	0.1%	2,346,529	4,009	0.2%
60-69	8,324,626	33,724	0.4%	1,302,770	7,085	0.5%
70-79	9,019,982	119,571	1.3%	438,600	6,640	1.5%
80-89	2,983,703	120,122	4.0%	52,687	1,791	3.4%
90+	145,282	17,751	12.2%	1,803	141	7.8%
Total	**24,271,260**	**295,359**	**1.2%**	**8,224,466**	**21,573**	**0.3%**

The overall average Individual mortality rate is significantly higher than the overall average Group mortality rate. By attained age cohort, however, the Individual mortality is generally better than the Group mortality, except for ages 80 and above. As Figure 9 shows, the exposure is significantly different by attained age cohort for Individual versus Group. The difference

between overall Group and overall Individual mortality is due to the difference in the ages of the two populations.

Mortality Rates – Active Lives Only

The mortality rates in this portion of this section are for active lives only. Over 99% of the total active and disabled life exposure is from the active lives only. Analysis is also done on select versus ultimate mortality rates.

Overall Mortality Rates by Gender: Figure 10 shows mortality data by gender for the active life mortality data. The overall mortality rate for active lives is about 0.8%, with a female rate of about 0.7% and the male rate of about 1.0%. The male rate has increased slightly from 0.9% in the prior report.

Figure 10
Overall Mortality Rates by Gender
Active Lives Only

	2004 Report			2007 Report		
	Exposure	Deaths	Mortality Rate	Exposure	Deaths	Mortality Rate
Female	12,233,615	79,963	0.7%	18,868,474	129,573	0.7%
Male	8,425,888	78,461	0.9%	13,340,956	129,357	1.0%
Total	**20,659,503**	**158,424**	**0.8%**	**32,209,430**	**258,930**	**0.8%**

Experience Compared to Industry Mortality: LTC mortality for actives lives is lower than many of the industry mortality tables commonly used in pricing and valuation. Figure 11 shows a comparison of the total active life LTC mortality to the 1994 GAM, A2000, Ultimate 2001 VBT and Ultimate 2008 VBT.

Figure 11
Ratio of LTC Mortality to Industry Tables
Active Lives Only

Attained Age Cohort	1994 GAM	A2000	Ultimate 2001 VBT	Ultimate 2008 VBT
0-29	32%	32%	22%	26%
30-39	44%	49%	33%	37%
40-49	47%	45%	33%	36%
50-59	39%	39%	27%	33%
60-69	34%	48%	31%	38%
70-79	42%	55%	40%	42%
80-89	49%	61%	47%	49%
90+	68%	83%	70%	69%
Total	**44%**	**56%**	**41%**	**44%**

The LTC active life mortality is only 41% to 56% of the industry tables, down from 49% to 67% when the disabled lives were included. The greatest changes occurred at the higher attained ages (70+). Appendix J-3 has more detailed information by gender and shows that female active life LTC mortality is 40% to 55% of industry tables and male active life LTC mortality is 41% to 58% of industry tables.

Select Mortality Compared to the 2001 VBT Select Table: The 2001 VBT table was created with a 25-year select period, since the submitted data for that table supported such development and it was believed that a 25-year select period was the best representation of current life experience. The 25-year select period reflects the long-term impact of selection on mortality rates. Since all of the LTC mortality experience is from durations less than 25 and most of the business was underwritten, it should be expected that the LTC active life mortality would be low when compared to the ultimate 2001 VBT table. When comparing active life LTC experience mortality to the Ultimate 2001 VBT, the overall ratio is only 41%, as shown in Figure 11, indicating that there is mortality selection.

Figure 12 shows the LTC active life mortality compared to the select 2001 VBT and the select 2008 VBT mortality by duration. When comparing active life LTC experience mortality to the Select 2001 VBT and the Select 2008 VBT, the overall ratio jumps up to 79%, demonstrating a better fit to the select mortality rates. The select period for the 2001 VBT table was 25 years. For the 2008 VBT table, the select period is the earlier of 25 years or age 90, subject to a minimum of two years, regardless of issue age.

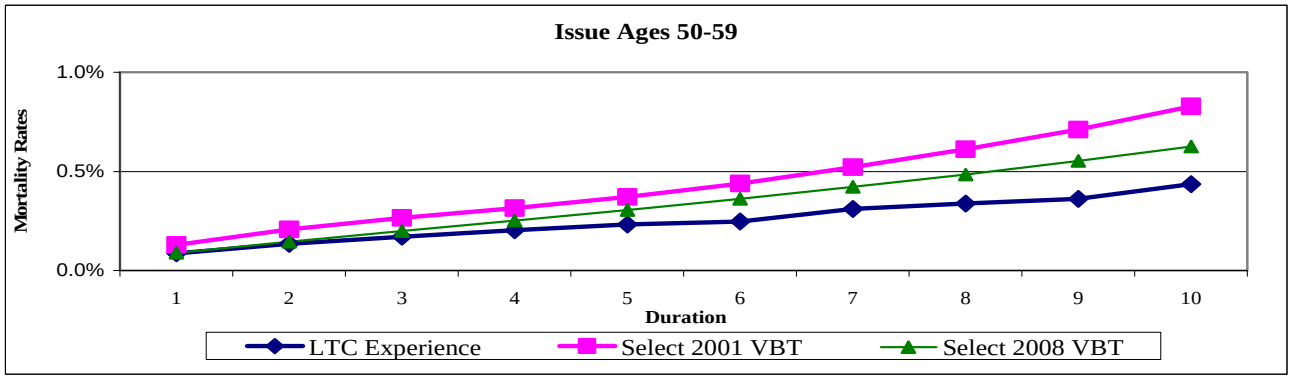
Figure 12
Mortality Rates Compared to Select VBT
Active Lives Only

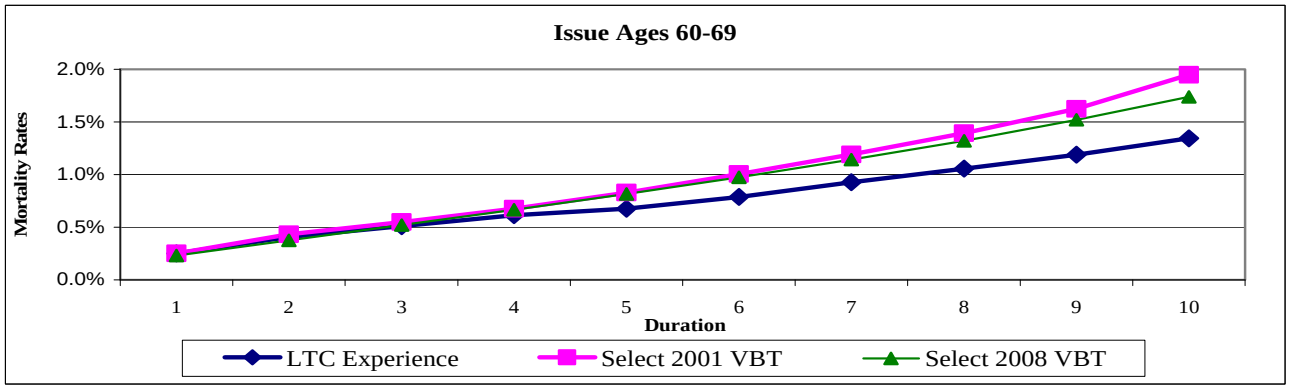
	2007 Report		Select	Ratio	Select	Ratio
Duration	Exposure	Mortality Rate	2001 VBT Mortality Rate	Actual / 2001 VBT	2008 VBT Mortality Rate	Actual / 2008 VBT
1	6,965,563	0.3%	0.3%	81%	0.3%	105%
2	5,217,312	0.5%	0.5%	90%	0.4%	107%
3	4,282,638	0.6%	0.7%	89%	0.6%	94%
4	3,506,681	0.7%	0.8%	86%	0.8%	87%
5	2,803,831	0.8%	1.0%	83%	1.0%	81%
6	2,216,879	1.0%	1.2%	80%	1.3%	78%
7	1,768,961	1.2%	1.5%	79%	1.5%	78%
8	1,401,701	1.3%	1.7%	77%	1.7%	77%
9	1,069,931	1.5%	2.0%	73%	2.0%	73%
10	834,386	1.6%	2.3%	68%	2.3%	71%
11	654,673	1.8%	2.7%	66%	2.5%	71%
12	486,198	2.0%	3.1%	66%	2.8%	73%
13	362,127	2.2%	3.5%	64%	3.1%	72%
14	262,211	2.7%	4.0%	68%	3.5%	78%
15	172,773	3.5%	4.6%	78%	4.0%	89%
16	105,141	4.2%	4.9%	85%	4.4%	96%
17	62,448	4.5%	5.0%	91%	4.5%	102%
18	22,129	6.9%	6.9%	100%	6.5%	106%
19	9,473	9.3%	7.5%	124%	7.3%	128%
20	2,955	11.4%	9.4%	122%	9.4%	121%
21	954	13.3%	10.8%	123%	11.2%	119%
22	350					
23	115					
Total	**32,209,430**	**0.8%**	**1.0%**	**79%**	**1.0%**	**79%**

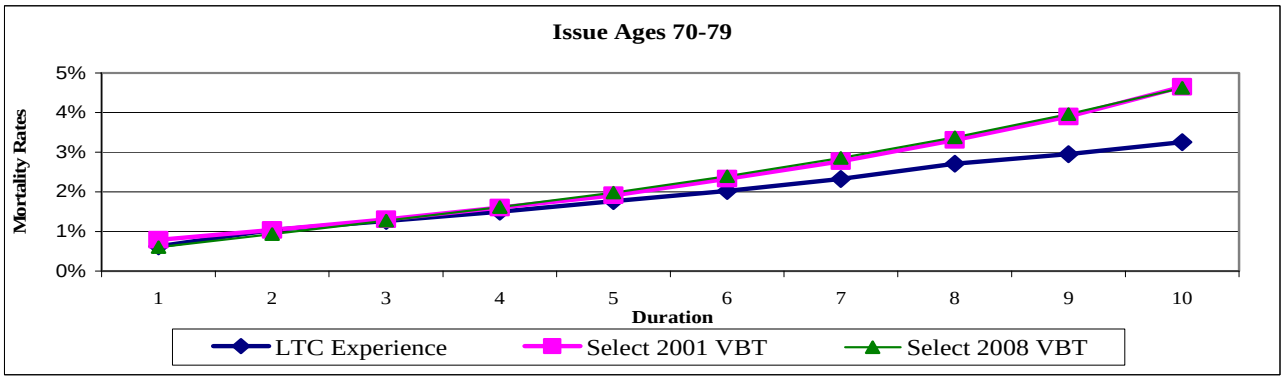
The Select 2001 VBT mortality rates were weighted by the 2007 report exposure, recognizing both the issue age and duration. Selection appears to wear off over time (around duration 18); however, data at the higher durations is still extremely limited.

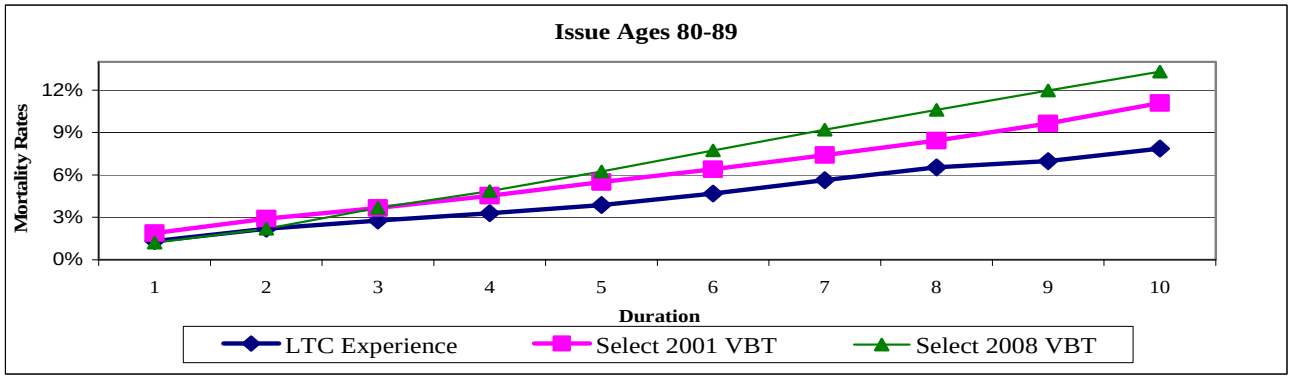
Figure 13 contains graphs that compare the active life LTC experience mortality rates to the Select 2001 VBT and the Select 2008 VBT rates by issue age cohort. (The scales on the graphs are not the same for each age cohort.) The LTC experience appears to be much lower and flatter than the Select 2001 VBT for all age cohorts. While the select rates for issue ages 60-79 appear similar for Select 2001 VBT and Select 2008 VBT, the Select 2008 VBT mortality rates are lower for issue ages 50-69, but higher for issue ages above 80.

Figure 13
LTC Mortality vs Select VBT, Issue Age Cohorts
Active Lives Only









Mortality Selection Period Comparison: Figure 14 shows the comparison of total active life LTC mortality by attained age: (1) assuming no select period ("Aggregate/All Durations") and (2) assuming a 10-year select period ("Ultimate/Durations 11+").

Figure 14
Total Mortality - With and Without Selection
Active Lives Only

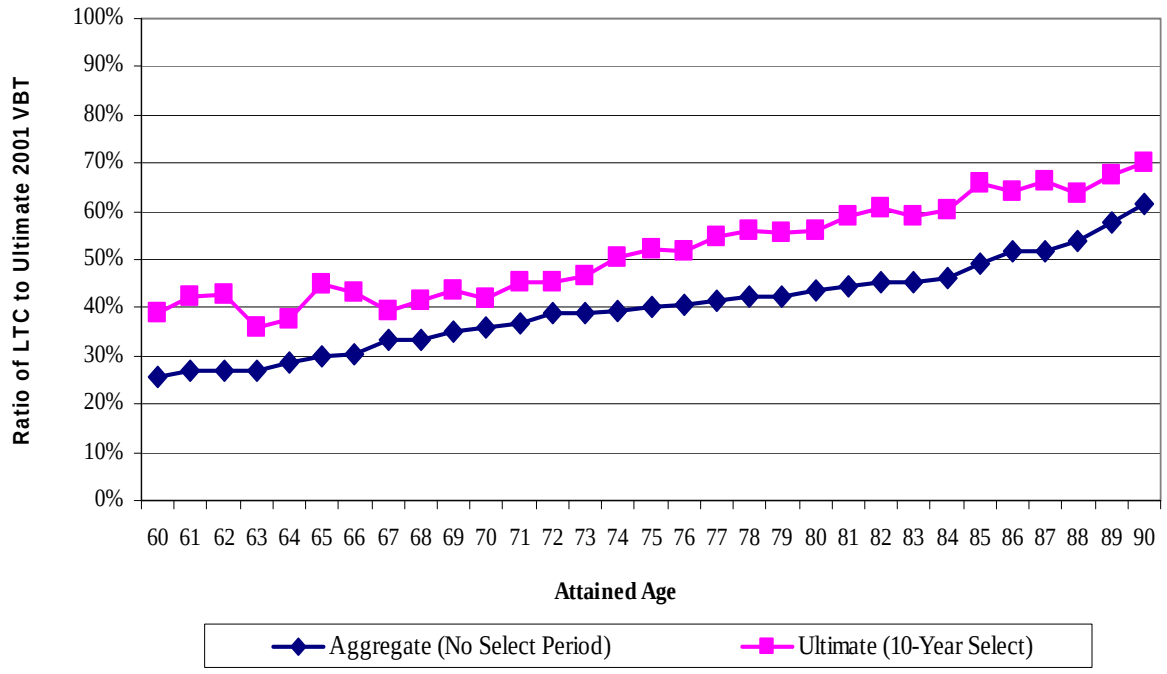
Attained Age	Aggregate (All Durations) Select Period = 0			Ultimate (Durations 11+) Select Period = 10		
	Exposure	Deaths	Mortality Rate	Exposure	Deaths	Mortality Rate
50	388,767	329	0.08%	15,038	19	0.13%
51	419,180	424	0.10%	15,876	27	0.17%
52	452,410	518	0.11%	16,563	33	0.20%
53	486,258	538	0.11%	17,617	30	0.17%
54	523,210	593	0.11%	19,053	50	0.26%
55	566,395	744	0.13%	20,009	50	0.25%
56	605,968	778	0.13%	21,170	45	0.21%
57	634,568	942	0.15%	21,663	62	0.29%
58	663,187	1,088	0.16%	22,355	71	0.32%
59	704,348	1,309	0.19%	22,830	71	0.31%
60	739,345	1,466	0.20%	23,315	70	0.30%
61	771,814	1,743	0.23%	24,258	87	0.36%
62	817,745	2,044	0.25%	25,259	101	0.40%
63	865,064	2,393	0.28%	25,973	96	0.37%
64	951,040	3,062	0.32%	26,716	114	0.43%
65	1,041,160	3,895	0.37%	28,239	157	0.56%
66	1,075,655	4,446	0.41%	30,541	178	0.58%
67	1,100,918	5,385	0.49%	33,156	192	0.58%
68	1,116,604	5,950	0.53%	36,419	243	0.67%
69	1,131,063	6,897	0.61%	41,003	311	0.76%
70	1,132,177	7,716	0.68%	47,398	376	0.79%
71	1,112,970	8,479	0.76%	53,486	503	0.94%
72	1,078,386	9,580	0.89%	61,013	634	1.04%
73	1,036,172	10,183	0.98%	68,887	810	1.18%
74	990,285	10,715	1.08%	82,239	1,151	1.40%
75	934,458	11,376	1.22%	95,973	1,520	1.58%
76	870,729	11,750	1.35%	100,640	1,726	1.72%
77	802,055	12,189	1.52%	102,998	2,059	2.00%
78	733,793	12,530	1.71%	103,764	2,334	2.25%
79	669,071	12,601	1.88%	103,698	2,548	2.46%
80	589,213	12,502	2.12%	100,460	2,757	2.74%
81	506,974	12,298	2.43%	94,030	3,015	3.21%
82	429,892	11,804	2.75%	85,384	3,133	3.67%
83	359,199	10,860	3.02%	76,307	3,003	3.94%
84	295,935	10,063	3.40%	68,023	3,026	4.45%
85	232,975	9,339	4.01%	59,303	3,174	5.35%
86	176,777	8,108	4.59%	50,151	2,859	5.70%
87	132,258	6,750	5.10%	42,045	2,738	6.51%
88	97,126	5,686	5.85%	35,199	2,442	6.94%
89	69,339	4,752	6.85%	29,949	2,404	8.03%
90	47,528	3,781	7.96%	23,568	2,136	9.06%

Removing the early duration experience does have an effect on the ultimate level of mortality, indicating that there is a selection period. The selection period appears to be at least ten durations, but given the limited exposure at the higher durations, it is difficult to determine when the selection period ends.

Mortality Compared to the Ultimate 2001 VBT Table: Figure 15 shows the comparison of total active life LTC mortality, with and without a select period, to the ultimate 2001 VBT mortality.

The LTC ultimate mortality, assuming a 10-year select period, shows a relatively smooth increase. Also, LTC ultimate mortality ratio, assuming a 10-year select period, is significantly less than 100%, indicating that the select period may be longer than 10 years.

Figure 15
Total Active Life Mortality Comparison vs Ultimate 2001 VBT



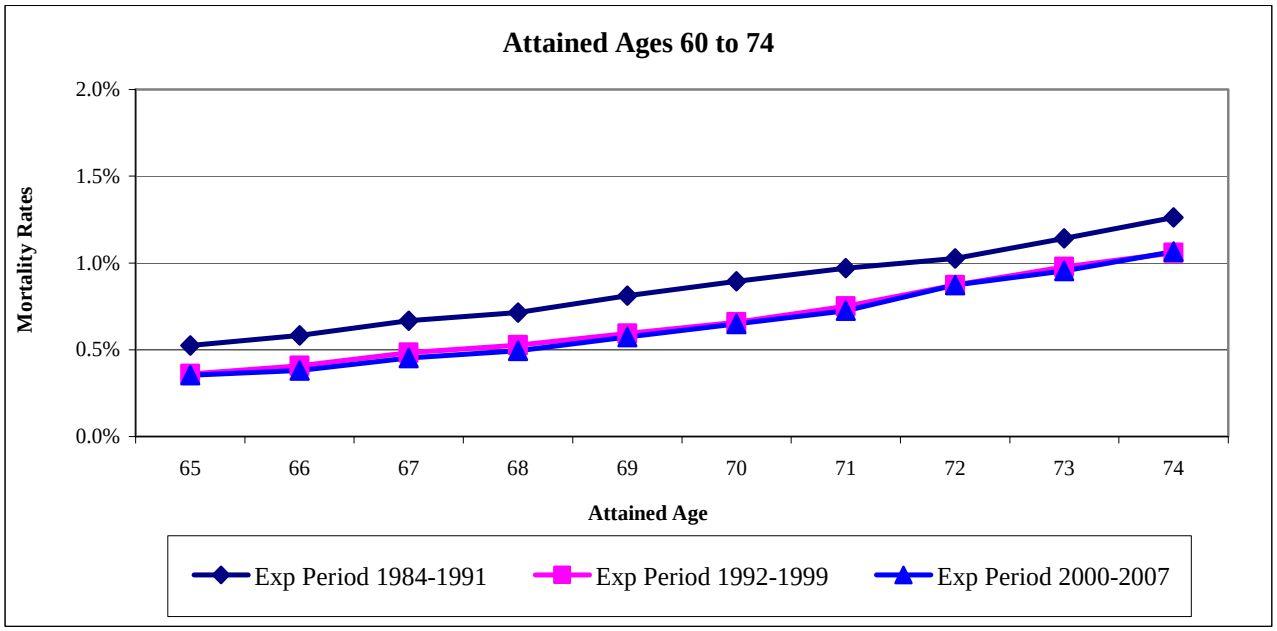
Appendix J-4 has detailed mortality rate calculations by attained age for the LTC mortality, by gender and in total, with and without a select period.

Trend of Active Life Mortality by Exposure Period: The mortality data was originally divided into seven exposure periods, each with limited exposure. In order to determine if there were any discernible trends, the seven exposure periods were combined into three exposure periods. Each combined exposure period includes eight calendar years of exposure. This is NOT the same as issue year; for example, a policy issued in 1997 would have its first three durations in the 1992–1999 exposure period, durations 4 through 8 in the 2000–2007 exposure period.

Appendix J-5 shows the active life deaths and mortality rates in total and by exposure periods by gender and in total for attained ages 40 through 99.

Figure 16 contains graphs for two different attained age cohorts that show the active life attained age mortality by combined exposure periods. (Note the scales are not the same on the two graphs.) For attained ages 60-74, mortality rates were higher during the older exposure periods, while mortality rates are similar for the later combined exposure periods. For attained ages, 75-84, mortality rates are higher for the more recent exposure periods.

Figure 16
Total Mortality Rates by Exposure Period
Active Lives Only



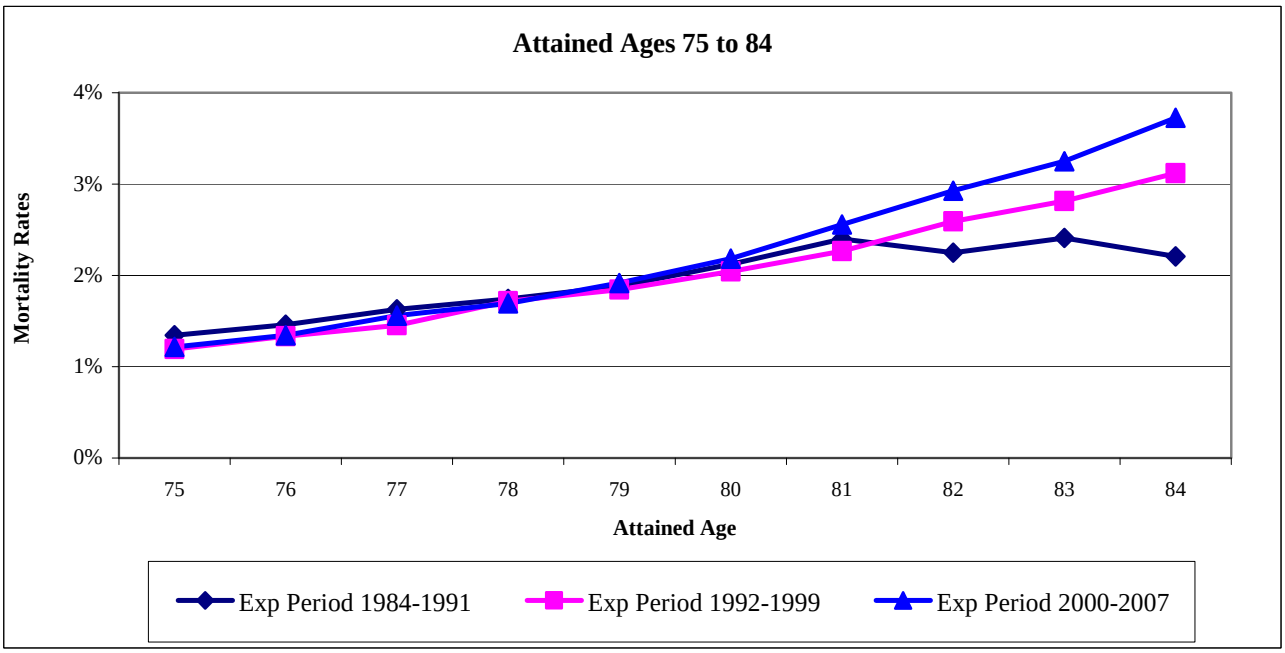


Figure 17 shows a comparison of both the 1984-1991-exposure period and the 1992-1999-exposure period to the 2000-2007-exposure period by attained age cohort. There appears to be a small amount of improvement in mortality below age 80 when compared to the earlier timeframes, but it seems to be worsening at the higher ages. Perhaps there is a more accurate reporting of deaths at higher attained ages in the more recent exposure period.

Figure 17
Average Annual Mortality Change
Active Lives Only

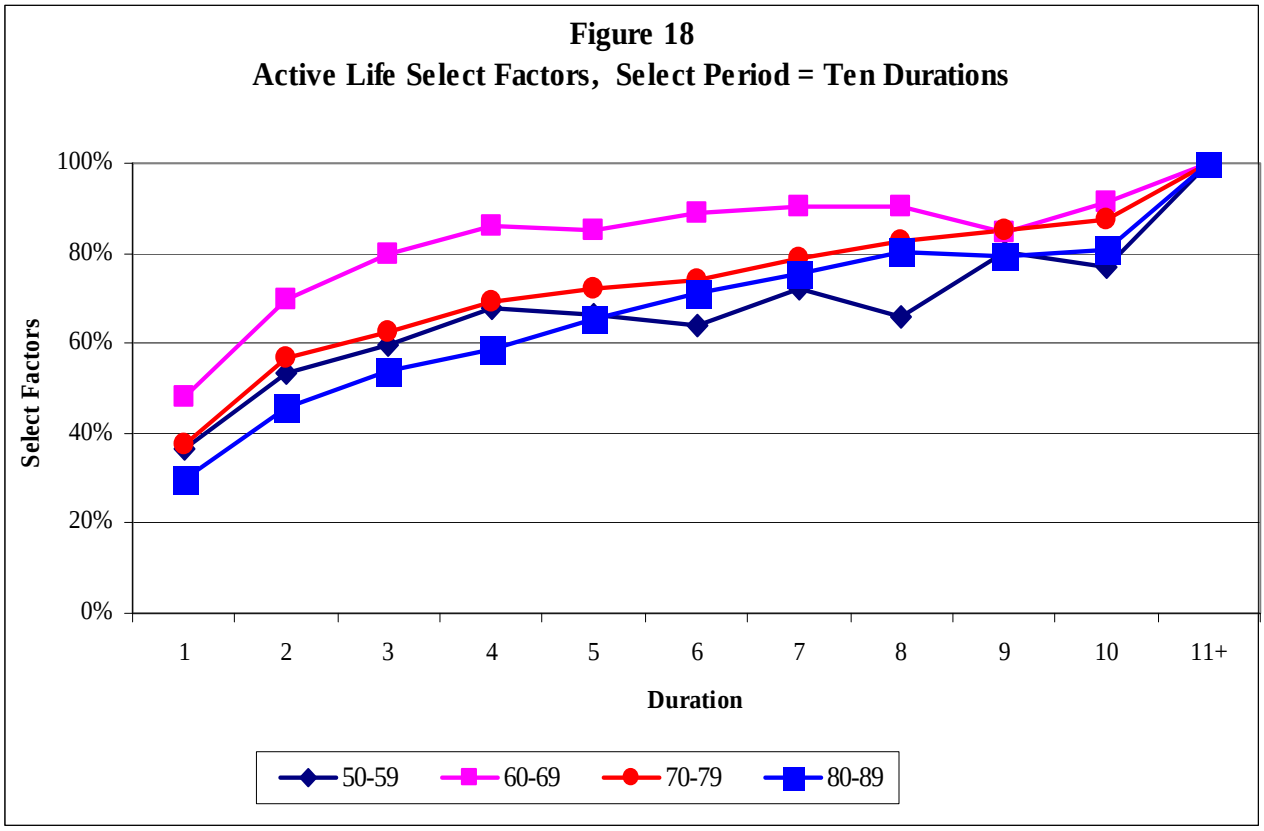
Exposure Period 1984-1991 to Exposure Period 2000-2007			
Attained Age Cohort	**Female**	**Male**	**Total**
0-29	-2%	-4%	-3%
30-39	-5%	-11%	-8%
40-49	-4%	-6%	-5%
50-59	-6%	-7%	-6%
60-69	-3%	-4%	-3%
70-79	0%	-2%	-1%
80-89	3%	2%	3%
90+	20%	20%	20%
Total	**0%**	**-3%**	**-1%**

Exposure Period 1992-1999 to Exposure Period 2000-2007			
Attained Age Cohort	**Female**	**Male**	**Total**
0-29	-10%	-5%	-7%
30-39	-4%	-10%	-7%
40-49	-1%	-4%	-3%
50-59	-1%	-2%	-1%
60-69	-2%	-2%	-2%
70-79	1%	0%	0%
80-89	3%	1%	2%
90+	6%	3%	5%
Total	**-1%**	**-3%**	**-2%**

Active Life Mortality Selection: Appendix J-6 has tables of mortality rates by attained age cohorts and selection factors by gender and in total. The select factors are calculated as a ratio of a given duration to the mortality rates that may be considered ultimate. The three sets of assumptions are: 1) durations 1 through 8 select, 9 and higher ultimate; 2) durations 1 through 9 select, 10 and higher ultimate; and 3) durations 1 through 10 select, 11 and higher ultimate.

Figure 18 shows selection factors, assuming a select period of 10 durations, with ultimate mortality for durations 11 or higher. For most attained age cohorts, it appears the selection period may be duration 9 or higher. Attained ages 60 through 69 appear to have a smaller impact from selection than other ages.

Issue-age-based selection factors would be determined by grading between the attained age cohorts.



Mortality Rates – Disabled Lives Only

The mortality rates in this portion of this section are for disabled lives only. Rates are shown split by gender as well as in total.

Overall Mortality Rates by Gender: Figure 19 shows the disabled life mortality data. The overall mortality rate is about 20%, with a female rate of about 17% and the male rate of about 28%. All of these rates have decreased since the prior report. There is a larger amount of exposure data in the 2007 Report and many more deaths, leading to more credibility with this report.

Figure 19
Overall Mortality Rates by Gender
Disabled Lives Only

	2004 Report			2007 Report		
	Exposure	**Deaths**	**Mortality Rate**	**Exposure**	**Deaths**	**Mortality Rate**
Female	120,844	24,205	20.0%	201,039	34,504	17.2%
Male	53,509	16,004	29.9%	85,258	23,498	27.6%
Total	**174,353**	**40,209**	**23.1%**	**286,297**	**58,002**	**20.3%**

Experience Compared to Industry Mortality: The disabled life LTC mortality is compared to the Society of Actuaries Table 95, which is a disabled life mortality table based on a disability income insurance definition of disability. SOA Table 95 excludes deaths from mental nervous disorders, AIDS and pregnancy; it also does not provide data for age groups above age 75.

People receiving long-term care are generally older and more disabled than people receiving disability income benefits. It is not surprising that the LTC mortality is significantly higher than SOA Table 95, as can be seen in Figure 20.

Figure 20
Ratio of LTC Mortality to SOA Table 95
Disabled Lives Only

Age at Claim	Female	Male	Total
Under 50	171%	107%	136%
50-54	276%	242%	261%
55-59	411%	278%	352%
60-64	320%	342%	329%
65-69	267%	346%	296%
70-74	201%	303%	235%
Total	**234%**	**314%**	**262%**

Appendix J-7 has detailed data and rates for the disabled life LTC mortality, as well as comparisons to SOA Table 95 by age and duration, gender and in total.

Disabled Life Mortality vs. Active Life Mortality: Disabled lives represent a very small portion of total exposure, less than 1%. Overall, the disabled lives mortality rate is about 25 times the active lives mortality rate, as seen in Figure 21. Note the ratio varies widely by attained age cohort. This overall ratio will also vary as the distribution of exposure and deaths vary by attained ages for both the active and disabled life changes in the future.

Figure 21
Comparison of Active Lives Mortality Rates to Disabled Lives Mortality Rates

Attained	Active Lives			Disabled Lives			Disabled /
Age Cohort	Exposure	Deaths	Mortality Rate	Exposure	Deaths	Mortality Rate	Active
0-29	535,081	82	0.0%	50	0	0.0%	0
30-39	1,492,341	441	0.0%	474	20	4.2%	143
40-49	2,748,708	1,677	0.1%	1,450	78	5.4%	88
50-59	5,444,292	7,263	0.1%	3,877	547	14.1%	106
60-69	9,610,408	37,281	0.4%	16,988	3,528	20.8%	54
70-79	9,360,114	107,119	1.1%	98,469	19,092	19.4%	17
80-89	2,889,913	92,195	3.2%	146,477	29,718	20.3%	6
90+	128,573	12,872	10.0%	18,512	5,019	27.1%	3
Total	**32,209,430**	**258,930**	**0.8%**	**286,297**	**58,002**	**20.3%**	**25**

Appendix J-8 has detailed calculations and comparisons of the active and disabled life mortality rates by attained age, gender and in total.

Impact of Marital Discount on Mortality Rates

This section examines the impact of marital discounts on the mortality rates. Data for Group policies is excluded from this analysis as very little of the reported Group business has marital discounts. Only active lives data is included since little of the disabled lives data has marital discounts. Any data that did not include this information (i.e., "Unknown") has been excluded from these analyses. Data coded as "unknown" is, on average, older than the data coded as with or without a marital discount. From this viewpoint, Figure 22 shows that the overall mortality on business with a marital discount continues to appear to be about half that of mortality on business without a discount. The data coded as "no discount" is, on average, older than the data coded as "has discount." Mortality rates for this category would generally be higher due to the higher average attained age.

Figure 22
Summary of Data Underlying Marital Discount Analysis
Individual-Type Policies Only
Active Lives Only

Marital Discount Category	2004 Report			2007 Report		
	Exposure	Deaths	Mortality Rate	Exposure	Deaths	Mortality Rate
Has Discount	3,396,891	9,294	0.3%	7,652,302	38,008	0.5%
No Discount	6,113,710	33,824	0.6%	10,226,671	99,460	1.0%
Total	**9,510,601**	**43,118**	**0.5%**	**17,878,973**	**137,468**	**0.8%**

While the overall average mortality on business with a marital discount appears to be much lower than that on business without a marital discount, the relationship changes if the mortality rates are compared by duration. When viewed this way, the mortality rates on business with a marital discount are still lower, but the variance is much smaller. The marital discount was generally not offered on the older business, so there is limited data for the mortality on business with a marital discount at the later durations.

If the mortality rates from the business with a discount are weighted at each duration by the exposures of the business without a discount, the total mortality rate for business with a discount would be approximately 0.75%, or about 25% less than the total mortality rate for business without a discount.

Figure 23
Impact of Marital Discount on Mortality Rates by Duration
Individual-Type Policies Only
Active Lives Only

	Has Discount			No Discount		
Duration	**Exposure**	**Deaths**	**Mortality Rate**	**Exposure**	**Deaths**	**Mortality Rate**
1	1,779,238	2,717	0.15%	1,686,161	4,155	0.25%
2	1,401,345	3,771	0.27%	1,370,751	5,456	0.40%
3	1,178,505	4,369	0.37%	1,204,117	6,401	0.53%
4	958,410	4,818	0.50%	1,050,627	6,732	0.64%
5	719,390	4,664	0.65%	902,444	7,002	0.78%
6	527,555	4,309	0.82%	776,147	7,211	0.93%
7	383,701	3,763	0.98%	666,846	7,474	1.12%
8	265,708	3,015	1.13%	557,250	7,241	1.30%
9	170,911	2,165	1.27%	460,676	6,565	1.43%
10	107,128	1,508	1.41%	378,410	6,022	1.59%
11	67,509	1,081	1.60%	313,399	5,686	1.81%
12	39,622	723	1.82%	252,935	5,337	2.11%
13	24,474	463	1.89%	199,515	5,052	2.53%
14	15,847	322	2.03%	155,000	5,123	3.31%
15	8,593	200	2.33%	110,505	4,886	4.42%
16	2,623	66	2.52%	68,421	3,680	5.38%
17	1,082	28	2.59%	39,549	2,514	6.36%
18	462	14	3.03%	20,841	1,501	7.20%
19	200	11	5.49%	8,702	868	9.97%
20				2,954	337	11.41%
21				954	127	13.31%
22				350	67	19.17%
23				115	23	19.95%
Total	**7,652,302**	**38,007**	**0.50%**	**10,226,671**	**99,460**	**0.97%**

Figure 24 shows the mortality rates by marital discount by gender. It appears the mortality rate differential is greater on female mortality than male mortality. It also appears the differential is greater in the early durations.

Figure 24
Impact of Marital Discount on Mortality Rates by Gender
Individual-Type Policies Only
Active Lives Only

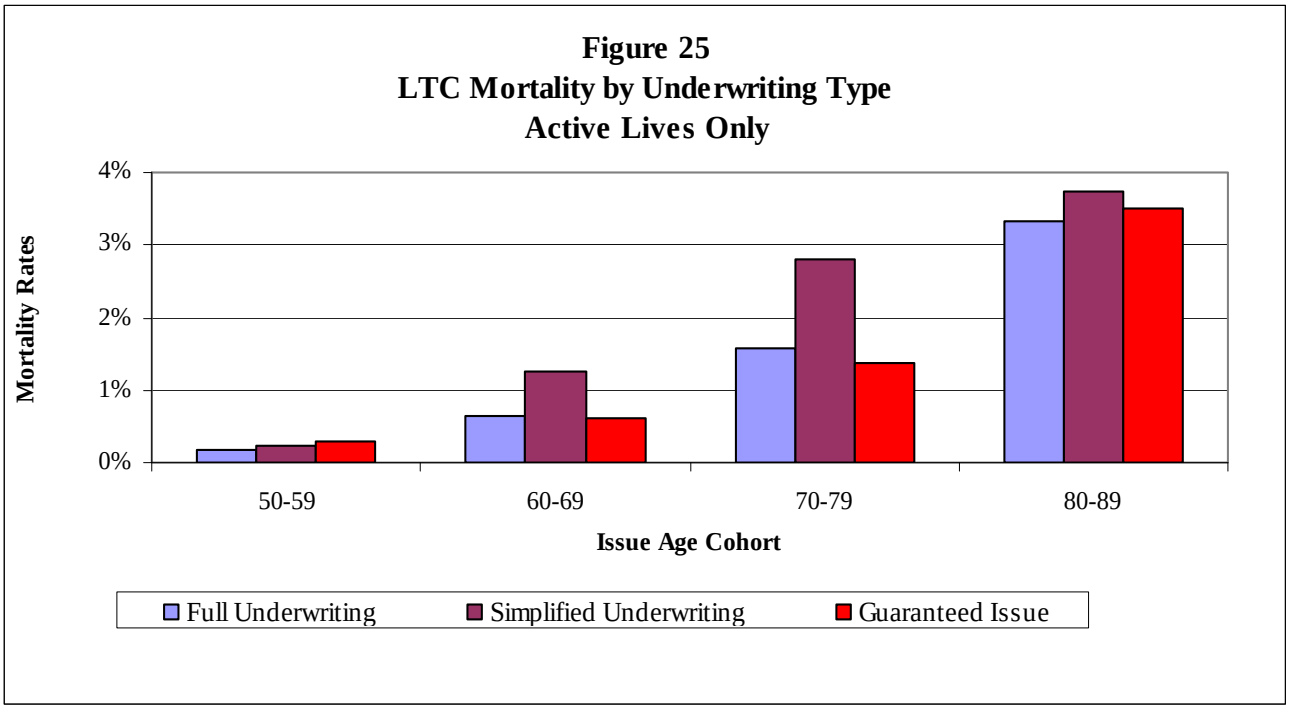
	Female			Male			Total		
Duration	Has Discount	No Discount	Ratio Has / No	Has Discount	No Discount	Ratio Has / No	Has Discount	No Discount	Ratio Has / No
1	0.10%	0.20%	48%	0.21%	0.34%	62%	0.15%	0.25%	62%
2	0.17%	0.34%	51%	0.37%	0.52%	72%	0.27%	0.40%	68%
3	0.24%	0.44%	55%	0.51%	0.71%	71%	0.37%	0.53%	70%
4	0.34%	0.54%	64%	0.67%	0.85%	80%	0.50%	0.64%	78%
5	0.43%	0.66%	64%	0.89%	1.00%	88%	0.65%	0.78%	84%
6	0.55%	0.81%	68%	1.11%	1.18%	94%	0.82%	0.93%	88%
7	0.62%	0.96%	65%	1.37%	1.45%	95%	0.98%	1.12%	88%
8	0.78%	1.11%	71%	1.53%	1.68%	91%	1.13%	1.30%	87%
9	0.88%	1.19%	74%	1.71%	1.89%	91%	1.27%	1.43%	89%
10	0.97%	1.35%	71%	1.91%	2.05%	93%	1.41%	1.59%	88%
11	1.23%	1.51%	82%	2.02%	2.39%	85%	1.60%	1.81%	88%
12	1.30%	1.79%	73%	2.42%	2.72%	89%	1.82%	2.11%	86%
13	1.40%	2.19%	64%	2.46%	3.18%	77%	1.89%	2.53%	75%
14	1.43%	2.84%	50%	2.74%	4.19%	65%	2.03%	3.31%	61%
15	1.95%	3.85%	51%	2.77%	5.53%	50%	2.33%	4.42%	53%
16	2.65%	4.64%	57%	2.36%	6.86%	34%	2.52%	5.38%	47%
17	2.27%	5.49%	41%	2.95%	8.15%	36%	2.59%	6.36%	41%
18	2.14%	6.52%	33%	3.95%	8.67%	46%	3.03%	7.20%	42%
19	7.10%	9.05%	78%	3.93%	12.11%	32%	5.49%	9.97%	55%
20		10.49%			13.64%			11.41%	
21		12.37%			15.84%			13.31%	
22		18.82%			20.04%			19.17%	
23		21.49%			15.86%			19.95%	
Total	**0.33%**	**0.83%**	**41%**	**0.67%**	**1.27%**	**53%**	**0.50%**	**0.97%**	**51%**

Appendix J-9 has detailed mortality calculations for business with marital discounts versus business without marital discounts.

Mortality by Underwriting Type

This portion of this section examines mortality by three different types of underwriting: full, simplified and guaranteed issue. Figure 25 compares the active life experience of each of the underwriting types by issue age cohort.

Figure 25
LTC Mortality by Underwriting Type
Active Lives Only



The guaranteed issue type has lower mortality than the simplified underwriting at most ages. The guaranteed issue type is mostly Group business with actively-at-work requirements. This may indicate that actively-at-work requirements may be more effective than simplified underwriting techniques with regard to mortality.

Figure 26 shows the disabled life mortality data for full and simplified underwriting. Most of the guaranteed issue type is Group business with a lower issue age, thus the disabled lives exposure is very limited and excluded from this analysis.

Figure 26
Mortality By Underwriting Type
Disabled Lives Only

Underwriting Type	2007 Report		
	Exposure	Deaths	Mortality Rate
Full Underwriting	200,081	36,738	18.4%
Simplifed Underwriting	97,514	19,819	20.3%

Appendix J-10 shows mortality data and calculations by issue age cohort for each of the underwriting types.

Mortality by Geographic Region

This portion of this section examines the mortality by the geographic region of the country by duration. This breakdown by geographic region is new to this Report.

Almost half of the exposure base is currently coded as "unknown" region, followed by 17% for the Southern region, 16% for the Midwest, 12% for the West and 7% for the Northeast.

Figure 27 shows combined mortality rates, both active and disabled, and both individual and group policy types, by region. Note the mortality appears to be slightly higher in the Midwest. Figure 28 shows mortality rates for Individual type active lives only, most issued with full underwriting. The mortality rates by region are relatively similar in this comparison. The amount of exposure to both group business and disabled lives appears to have some regional variance, but the exposure and number of deaths is still very limited.

Appendix J-11 shows detailed mortality rate calculations by the geographic region of the country, as well as by duration.

Figure 27
Mortality Rates by Geographic Region
Individual and Group Policy Types
Active and Disabled Lives

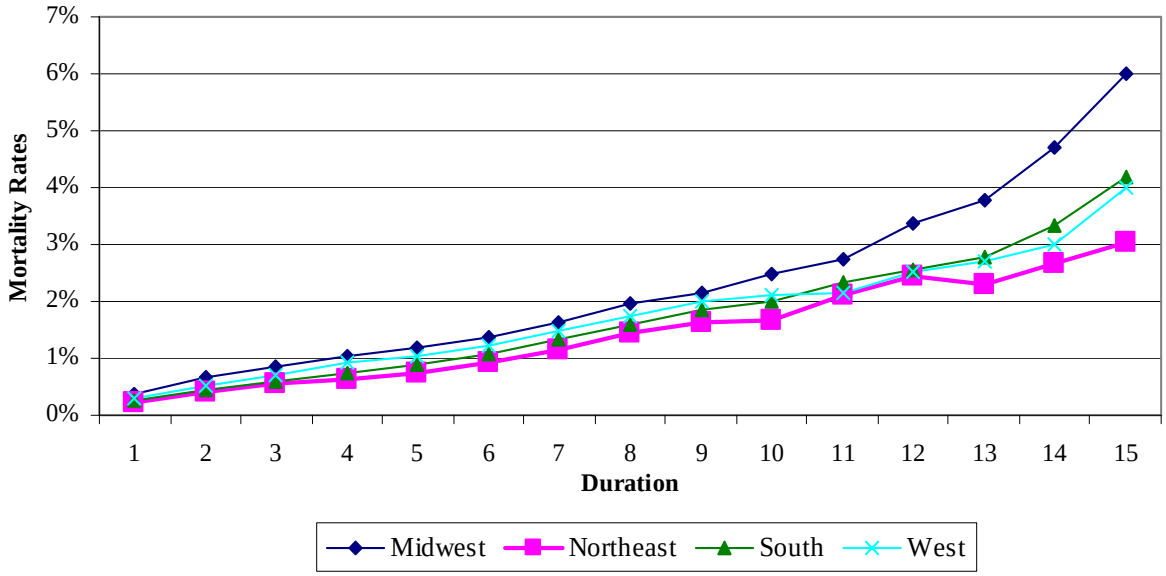
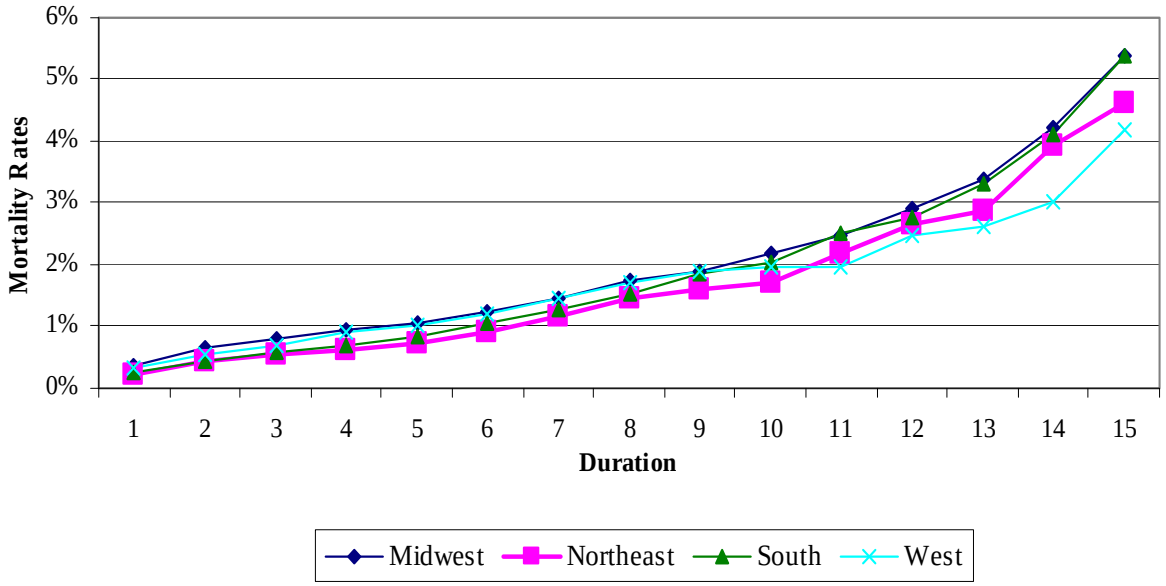


Figure 28
Mortality Rates by Geographic Region
Individual-Type Policies Only
Active Lives Only



I7. Section IV – Cause of Claim

This section presents information relating to the primary diagnosis for LTC claimants in this Report. Generally, eight to nine categories have been selected for analysis in the following sub-sections of this Report with respect to Nursing Home claims, Home Health Care/ADC/Other ("Home Health Care") and Assisted Living Facility claims.

Appendices G-1 through G-15 detail the number of claims, days on claim and dollars of claim payment, as well as average payments, average days and average payments per day by primary diagnosis cohort along with other policy and claim characteristics.

For this Report, an Assisted Living care location was added so please keep this in mind when comparing to the prior Report which combined nursing home and assisted living claims into one location. A "*Total*" claims analysis was also performed to allow the inclusion of 12.6% ($3.5 billion) of the claim payments submitted that did not distinguish between Nursing Home, Home Health Care and Assisted Living settings. Therefore, "*Total*" claims includes all Nursing Home claims, Home Health Care claims, Assisted Living and those claims that were not identified as Nursing Home, Home Health Care or Assisted Living. A claimant that has multiple care settings across Nursing Home, Assisted Living and Home Health Care claims is counted as one claim in each care setting and is only counted as one claim in the Total claims analysis with combined day/visits and claim payments. For the "Total" claims analysis, a Home Health Care "visit" is considered the same as one Nursing Home or Assisted Living "day."

Compared to the prior Report with experience through 2004, significantly more Nursing Home and Home Health Care claim records were captured with diagnosis information. Nursing Home claim records increased to 149,163, compared to 102,821 in the prior Report, and Home Health Care increased to 86,335, compared to 52,272 in the prior Report. Despite this increase in data, the Home Health Care and, to a lesser extent, the Nursing Home data for some of the more detailed breakdowns are still not credible. Diagnosis cohorts with less than 100 claims were excluded from this report, but can be found in Appendix G.

Of the 149,163 claims that had Nursing Home payments, 120,392 (81%) were coded with primary diagnosis information (compared to 77% in the prior Report). Of the 36,142 claims that had Assisted Living payments, 33,946 (94%) were coded with primary diagnosis. Of the 86,335 claims that had Home Care payments, 76,829 (89%) were coded with primary diagnosis. Claims coded with diagnosis "Other/Unknown" have remained about the same for both Nursing Home and Home Health Care. The "other" diagnosis cohort includes claims in the ill-defined/miscellaneous condition diagnosis cohort, as well as any diagnosis cohort where the prevalence was less than 1.0% of the total. Unless otherwise noted, the following analysis excludes the "Other/Unknown" diagnosis category.

In summary, for total claims combined (with or without diagnosis information), the average claim (whether open or closed) has a length of 492.7 days and $42,132, increases of 34% and 21%, respectively, from the prior Report. For those with a diagnosis, the averages are 513.8 days and $45,329, increases of 29% and 17%, respectively, from the prior Report.

The chart below summarizes the findings of Cause of Claim Analysis.

Summary of Cause of Claim Findings: 1984-2007

	Nursing Home	Home Health Care	Assisted Living	Total
Top Cause of Claim (G-2)				
-by claim count	Alzheimer's (25.5%)	Cancer (14.6%)	Alzheimer's (37.2%)	Alzheimer's (20.7%)
-by average claim payments	Alzheimer's ($61K)	Stroke ($40k)	Mental ($58.7k)	Alzheimer's ($76K)
-by length of claim	Alzheimer's (610 days)	Nervous System (454 visits)	Mental (613 visits)	Alzheimer's (765 days)
Open vs. Closed Status (G-3)				
-open (average number of days/visits)	453 days	539 visits	578 visits	730 days/visits
-closed (average number of days/visits)	422 days	297 visits	516 visits	495 days/visits
Male vs. Female (G-4)				
-male (leading cause of claim)	Alzheimer's (26%)	Cancer (17%)	Alzheimer's (38%)	Alzheimer's (22%)
-female (leading cause of claim)	Alzheimer's (25%)	Arthritis (17%)	Alzheimer's (37%)	Alzheimer's (20%)
Attained Age Group (G-5)				
-<65 (leading cause of claim)	Nervous Systems (21%)	Cancer(28%)	Alzheimer's (39%)	Cancer(27%)
-65-74 (leading cause of claim)	Alzheimer's (27%)	Cancer (21%)	Alzheimer's (43%)	Alzheimer's (19%)
-75+ (leading cause of claim)	Alzheimer's (25%)	Alzheimer's (16%)	Alzheimer's (36%)	Alzheimer's (22%)
Policy Duration (G-6)				
-claim counts	decreasing prevalence by duration	decreasing prevalence by duration	decreasing prevalence by duration	decreasing prevalence by duration
Incurral Year Group (G-7)				
-leading diagnosis				
1984-1987	Circulatory (20%)	Cancer (30%)	Injury (67%)	Injury (21%)
1988-1991	Alzheimer's (16%)	Cancer (17%)	Alzheimer's (28%)	Alzheimer's (16%)
1992-1996	Alzheimer's (24%)	Alzheimer's (16%)	Alzheimer's (36%)	Alzheimer's (20%)
1997-2000	Alzheimer's (28%)	Alzheimer's (16%)	Alzheimer's (43%)	Alzheimer's (21%)
2001-2004	Alzheimer's (26%)	Arthritis (15%)	Alzheimer's (33%)	Alzheimer's (21%)
2005-2007	Alzheimer's (27%)	Alzheimer's (16%)	Alzheimer's (35%)	Alzheimer's (22%)
Closed Status (G-8)				
- leading cause of closure (of known status)	Death (67%)	Death (55%)	Death (65%)	Death (61%)
Issue Year Group (G-9)				
- leading diagnosis				
1984-1987	Alzheimer's (16%)	Injury (15%)	Alzheimer's (23%)	Alzheimer's (17%)
1988-1991	Alzheimer's (25%)	Alzheimer's (15%)	Alzheimer's (31%)	Alzheimer's (24%)
1992-1996	Alzheimer's (29%)	Alzheimer's (16%)	Alzheimer's (38%)	Alzheimer's (22%)
1997-2001	Alzheimer's (23%)	Arthritis (15%)	Alzheimer's (35%)	Alzheimer's (16%)
2002-2004	Alzheimer's (28%)	Cancer (23%)	Alzheimer's (47%)	Alzheimer's (19%)
2005-2007	Stroke (23%)	Cancer (22%)	Alzheimer's (34%)	Cancer (25%)
Underwriting Type (G-10)				
- full underwriting (Avg. $ per day)	$93	$90	$106	$94
-simplified underwriting (Avg. $ per day)	$80	$89	$130	$99
Benefit Period Type (G-11)				
-limited (average days)	398	318	495	453
-unlimited (average days)	528	347	554	538
Average Number of Home Care Visits (G-12)				
- leading diagnosis	N/A	Cancer (4.0 visits per week)	N/A	N/A
- overall average	N/A	Overall 3.2 visits per week	N/A	N/A
Policy Type (G-13)				
- group (leading cause of claim)	Alzheimer's (32%)	Cancer (21%)	Alzheimer's (42%)	Alzheimer's (26%)
- individual (leading cause of claim)	Alzheimer's (25%)	Arthritis (15%)	Alzheimer's (37%)	Alzheimer's (20%)
Marital Status (G-14)				
-marital discount (average days per claim)	358	340	482	435
- no marital discount (average days per claim)	434	367	568	507
Region (G-15)				
- Midwest (leading cause of claim)	Alzheimer's (22%)	Alzheimer's (18%)	Alzheimer's (40%)	Alzheimer's (24%)
- Northeast (leading cause of claim)	Alzheimer's (32%)	Alzheimer's (20%)	Alzheimer's (51%)	Alzheimer's (28%)
- South (leading cause of claim)	Alzheimer's (30%)	Alzheimer's (16%)	Alzheimer's (46%)	Alzheimer's (27%)
- West (leading cause of claim)	Alzheimer's (26%)	Alzheimer's (18%)	Alzheimer's (47%)	Alzheimer's (26%)
- Other (leading cause of claim)	Alzheimer's (25%)	Alzheimer's (13%)	Alzheimer's (34%)	Alzheimer's (17%)

Definition of Terms

Tally: Number of claims with either a Nursing Home and/or an Assisted Living payment and/or a Home Health Care payment. If a claim had payments in multiple locations, it is included in the tally of both charts. If a claim had payments in multiple locations, the claim days and payments only reflect the portion of the claim attributable to each location.

Total Payments: The sum of the claim payments made for that claim within that claim location.

Average Claim Payments: Total Payments/Tally

Average Days: Days/Tally

Average per Day: Average Claim Payments/Average Days

Days: The minimum of the number of days recorded (as service) for that claim or the length of time between the service begin date and the service end date.

ICD-9-CM Codes by Diagnosis (Appendix G-1)

Primary ICD9 codes were used to map claims into diagnosis categories. Appendix G-1 describes the mapping logic. Diagnosis is defined as the primary diagnosis at onset of claim.

Diagnosis Category Summary (Appendix G-2)

For Nursing Home claims, Alzheimer's claims have continued to increase in prevalence in recent years and remain the leading cause of claim in this Report, now as prevalent as the next two most common causes combined. The leading causes of Nursing Home claims over the 1984 to 2007 period were Alzheimer's (25.5%), Stroke (13.0%) and Circulatory (10.2%).

Average claim payments for Alzheimer's were the most costly at $61K, followed by Nervous System ($52K), Mental ($51K) and Stroke ($47K). The least costly claims are Cancer ($15K), Congenital ($19K) and Pregnancy Disorders ($20K).

Alzheimer's exhibited the longest average claim duration with 610 days, followed by Hypertension (550 days). The diagnosis cohorts with the shortest average Nursing Home claim duration were Cancer (179 days) and Congenital (276 days). The average claim duration for all diagnosis cohorts was 460 days, which is lower than the prior Report of 482 days, but note that the prior Report combined Nursing Home and Assisted Living into one category. The diagnosis cohorts with the highest average claim payments per day were Alzheimer's ($101/day) and Nervous System ($94/day). Among the least costly causes, as measured by average claim payments/day, were Pregnancy ($56/day) and Congenital ($69/day).

FIGURE 1: Distribution of Number of Nursing Home Claims by Diagnosis

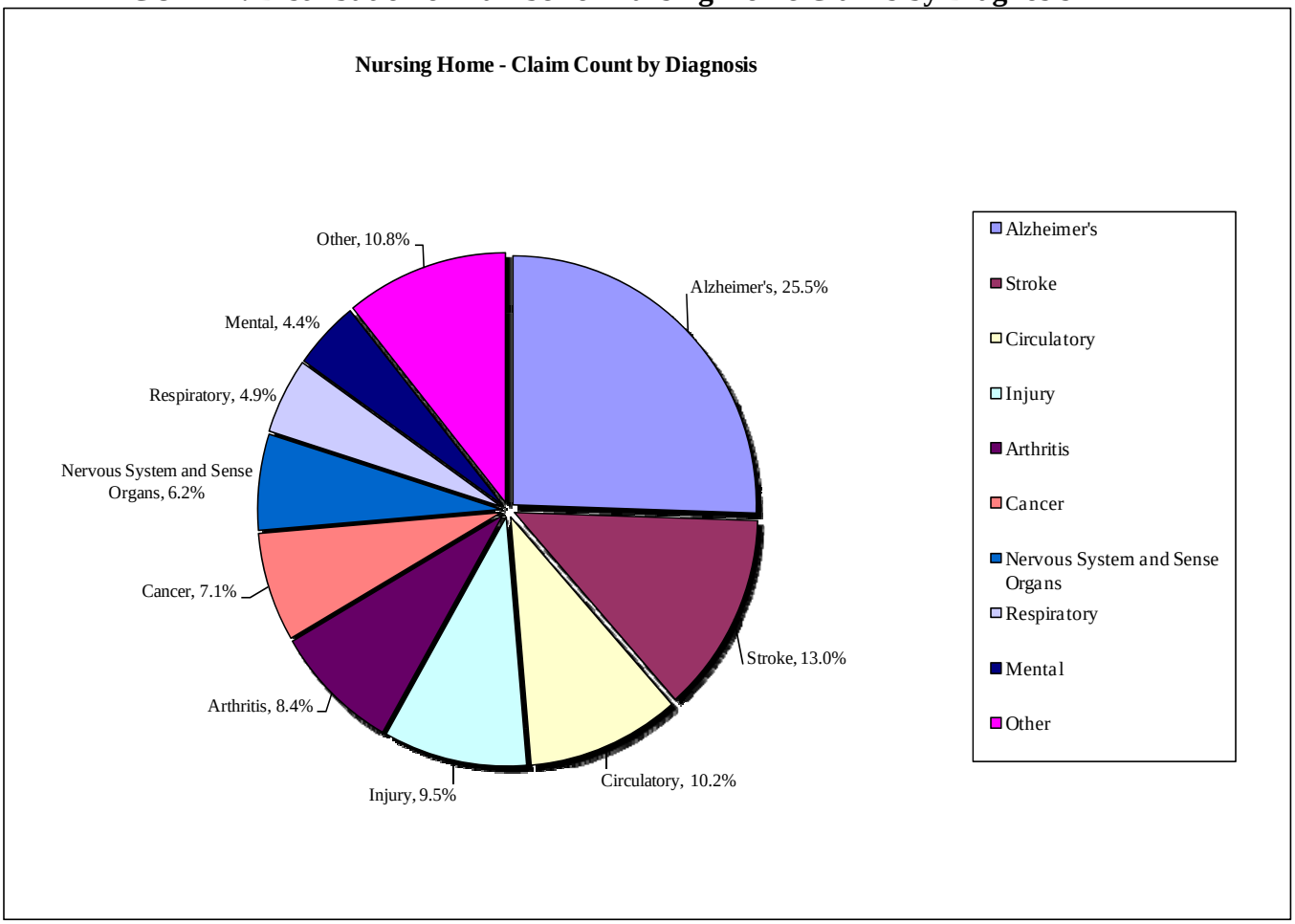
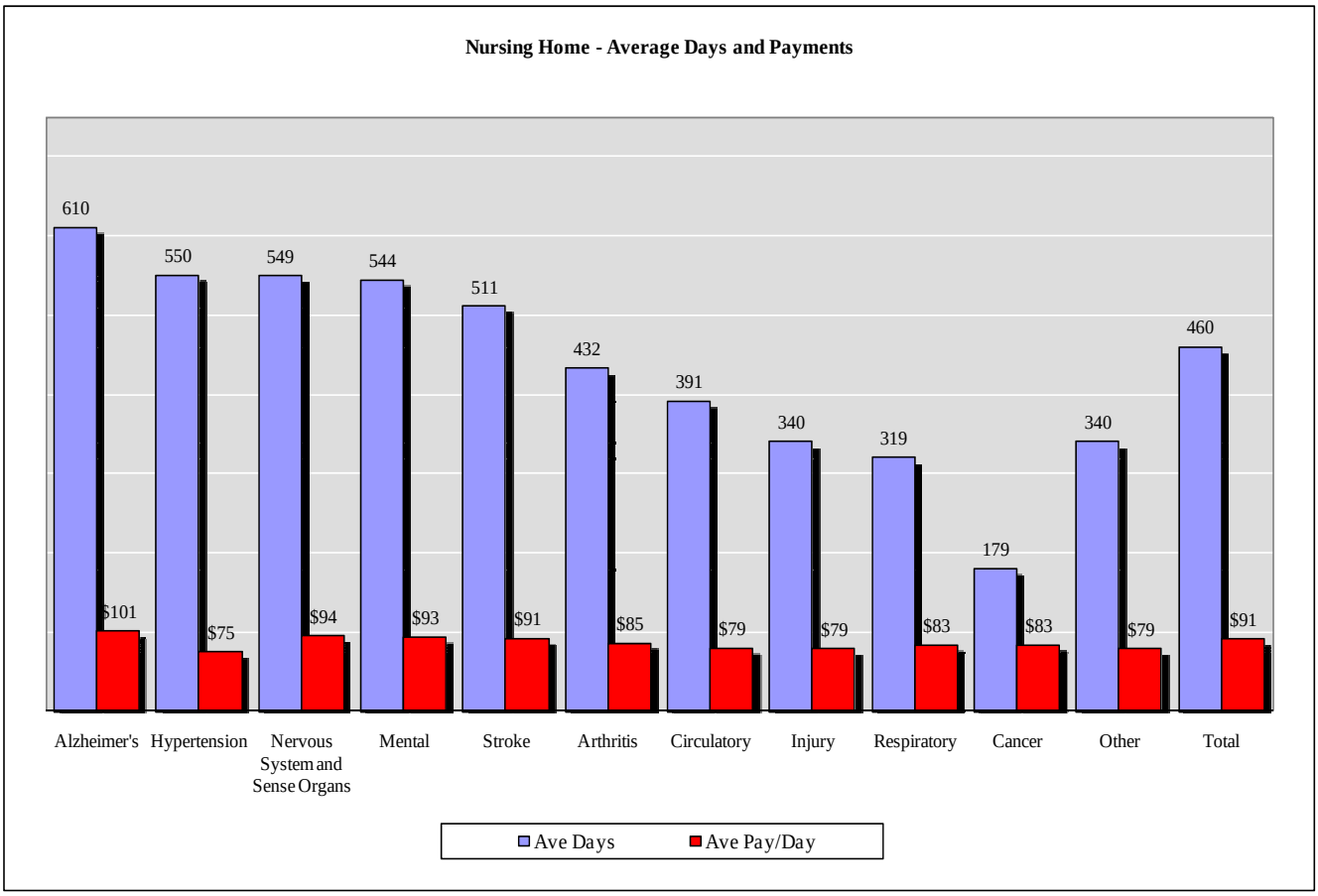


FIGURE 2: Average Number of Days on Claim and Average Cost per Day for Nursing Home Claims by Diagnosis



For Home Health Care claims, while still much smaller than the block of Nursing Home claims, the current Report (data through 2007) has 65% more Home Health Care claims as the prior Report (data through 2004). Home Health Care claims contribute approximately one-third of the total claims. There were 86,335 claims with Home Health Care payments in the current Report versus 52,272 in the prior Report. While 19% of the Nursing Home claims were coded as diagnosis Other\Unknown, there were only 11% of the Home Health Care claims with an Other\Unknown diagnosis.

For the 1984 through 2007 Report, the leading Home Health Care diagnosis by claim count is Cancer (14.6%), followed by Arthritis (14.4%) and Alzheimer's (14.2%). In terms of average claim payments for Home Health Care claims, Stroke claims have the highest at $40K, followed by Nervous System ($38K). On the lower side of the average claim payments were Cancer ($11K) and Genitourinary System ($17K). Average visits for Home Health Care claims were the longest for Stroke (454) and Nervous System (453) claims. The total average visits across all diagnosis cohorts were 320 visits, an increase of 80% over the prior Report's total average visits of 178. Viewing only diagnosis cohorts with at least 100 claims in the Report, the Alzheimer's

diagnosis cohort exhibited the highest average payments per visit at $91/visit, followed by Stroke ($89/visit) and Nervous System ($84/visit). Among the least costly diagnosis cohorts were Respiratory ($67/visit), Hypertensions ($70/visit) and Circulatory ($70/visit). Compared with Nursing Home claims, Home Health Care claims had a shorter average length of claim for all diagnosis cohorts.

FIGURE 3: Distribution of Number of Home Health Care Claims by Diagnosis

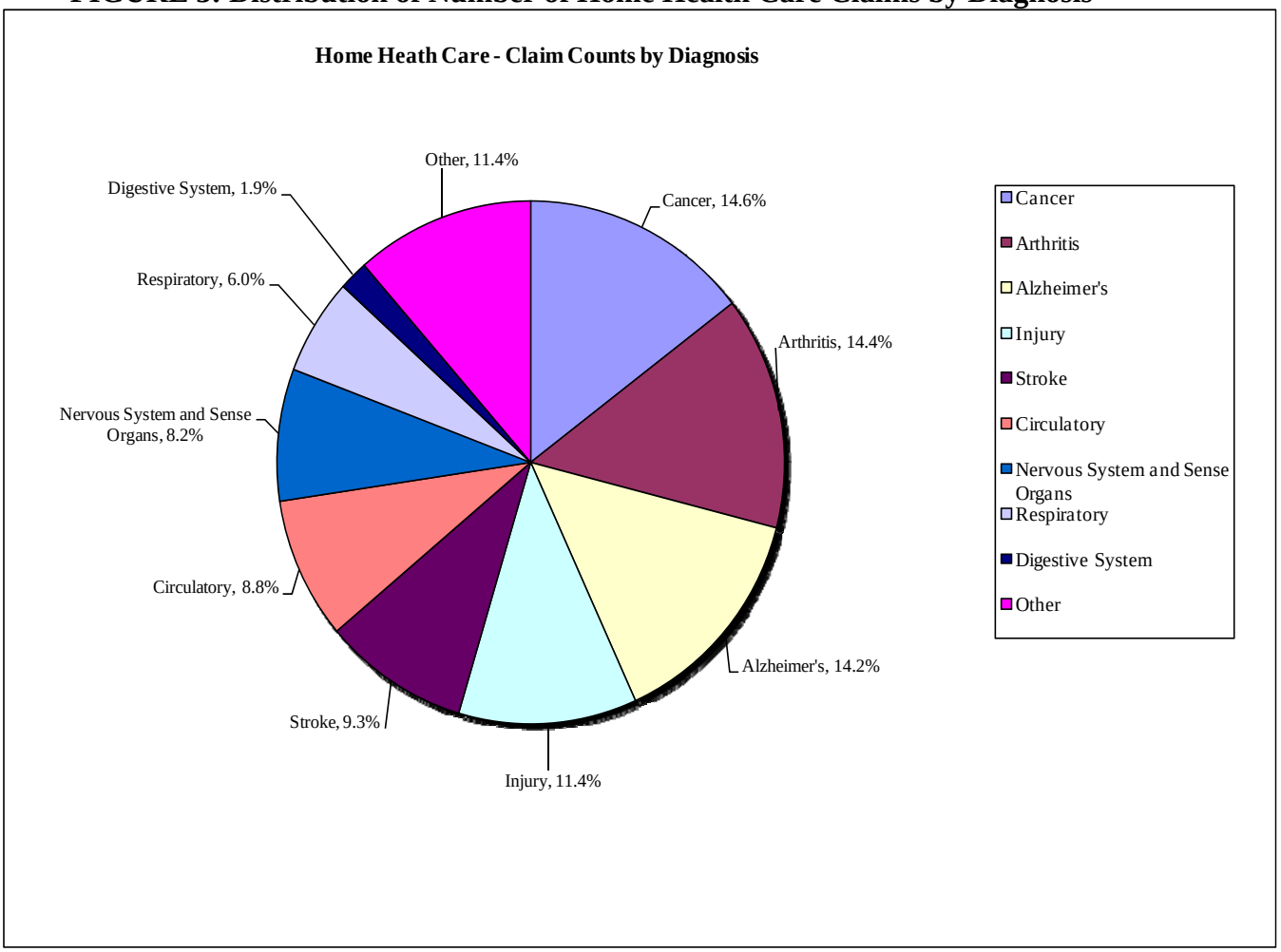
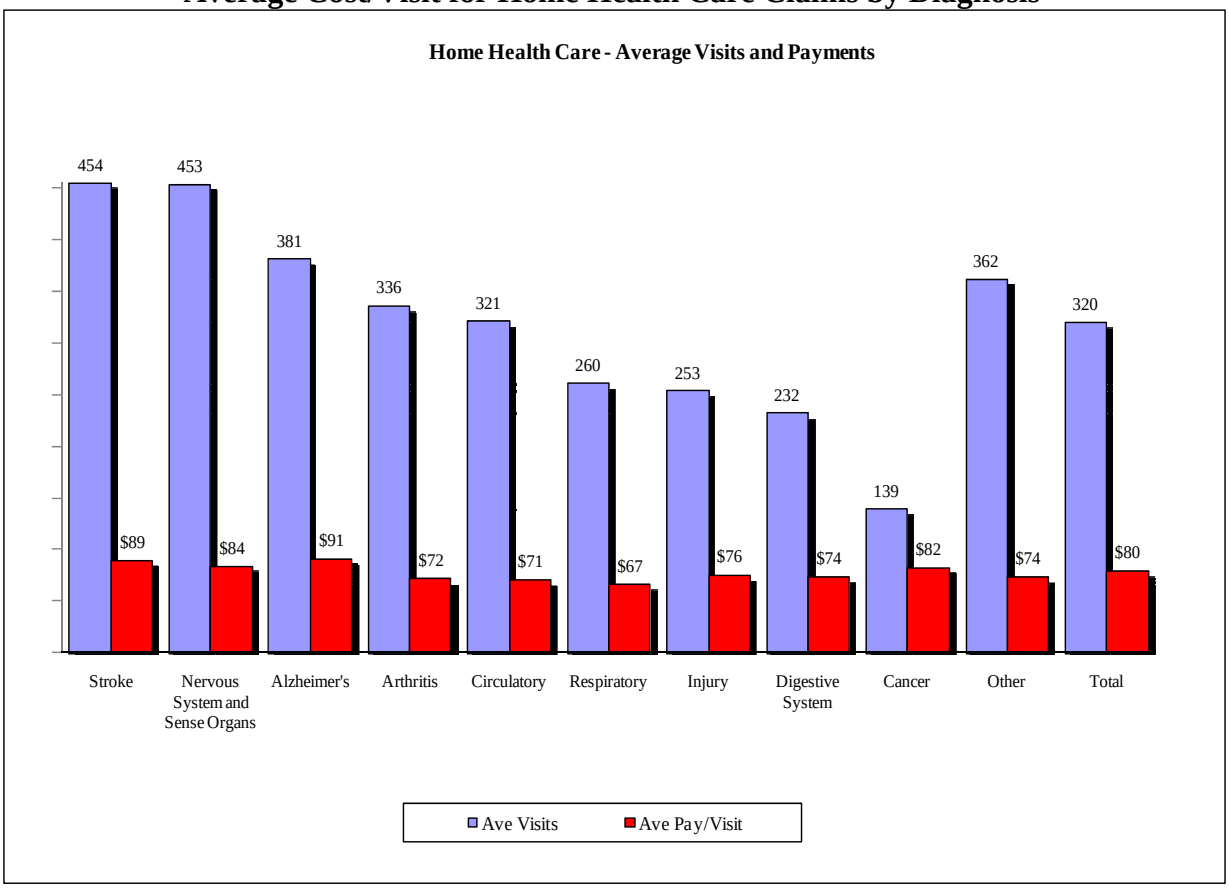


FIGURE 4: Average Number of Visits per Claim and Average Cost/Visit for Home Health Care Claims by Diagnosis



For Assisted Living claims, Alzheimer's (37.2%) is the leading cause of claim in this Report, followed by Arthritis (8.6%) and Stroke (8.6%). The prior Report did not separate Assisted Living claims from Nursing Home Claims.

Average claim payments for Mental were the most costly at $59K, followed by Alzheimer's ($57K), Arthritis ($53K) and Nervous System ($52K). Viewing only diagnosis cohorts with at least 100 claims in the Report, the least costly claims are Cancer ($30K), Genitourinary System ($36K) and Endocrines ($40K).

Arthritis exhibited the longest average claim duration with 560 days, followed by Alzheimer's (535 days). The diagnosis cohorts with the shortest average Assisted Living claim duration were Cancer (315 days) and Respiratory (444 days). The diagnosis cohorts with the highest average claim payments per day were Alzheimer's ($107/day), Nervous System ($99/day) and Stroke ($99/day). Among the least costly causes, as measured by average claim payments/day, were Diabetes ($87/day) and Circulatory ($88/day).

FIGURE 5: Distribution of Number of Assisted Living Claims by Diagnosis

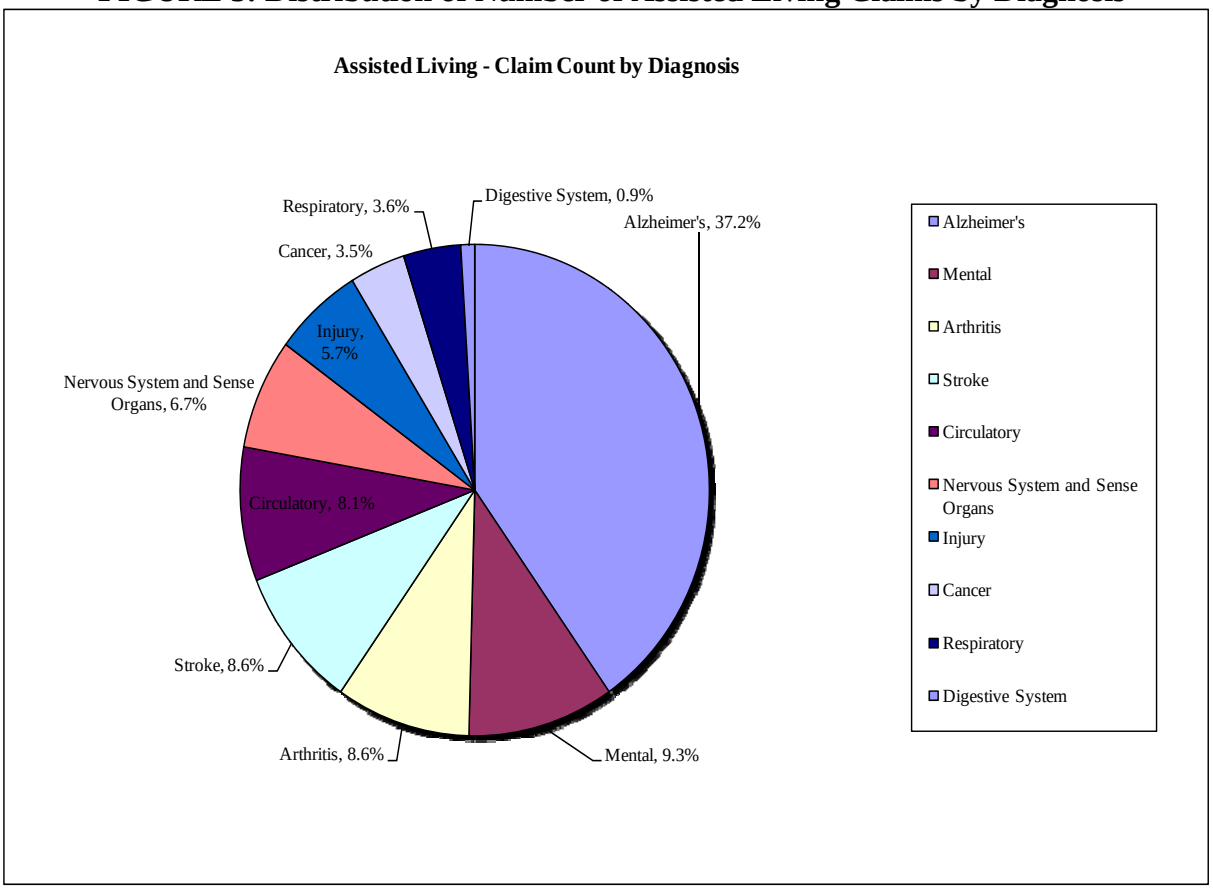
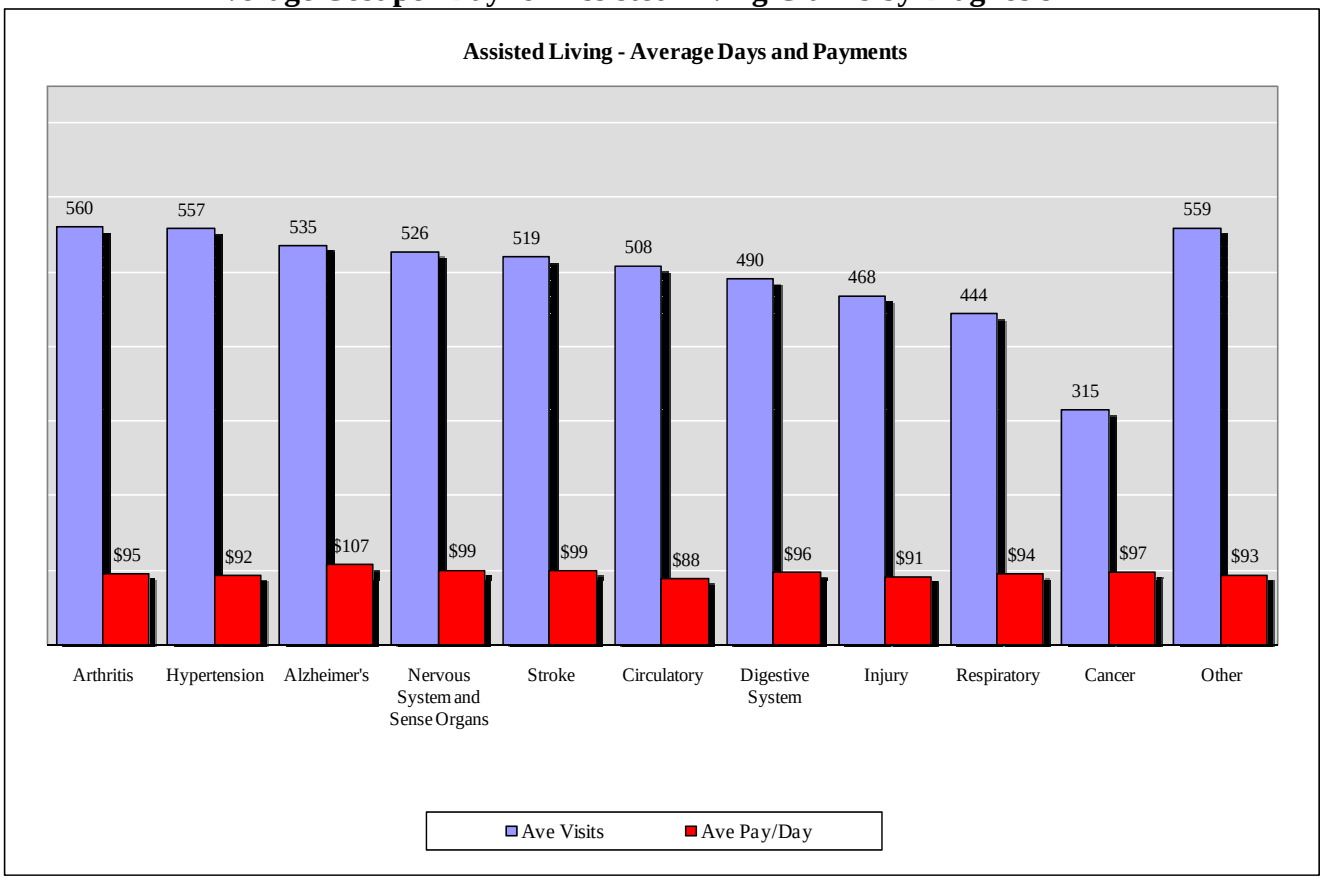


FIGURE 6: Average Number of Days on Claim and Average Cost per Day for Assisted Living Claims by Diagnosis



For Total claims over the 1984 to 2007 period, the leading causes of claims were Alzheimer's (20.7%), Stroke (10.7%) and Arthritis (10.7%).

Average claim payments for Alzheimer's were the most costly at $76K (up from $59K in the prior Report), followed by Nervous System ($59K), and Stroke ($57K). The least costly claims are Cancer ($16K), Pregnancy Disorders ($23K) and Congenital ($25K).

For Total Claims, Alzheimer's exhibited the longest average claim duration with 765 days/visits (up from 558 days in the prior Report), followed by Nervous System (654 days). The diagnosis cohorts with the shortest average Total claim duration were Cancer (195 days) and Genitourinary System (322 days). The diagnosis cohorts with the highest average claim payments per day were Alzheimer's ($99/day) and Nervous System ($90/day). Among the least costly causes as measured by average claim payments/day, were Pregnancy ($66/day) and Congenital ($72/day).

FIGURE 7: Distribution of Number of Total Claims by Diagnosis

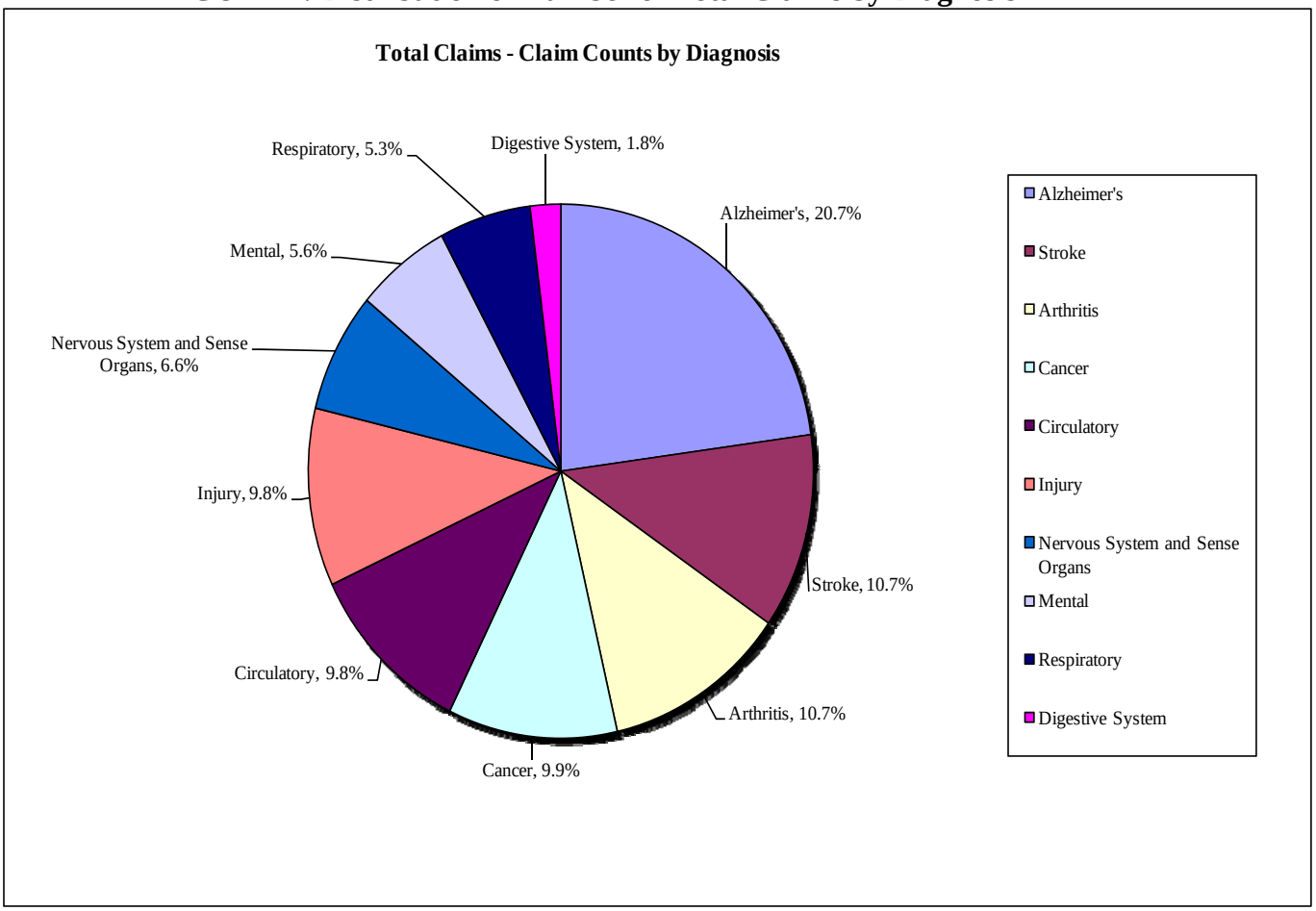
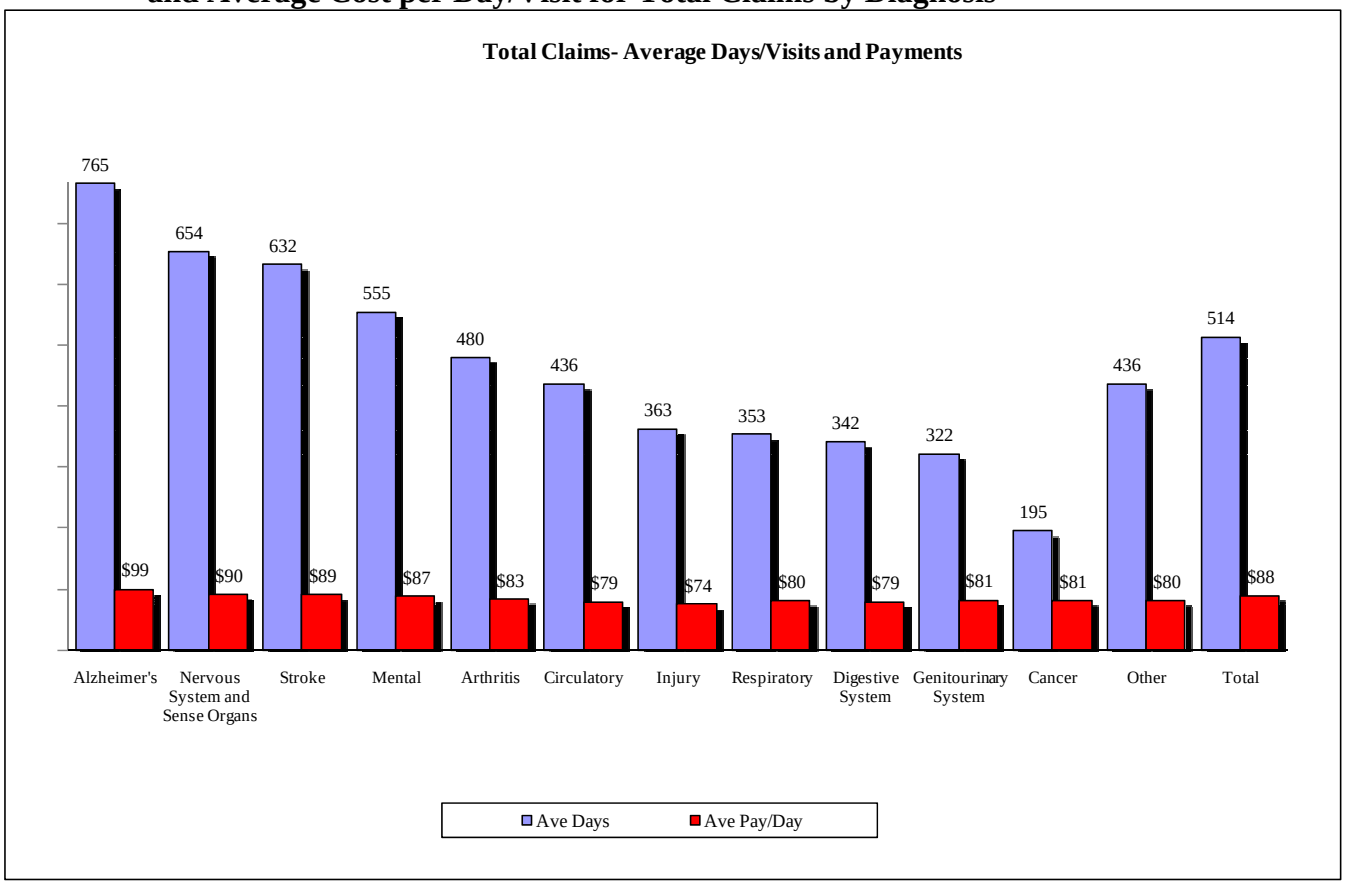


FIGURE 8: Average Number of Days/Visits per Claim and Average Cost per Day/Visit for Total Claims by Diagnosis



Claim Status – Open vs. Closed (Appendix G-3)

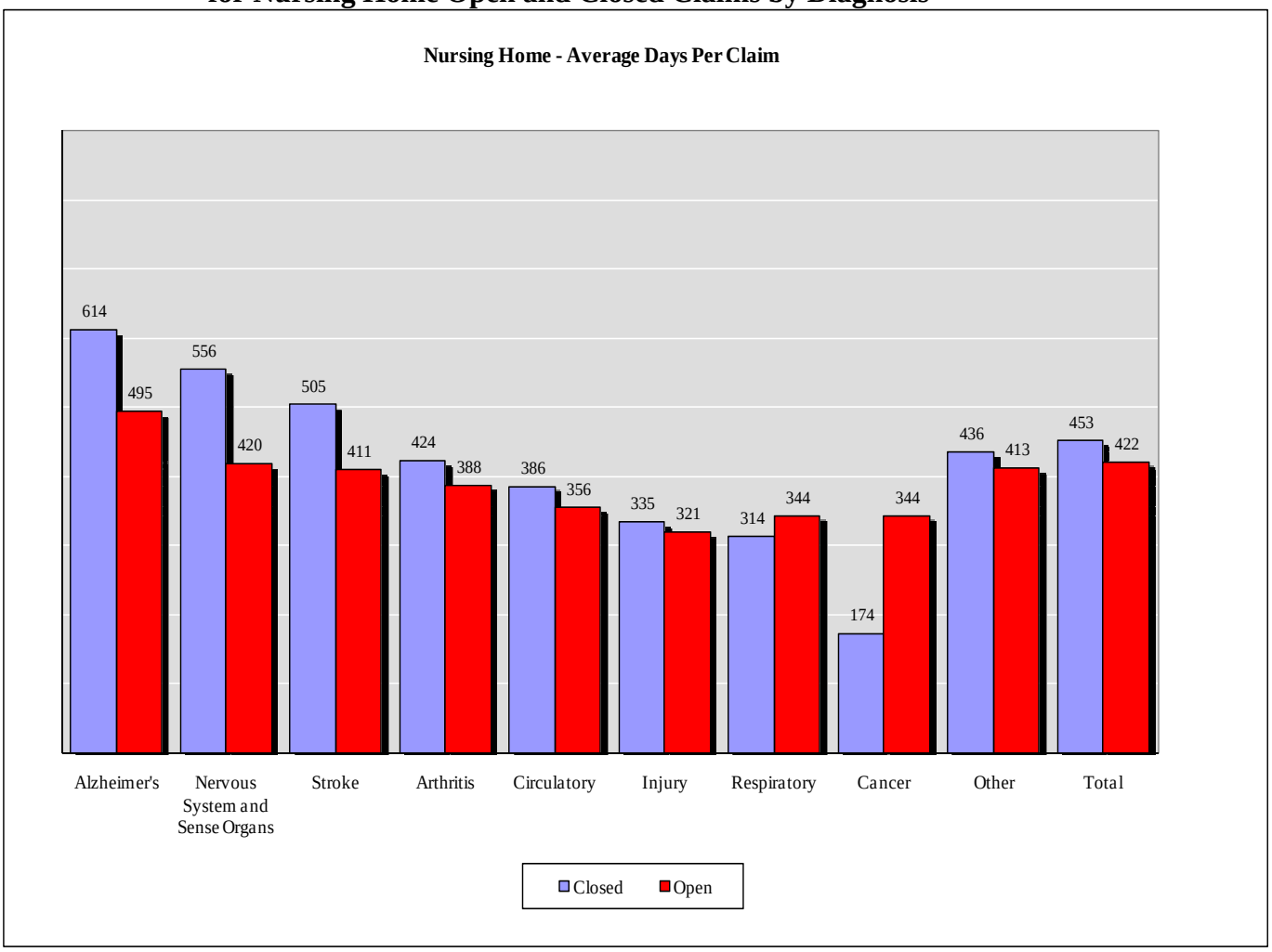
Appendix G-3 is the same as G-2, except that it breaks claims by open versus closed claim status.

In general, Nursing Home open claims are not much longer than closed claims. For Assisted Living, open claims are somewhat longer than closed claims, and for Home Health Care, open claims are much longer than closed claims.

For Nursing Home claims contributing to the Report, 96% were closed, which is consistent with the prior Report. The average number of Nursing Home days on claim of 422 for closed claims is virtually the same as the open claims average of 421. The prior Report had a closed claims average of 410 compared to open of 557, where Nursing Home and Assisted Living claims were combined. You'll see a similar longer average number of days on claim for open claims in the Assisted Living sub-section of 578. For closed claims, Alzheimer's had the highest average days on claim (614 days), followed by Nervous System (556 days). For open claims, Alzheimer's had the highest average days on claim (495 days), followed by Nervous System (420 days).

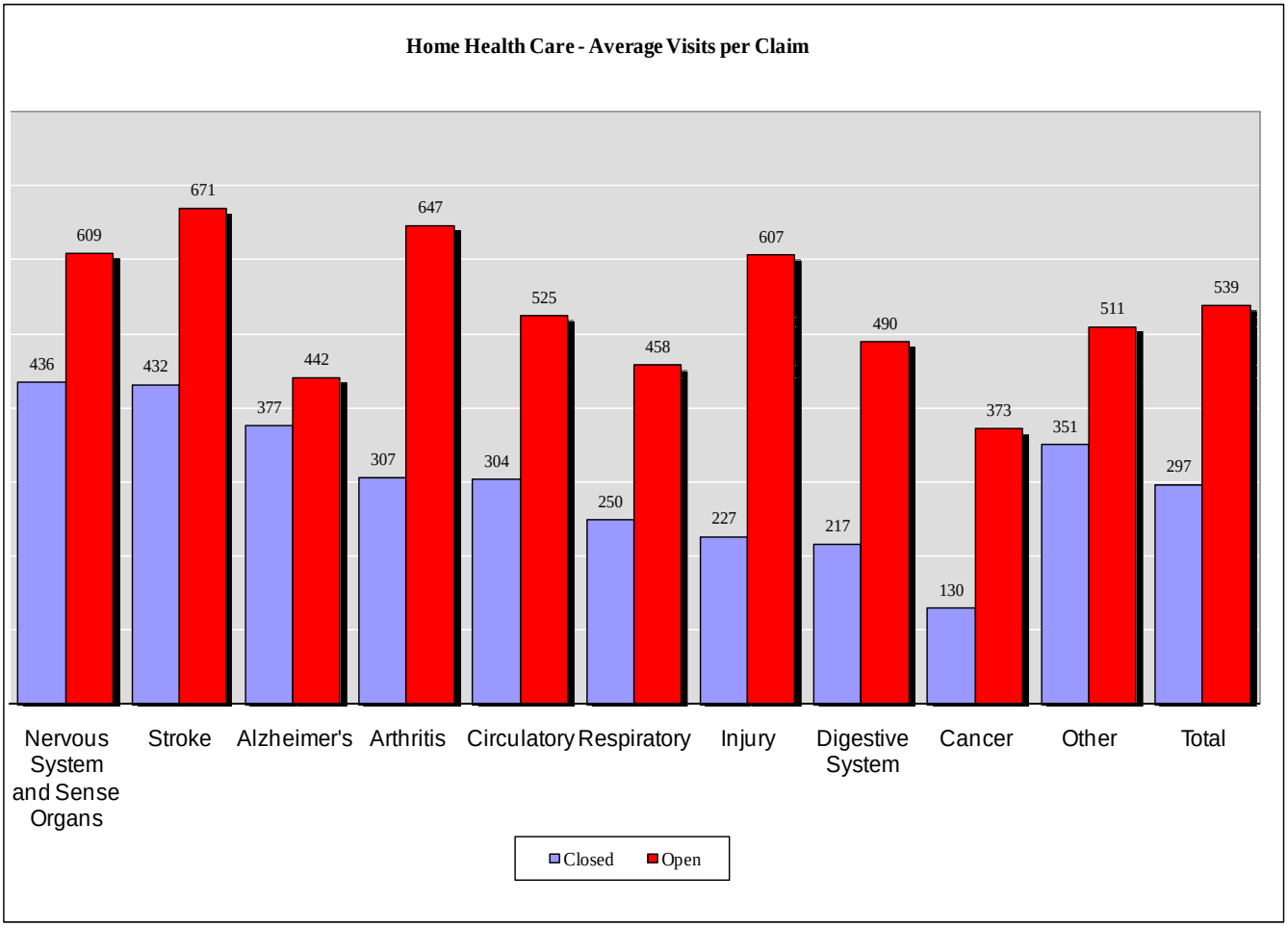
Diagnosis cohorts with the highest percentage of open Nursing Home claims were Alzheimer's (37%) and Stroke (14%).

FIGURE 9: Average Number of Days on Claim for Nursing Home Open and Closed Claims by Diagnosis



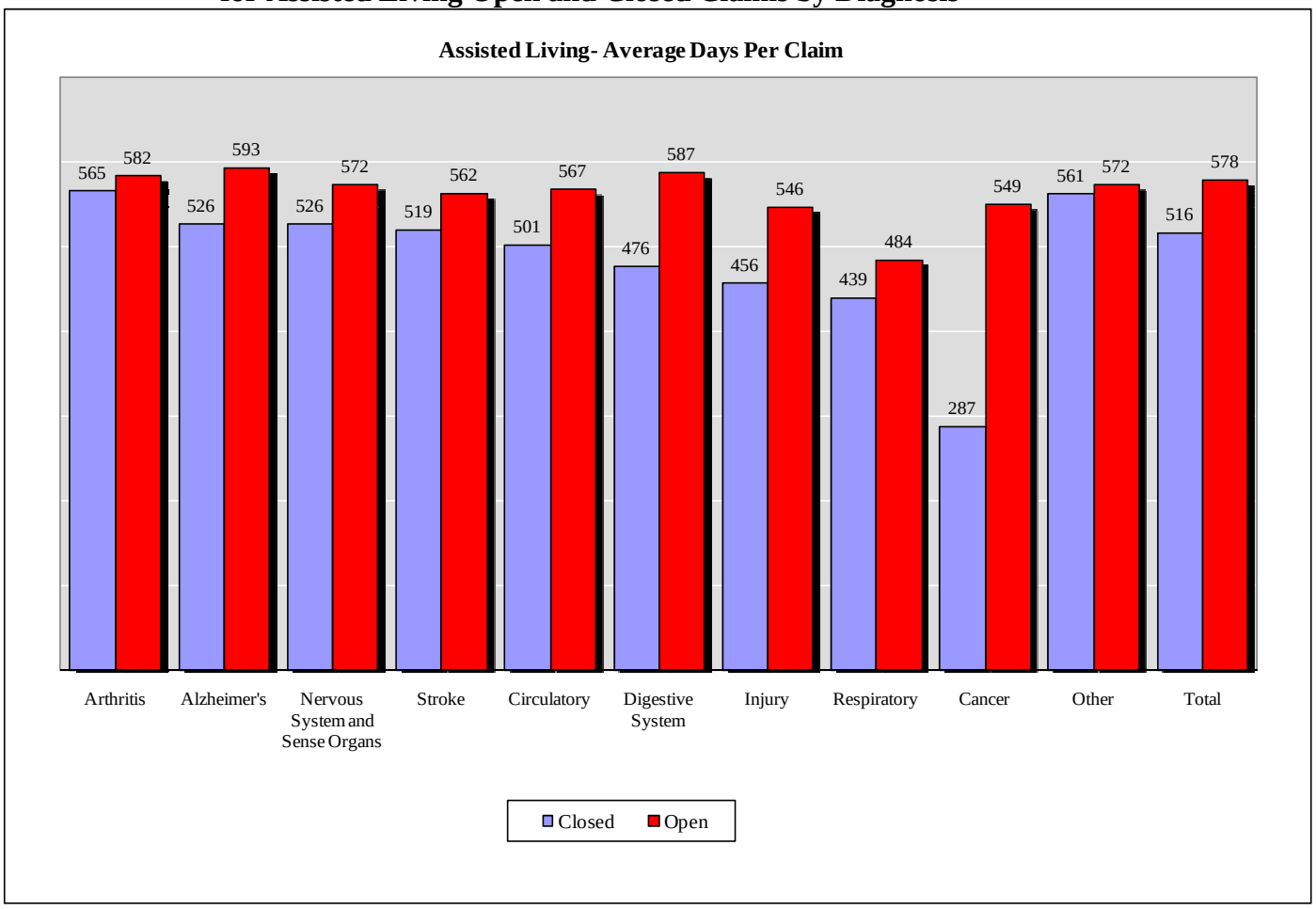
For Home Health Care claims contributing to the Report, 91% were closed (92% in the prior Report). The average number of claim visits was 288 for closed claims, compared to 540 for open claims. The average number of visits has increased significantly from the prior Report of 139 for closed claims and 352 for open claims. For closed claims, Nervous System had the highest average number of claim visits (436 visits), followed by Stroke (432 visits). For open claims, Stroke had the highest average number of claim visits (671 visits), followed by Nervous System (609 visits). The top diagnosis cohorts with the highest percentage of open Home Health Care claims were Alzheimer's (30%) and Arthritis (13%).

FIGURE 10: Average Visits per Claim for Home Health Care Open and Closed Claims by Diagnosis



For Assisted Living claims contributing to the Report, 83% were closed. The average number of claim visits was 502 for closed claims, compared to 578 for open claims. For closed claims, Arthritis had the highest average number of claim days (565 days), followed by Alzheimer's (526 days). For open claims, Alzheimer's had the highest average number of claim days (593), followed by Digestive (587). The top diagnosis cohorts with the highest percentage of open Assisted Living claims were Alzheimer's (50%) and Arthritis (9%).

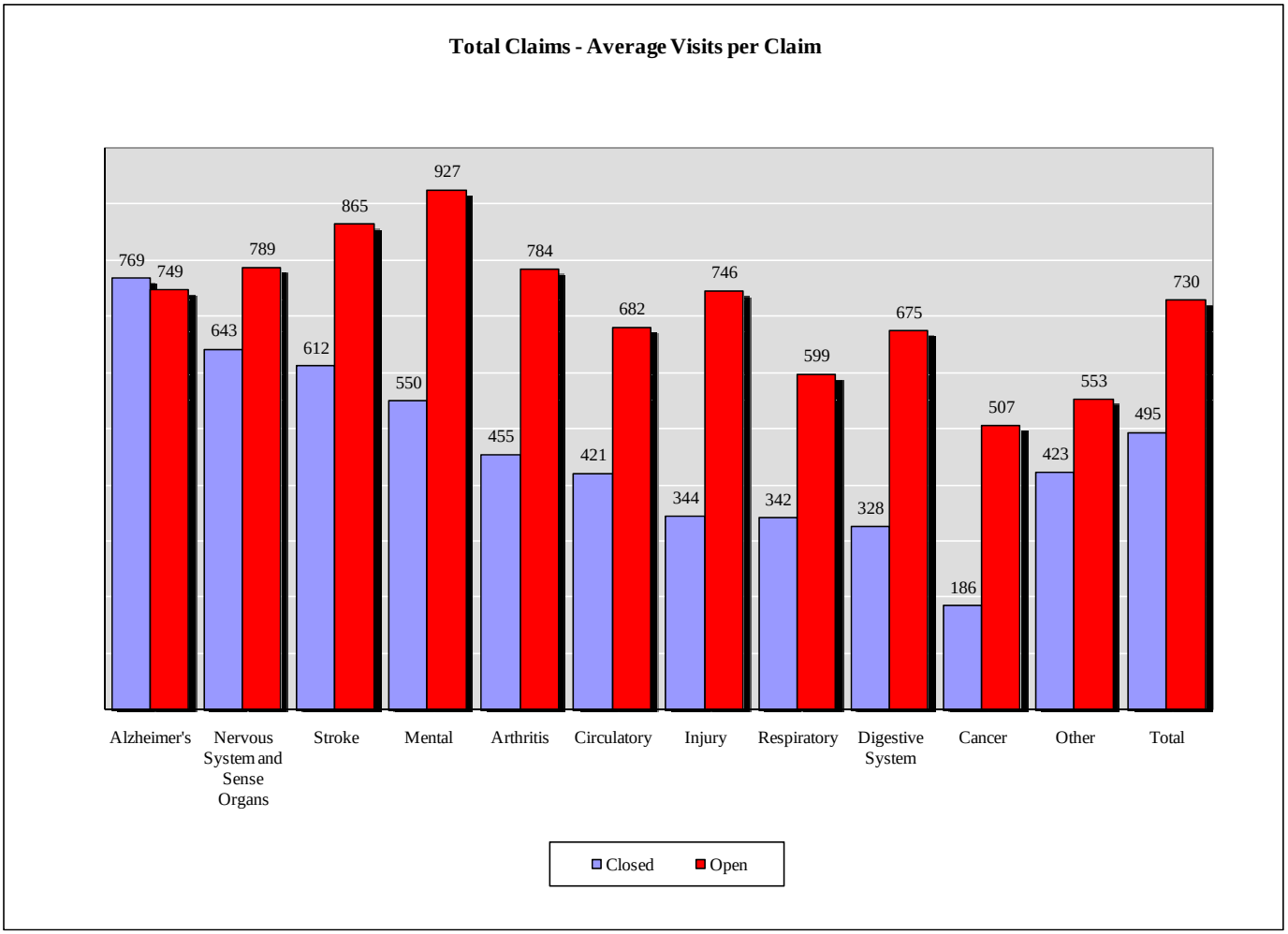
FIGURE 11: Average Number of Days on Claim for Assisted Living Open and Closed Claims by Diagnosis



For Total claims in this Report, 95% of the claims were closed, which helps mitigate the impact that future experience from open claims will have on aggregate results. Based on average days on claim and average claim visits, open claims were significantly longer than closed claims for all diagnosis cohorts.

The average number of Total days/visits on claim was 472 for closed claims, compared to 730 for open claims. For closed claims, Alzheimer's had the highest average days on claim (769 days), followed by Nervous System (643 days). For open claims, Mental had the highest average days on claim (927 days), followed by Stroke (865 days). Diagnosis cohorts with the highest percentage of open Nursing Home claims were Alzheimer's (36%) and Arthritis (11%).

FIGURE 12: Average Number of Days on Claim for Total Open and Closed Claims by Diagnosis



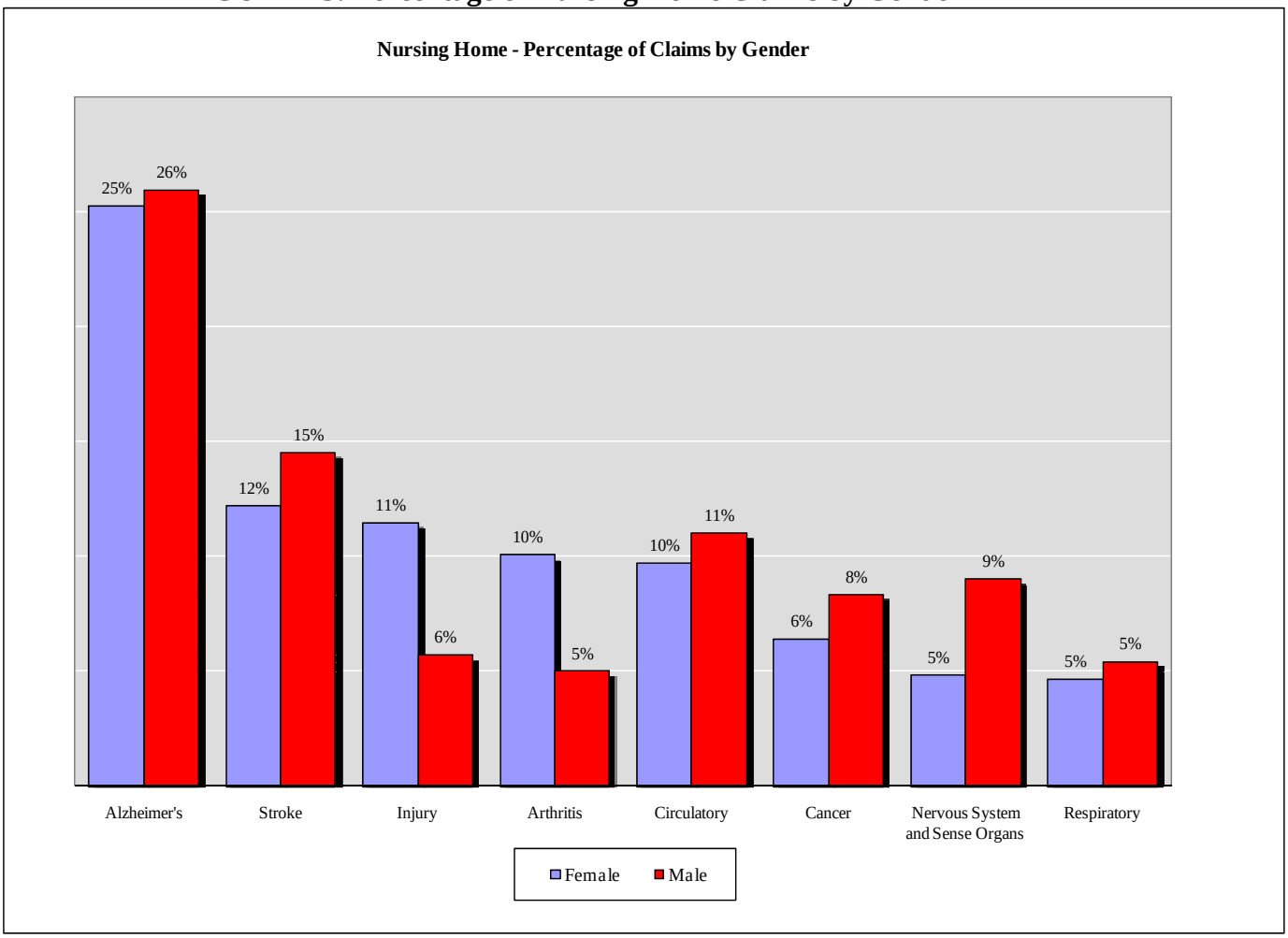
Gender (Appendix G-4)

Appendix G-4 compares claims experience by diagnosis category for males and females.

Following Alzheimer's, the next most prevalent diagnosis cohorts for both males and females remained unchanged from the prior Report (Stroke – males, Injury – females). In terms of Nursing Home average days and Home Health Care average visits, both male and female cohorts experienced very similar days and visits as with the prior Report.

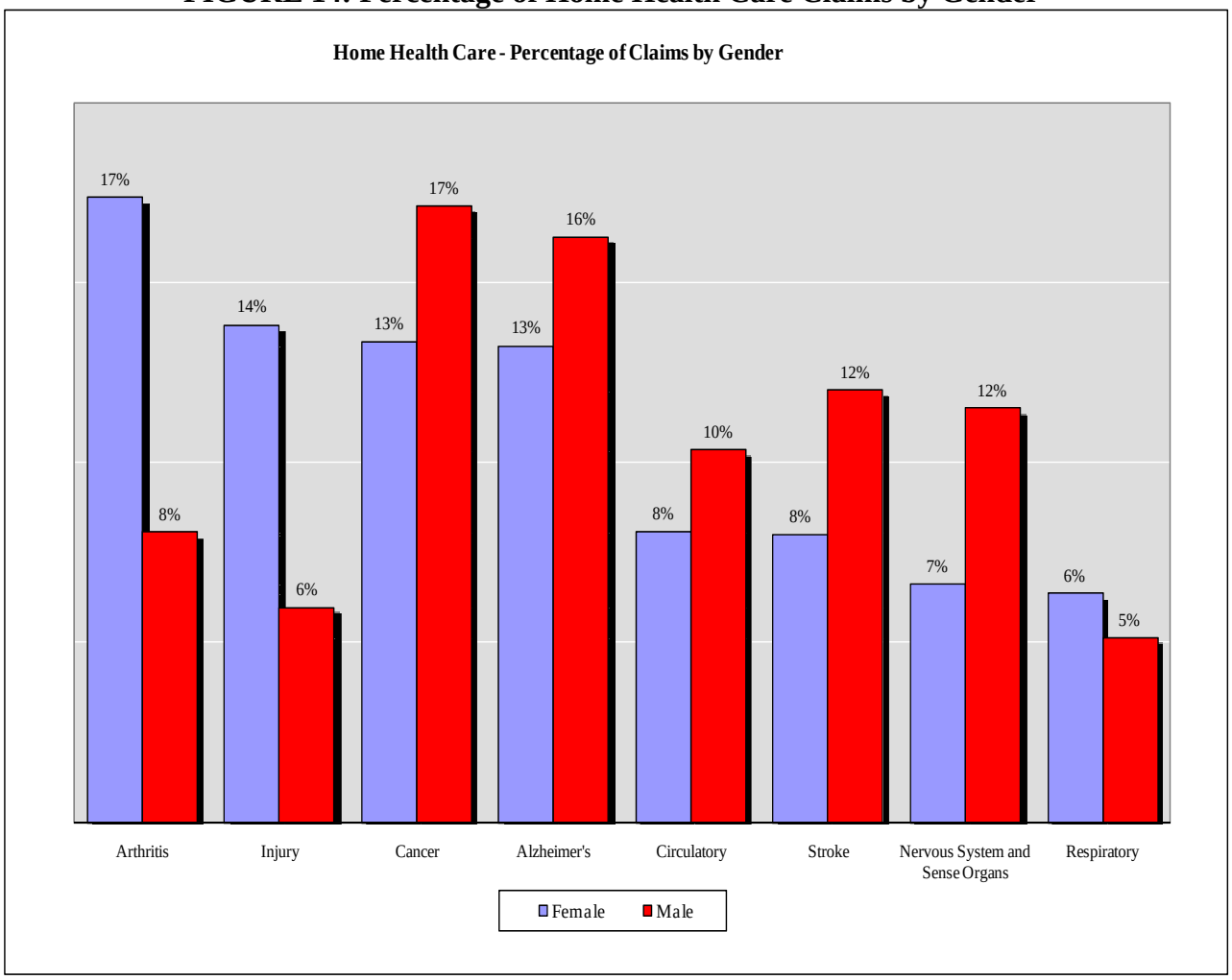
For both the Male and Female cohorts, Alzheimer's was the leading cause of Nursing Home claims at 26% and 25%, respectively. Nursing Home Alzheimer's claims were also the most costly in terms of highest average payments for both males and females. Following Alzheimer's claims in prevalence were Injury (12%) for females and Stroke (15%) for males.

FIGURE 13: Percentage of Nursing Home Claims by Gender



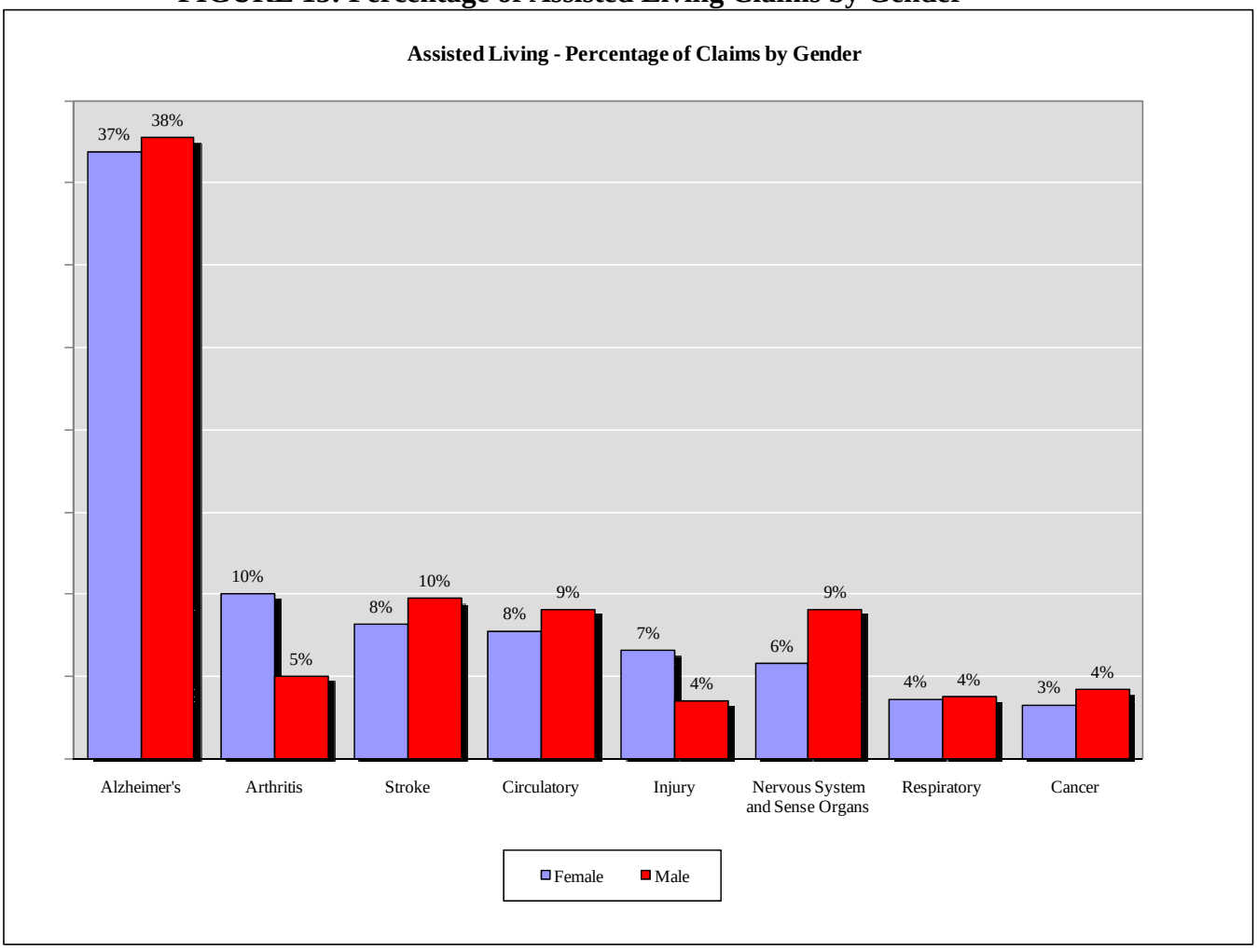
For Female Home Health Care claims, Arthritis claims were the most prevalent at 17%, followed by Injury (14%). For Male Home Health Care claims, Cancer claims were the most prevalent at 17%, followed by Alzheimer's (16%).

FIGURE 14: Percentage of Home Health Care Claims by Gender



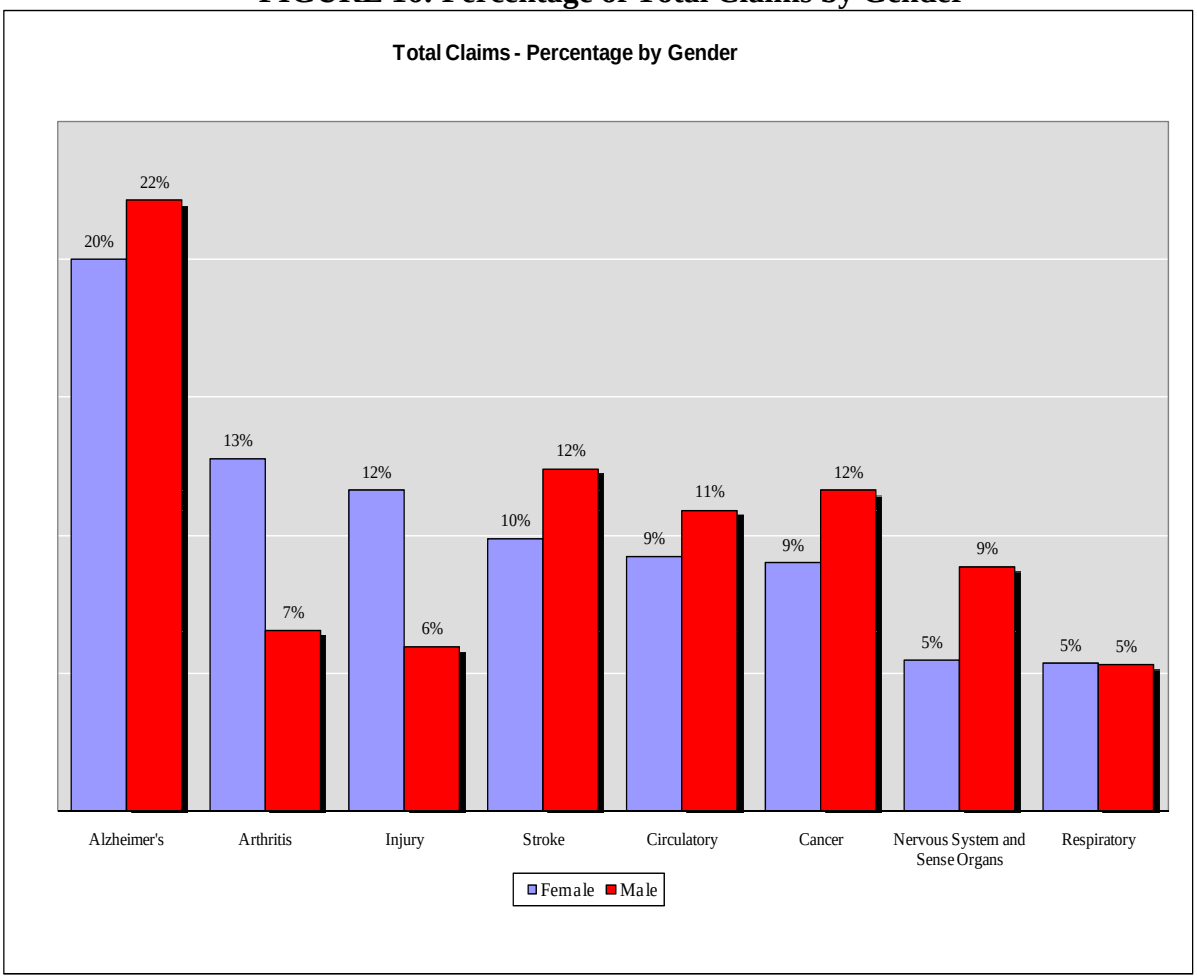
For Female Assisted Living Care claims, Alzheimer's claims were the most prevalent at 37%, followed by Arthritis (10%). For Male Assisted Living Care claims, Alzheimer's claims were the most prevalent at 38%, followed by Stroke (10%).

FIGURE 15: Percentage of Assisted Living Claims by Gender



For both Male and Female Total claims, Alzheimer's claims were the leading cause of claims at 22% and 20%, respectively. Following Alzheimer's claims in prevalence is Arthritis (13%) for females and Stroke (12%) for males.

FIGURE 16: Percentage of Total Claims by Gender



Attained Age Summary (Appendix G-5)

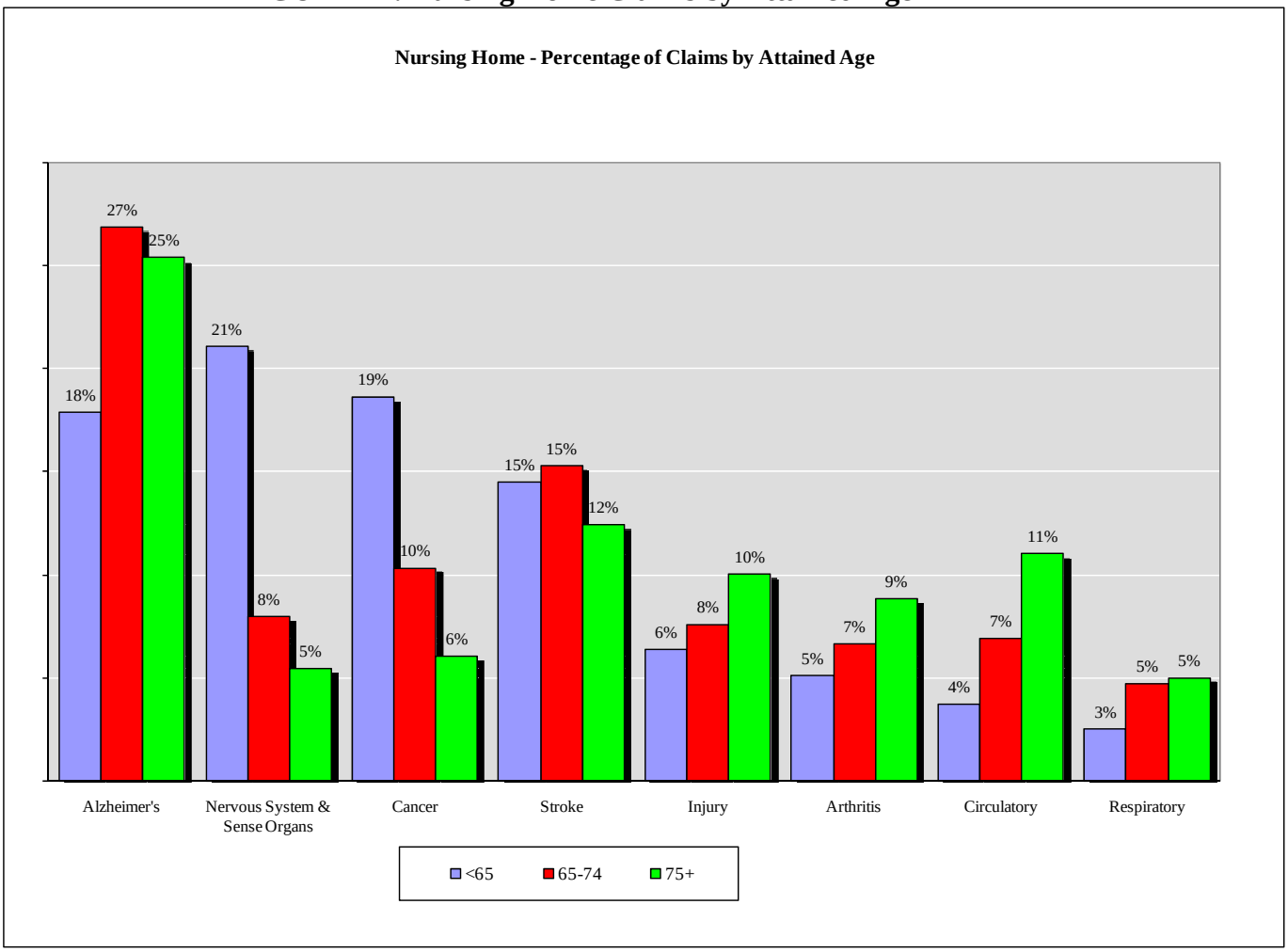
Appendix G-5 compares claims experience by diagnosis category by attained age.

The diagnosis cohorts with the highest percentage of Nursing Home claims for ages 75 and above were Alzheimer's (25%) and Stroke. For ages 65-74, the leading diagnosis cohorts were also Alzheimer's (27%) and Stroke (15%). For claimant ages under 65, the leading diagnosis codes were Nervous System (21%) and Cancer (19%).

The diagnosis cohorts of Alzheimer's, Nervous System, Stroke and Circulatory have average claim durations that generally decrease with age. Diagnosis cohorts of Arthritis, Cancer and Injury generally increase with age.

Most Nursing Home diagnosis cohorts have increasing prevalence with age, except Alzheimer's, Cancer and Nervous System, which decrease, and Stroke remains fairly level.

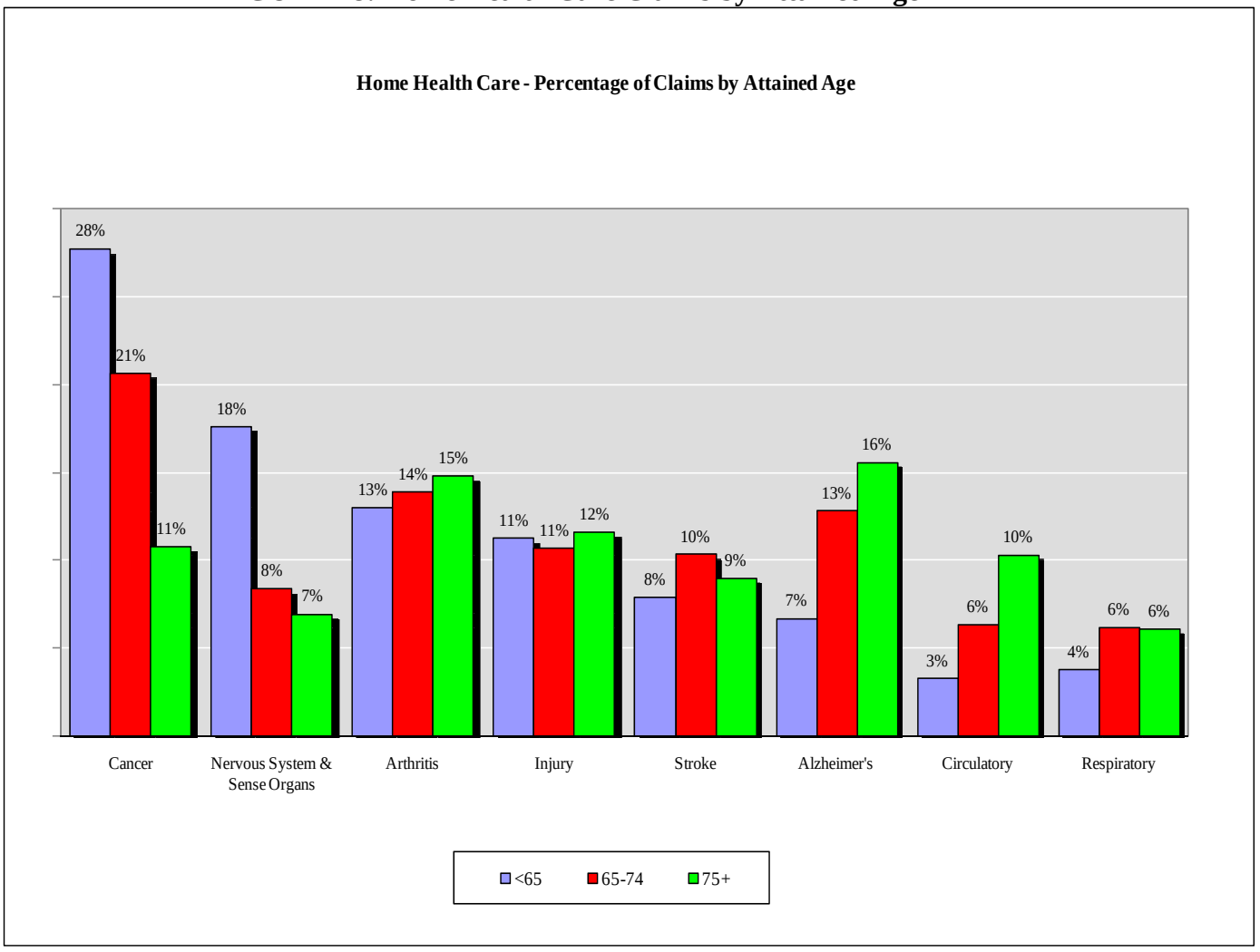
FIGURE 17: Nursing Home Claims by Attained Age



The diagnosis cohorts with the highest percentage of Home Health Care claims for ages 75 and above were Alzheimer's (16%) and Arthritis (15%). For ages 65-74, the leading diagnosis cohorts were Cancer (21%) and Arthritis (14%). For claimant ages under 65, the leading diagnosis codes were Cancer (28%) and Nervous System (18%).

Home Health Care diagnosis cohorts with increasing prevalence by age include Alzheimer's, Arthritis, Circulatory, Injury and Respiratory. Decreasing prevalence occurs for Cancer and Nervous System, whereas Stroke is highest for the 65-74 age band.

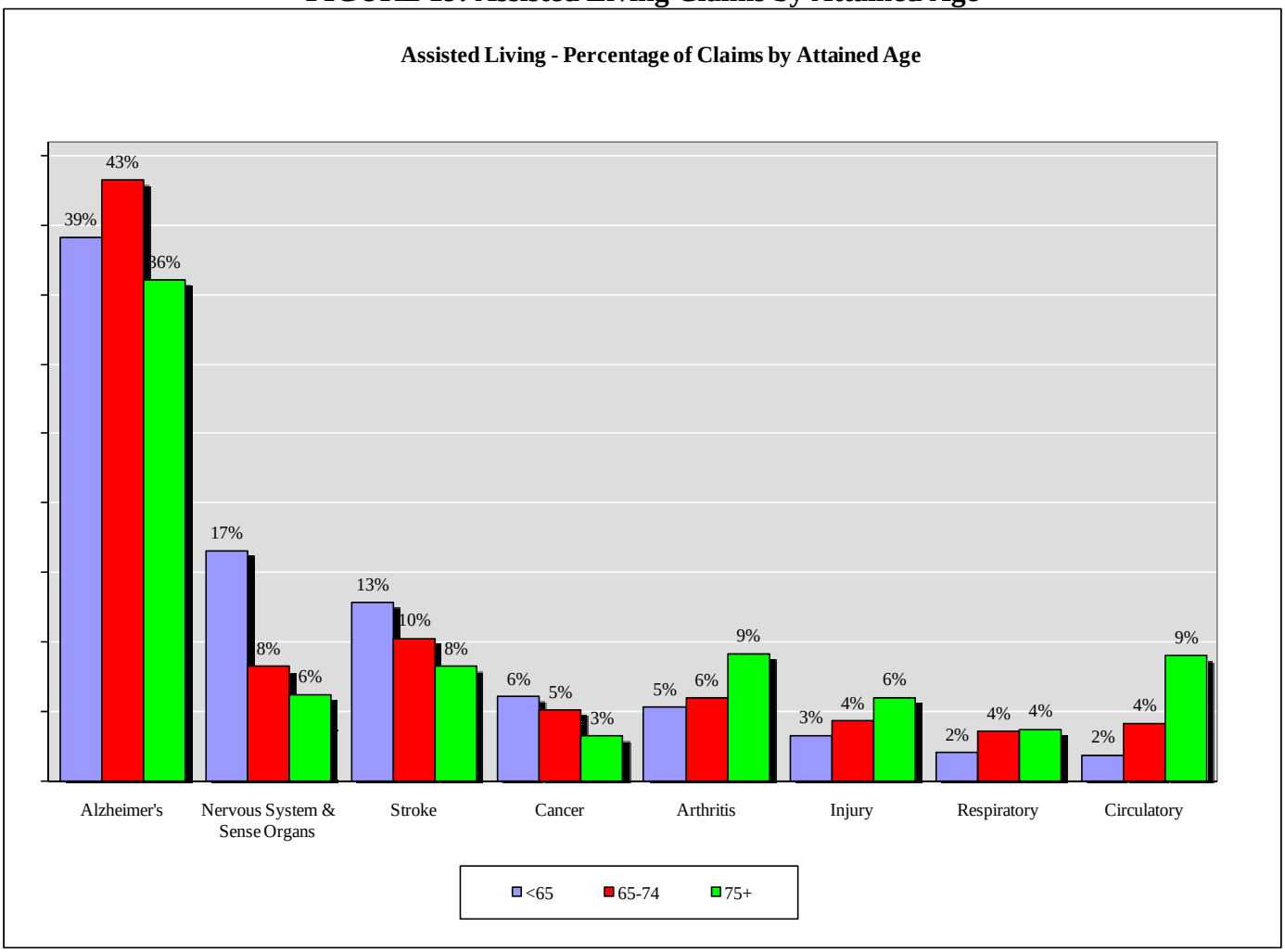
FIGURE 18: Home Health Care Claims by Attained Age



The diagnosis cohorts with the highest percentage of Assisted Living claims for ages 75 and above were Alzheimer's (36%) and Arthritis (9%). For ages 65-74, the leading diagnosis cohorts were Alzheimer's (42%) and Stroke (10%). For claimant ages under 65, the leading diagnosis codes were Alzheimer's (39%) and Nervous System (17%).

It is evident that the primary diagnosis for all age brackets is Alzheimer's by a wide margin. Assisted Living diagnoses cohorts with increasing prevalence by age include Arthritis, Circulatory, Injury and Respiratory. Decreasing prevalence occurs for Cancer, Nervous System and Stroke, whereas Alzheimer's is highest for the 65-74 age band.

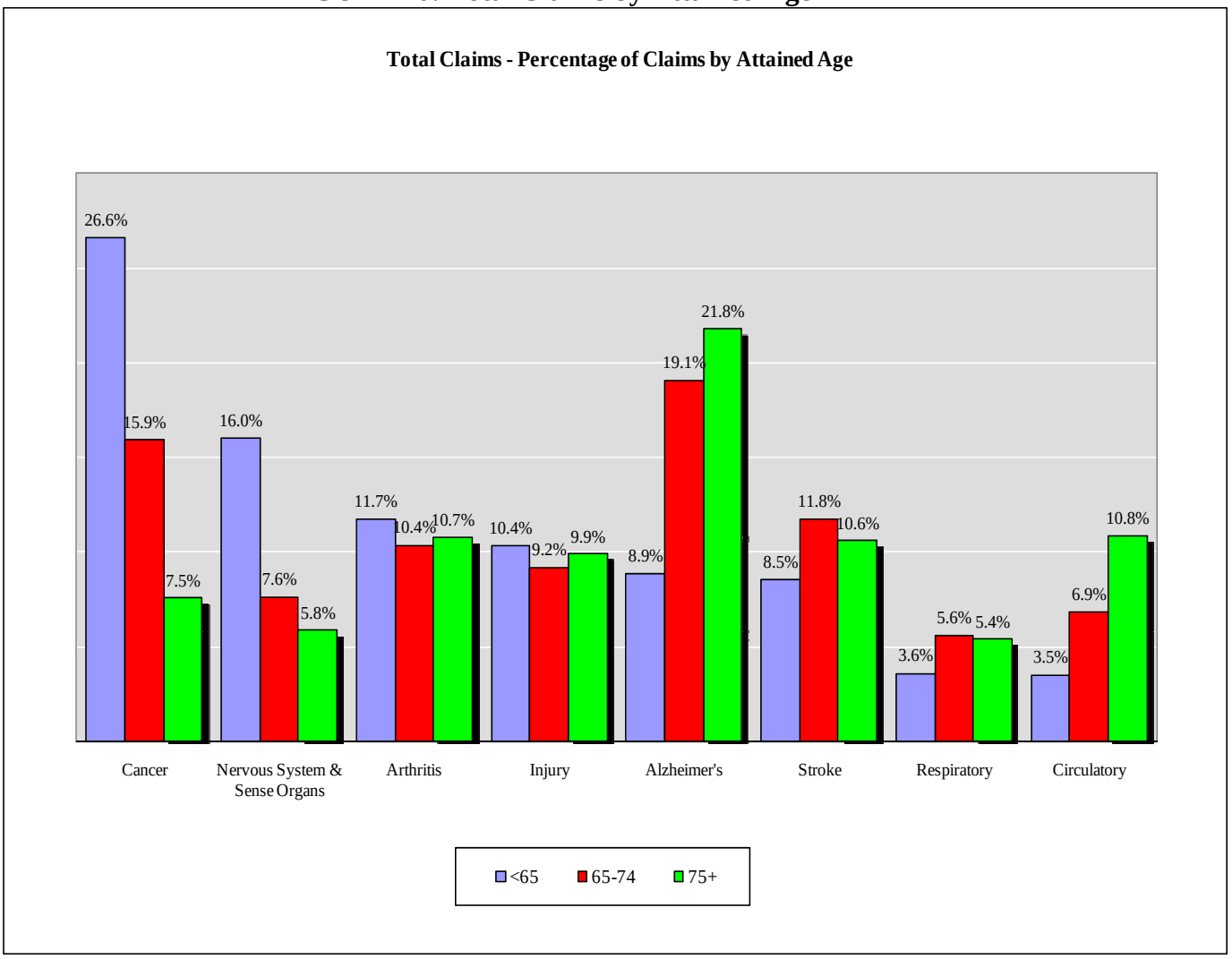
FIGURE 19: Assisted Living Claims by Attained Age



The diagnosis cohorts with the highest percentage of Total Claims for ages 75 and above were Alzheimer's (22%) and Stroke (11%). For ages 65-74, the leading diagnosis cohorts were Alzheimer's (19%) and Cancer (16%). For claimant ages under 65, the leading diagnosis codes were Cancer (27%) and Nervous System (16%).

The Total claims diagnosis cohorts with increasing prevalence by age include Alzheimer's and Circulatory. Decreasing prevalence occurs for Cancer and Nervous System. Arthritis, Injury, Respiratory and Stroke are similar across age bands.

FIGURE 20: Total Claims by Attained Age

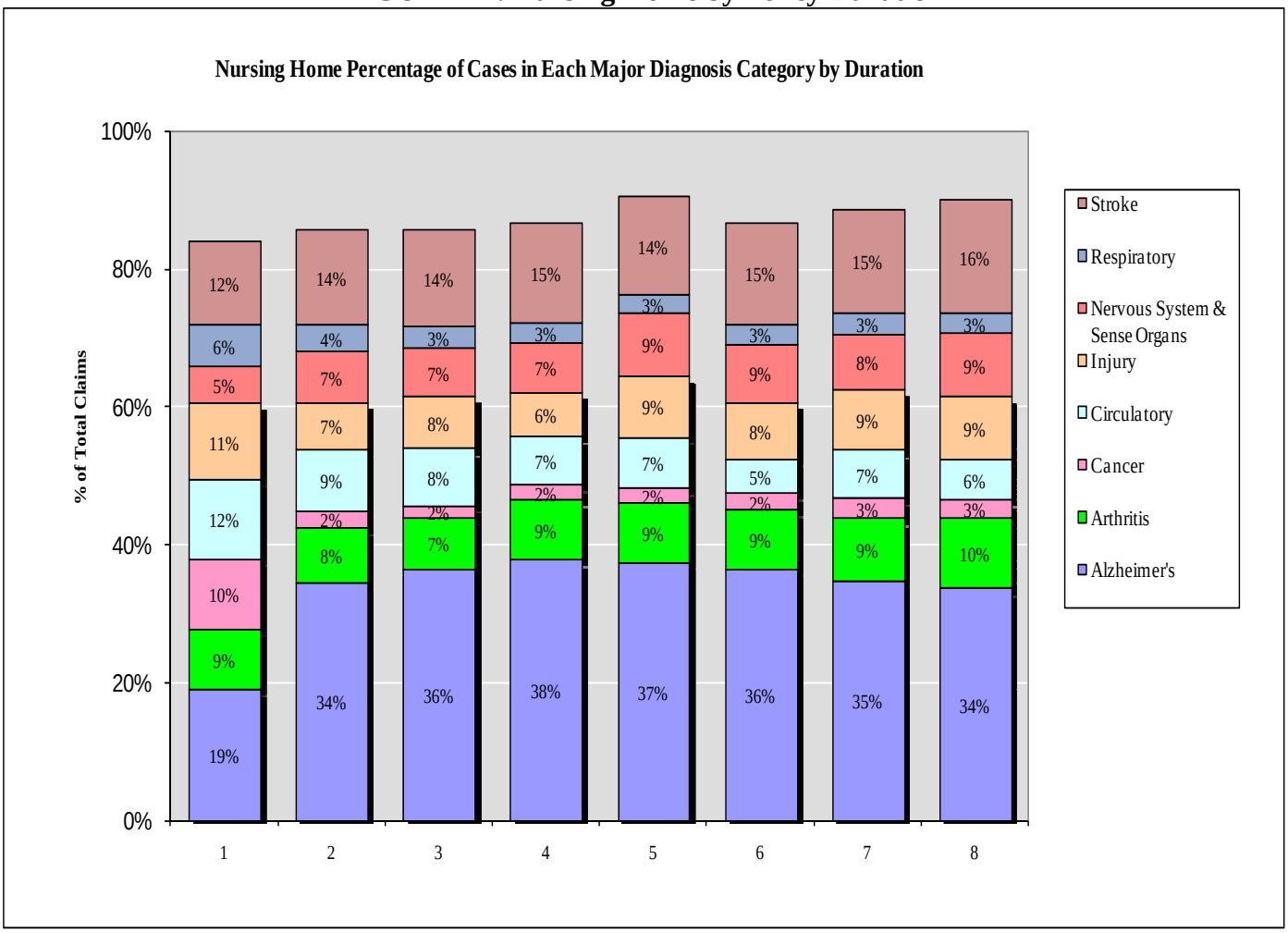


Policy Duration Summary (Appendix G-6)

Appendix G-6 compares claims experience by major diagnosis and policy duration of claim incurral.

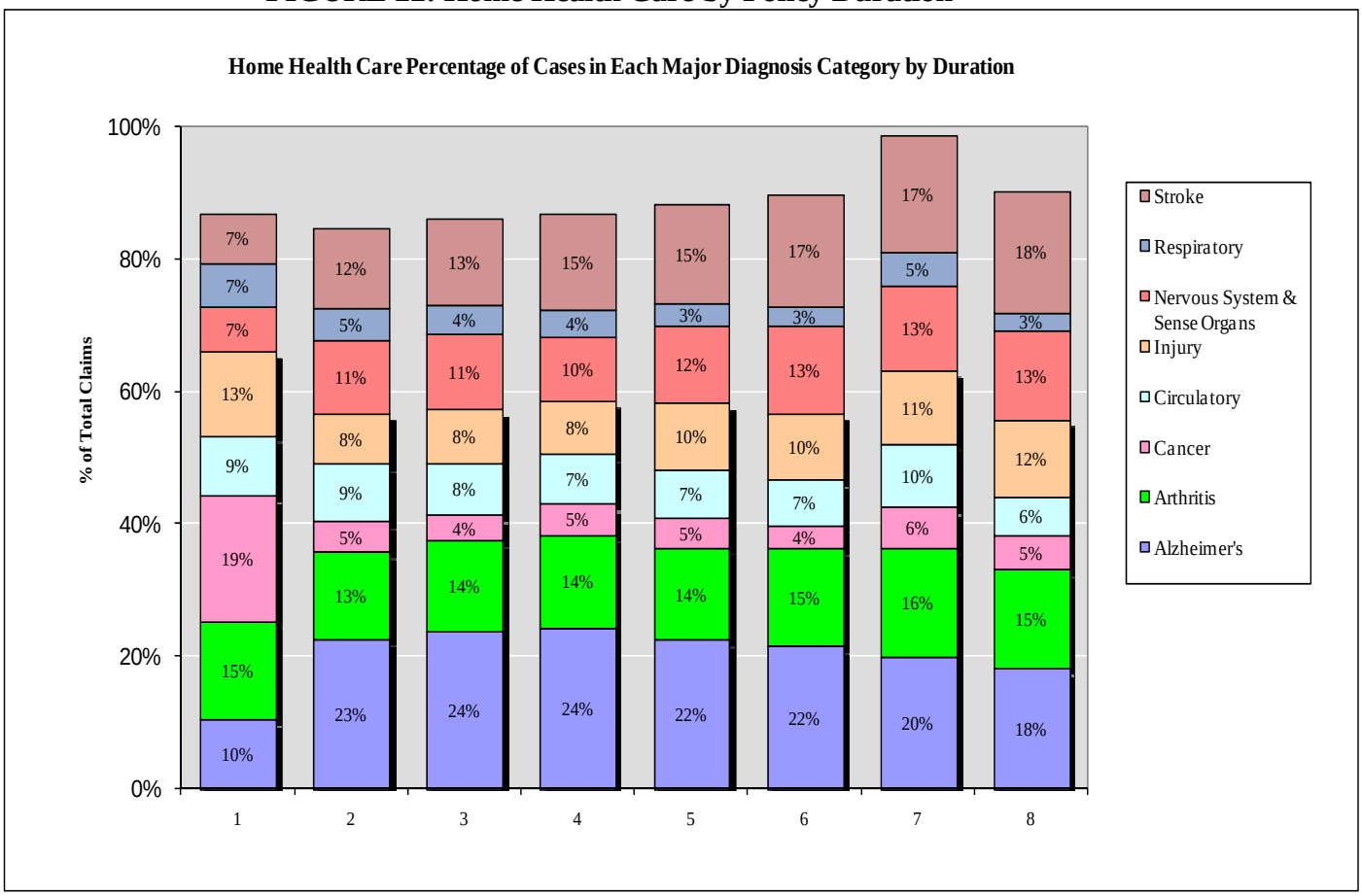
For Nursing Home claims, most diagnosis cohorts (excluding Ill-Defined and Other/Unknown claims) have lower claim counts in early durations and then peak at around duration 3-5. Claim counts tend to become constant or slightly decline in the later policy durations. As can be seen in the graph below, Alzheimer's is the most prevalent Nursing Home diagnosis cohort regardless of policy duration. Also, it can be seen that Cancer is highly prevalent for early policy durations, but is replaced among the most common major diagnosis cohorts by Arthritis in later policy durations. The prevalence of Circulatory, Stroke and Injury are the most constant across all of the policy durations.

FIGURE 21: Nursing Home by Policy Duration



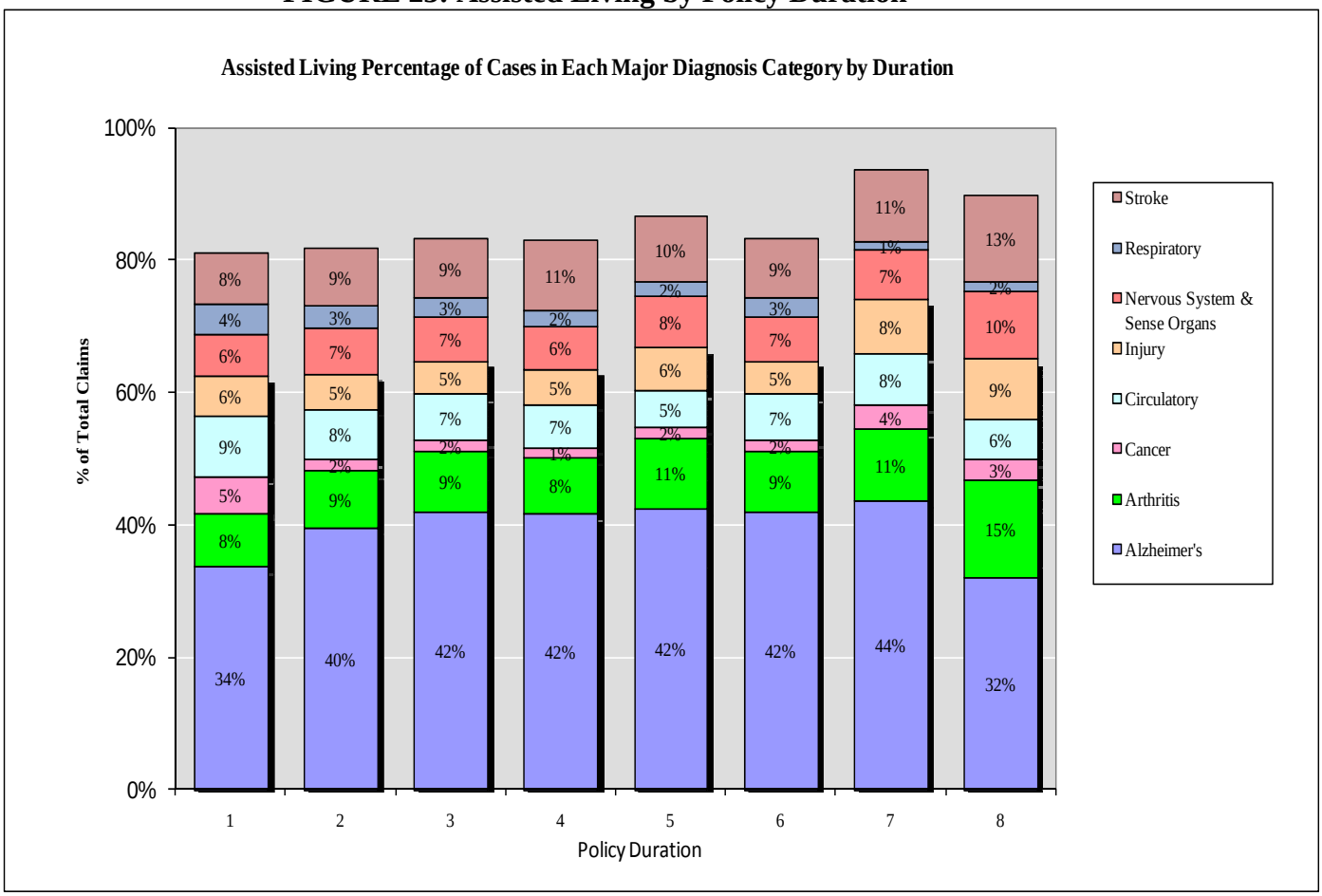
Home Health Care claims exhibit a significantly different pattern of claims than Nursing Home by policy duration. The highest early duration diagnosis cohorts are Cancer and Arthritis, followed by Injury and Stroke. These early duration claims could have underwriting significance, including possible anti-selection. This is further demonstrated in that, unlike Nursing Home Claims, total Home Health Care claim counts peak at duration 1, and steadily decline as the policy duration increases. As policy duration increases, Alzheimer's becomes more and more prevalent, peaking at 24% of total claims in durations 3 and 4.

FIGURE 22: Home Health Care by Policy Duration



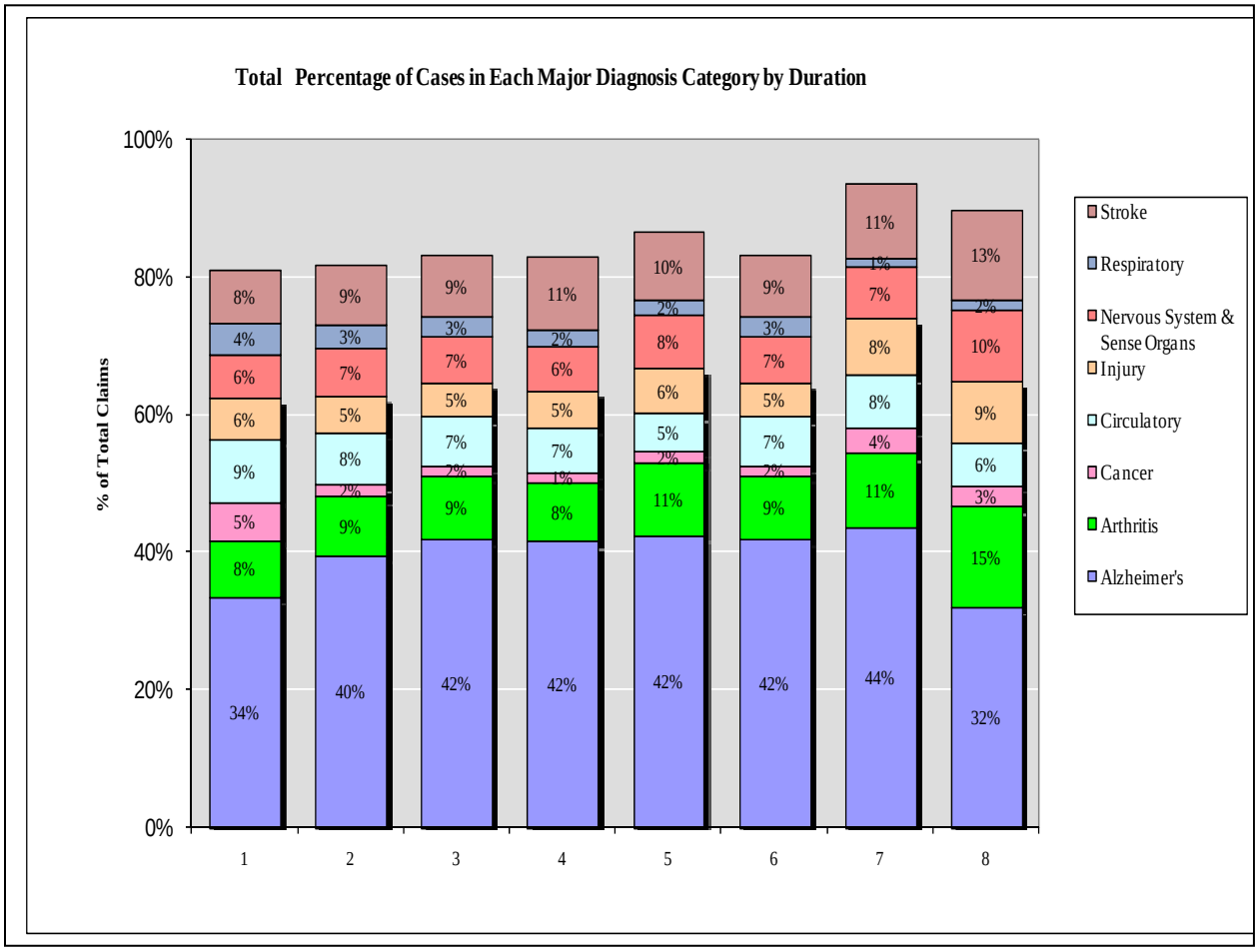
For Assisted Living claims, Alzheimer's and Cancer exhibit the highest early policy duration claims. However, Alzheimer's percentage of claim counts continue to increase through duration 7, while Cancer's claim percentage peaks in duration 2 and decreases steadily thereafter. Stroke and Arthritis have the most constant percentage of claims by duration. The percentage of claims due to Circulatory issues increases slightly with increasing policy duration.

FIGURE 23: Assisted Living by Policy Duration



For Total claims, Alzheimer's and Cancer exhibit the highest early policy duration claims. However, Alzheimer's percentage of claim counts continue to increase through duration 7, while Cancer's claim percentage peaks in duration 2 and decreases steadily thereafter. Stroke and Arthritis have the most constant percentage of claims by duration. The percentage of claims due to Circulatory issues increases slightly with increasing policy duration.

FIGURE 24: Total Claims by Policy Duration



Incurral Year Cohort (Appendix G-7)

Appendix G-7 compares claims experience by diagnosis cohort by claim incurral year periods (1984-1987; 1988-1991; 1992-1996; 1997-2000; 2001-2004, 2005-2007).

For Nursing Home Claims, the prevalence of the Alzheimer's diagnosis cohort has steadily increased through 1997-2000 and remained level thereafter.

The average cost per day increased as the incurral year increased, except for the most recent time period, 2005-2007, which decreased from $101 in the 2001-2004 incurral period to $95 in the 2005-2007 incurral period. The average claim payment increased with incurral period, except

for the two most recent incurral periods. The most recent incurral period had a larger portion of open claims (30.2% open for 2005-2007 cohort compared to 4.0% open for the earlier incurral year cohorts combined). Since there are a large percentage of open claims in the most recent claim incurral cohort period, the average payments and average days are expected to be understated.

Except for claims with incurral years before 1987 where there is very little experience by diagnosis cohort, Alzheimer's is the leading cause of claim. The next two leading causes of claim are Circulatory (1988-1991) and Stroke for more recent incurral cohorts.

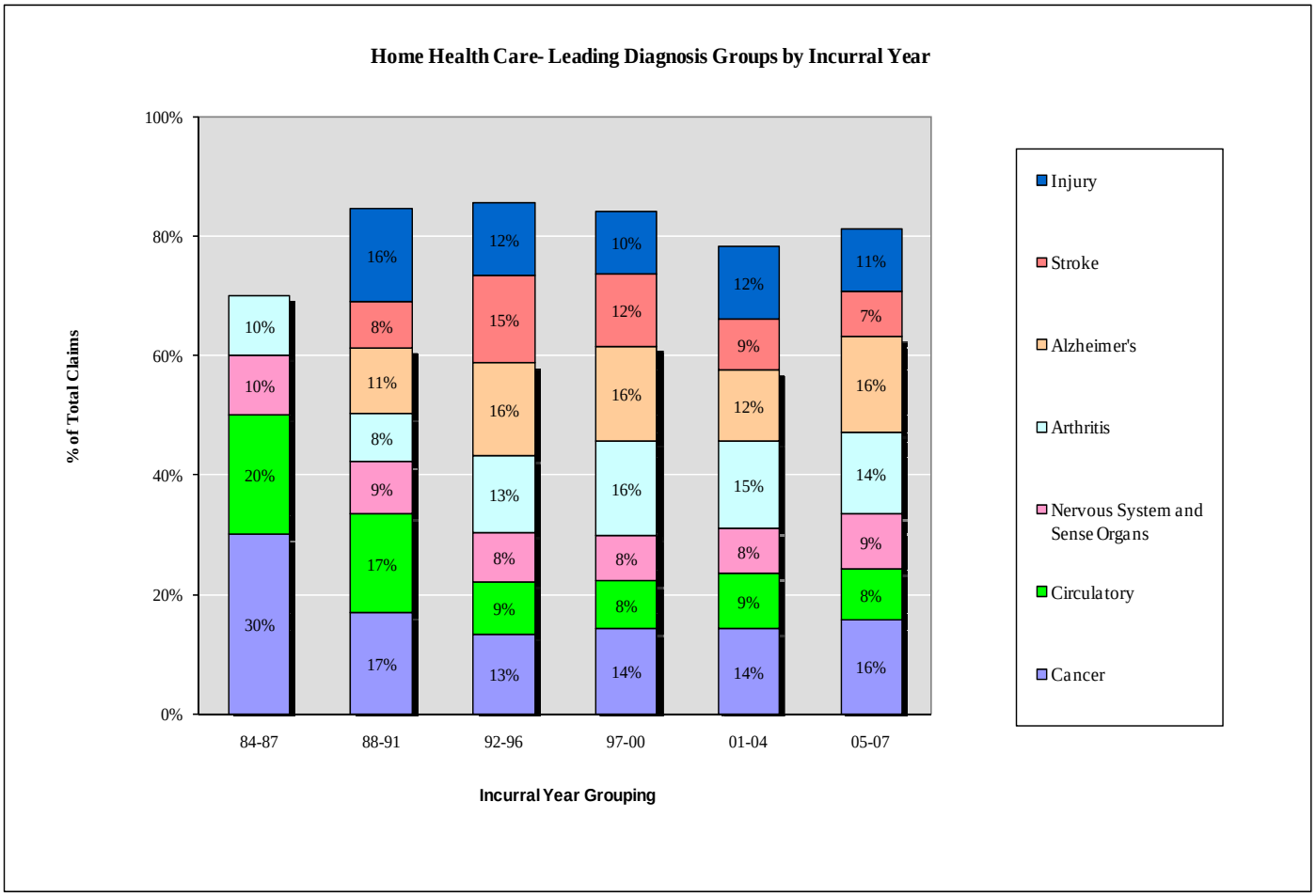
As noted in the prior Report, the assignment of ICD-9 codes has increased significantly over time. For example, 76% of the 1984-1987 cohort were coded as Other\Unknown, compared to the most recent incurral cohort, 2005-2007, which had only 6% of claims coded as Other\Unknown.

FIGURE 25: Incurral-Year Cohort for Nursing Home Claims

For Home Health Care claims, the leading diagnosis has varied by incurral year cohort, with Alzheimer's leading three incurral periods, Cancer leading two and Arthritis leading the other. Note the incurral years 1984-1987 had only 30 claims and 1988-1991 had 680 claims.

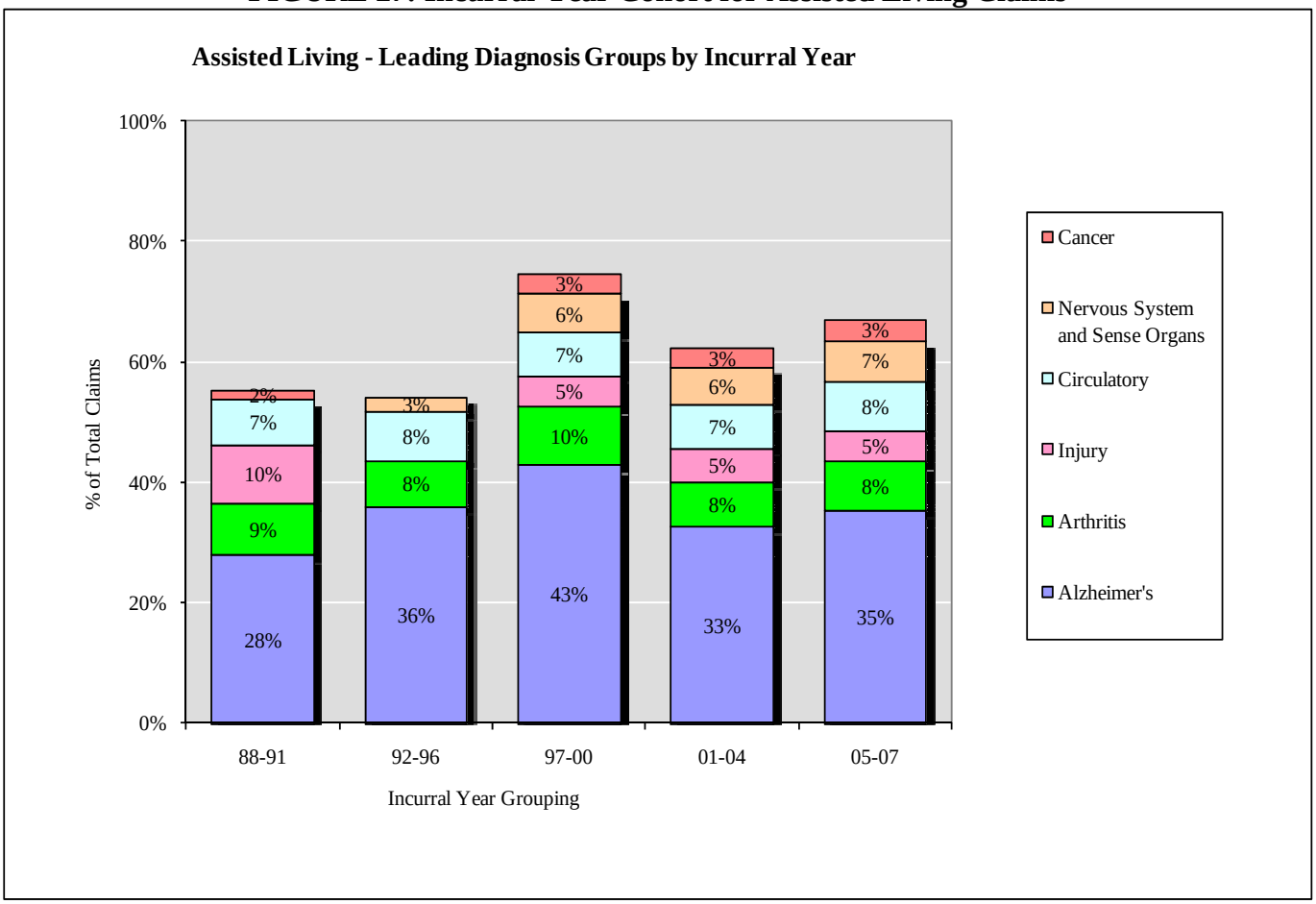
The average cost per visit increased from $66 for 1992-1996 to $83 for 1997-2000. The average cost per visit decreased to $77 for 2001-2004 and decreased again to $75 for 2005-2007. The drop in average cost per visit may be due to the inclusion of more claims from Group contracts. Most Group LTC policies have daily benefit limits for Home Health Care that are significantly less than the daily limits for Nursing Home Care.

FIGURE 26: Incurral-Year Cohort for Home Health Care Claims



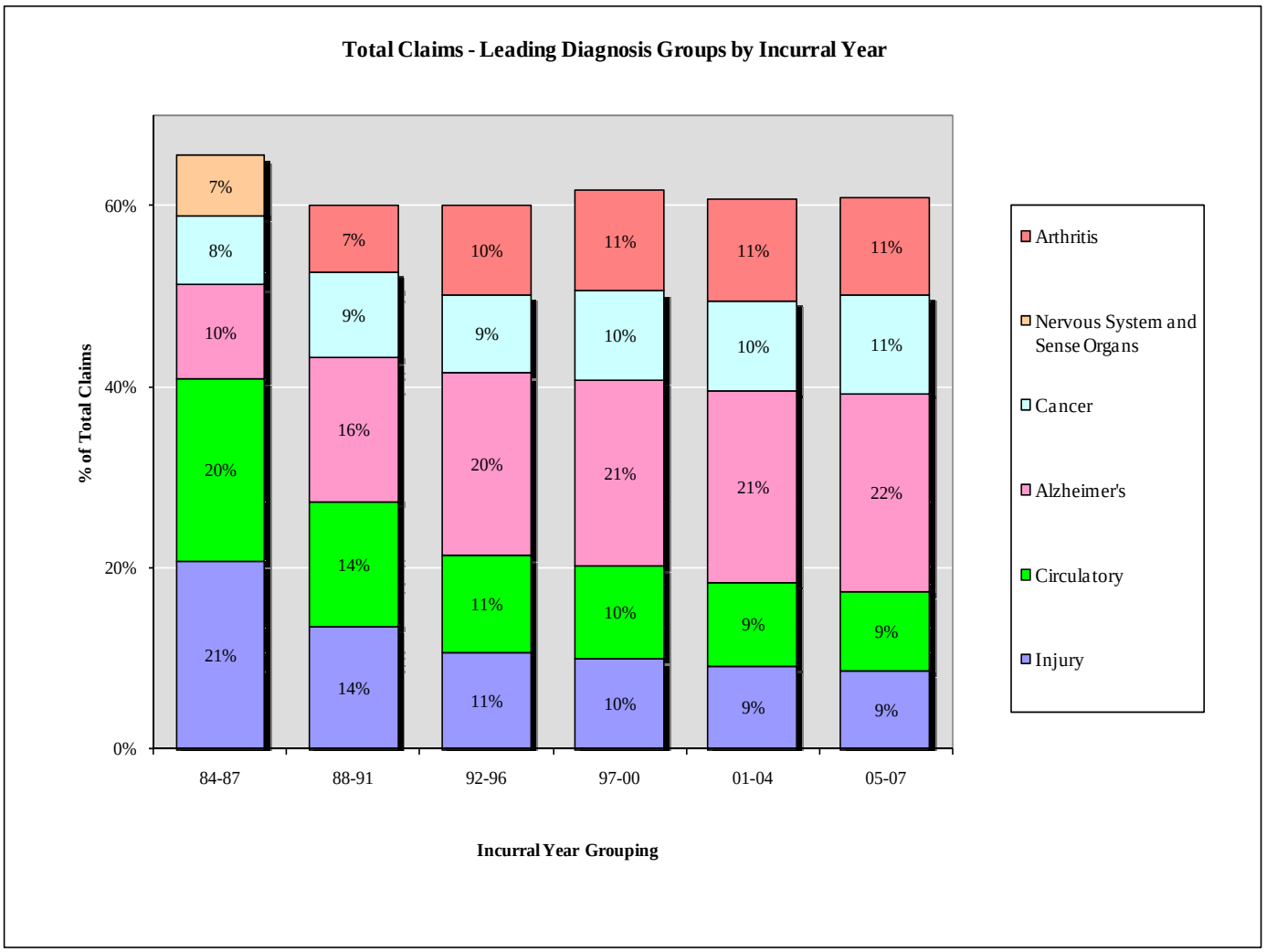
For Assisted Living claims, the leading diagnosis code is Alzheimer's for incurral periods excluding 1984-1987 (six claims). The average cost for all diagnosis cohorts per day/visit has varied from $117 for 1988-1991, $94 for 1992-1996, $100 for 1997-2000, $102 for 2001-2004 and $91 for 2005-2007.

FIGURE 27: Incurral-Year Cohort for Assisted Living Claims



For Total claims, the leading diagnosis codes are Injury (1984-1987) and Alzheimer's for all later incurral periods. The Total average cost per day/visit increased over all incurral periods, except for the most recent one, 2005-2007, where it decreased from $102 to $91.

FIGURE 28: Incurral-Year Cohort for Total Claims



Closed Status (Appendix G-8)

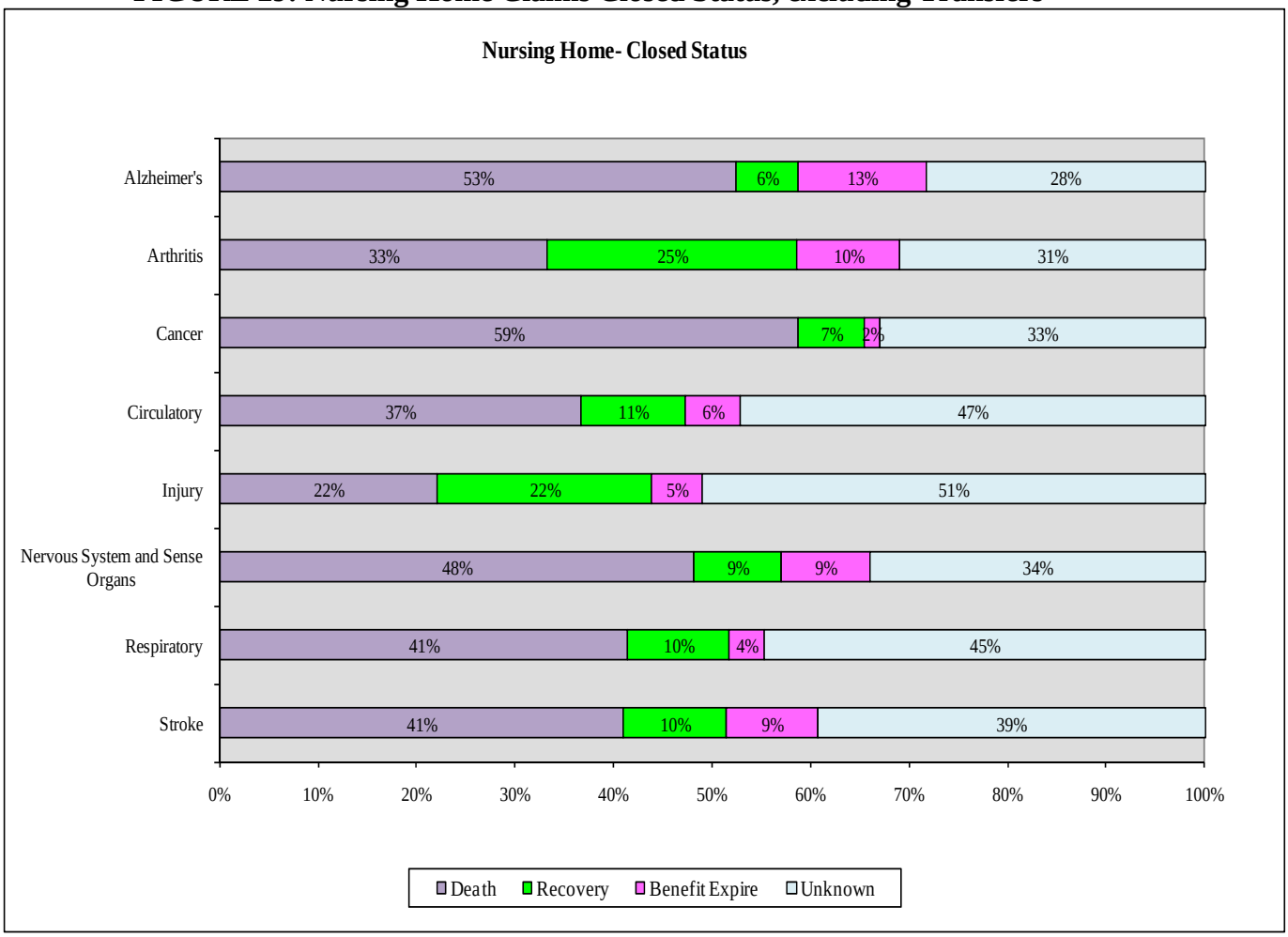
Appendix G-8 compares claims experience on closed claims by the diagnosis cohort and by the reason for closing claims ("claim close status"). The claim close status can be benefit expiry, death, recovery or transfer to a non-covered level of care.

A significant portion (48%) of data is coded as "Other\Unknown" claim close status at this time. Another noteworthy observation of the data was that 6% of total Alzheimer's claims are coded as closed due to recovery and was as high as 10% for Home Health Care.

For Nursing Home claims, excluding unknown close status, the percentage of claims closed due to death is 54% (prior Report 66%), recovery is 20% (prior Report 24%) and benefit expiry is 13% (prior Report 10%). As expected, the largest average payments and largest average claim days are from Nursing Home claims that closed due to benefit expiry ($89K), followed by claims that closed due to death ($43K), recoveries ($19K) and the smallest average payments and claim days from claims that transferred ($16K). Transferred status only represented 153 of the 135,871 claims.

By diagnosis cohort, excluding unknown close status, Alzheimer's Nursing Home claims had a much larger than average percentage of claims close due to death at 73%, with benefit expiries at 18% and recoveries at 9% (prior Report 12%). Cancer (88%) had the highest death close status. Injury (44%) and Arthritis (37%) had the highest recovery rates. Alzheimer's (18%) and Stroke (15%) had the highest benefit expiry rate.

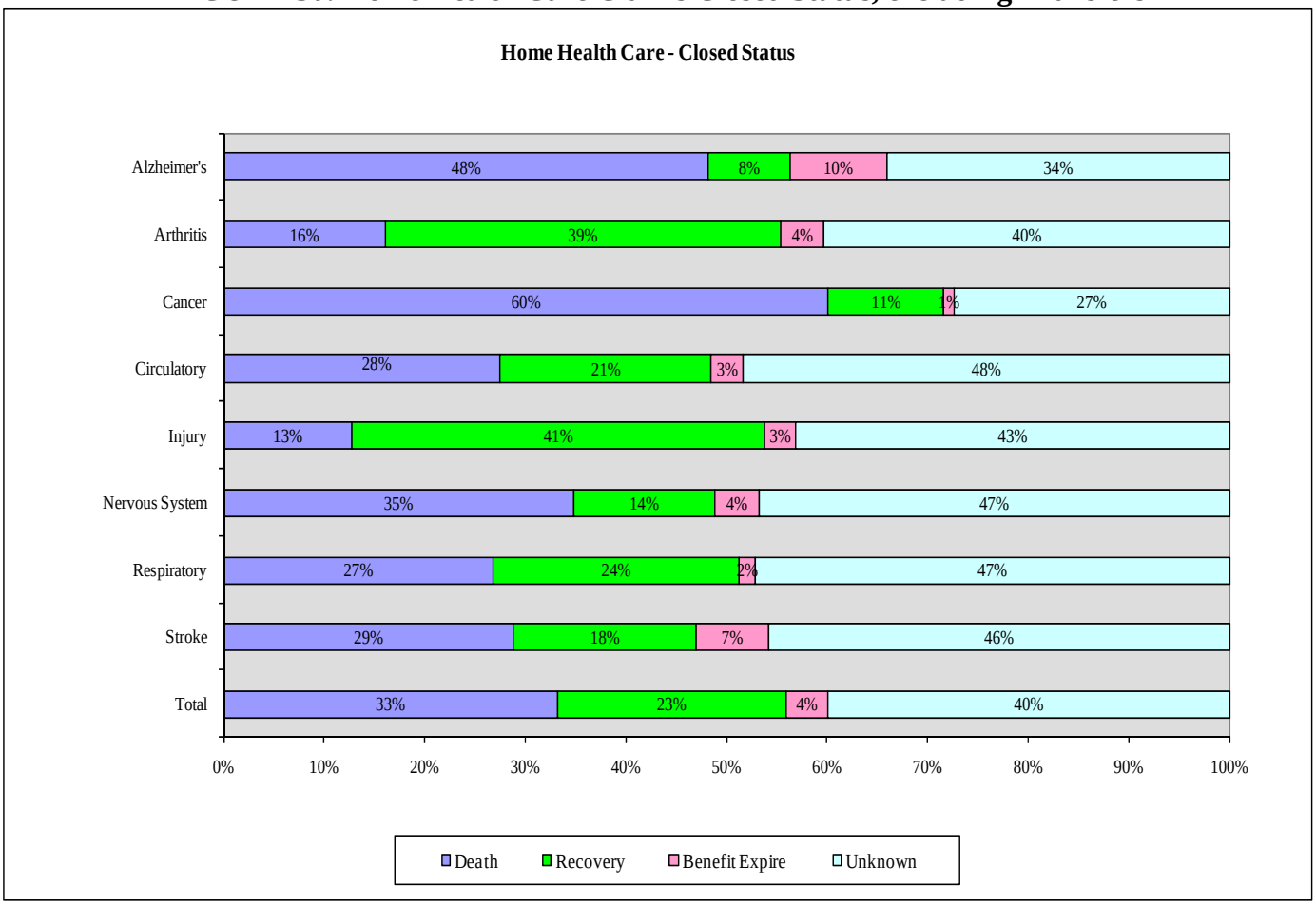
FIGURE 29: Nursing Home Claims Closed Status, excluding Transfers



For Home Health Care claims, excluding unknown close status, the percentage closed due to death is 55%, due to recovery is 38% and due to benefit expiry is 7%. As expected, the largest average payments are from Home Health Care claims that closed due to benefit expiry ($51K), followed by claims that closed due to death ($26K), then transfers ($12K) and finally the smallest average payments from claims that recovered ($11K). Claims that closed due to benefit expiry have the largest average claim days (546), followed by transfers (186), death (279) and recovery (145).

By diagnosis, excluding unknown close status, for Alzheimer's Home Health Care claims, the percentage of claims closed due to death was 73%; with benefit expiries 15% and recoveries 12% (prior Report was 23%). In contrast, Home Health Care Injury (72%) and Arthritis (66%) claims had the highest recovery rates. Cancer claims had the highest close percentage rate due to death at 83%.

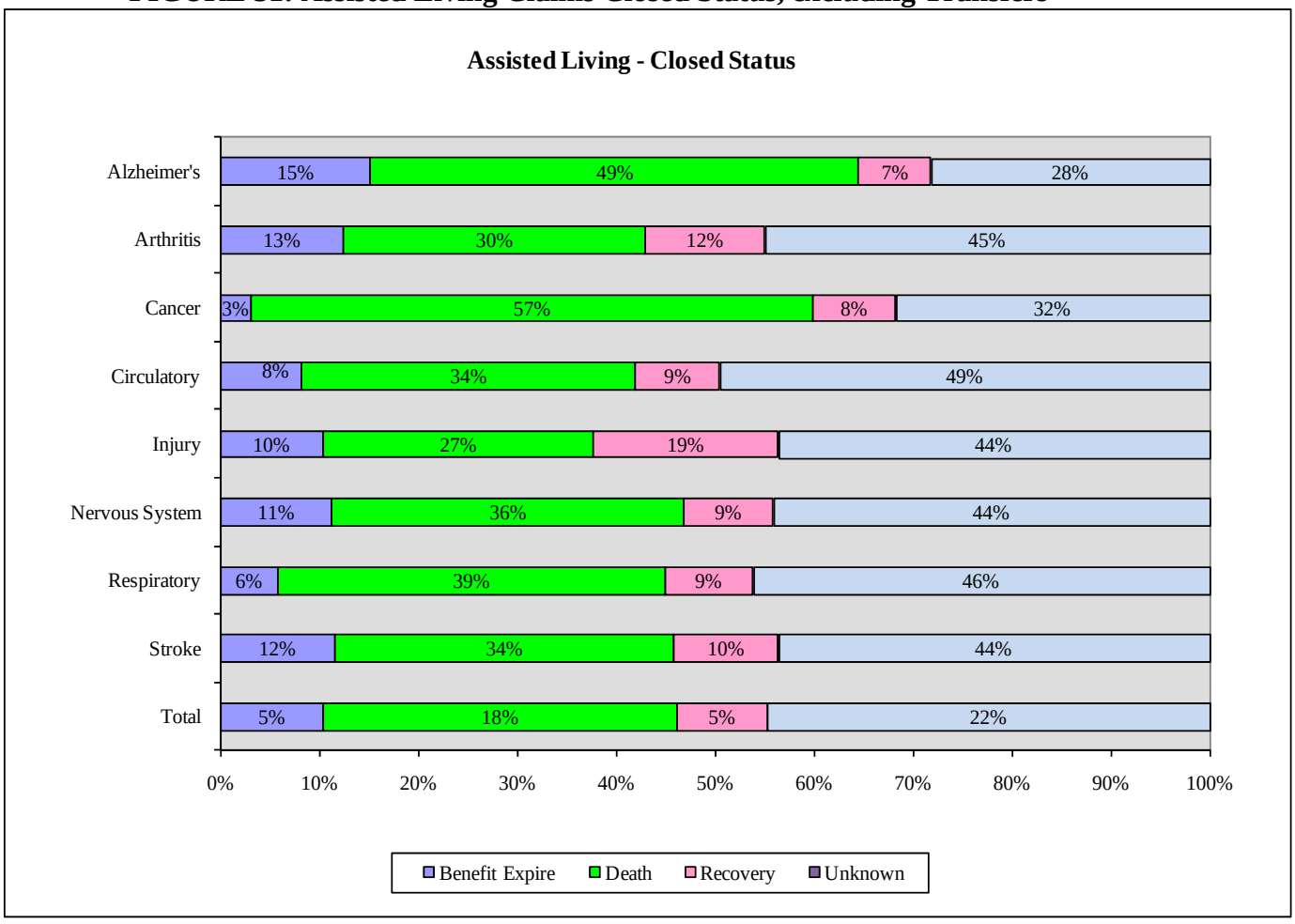
FIGURE 30: Home Health Care Claims Closed Status, excluding Transfers



For Assisted Living claims, excluding unknown close status, the percentage closed due to death is 65%, due to recovery is 17% and due to benefit expiry is 19%. As expected, the largest average payments are from Assisted Living claims that closed due to benefit expiry ($81K), followed by claims that closed due to death ($48K), then claims closed due to recoveries ($34K) and finally the smallest average payments from claims that transferred ($21K). Claims that closed due to benefit expiry have the largest average claim days (718), followed by death (437), recovery (385) and transfer (277).

By diagnosis, excluding unknown close status, for Alzheimer's Assisted Living claims, the percentage of claims closed due to death was 69%; with benefit expiries at 21% and recoveries at 10%. In contrast, Assisted Living Injury (33%) and Arthritis (22%) claims had the highest recovery rates. Cancer claims had the highest close percentage rate due to death at 83%.

FIGURE 31: Assisted Living Claims Closed Status, excluding Transfers

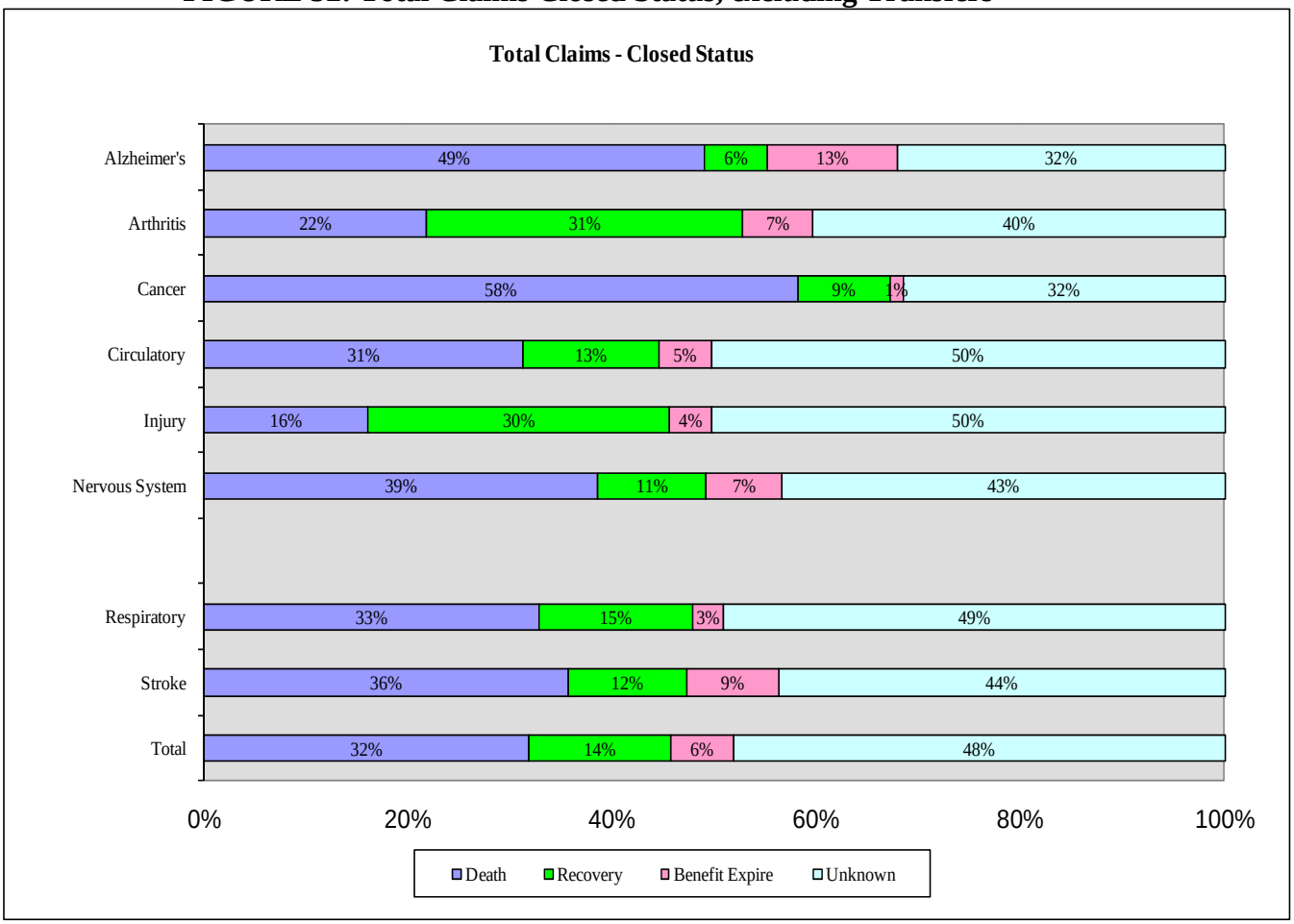


For Total claims, excluding unknown close status, the percentage closed due to death is 61%, due to recovery is 27%, due to benefit expiry is 12% and due to transfer is less than 1%. As expected, the largest average payments are from Total claims that closed due to benefit expiry ($100K), followed by claims that closed due to death ($47K), then recoveries ($18K) and finally the smallest average payments from claims that transferred ($17K). Claims that closed due to benefit expiry have the largest average claim days (1,111), followed by deaths (517), transfers (257) and recovery (233).

By diagnosis, excluding unknown close status, for Alzheimer's Total claims, the percentage of claims closed due to death was 72%; with benefit expiries at 19% and recoveries at 9%. In contrast, Injury (59%) and Arthritis (52%) claims had the highest recovery rates. Cancer claims had the highest close percentage rate due to death at 85%.

Transfer status only represented 653 of the 284,560 claims with known status.

FIGURE 32: Total Claims Closed Status, excluding Transfers



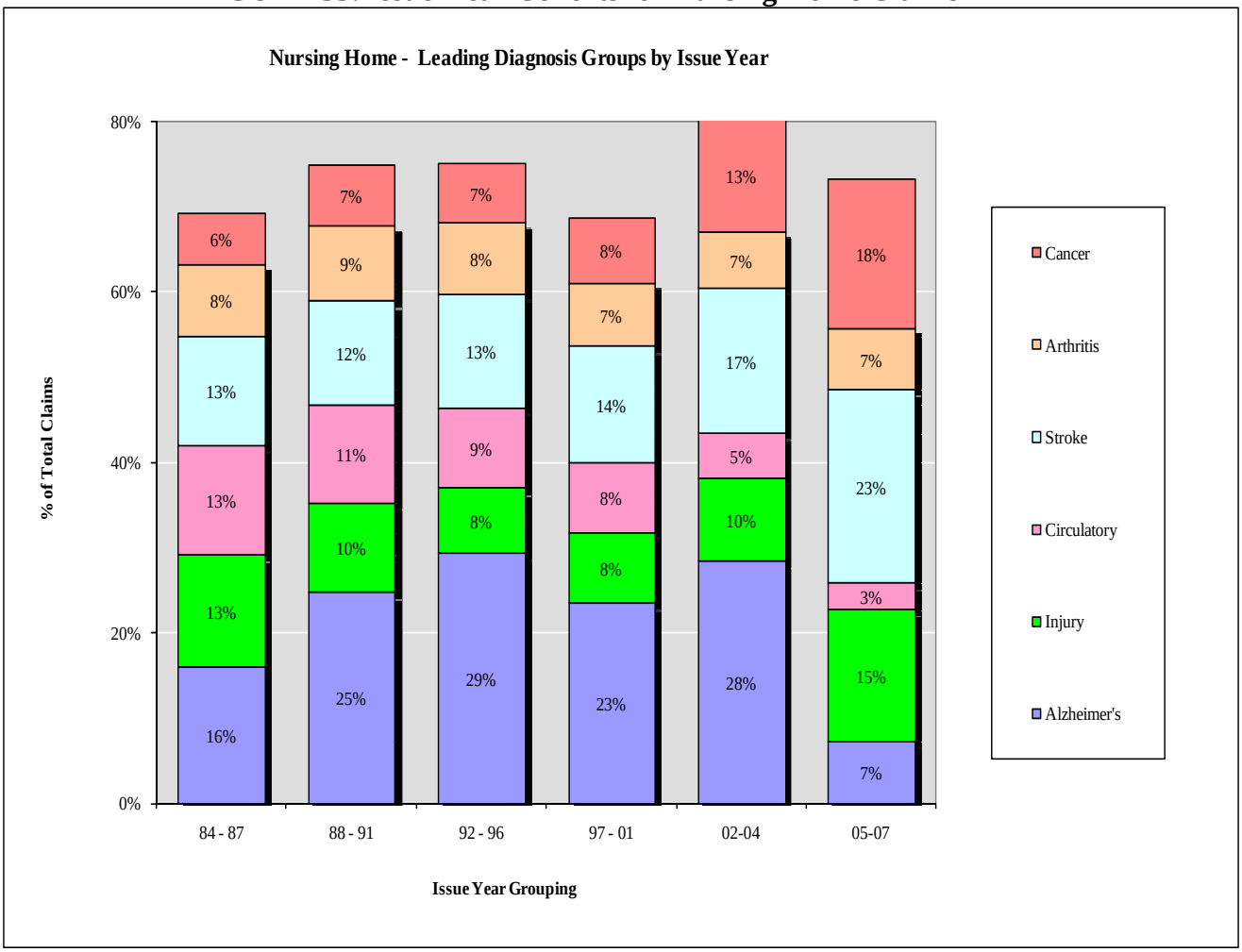
Issue Year (Appendix G-9)

Appendix G-9 compares claims experience by diagnosis cohort and issue year.

The earliest issue year cohort (1984-1987) has a large percentage of the data with an Other\Unknown diagnosis cohort for both Nursing Home and Home Health Care claims. A shift from Nursing Home to Home Health Care claim utilization is evident in the Report. For the most recent issue period (2002-2004), the percentage of claims that are Home Health Care is 71%, where in the prior period (1997-2001), Home Health Care represents 61% of claims.

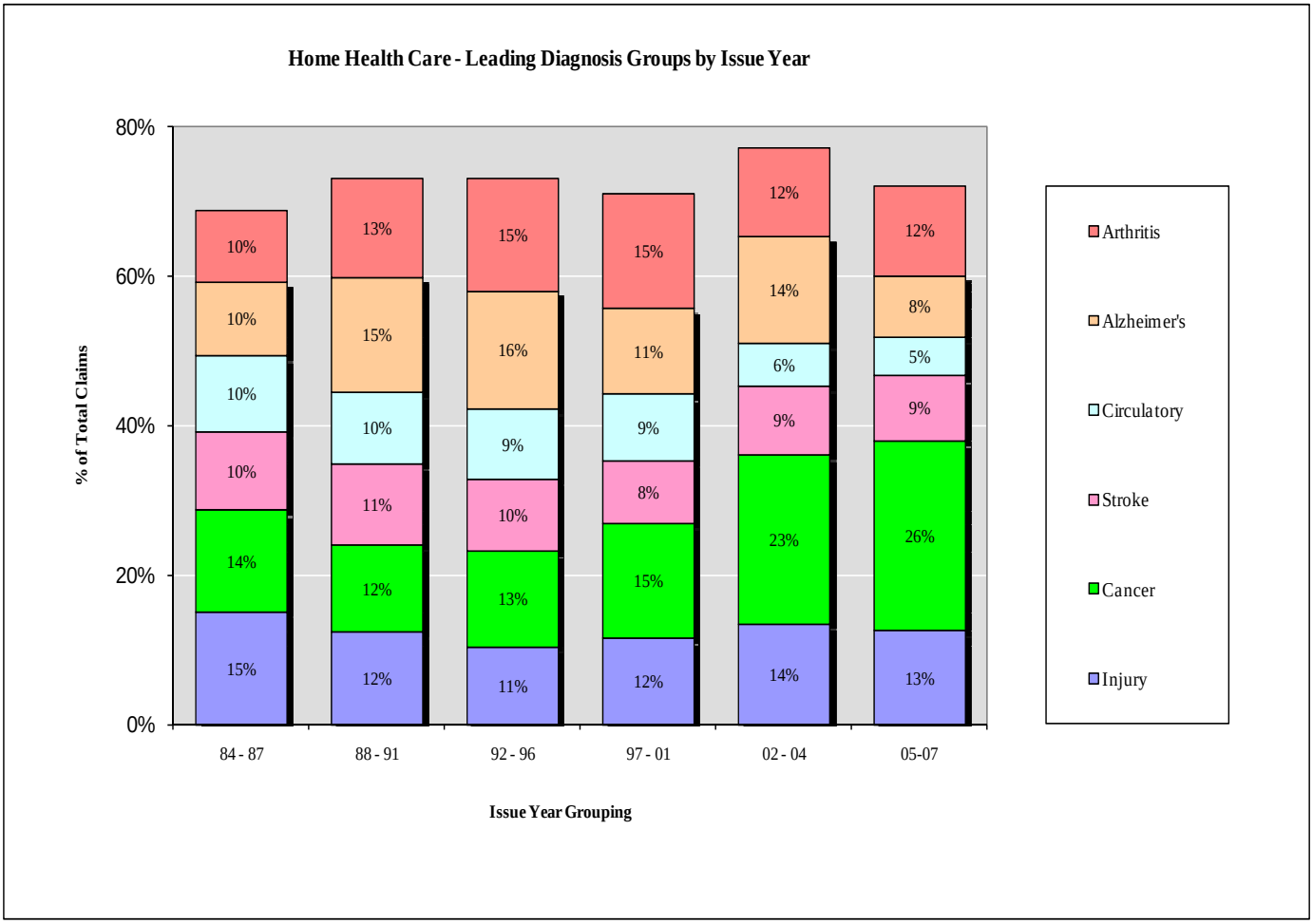
For Nursing Home claims, the most prevalent diagnosis cohorts for issue year cohort 1988-1991 are Alzheimer's, Stroke and Circulatory. For the issue year cohorts 1992-1996, 1997-2001 and 2002-2004, the top two most prevalent diagnosis cohorts are also Alzheimer's and Stroke. Cancer claim activity ranked third in the 2002-2004 and second in 2005-2007. The increasing prevalence may be associated with younger issue ages.

FIGURE 33: Issue-Year Cohorts for Nursing Home Claims



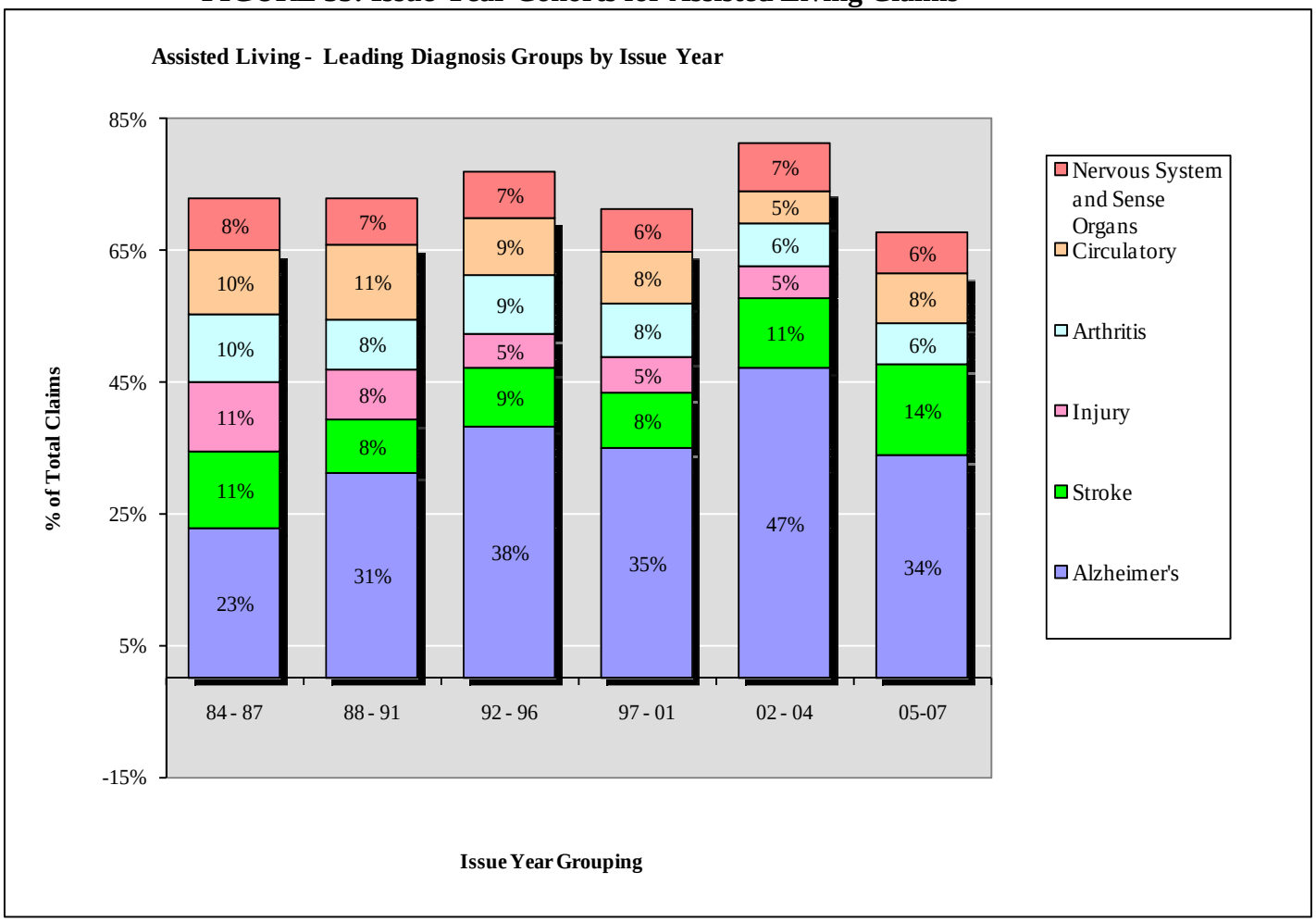
For Home Health Care claims, the most prevalent diagnosis cohorts for issue-year cohort 1988-1991 were Alzheimer's, Injury and Arthritis. For the issue-year cohort 1992-1996, the most prevalent were Alzheimer's, followed by Arthritis and Cancer. For 1997-2001, Cancer and Arthritis are the most prevalent. For 2002-2004, Cancer is also the most prevalent, but the next most prevalent is Alzheimer's. For 2005-2007, the increased Injury prevalence may be due to the impact of underwriting selection, which reduces the likelihood of a chronic condition being the cause of claim in the early policy durations so that Injury/Accident becomes a more common cause of claim.

FIGURE 34: Issue-Year Cohorts for Home Health Care Claims



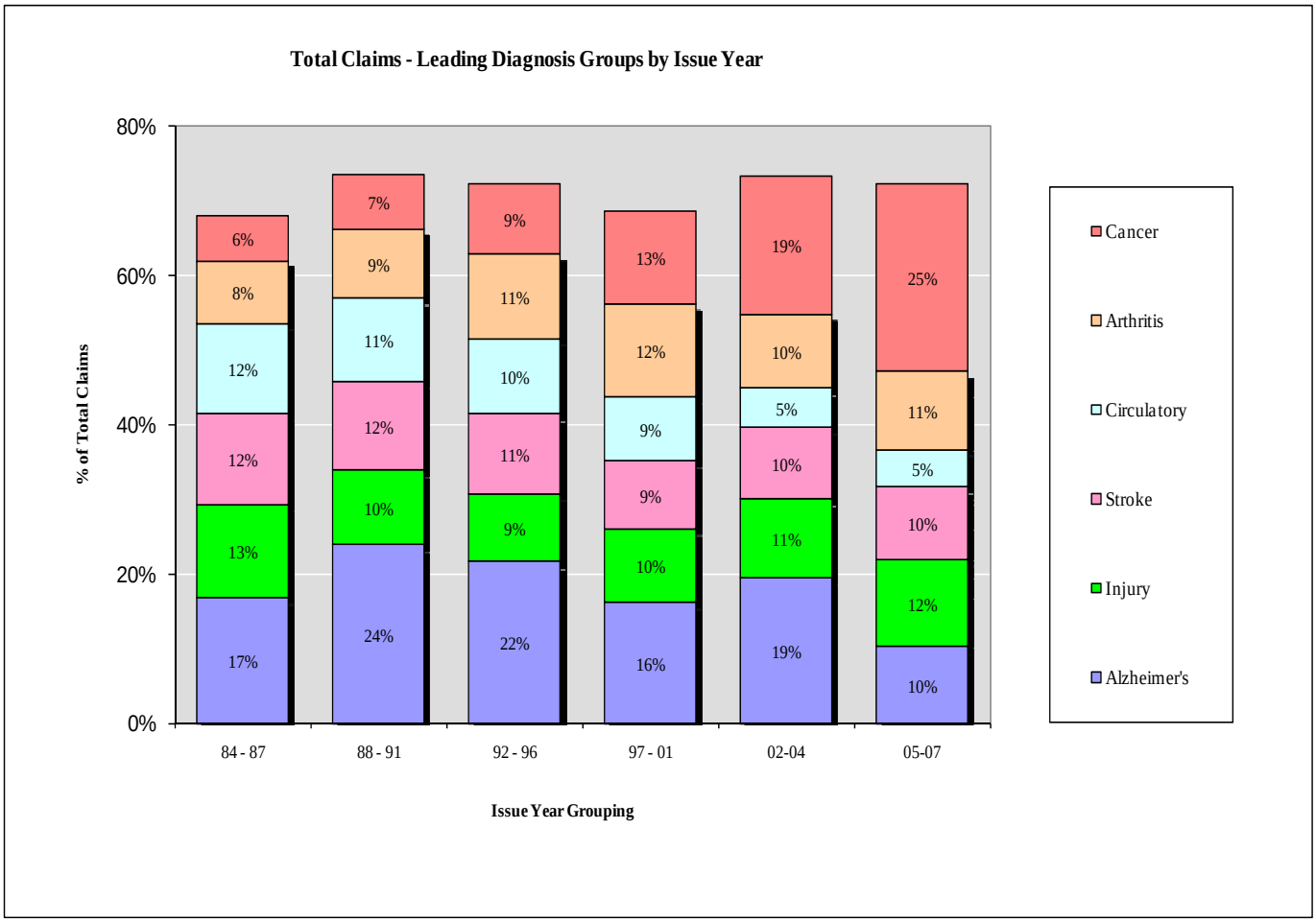
For Assisted Living claims, the most prevalent diagnosis cohort for all issue-year cohorts is Alzheimer's.

FIGURE 35: Issue-Year Cohorts for Assisted Living Claims



For Total claims, the most prevalent diagnosis cohorts for the 1984-1987 issue-year cohort are Alzheimer's, Injury and Stroke. For issue-year cohort 1988-1991, Circulatory edged out Injury as the third highest diagnosis cohort. For the issue-year cohort 1992-1996, the most prevalent was Alzheimer's, followed by Stroke and Arthritis. For 1997-2001, Alzheimer's was the most prevalent, followed by Cancer and Arthritis. For 2002-2004, Alzheimer's is still the most prevalent, followed by Cancer and Injury. For 2005-2007, Cancer is the most prevalent followed by Injury and Arthritis.

FIGURE 36: Issue-Year Cohorts for Total Claims



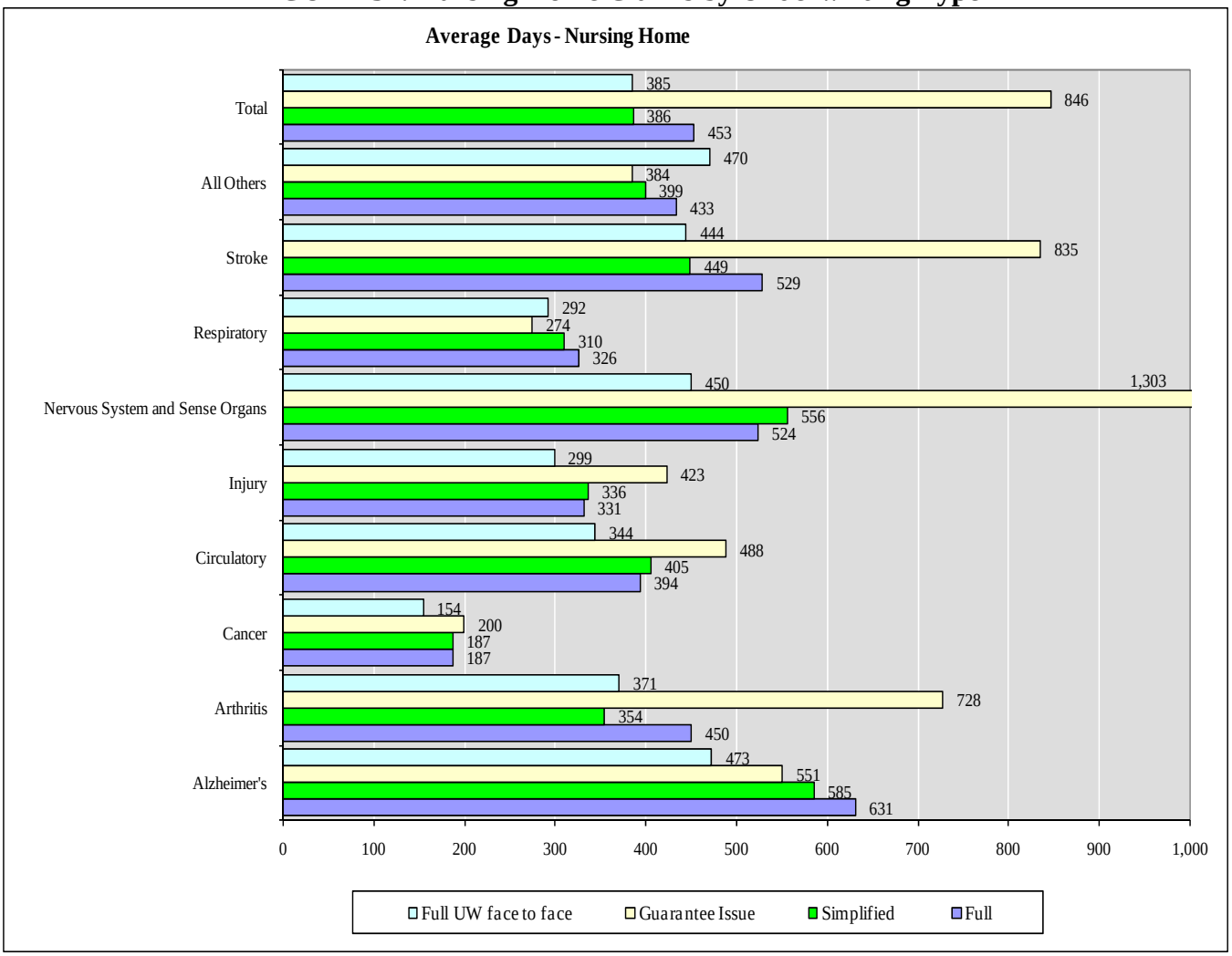
Underwriting Type (Appendix G-10)

Appendix G-10 compares claims experience by diagnosis cohort and underwriting type. The "Total" in each graph excludes claims where the diagnosis is coded as "Other/Unknown."

The underwriting categories of Full Medical, Full Medical plus Face-to-Face and Simplified have the most credible data, whereas the Guarantee Issue ("GI") with Actively-at-Work Required has only 1,408 claims.

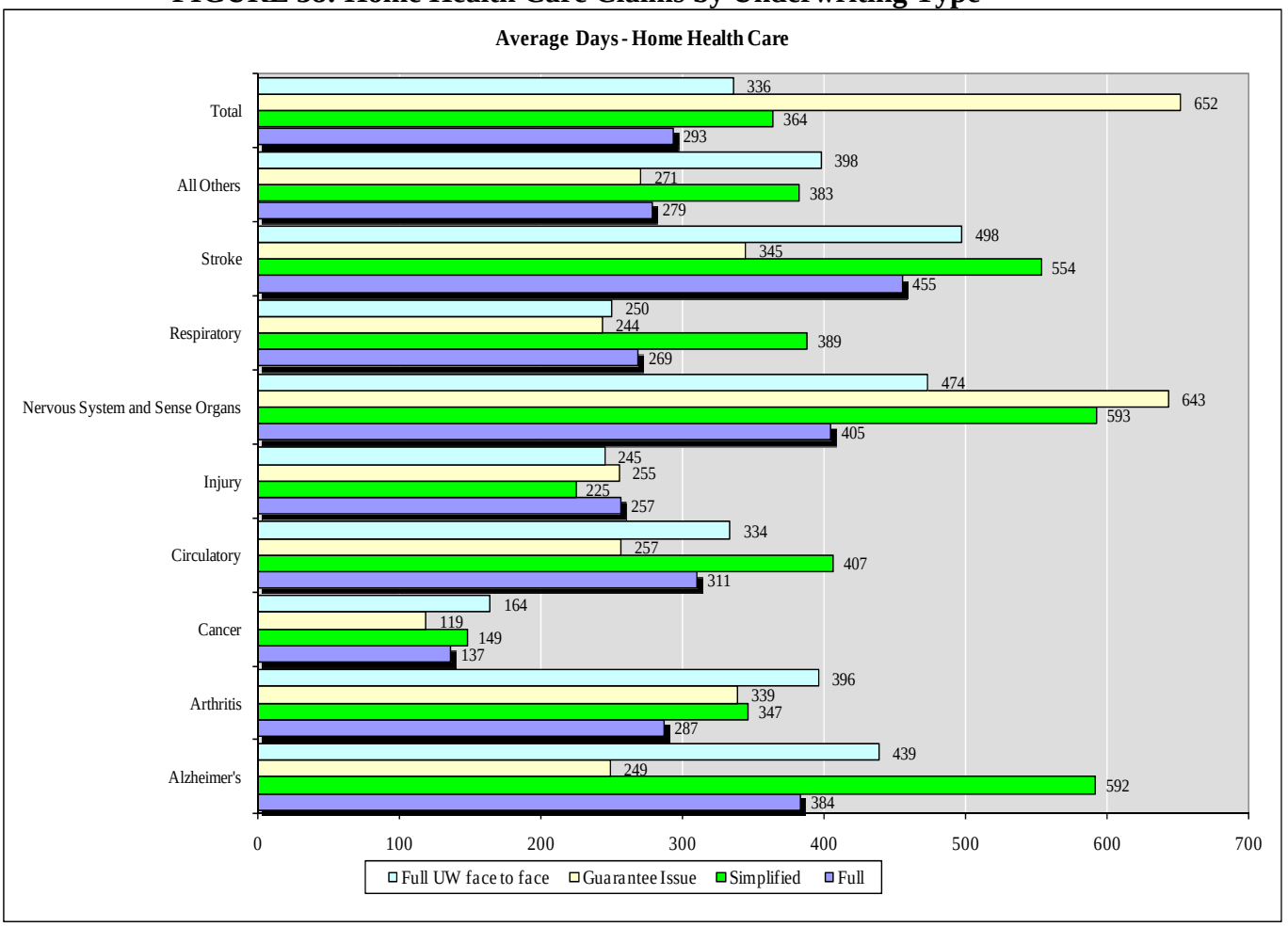
Nursing Home claims, Simplified underwriting and Full Medical plus Face-to-Face have similar average days on claim and are lower than Full Medical underwriting. The Guarantee Issue has significantly higher average days on claim than all other underwriting categories, led by diagnosis cohorts Nervous System, Stroke and Arthritis as shown in Figure 37 below.

FIGURE 37: Nursing Home Claims by Underwriting Type



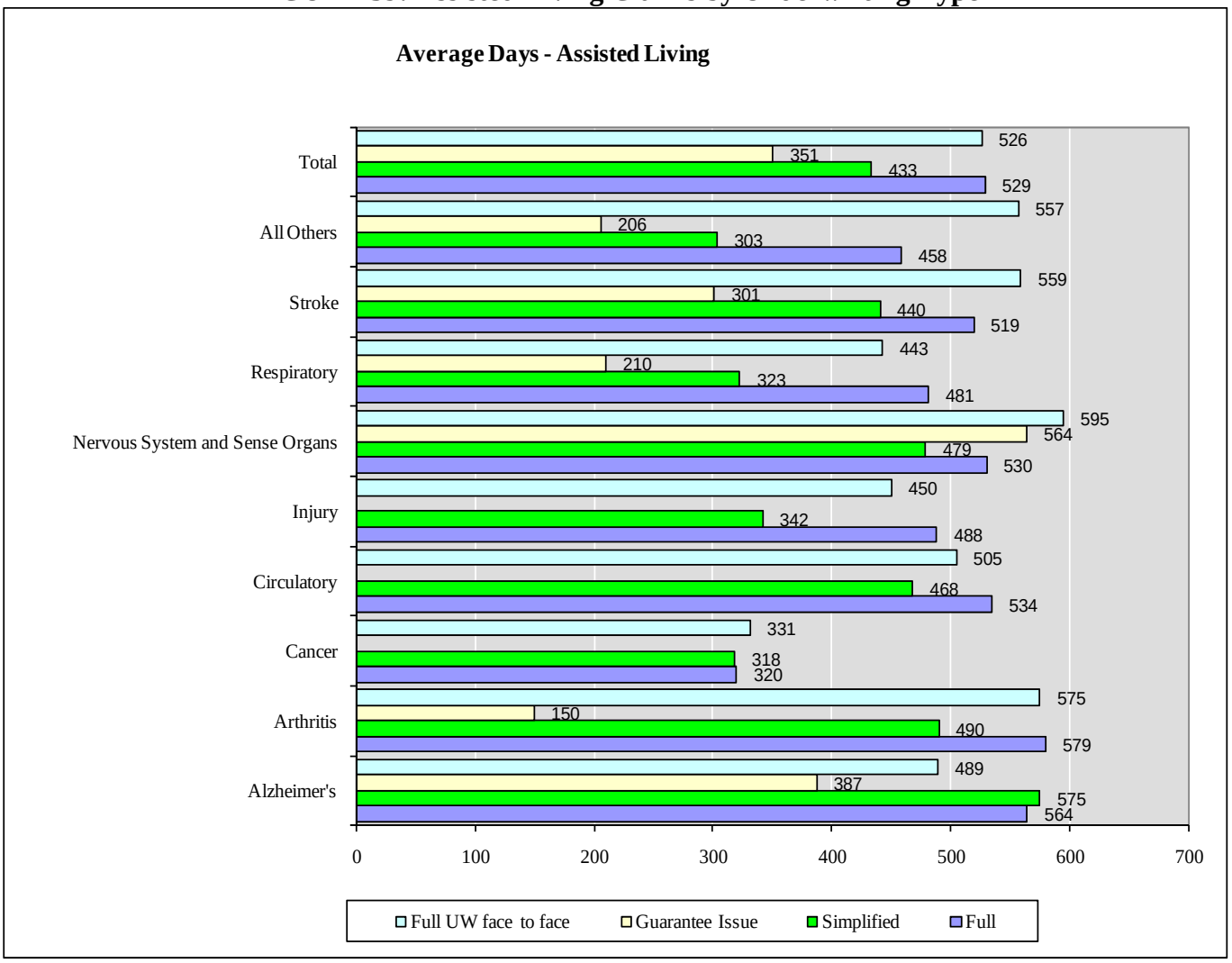
For Home Health Care claims, Full underwriting has the lowest average days on claim, followed by Simplified underwriting and Full Underwriting with Face-To-Face. Similar to Nursing Home, Guarantee Issue has much higher average days on claim driven by Nervous System and the Unknown Diagnosis category. The Simplified Underwriting category is based upon 6,176 claims and Guarantee Issue is based upon 1,916 claims.

FIGURE 38: Home Health Care Claims by Underwriting Type



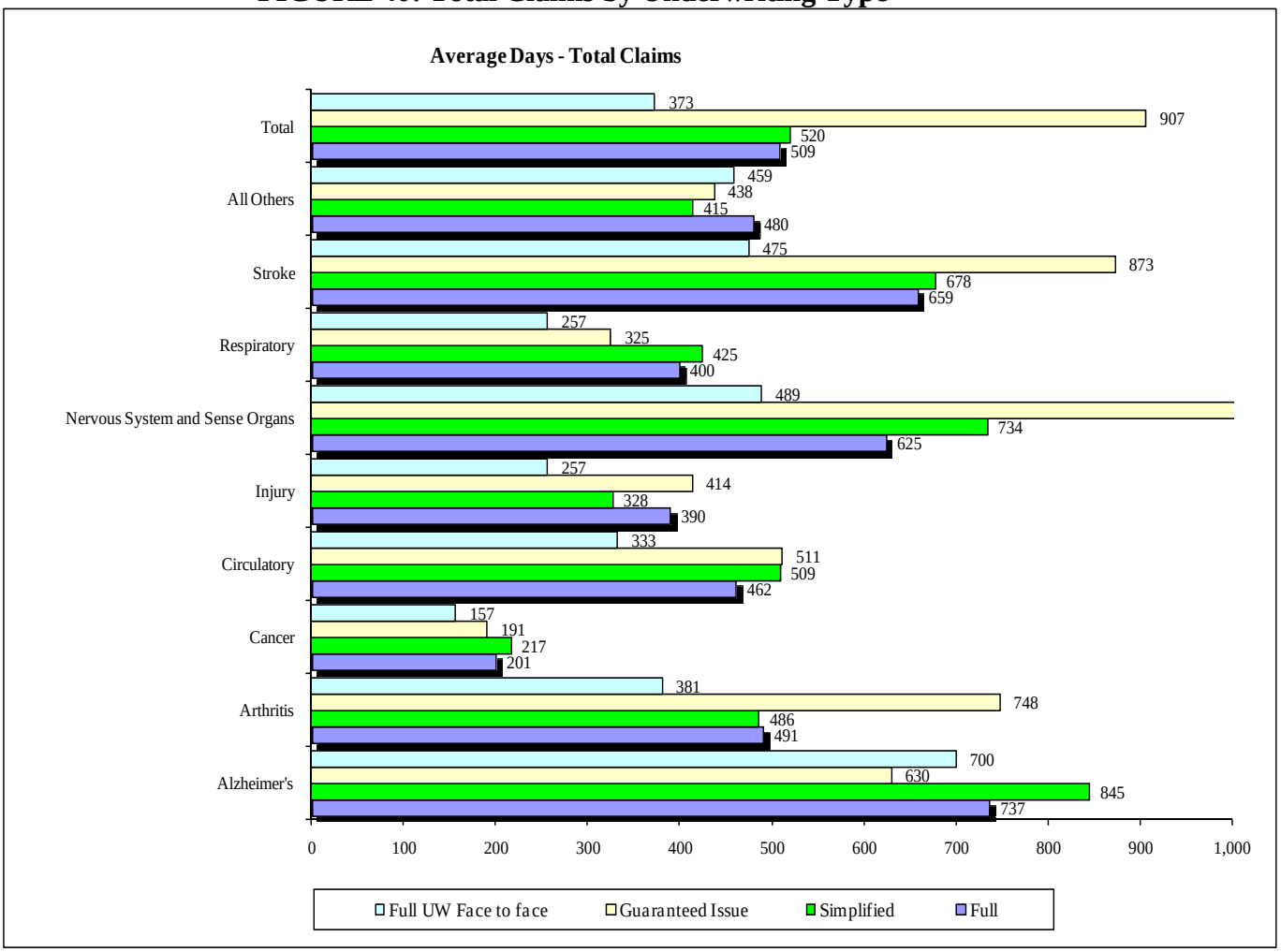
For Assisted Living claims, Simplified underwriting (2,416 claims) had a lower average than either Full underwriting or Full underwriting with Face-to-Face. The Guarantee Issue with Actively-at-Work Required was also lower but only had 31 claims.

FIGURE 39: Assisted Living Claims by Underwriting Type



For Total claims, the average days on claim increase as the level of underwriting decreases. Guarantee Issue with Actively-at-Work Required has a significantly higher average cost per day than all other underwriting categories and across most diagnosis cohorts in Figure 40 below; however, it also has limited credibility with a total of 2,872 claims.

FIGURE 40: Total Claims by Underwriting Type



Benefit Period Type (Appendix G-11)

Appendix G-11 compares claims experience by diagnosis cohort and benefit period limitation. Overall, the unlimited benefit period days on claim are significantly longer than claims with limited benefit periods.

For Nursing Home claims, 13% of claims have an unlimited benefit period. By diagnosis cohort, Alzheimer's, Nervous System and Stroke have the highest percentage of claims with an unlimited benefit period. For all diagnosis cohorts, the average duration of claim is longer for unlimited benefit periods (559 days) vs. limited benefit periods (428 days).

For Home Health Care claims, 15% of claims have an unlimited benefit period. By diagnosis cohort, Stroke, Nervous System and Alzheimer's have the highest percentage of claims with an unlimited benefit period. Overall, the unlimited benefit period (357 days) has a slightly larger average claim duration than the limited benefit period (319 days). By diagnosis cohorts, the average duration of claim is slightly longer for limited benefit periods for Digestive.

For Assisted Living claims, 26% of claims have an unlimited benefit period. By diagnosis cohort, Arthritis, Respiratory and Nervous System have the highest percentage of claims with an unlimited benefit period. Overall, the unlimited benefit period (607 days) has a larger average claim duration than the limited benefit period (507 days). By diagnosis cohorts, the average duration of claim is slightly longer for limited benefit periods for Stroke.

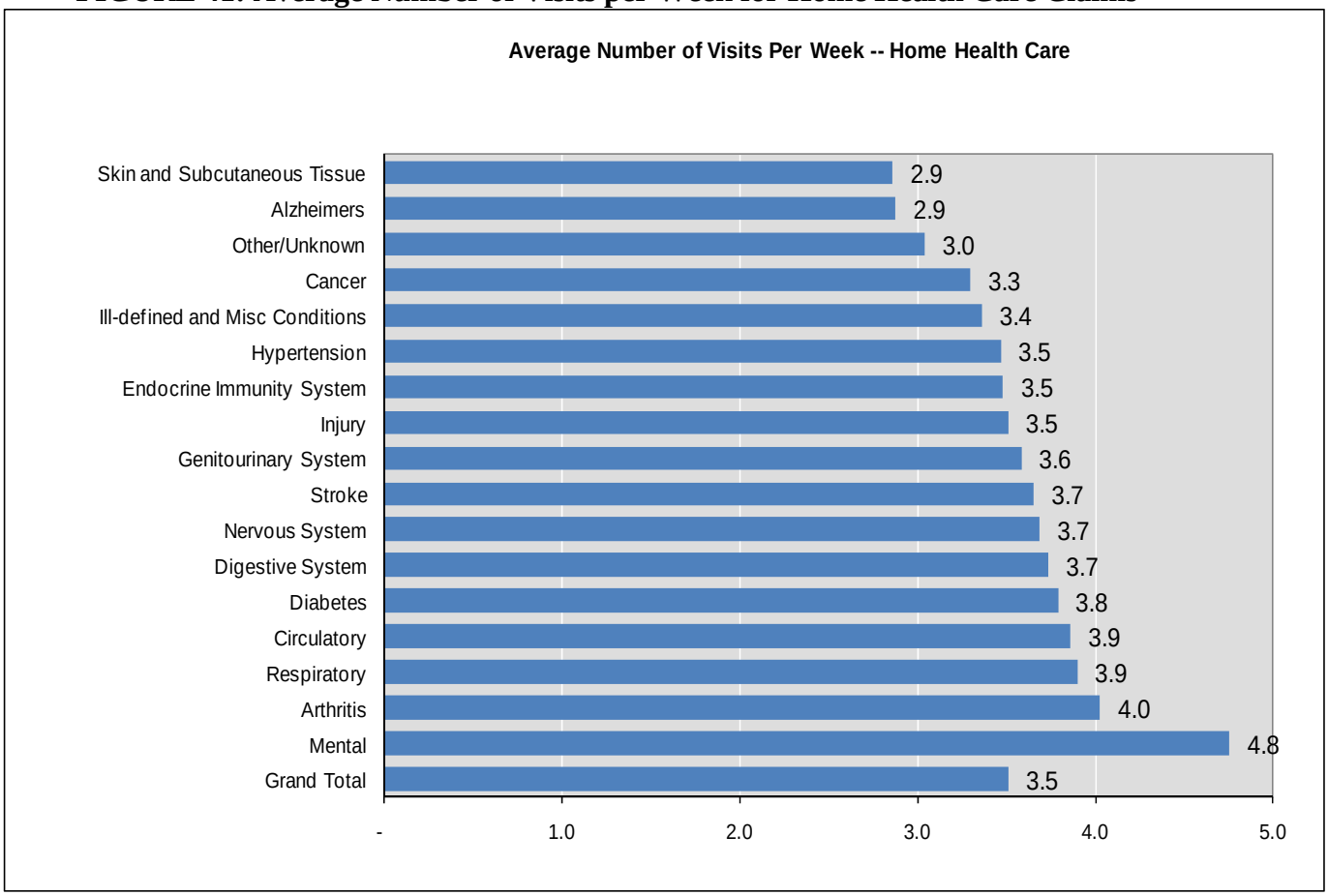
For Total claims, 12% of claims have an unlimited benefit period. By diagnosis cohort, Alzheimer's, Mental and Stroke have the highest percentage of claims with an unlimited benefit period. In aggregate, claims with an unlimited benefit period had a longer average duration (564 days) than those with a limited benefit period (475 days). Alzheimer's, Nervous System and Stroke had the longest average duration for claims with limited benefits.

Average Number of Home Health Care Visits per Week by Diagnosis (Appendix G-12)

Appendix G-12 shows the average number of Home Health Care visits per week by diagnosis cohort 100.

Compared with the prior Report, the average number of visits per week increased from 3.16 to 3.51. Mental claims had the highest average visits per week at 4.75, but it had the lowest average in the prior Report. Mental claim visits per week are also substantially higher than the next highest diagnosis, Arthritis, which has 4.03 visits per week. The prior Report had Cancer with the highest average of 4.03. The diagnosis cohort with the fewest average number of visits per week (excluding categories with less than 100 claims and Unknown claims) is Skin and Subcutaneous Tissue, with an average of 2.86 visits.

FIGURE 41: Average Number of Visits per Week for Home Health Care Claims

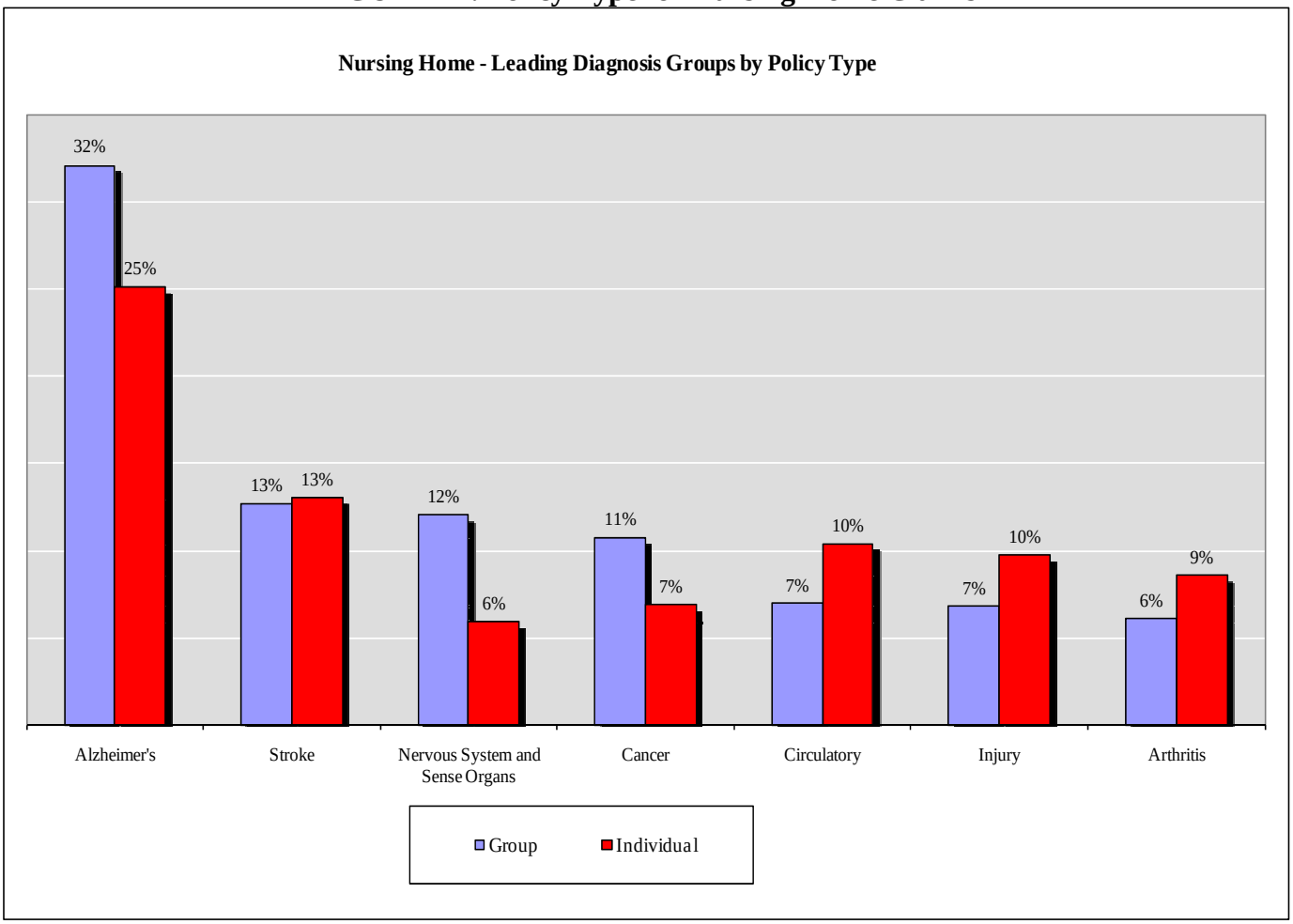


Individual and Group Diagnosis Summary (Appendix G-13)

Appendix G-13 compares claims data based upon the type of plan, either Group or Individual.

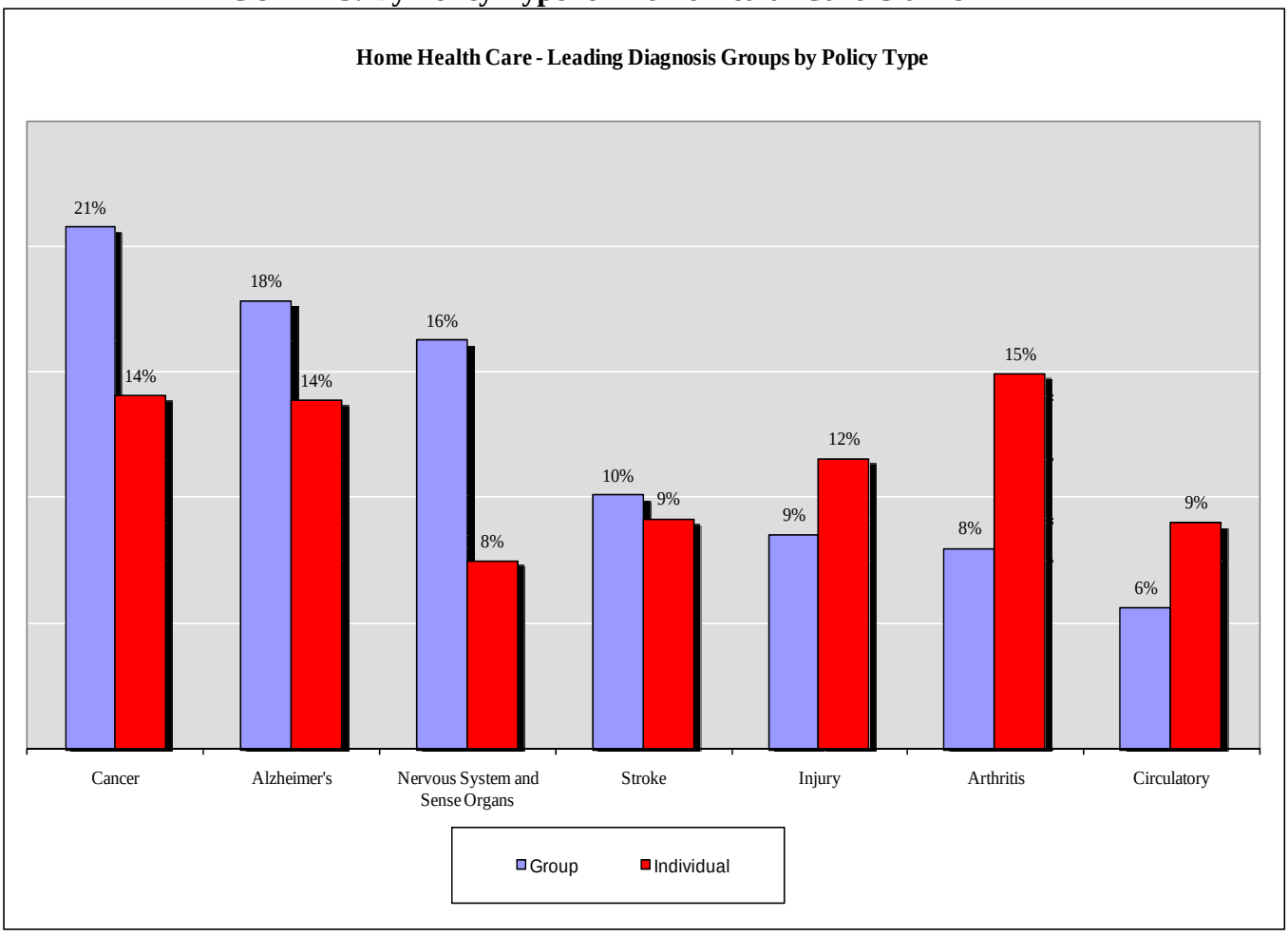
For Nursing Home data, Alzheimer's was the most prevalent diagnosis for both Group (32%) and Individual (25%) claims. For Group claims, following Alzheimer's, the leading diagnosis code was Stroke (13%). For Individual claims, Alzheimer's was also followed by Stroke (13%). The average duration of claim was larger for Group claims (569 days) than it was for Individual claims (424 days). However, Group claims ($83/day) were slightly less expensive than Individual claims ($88/day).

FIGURE 42: Policy Type for Nursing Home Claims



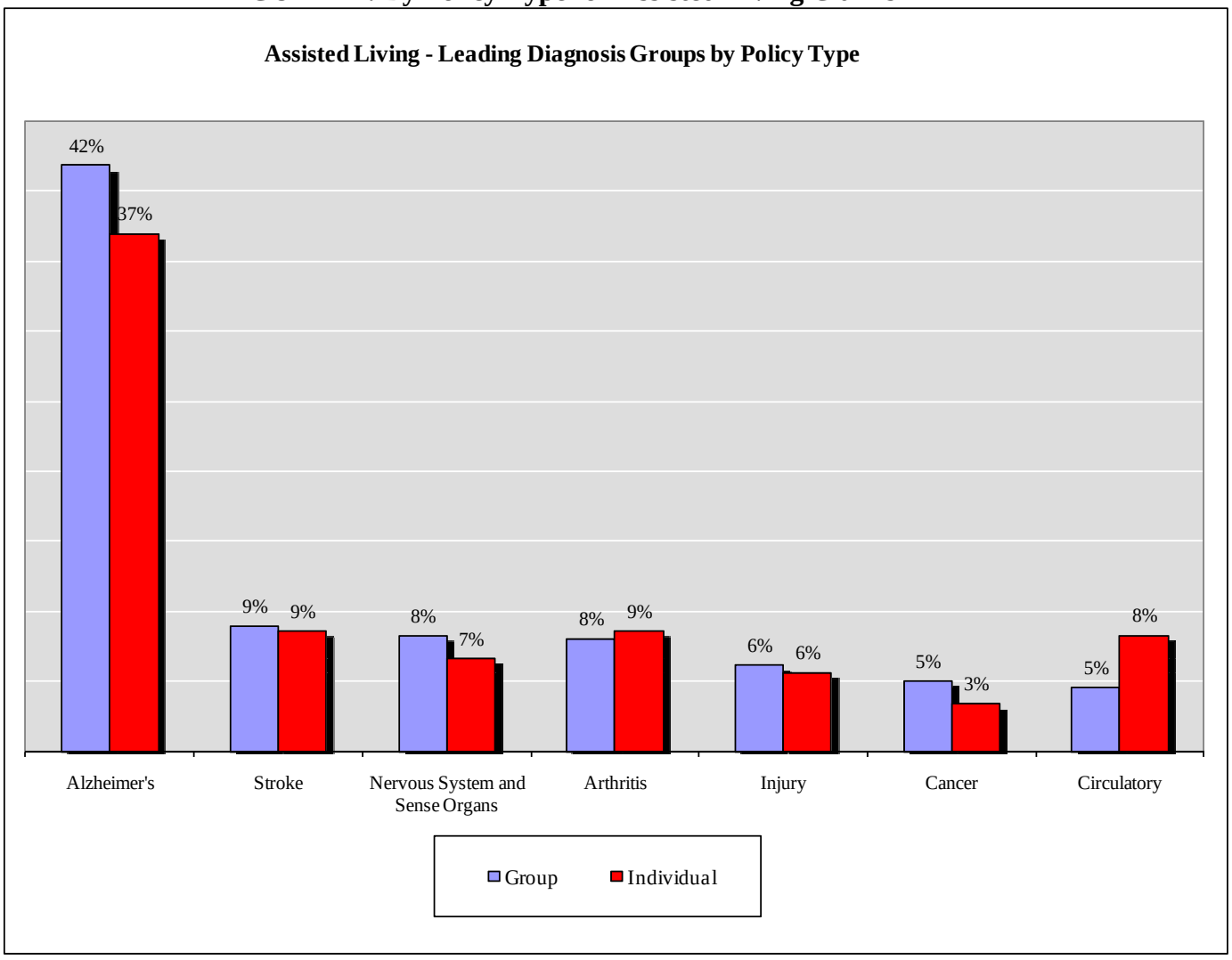
For Home Health Care data, Cancer (21%) was the largest diagnosis segment for Group claims and Arthritis was the most prevalent diagnosis for Individual claims (15%). For Group claims, following Cancer, the leading diagnosis was Alzheimer's (18%). For Individual claims, Arthritis is followed by Cancer and Alzheimer's, both at 14%. The average duration of claim was smaller for Individual claims (311 days) than it was for Group claims (381 days). However, Group claims ($46) had a considerably lower average cost per day than for Individual claims ($80).

FIGURE 43: By Policy Type for Home Health Care Claims



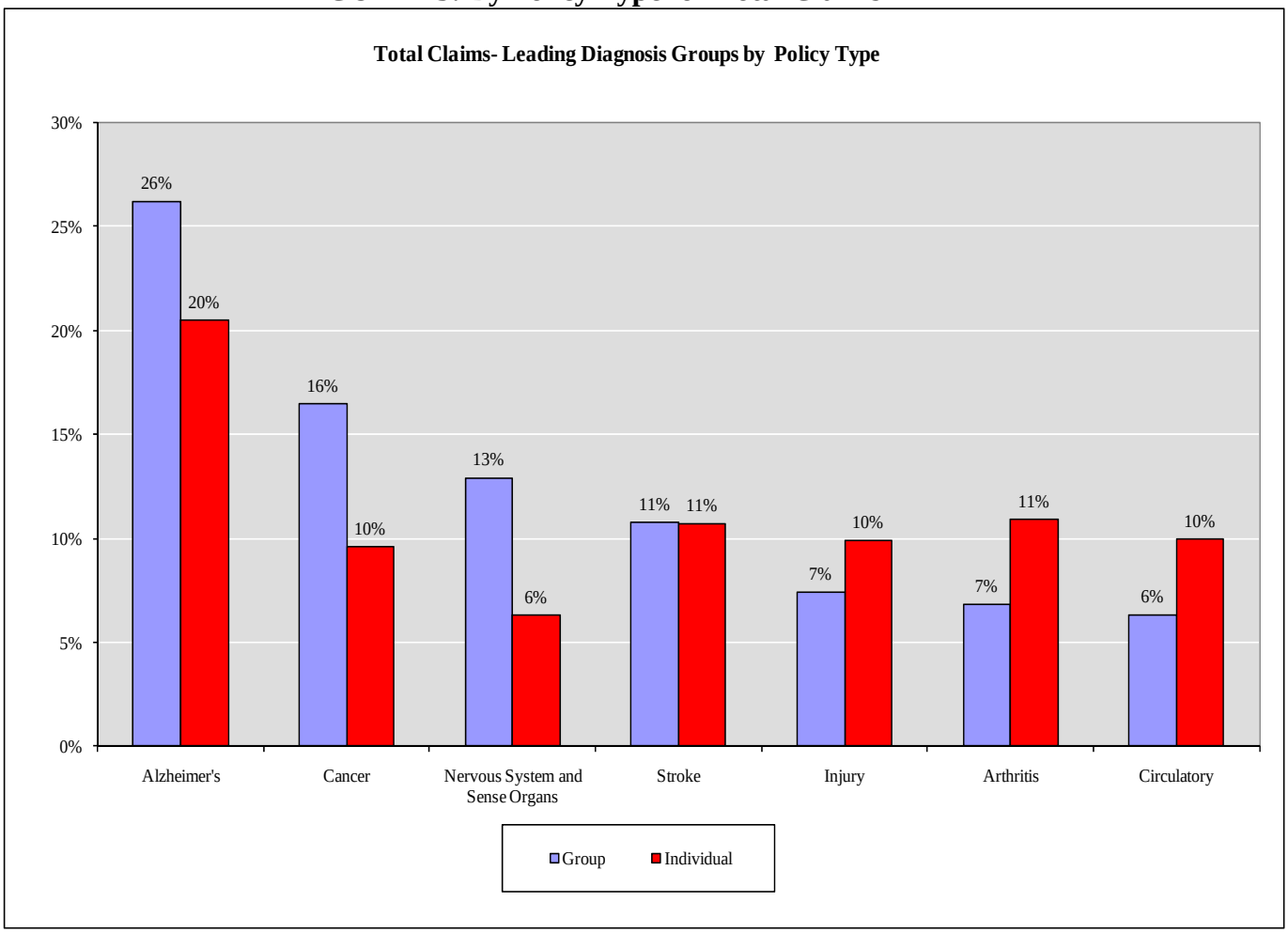
For Assisted Living claims, Alzheimer's was the largest diagnosis segment for both Group claims (42%) and Individual claims (37%) by a wide margin. For Group claims, following Alzheimer's, the leading diagnosis code was Stroke (9%). For Individual claims, Alzheimer's is also followed by Stroke (9%). The average duration of claim was longer for Individual claims (514 days) than it was for Group claims (434 days). However, both Group and Individual claims had the same average cost per day ($98).

FIGURE 44: By Policy Type for Assisted Living Claims



For Total claims, Alzheimer's was the most prevalent diagnosis for both Group (26%) and Individual (20%) claims. For Group claims, following Alzheimer's, the leading diagnosis code was Cancer (16%). For Individual claims, Alzheimer's was followed by Stroke and Arthritis, both at 11%. The average duration of claim was shorter for Individual claims (486 days) than it was for Group claims (630 days). Also, Group claims ($66/day) were less expensive than Individual claims ($87/day).

FIGURE 45: By Policy Type for Total Claims

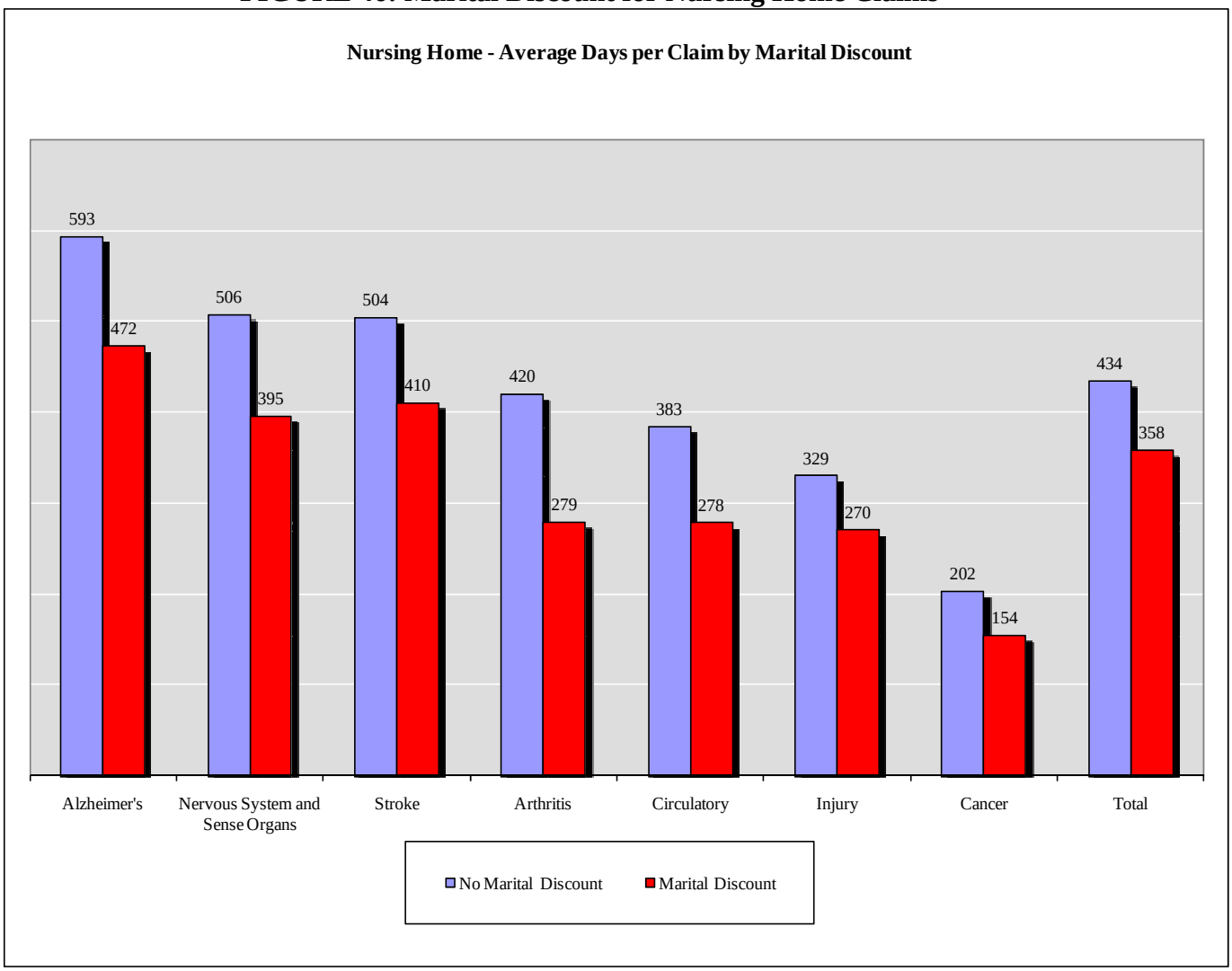


Marital Discount (Appendix G-14)

Appendix G-14 compares claims data based upon the marital discount of the claimant for individual policies only.

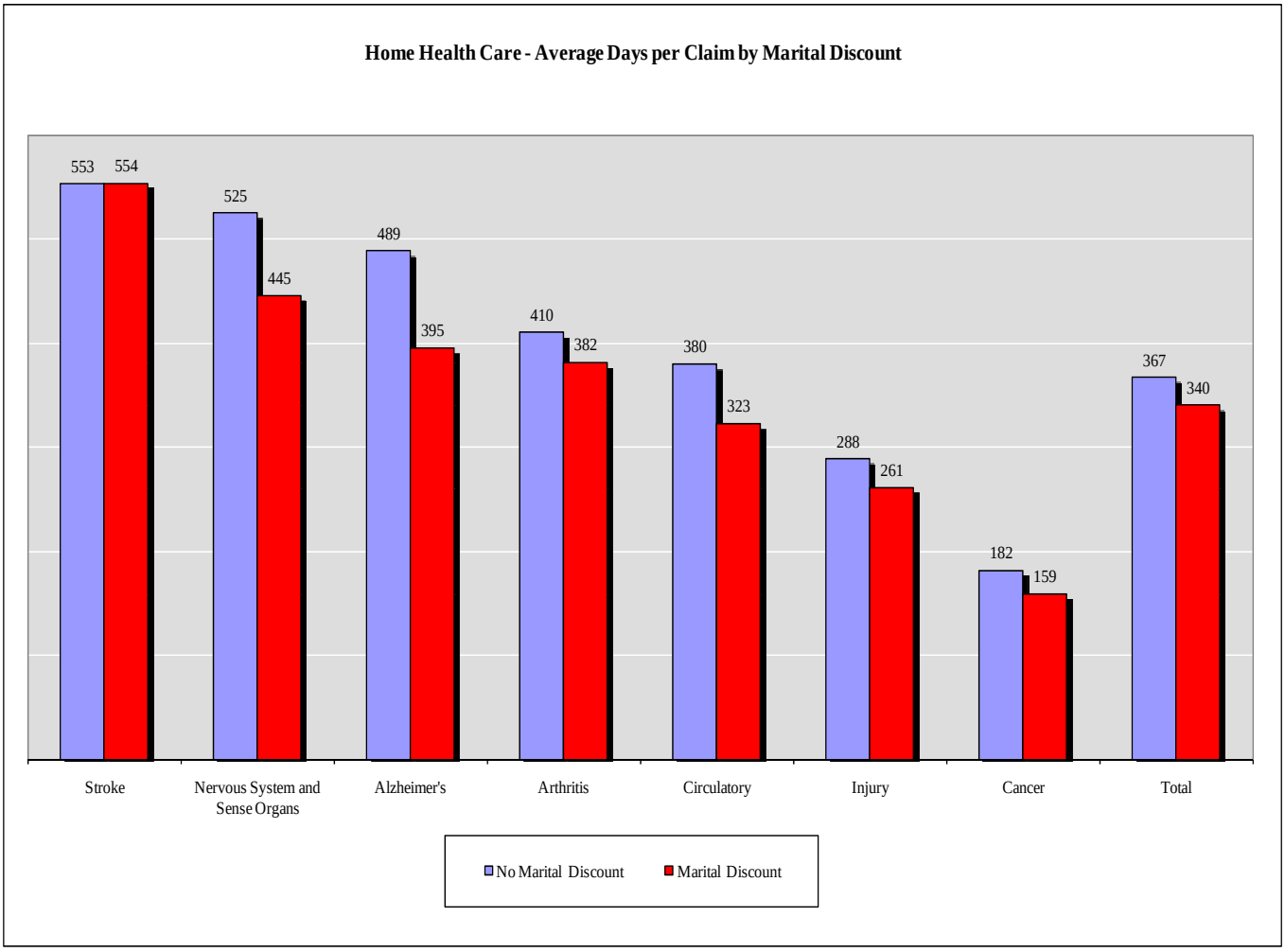
The graph below illustrates that Nursing Home claimants without a marital discount spend longer on claim than claimants with a marital discount. For each of the major diagnosis cohorts shown, the average number of days per claim is higher for claimants without a marital discount. In total, Nursing Home claims without a marital discount spend an average of 434 days on claim, which is 21% higher than claims with a marital discount, which have an average of 358 days on claim. However, the average cost per day for Nursing Home claims without a marital discount ($111) is less than Nursing Home claims with a marital discount ($117).

FIGURE 46: Marital Discount for Nursing Home Claims



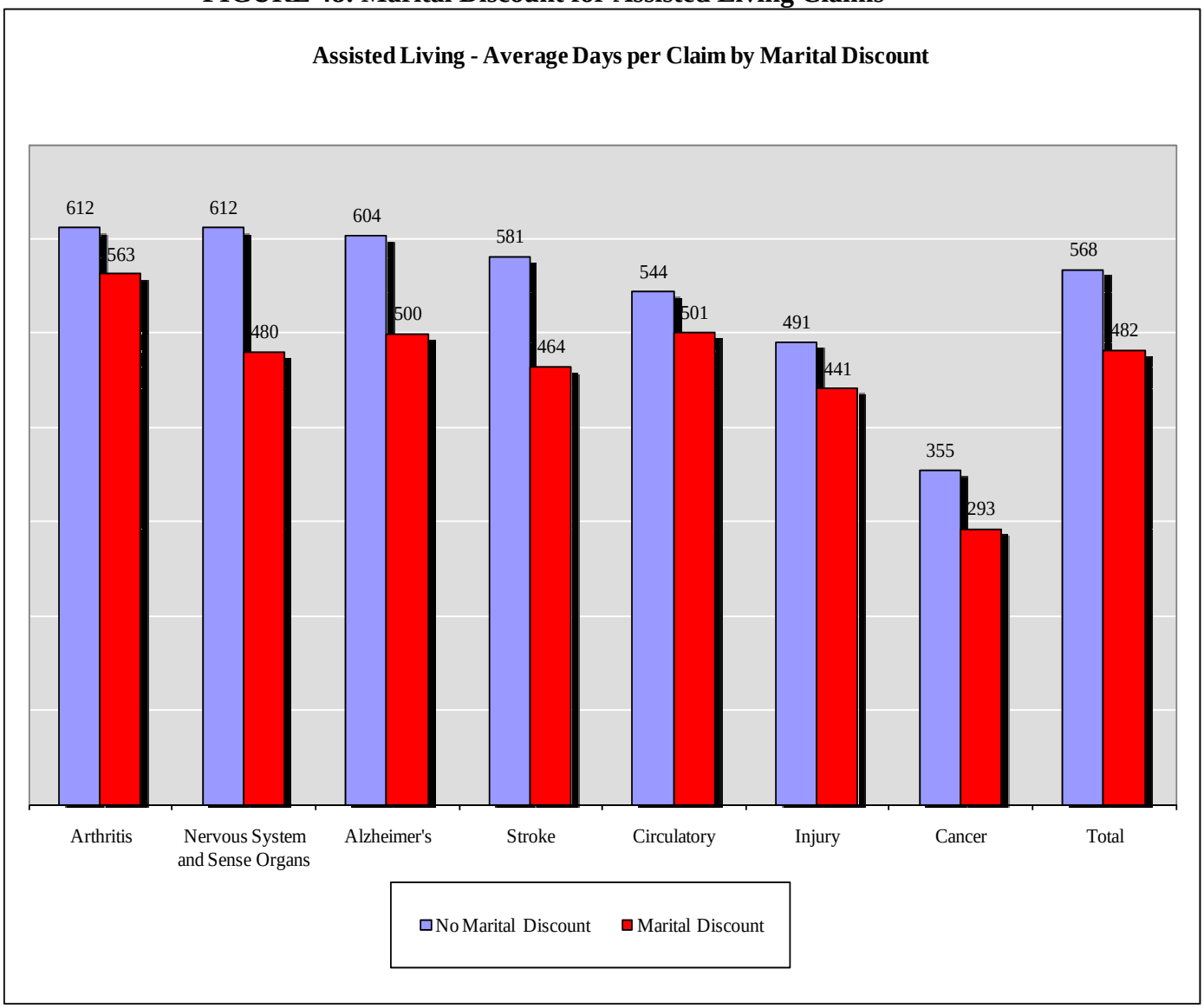
The data for Home Health Care claims demonstrates a different pattern than the data from Nursing Home and Assisted claims with minimal impact of the marital discount on the overall average days per claim. For Home Health Care, the overall average number of days on claim is slightly higher for claimants without a marital discount (367) than with a marital discount (340). The average cost per day is similar, as claimants with no marital discount cost an average of $79, while claimants with a marital discount cost an average of $80.

FIGURE 47: Marital Discount for Home Health Care Claims



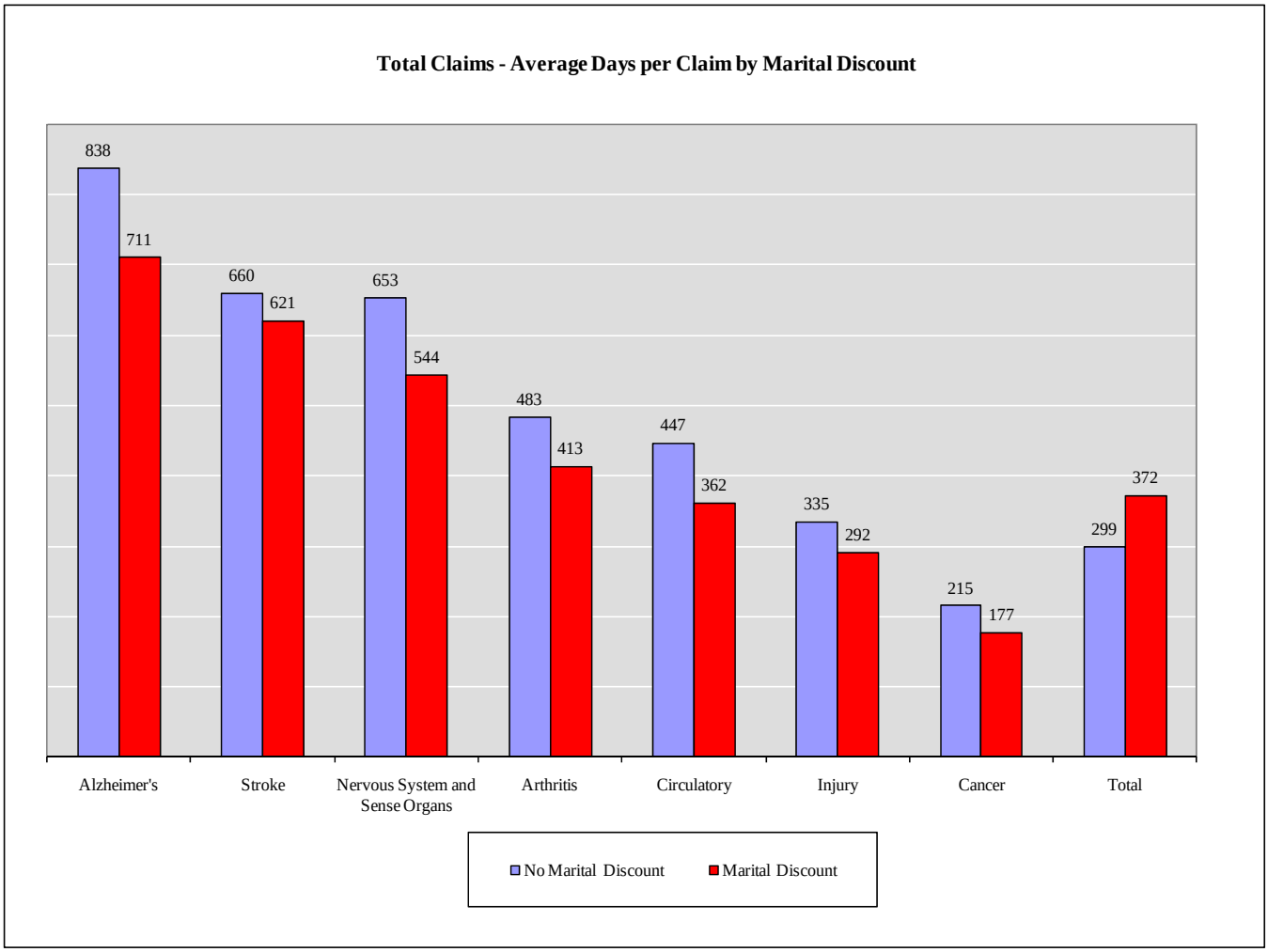
Assisted Living claims demonstrate a similar pattern to Nursing Home claims. For Assisted Living claims, the overall average number of days on claim is 18% higher for claimants without a marital discount (568) than with a marital discount (482). The average cost per day is similar, as claimants with no marital discount cost an average of $106, while claimants with a marital discount cost an average of $104.

FIGURE 48: Marital Discount for Assisted Living Claims



For Total claims, the overall average number of days on claim is 17% higher for claimants without a marital discount (507) than with a marital discount (435). The average cost per day is similar, as claimants with no marital discount cost an average of $100, while claimants with a marital discount cost an average of $94.

FIGURE 49: Marital Discount for Total Claims



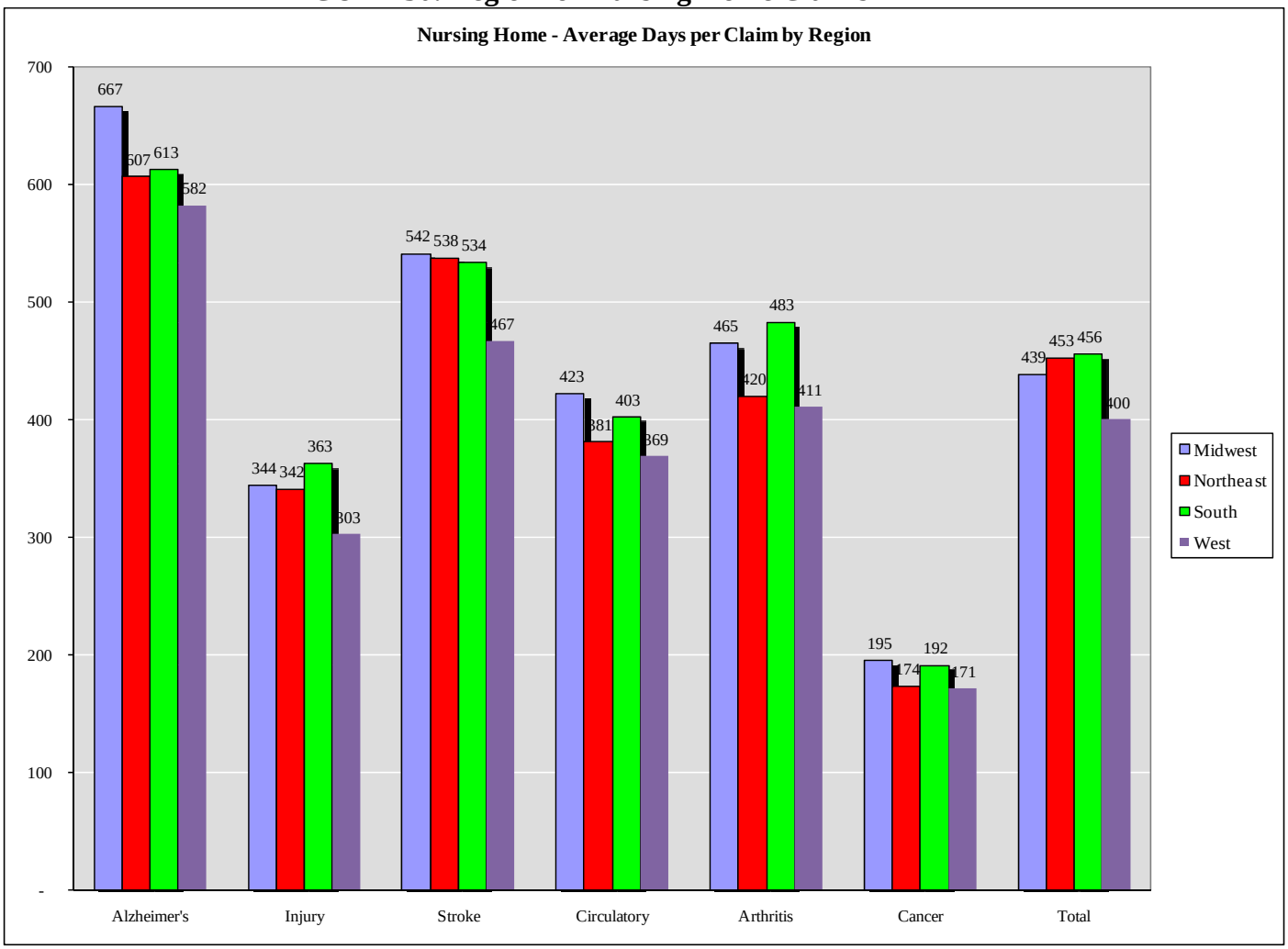
Regional Summary (Appendix G-15)

Appendix G-15 compares claims data based upon geographical region of the United States.

Average costs per day across all care settings were much higher in the Northeast than the other geographic regions and the Midwest had the lowest cost per day. Drivers may include actual cost and policy size by region.

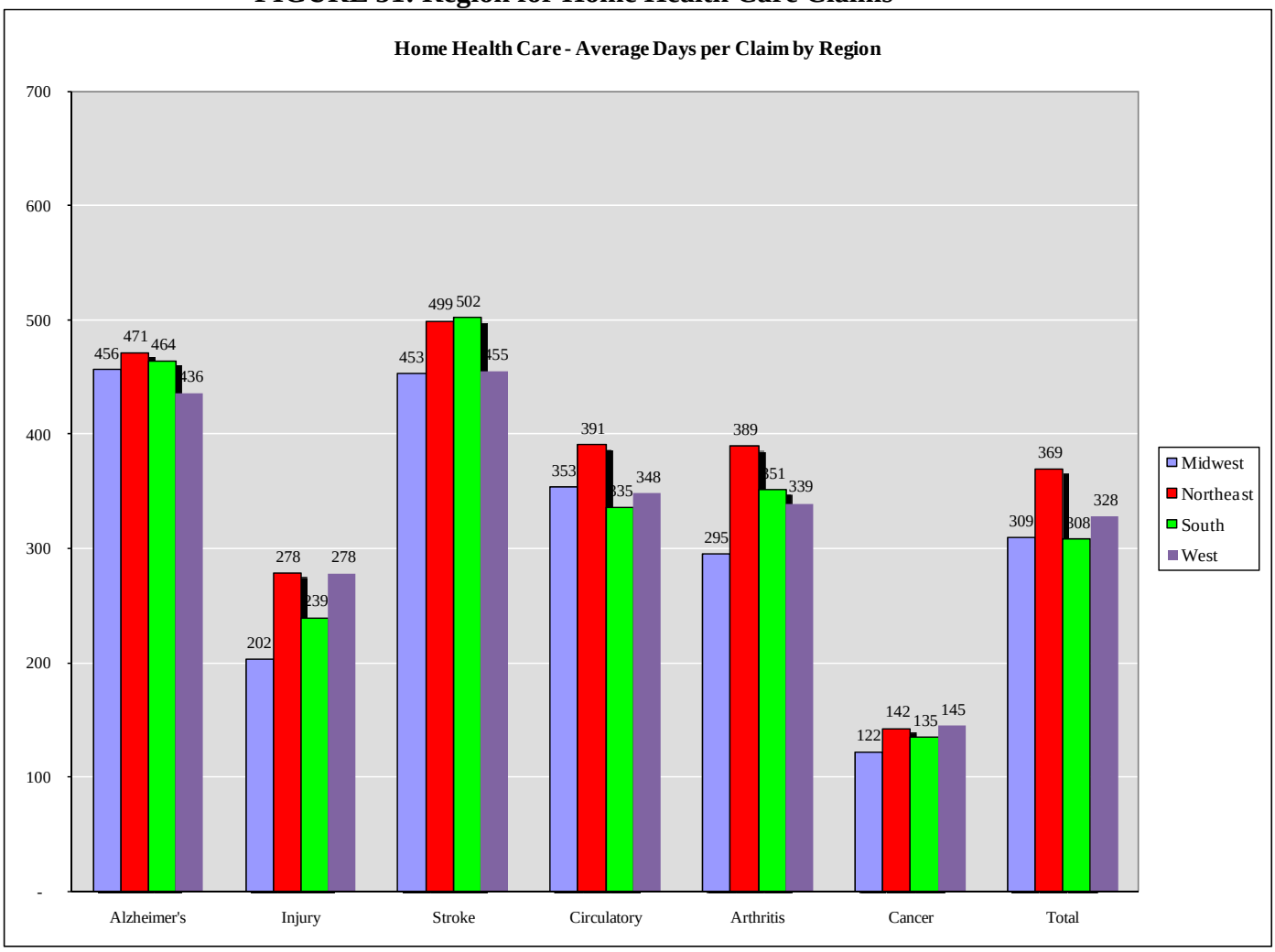
Overall, the Nursing Home average days on claim are reasonably close, except the West which is lower at 400 days. The South region had the highest at 456 days. The Midwest had the highest Alzheimer's days on claim at 667, almost 9% higher than the next highest region, the South.

FIGURE 50: Region for Nursing Home Claims



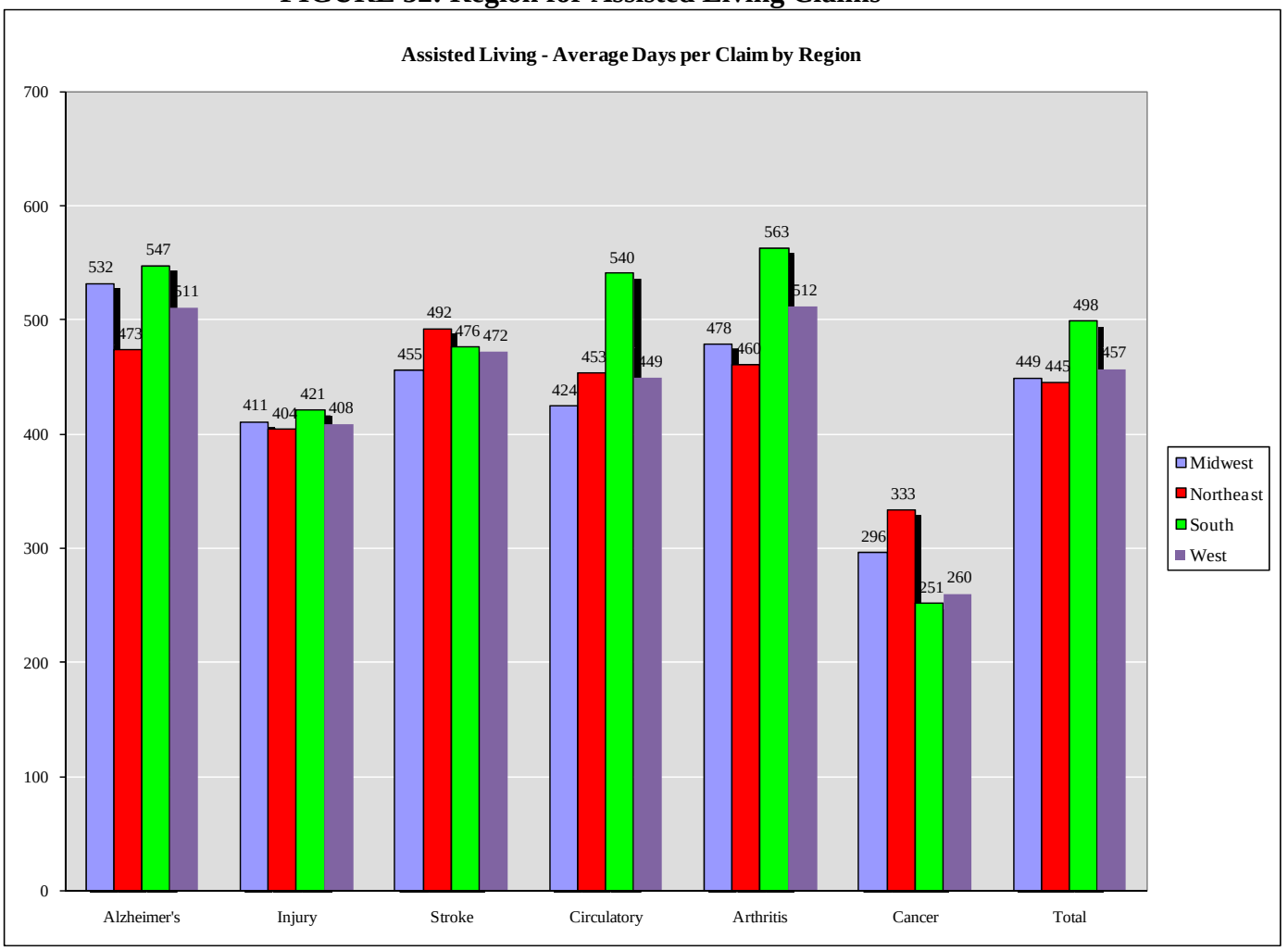
Overall, the Northeast has the highest Home Health Care average days on claim at 369 and the South had the lowest at 308, but was nearly the same as the Midwest. The higher Northeast total average is driven by higher Arthritis and Circulatory average days on claim.

FIGURE 51: Region for Home Health Care Claims



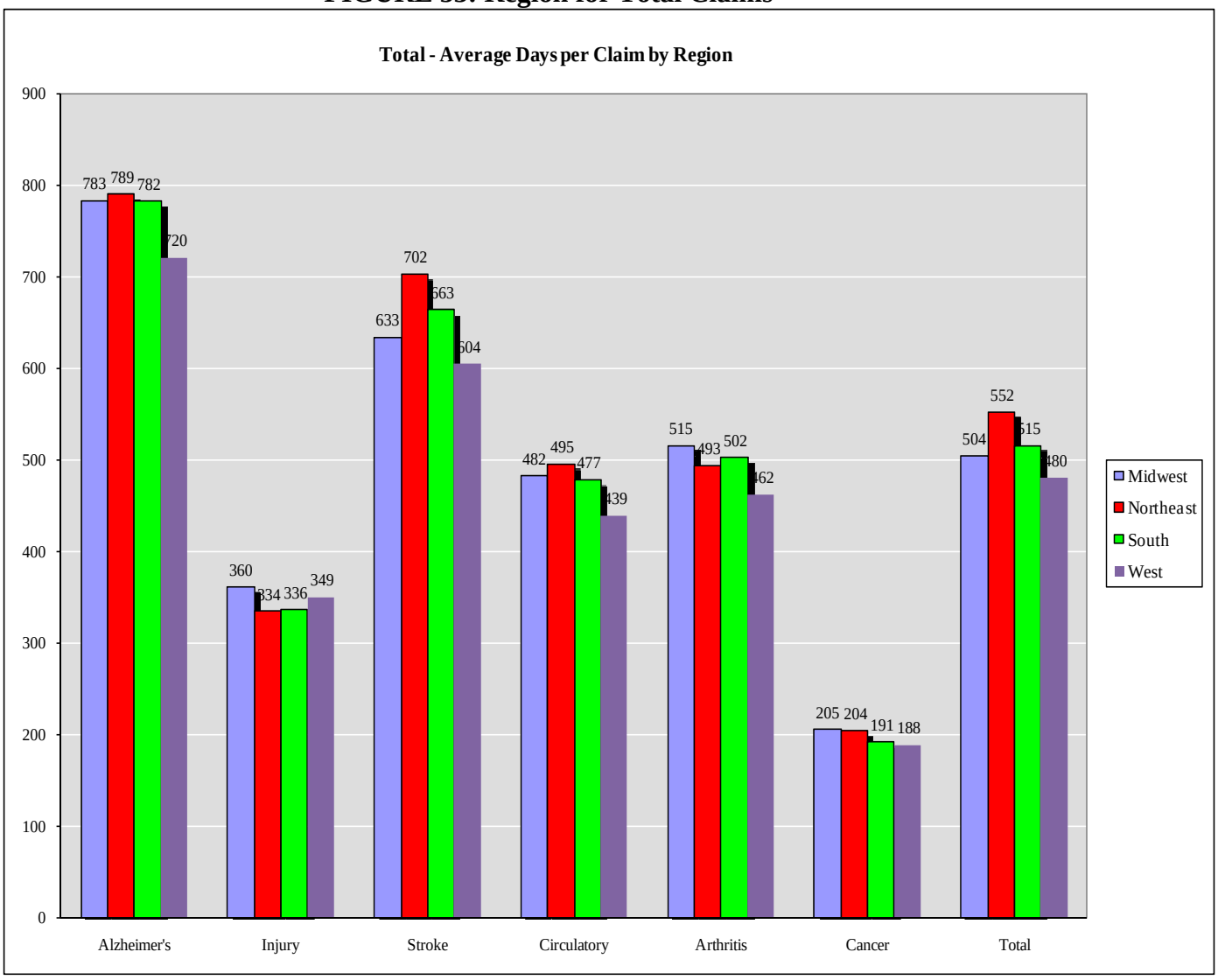
Overall, the South has the highest Assisted Living average days on claim at 499 and the other regions are fairly close, ranging from 445 to 457 days on claim. The higher South total average is driven by higher Alzheimer's, Arthritis and Circulatory average days on claim.

FIGURE 52: Region for Assisted Living Claims



Overall, the Northeast had the highest Total average days on claim at 552, and the West had the lowest average days on claim of 478. The higher Northeast total average is driven by higher Nervous System and Stroke average days on claim.

FIGURE 53: Region for Total Claims



I8. Section V – Total Terminations

This section presents experience on total termination rates, which includes both lapses and deaths. Insurance issued in years 1984-2006 is included in this report. Data from all contributing companies, including those who did not distinguish between deaths and lapses, are included in these tables.

The total termination data used for this report includes almost twice as much exposure as was available for the 2004 Report. The data extends to the first 22 durations and is summarized in the table below.

The overall average total termination rate is 6.2%, down from 6.8% in the previous report, as shown in Figure 1. Total termination rates have continued to drop over time, lower at every duration, compared to the previous report and more substantial after duration 15. This is mostly driven by voluntary lapses rather than mortality. In reviewing these results, it is important to keep in mind that the current report includes two additional years of data, as well as several new data contributors to both prior and more recent exposure periods. These new contributors and the larger amount of data available explain a significant portion of the decline in both voluntary lapses and total terminations.

Figure 1: Trends in Total Termination Rate and Exposure

	Exposure			Total Termination Rate		
Duration	2001 Report	2004 Report	2007 Report	2001 Report	2004 Report	2007 Report
1	3,384,376	5,843,101	8,623,370	12.9%	10.2%	9.7%
2	2,426,151	4,488,025	6,980,089	9.5%	7.4%	6.9%
3	1,783,849	3,474,707	5,780,767	7.9%	6.2%	5.8%
4	1,364,869	2,698,518	4,776,148	6.9%	5.3%	5.0%
5	1,046,272	2,088,578	3,853,467	6.3%	4.9%	4.5%
6	794,643	1,596,968	3,059,239	5.9%	4.7%	4.5%
7	608,133	1,294,290	2,452,164	5.8%	4.9%	4.6%
8	462,617	1,068,484	1,944,493	6.0%	5.2%	5.1%
9	335,495	844,700	1,487,227	6.1%	4.4%	4.3%
10	252,900	680,344	1,186,797	6.5%	4.6%	4.5%
11	166,736	538,121	961,153	7.6%	4.7%	4.6%
12	105,774	380,516	746,054	8.5%	5.0%	4.9%
13	51,283	271,858	571,469	9.3%	5.3%	4.6%
14	24,114	190,084	441,547	10.9%	6.1%	5.0%
15	9,674	110,303	306,866	12.4%	7.6%	6.0%
16	2,712	63,515	212,231	13.6%	8.5%	6.1%
17	734	27,846	139,151	17.2%	9.8%	6.1%
18		6,671	69,182		13.1%	7.8%
19		1,681	38,051		15.8%	9.3%
20		444	16,835			10.7%
21			3,260			15.2%
22			657			20.2%
Total	**12,820,332**	**25,668,754**	**43,650,217**	**8.9%**	**6.8%**	**6.2%**

As with prior studies, it is likely that unrecorded deaths have been counted as lapses in the submitted data. By looking at total termination rates, this section provides an upper bound on how many insureds have terminated their coverage, regardless of the reason. This section includes data from nine additional contributing companies who did not identify the cause of termination. Data from these companies was excluded from the Mortality and Voluntary Lapse Sections.

Formulating total termination rates based on voluntary lapse rates developed from this data and combined with an industry mortality table are likely to be overstated as unreported deaths are likely to slip through as voluntary lapse. Care should be given when using the voluntary lapse data with a separate mortality table. It is hoped that the data on total termination rates presented in this report will allow the actuary to judge whether the combined lapse and mortality assumptions being considered are reasonable.

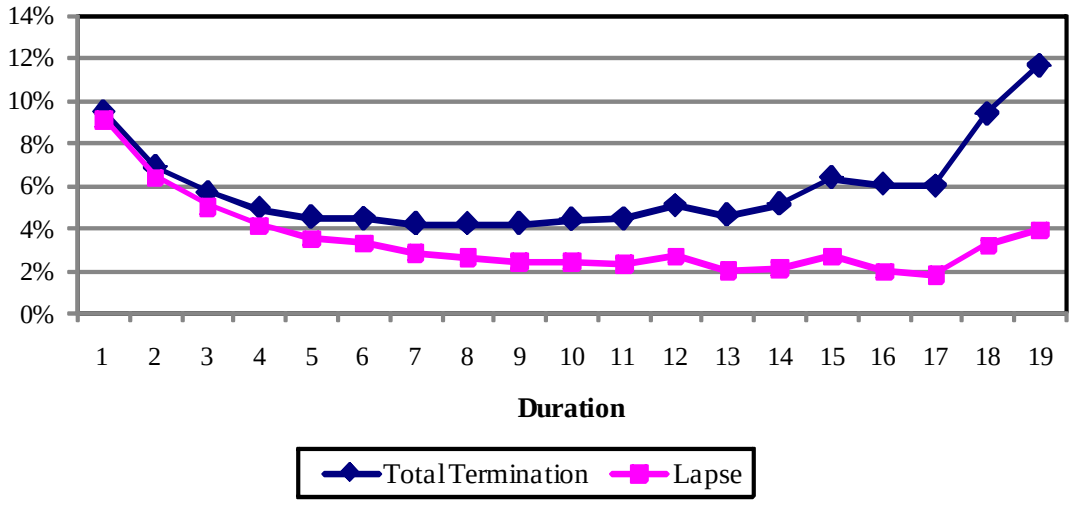
Discussion

Appendices I-1 through I-7 contain detailed data on total terminations and total exposures for each of the breakdowns discussed below. These discussions contain graphs and tables developed using the data in the appendices that attempt to highlight observed patterns and trends. Judgment was used when deciding what data to include when producing these graphs and tables. As a result, some cells that contain only a small amount of exposure are not shown here though they are included in the Appendices.

Total Termination Rates by Issue Age Cohort and Issue Year Cohort (Appendix I-1 & I-2)

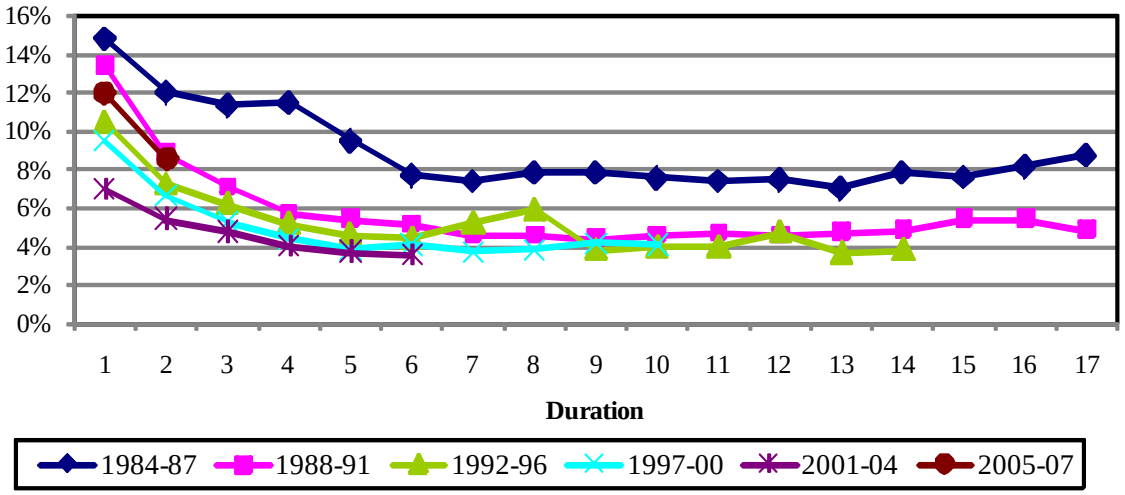
Figure 2 shows both voluntary lapse rates and total termination rates for only those contributors that provided voluntary lapse data. Both follow a similar pattern, but the difference between the total termination rate and the lapse rate widens as the duration increases. This is consistent with mortality rates becoming a more significant contributor to the total termination rate at the older ages. Voluntary lapses exhibit a more level pattern by policy duration with a slight increase after duration 17, likely due to unreported deaths.

Figure 2
Lapse and Total Termination Rates by Duration



Total termination rates by issue year cohort are shown in Figure 3. Again, termination rates are greatest for the oldest issue-year cohort. While the trend has shown a pattern of declining termination rates with more recent experience, rates for the 2007 Report have increased due to the greater presence of younger issue ages in the form of Group insurance.

Figure 3
Total Termination Rates by Issue Year Cohort - All Issue Ages



When broken down by issue-age cohort, the impact from higher Group insurance lapse rates is most noticeable for issue ages under 50, as shown in Figure 3A. However, the trend of declining termination rates with more recent experience presents itself for issue age 70 and above, as shown in Figures 3D and 3E, as the presence of Group insurance lessens at the higher issue ages. Also, Figures 3B and 3C (issue ages 50 to 69) show that, in some cases, total termination rates for the most recent issue years (2005-2007) are slightly higher than those for prior issue-year cohorts.

Figure 3A
Total Termination Rates by Issue Year Cohort - Issue Ages Under 50

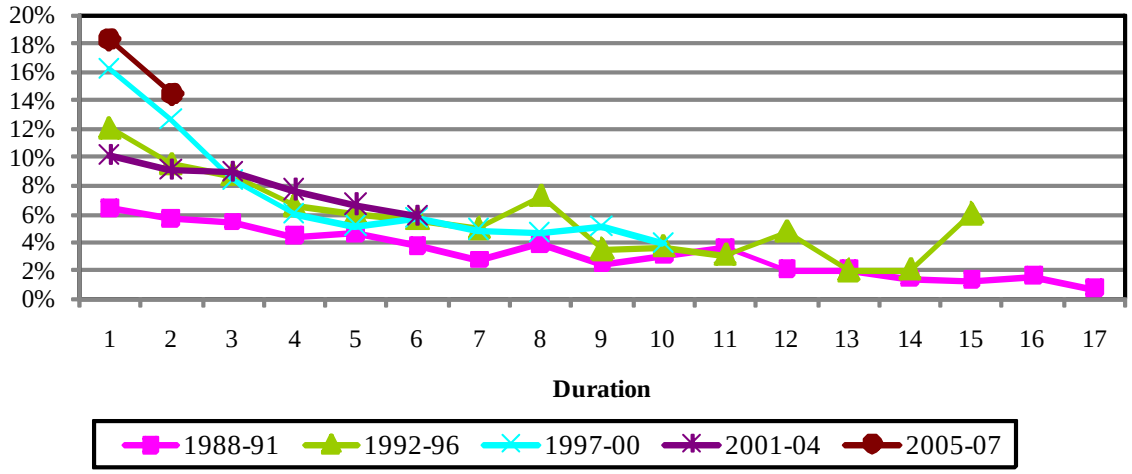


Figure 3B
Total Termination Rates by Issue Year Cohort - Issue Ages 50-59

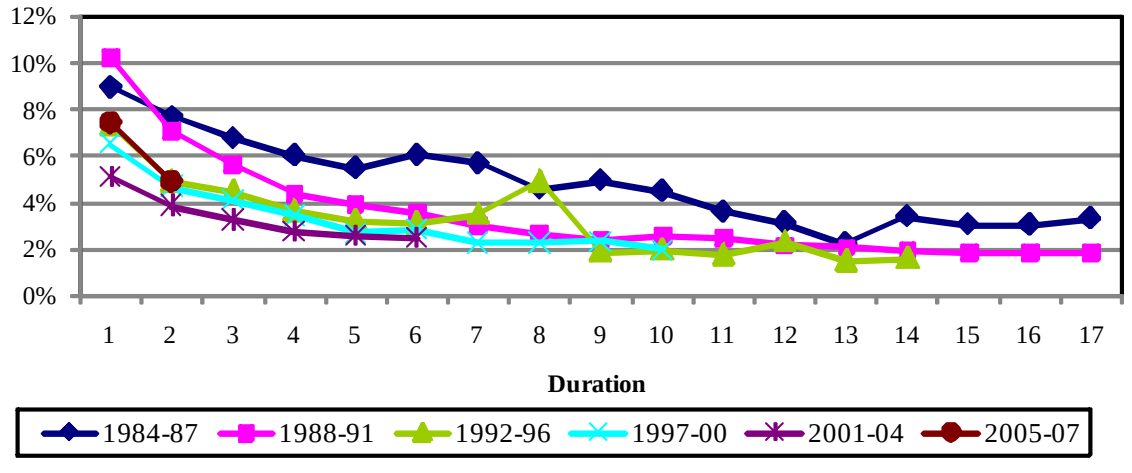


Figure 3C
Total Termination Rates by Issue Year Cohort - Issue Ages 60-69

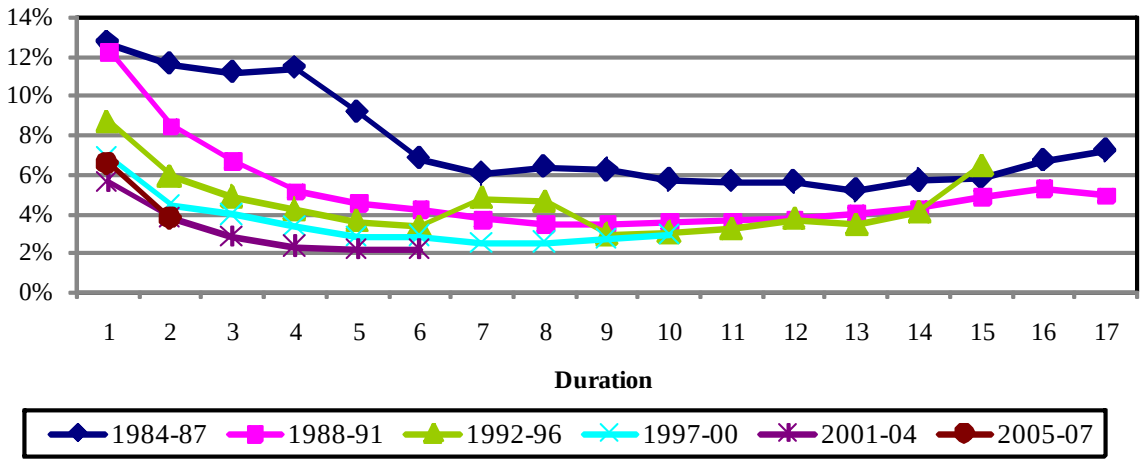
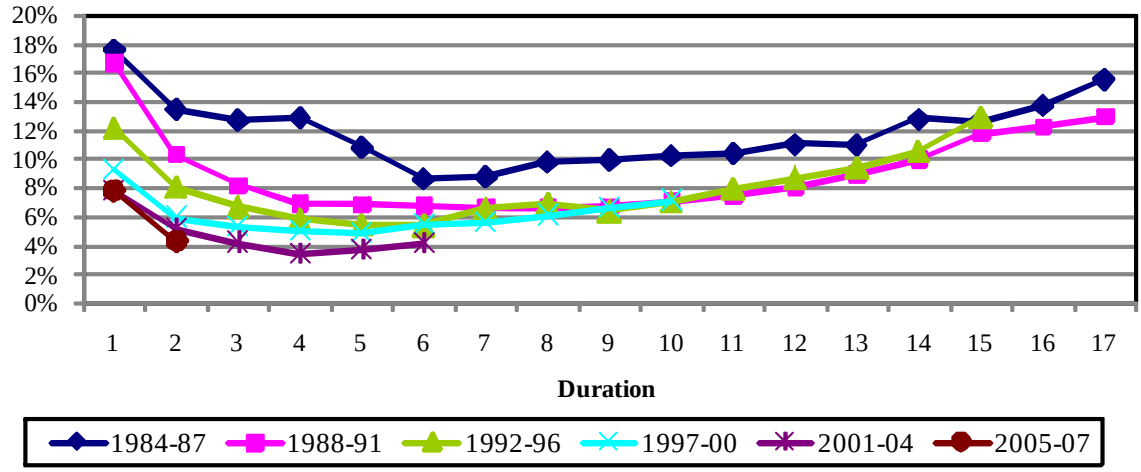


Figure 3D
Total Termination Rates by Issue Year Cohort - Issue Ages 70-79



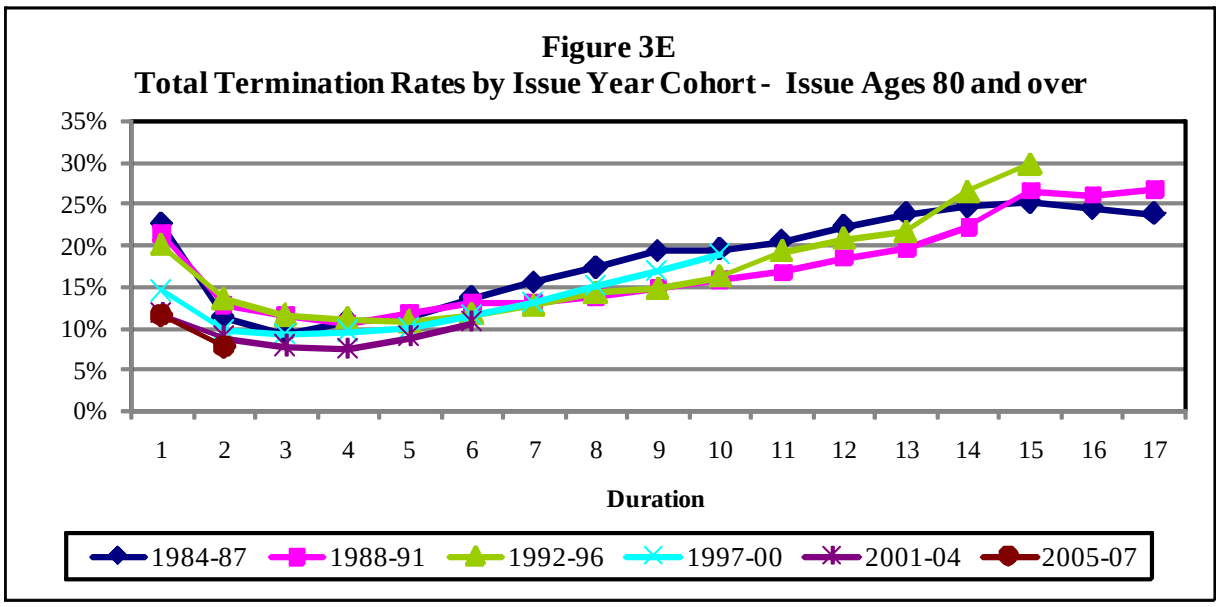
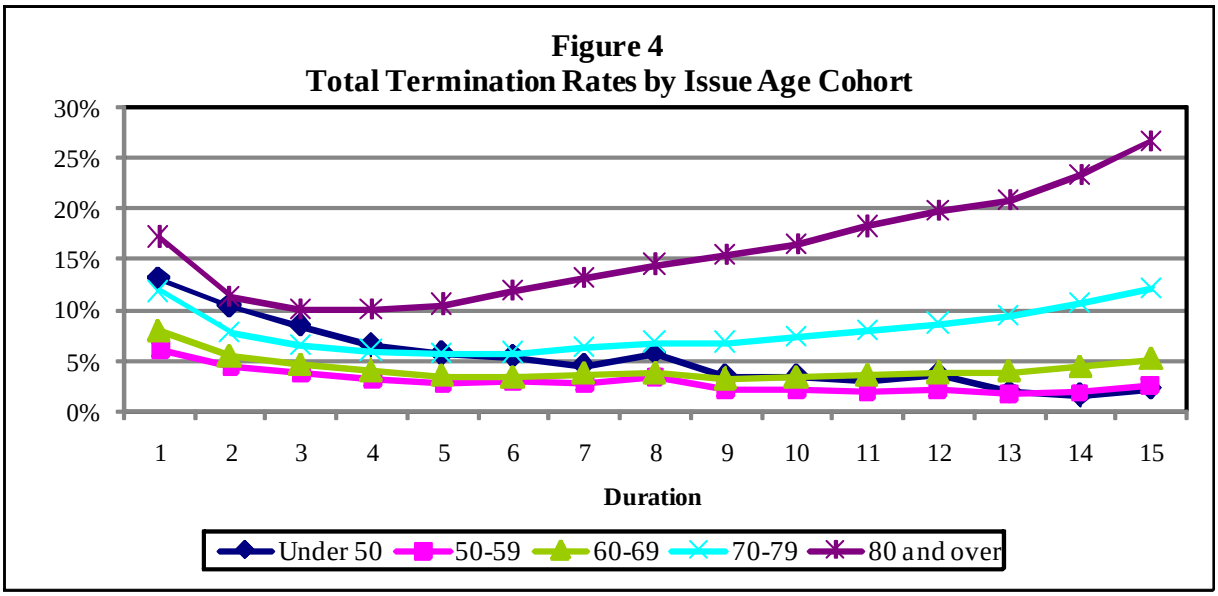


Figure 4 shows total termination rates by issue-age cohorts for all issue years combined. The pattern for issue ages "under 50" mirrors the pattern of the Group insurance experience shown in Figure 3 and 7 of the Voluntary Lapse Section. With the exception of the "under 50"data, total termination rates increase as the age of the cohort increases at most durations. For older issue ages, total termination rates at the later durations begin to increase significantly with the expected impact of mortality. This is most clearly found with issue ages 80 and over after the fourth duration.



Total Termination Rates by Issue Age Cohort and Type of Underwriting (Appendix I-3)

Figure 5 shows total termination rates by type of underwriting. The total termination rate for policies that were fully underwritten are consistently lower than policies with simplified underwriting, similar to the voluntary lapse data shown in Figure 12 of the Voluntary Lapse Section. Following the pattern of Group insurance, policies with guaranteed issue underwriting tend to have higher termination rates in early durations. Termination rates for both simplified and fully underwritten policies begin to exceed those of guaranteed issue policies after duration 6, as mortality rates become a more significant contributor to the total termination rate for the older aged Individual plans.

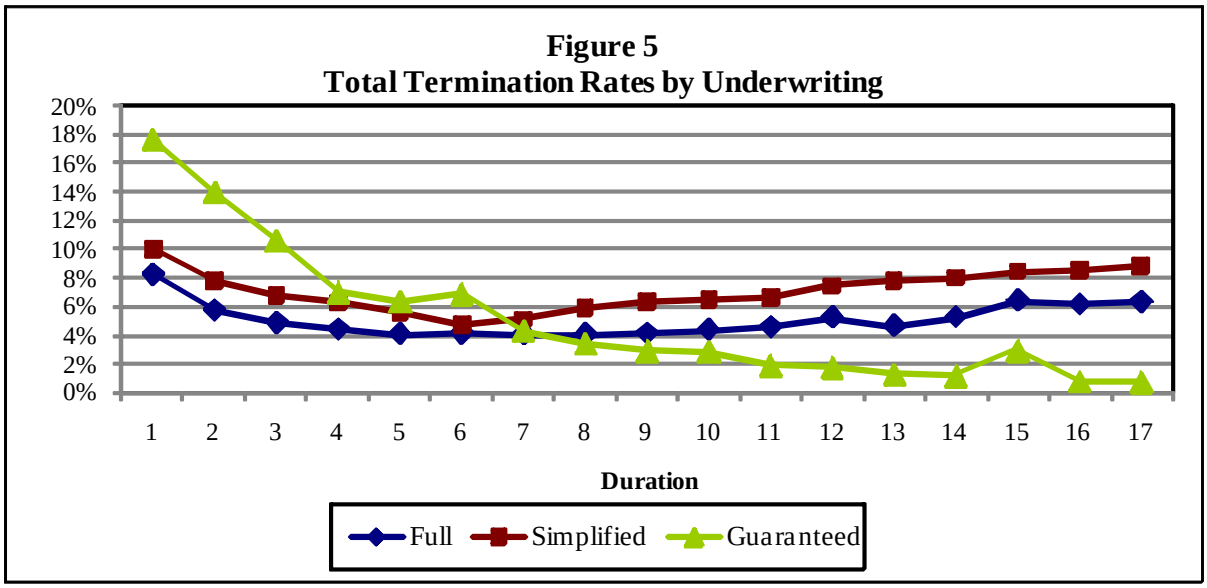
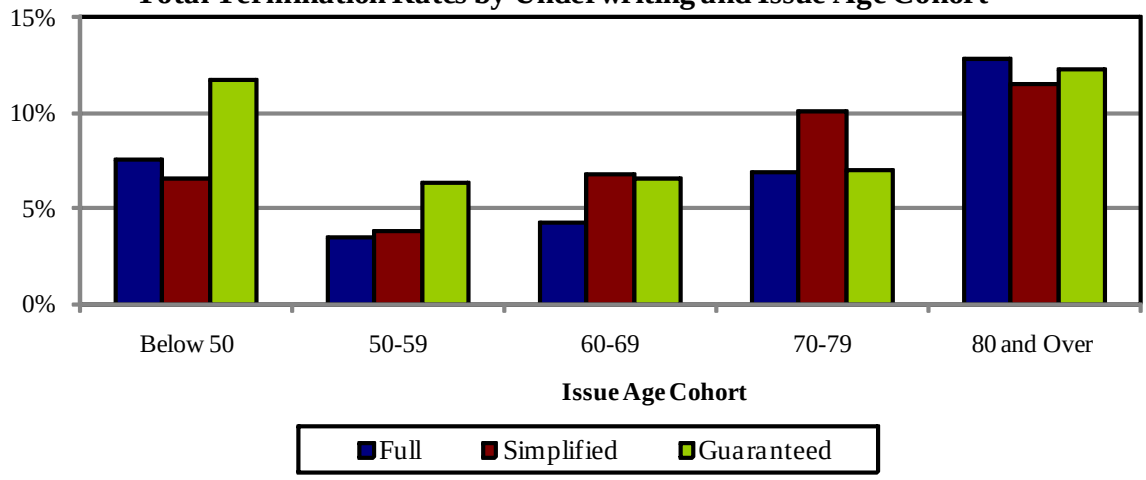


Figure 6 breaks out underwriting type by issue-age cohorts, combining all durations. For younger issue age cohorts with greater exposure of Group insurance, policies with guaranteed underwriting exhibit much higher total termination rates. In older issue-age cohorts, when mortality has a more significant impact on total termination rates, fully underwritten policies tend to have higher termination rates.

Note that similar patterns are present when focusing on the first five policy years or looking at Group and Individual insurance separately.

Figure 6
Total Termination Rates by Underwriting and Issue Age Cohort



Total Termination Rates by Gender (Appendix I-4)

Total termination rates by issue-age cohort and gender are shown in Appendix I-4. Figure 7 summarizes the difference between male and female total termination rates. Differences in the rate by gender are small for most of the durations shown. While higher voluntary lapse rates exhibited by females in the 2004 report might have overtaken the effects of higher male mortality in later durations, this is not the case for the 2007 Report. With the exception of the first duration and a few later durations, male termination rates were higher than female rates.

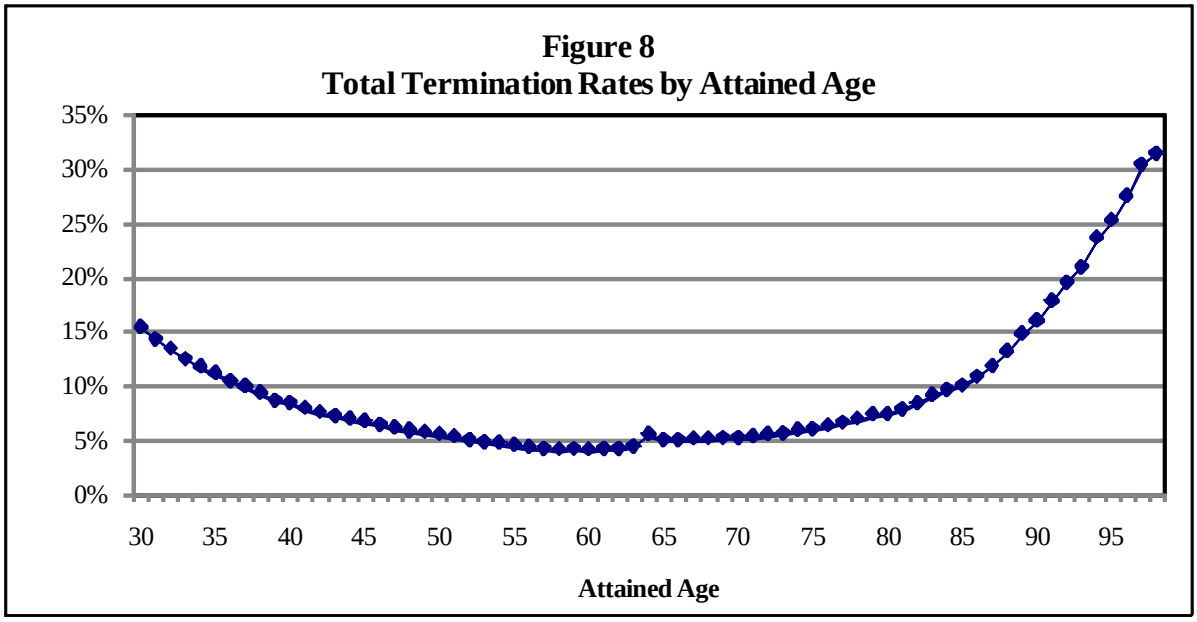
Figure 7: Total Termination Rates by Gender

Duration	Male	Female	Difference
1	9.6%	9.8%	-0.2%
2	6.9%	6.9%	0.0%
3	5.9%	5.8%	0.1%
4	5.1%	4.9%	0.3%
5	4.7%	4.4%	0.3%
6	4.7%	4.3%	0.4%
7	5.0%	4.4%	0.6%
8	5.5%	4.8%	0.6%
9	4.5%	4.1%	0.4%
10	4.7%	4.3%	0.3%
11	4.7%	4.4%	0.3%
12	5.1%	4.8%	0.3%
13	4.7%	4.6%	0.1%
14	5.0%	5.0%	0.0%
15	6.0%	6.0%	0.0%
16	6.1%	6.1%	0.0%
17	6.0%	6.1%	-0.1%
18	7.6%	7.9%	-0.3%
19	9.9%	8.9%	1.0%
Total	**6.3%**	**6.1%**	**0.2%**

Total Termination Rates by Attained Age (Appendix I-5)

Total termination rates by attained age are shown in Appendix I-5. Figure 8 summarizes the results. Like the results by issue-age cohort, total terminations tend to be higher at the youngest attained ages, from higher voluntary lapse rates, and oldest attained ages, with mortality having a greater impact after age 70.

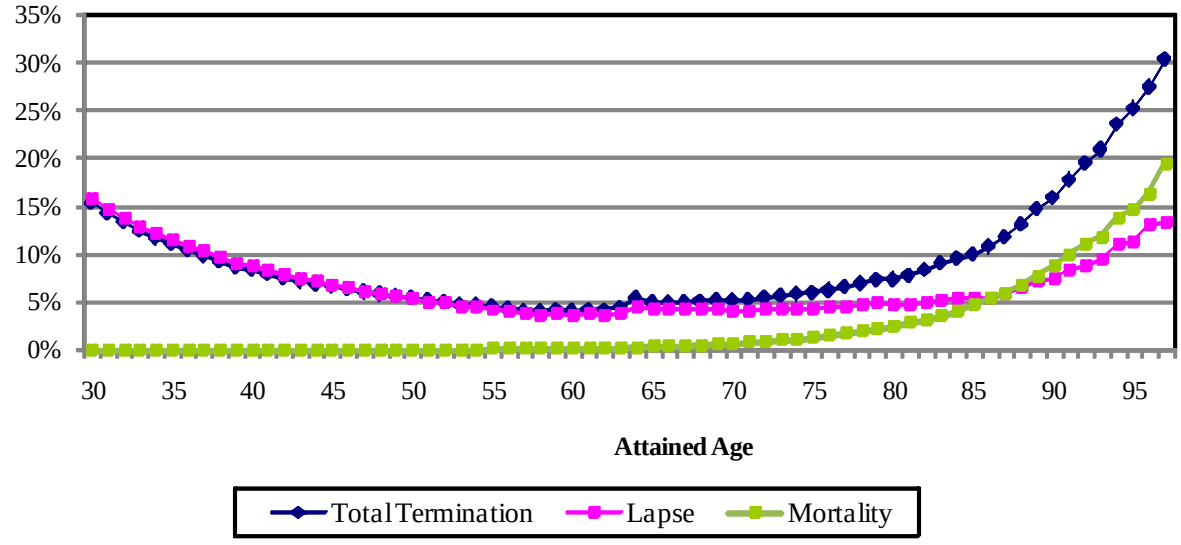
Figure 8
Total Termination Rates by Attained Age



Total Termination Rates, Voluntary Lapse Rates and Mortality Rates by Attained Age (Appendix I-6)

Total termination rates, voluntary lapse rates and mortality rates by attained age are shown in Appendix I-6 for those companies that were able to split their terminations by cause. Figure 9 summarizes this data. As expected, just about all of the termination activity is explained by voluntary lapses up to age 70. Thereafter, mortality becomes a greater factor. After age 85, mortality is even greater than lapse. Also as expected, this data indicates that voluntary lapses begin to increase after age 90 rather than level off. This is more likely an indication that unreported deaths are included in the reported voluntary lapses rather than an increase in voluntary lapses at the ages where insureds are more at risk of requiring coverage.

Figure 9
Total Termination, Voluntary Lapse and Mortality Rates by Attained Age



Total Termination Rates by Region (Appendix I-7)

Much like the regional analysis in the Voluntary Lapse Section, policies issued in the West have higher total termination rates than other regions. This is more so for Group insurance, as shown in Figure 10A. However, after duration 6, there is little difference between the four regions.

In Figure 10B, for Individual insurance, total termination rates for policies issued in the Midwest and West are very similar while the Northeast and South follow similar patterns.

Figure 10A
Group Total Termination Rates by Region

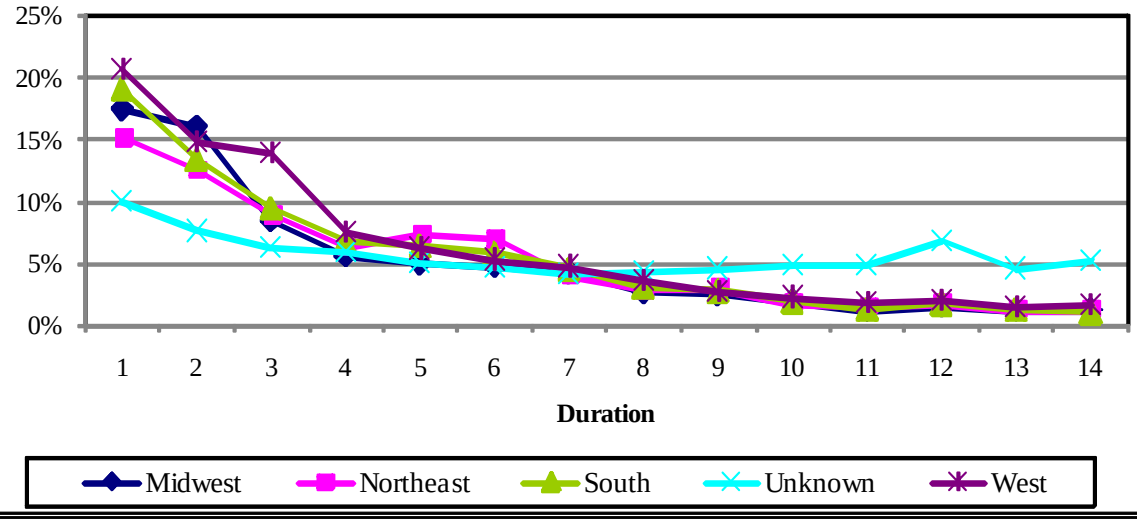
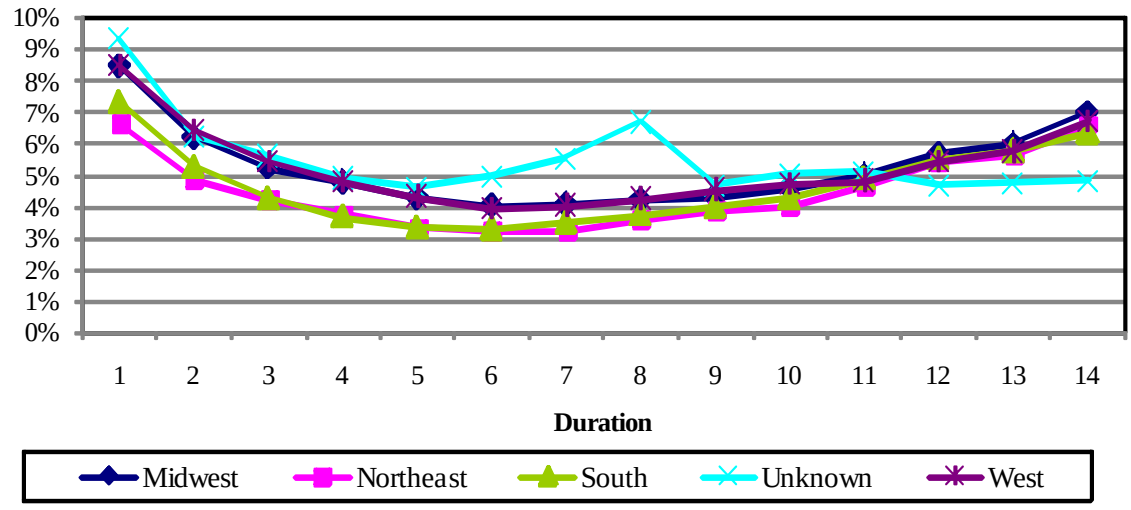


Figure 10B
Individual Total Termination Rates by Region



I9. Section VI – Voluntary Lapse

This section presents the voluntary lapse experience of LTC insurance in the United States for issue years 1984-2006. The results presented in this section include terminations for all reasons except death.

The data from nine contributing companies who did not distinguish between deaths and lapses has been excluded from this section and from the mortality section. In the section showing total termination rates, which includes both lapses and deaths, the data from all contributing companies is included.

Figure 1 below summarizes the overall lapse rates from this Report and the two prior reports, along with the accompanying exposures. There has been a significant increase in the amount of exposure available for each successive iteration, with the exposure for this Report significantly increasing from the 2004 level to more than 34 million policy years. The data now extends to the first 23 years. Lapse rates continue to drop with the overall lapse rate dropping slightly from the 2004 Report level of 5.5% to 5.2%. The most significant differences are seen in durations 15 and later.

Figure 1

	Exposure			Lapse Rate		
Duration	**2001 Report**	**2004 Report**	**2007 Report**	**2001 Report**	**2004 Report**	**2007 Report**
1	3,226,158	4,882,198	6,880,018	11.4%	9.2%	9.2%
2	2,337,392	3,756,285	5,557,192	8.3%	6.7%	6.4%
3	1,732,848	2,923,066	4,570,889	6.6%	5.2%	5.1%
4	1,337,757	2,283,573	3,756,837	5.6%	4.2%	4.2%
5	1,033,030	1,786,252	3,010,183	4.9%	3.6%	3.6%
6	785,779	1,362,587	2,385,819	4.3%	3.2%	3.3%
7	599,946	1,093,387	1,911,433	3.9%	2.9%	2.9%
8	455,764	892,586	1,520,991	3.8%	2.6%	2.7%
9	330,422	700,917	1,158,684	3.5%	2.4%	2.5%
10	249,703	554,514	903,932	3.8%	2.5%	2.5%
11	165,322	427,552	710,883	4.4%	2.3%	2.4%
12	106,367	298,328	531,704	4.7%	2.3%	2.7%
13	52,175	202,792	397,604	5.5%	2.2%	2.1%
14	24,494	140,862	289,668	7.6%	2.5%	2.1%
15	9,853	72,280	196,874	8.5%	2.8%	2.7%
16	2,765	31,328	124,047	9.6%	3.2%	2.0%
17	773	11,336	73,936		3.5%	1.8%
18	1	4,182	26,951		4.4%	3.2%
19		1,385	11,256			4.0%
20		468	3,706			
21			1,270			
22			400			
23			147			
Total	**12,450,549**	**21,425,878**	**34,024,424**	**7.4%**	**5.5%**	**5.2%**

Summary of Findings

This section summarizes the major findings of this Voluntary Lapse section. Note that these are only summaries; exceptions to these general trends, and additional discussion of the results observed, can be found in the sections that follow.

Lapse Rates by Duration

The downward trend in lapses by duration continues with voluntary lapse rates dropping quickly from an initial level of just over 9% through duration 17 and then beginning to rise again, possibly due to the impact of unreported deaths included in some companies' voluntary lapse data.

Lapse Rates by Policy Type (Individual vs. Group)

Individual lapse rates drop from an initial level of 7.6% to 2.4% at duration 9, and then begin to slowly rise. Group lapse rates start out at just over 13% in duration 1, but then drop below 1% at duration 14. The lower ultimate lapse results for Group may be due to the fact that Group products are generally issued at younger ages and, therefore, there will be fewer unreported deaths to cause distortion in voluntary lapse results at the later durations.

Lapse Rates by Issue Year Cohort

Lapse rates for Individual policies continue to show a decreasing pattern with more recent issue years. Group insurance lapse rates show no clear pattern by issue-year cohort.

Lapse Rates by Issue Age and Attained Age Cohorts

Issue-age cohorts show a consistent pattern of higher lapse rates as the issue age gets older, even in early policy durations when mortality effects should be minimal. Total lapse rates are higher at attained ages below 40.

Lapse Rates by Type of Underwriting

The latest study data indicates that for Individual insurance, there continues to be a pattern of higher lapse rates for the less stringent forms of underwriting. However, for Group, simplified issue business now shows the lowest levels of lapse, followed by fully underwritten business and then guaranteed issue.

Lapse Rates by Gender

Lapse rates do not differ greatly by gender either in total or by duration.

Lapse Rates by Elimination Period

With the exception of elimination periods of greater than 100 days, Individual insurance clearly shows a trend towards lower lapse rates as the elimination period becomes longer. For Group insurance, the trends are much less clear.

Lapse Rates by Benefit Period

In contrast to the 2004 study results, the current study data indicates that for Individual insurance, lapse rates for coverage with an unlimited benefit period are slightly lower than lapse

rates for limited coverage at almost all durations. For Group business, policies with unlimited benefit periods again exhibited slightly higher rates of lapse than policies with limited coverage.

Lapse Rates by Benefit Escalator Clause
Lapse rates for policies with no benefit escalator clause are higher than for policies with such a clause, though the difference becomes small at the later durations.

Lapse Rates by Premium Payment Mode
Policies with monthly or quarterly payment frequencies have slightly higher rates of lapse in the early durations than policies with semi-annual or annual payment frequencies. Those who pay monthly by electronic funds transfer generally have lower lapse rates than those who pay monthly by other methods.

Lapse Rates by Policy Quarter
Lapse rates are highest in the quarter containing the coverage anniversary. The pattern of lapse rates in each quarter varies significantly with the frequency of premium payment, indicating that the premium-paying decision is a major driver of lapse rates.

Lapse Rates by Distribution Type
Lapse rates for business sold by Enrollers or through Direct Response are significantly higher in the first few years than the rates for Company Agent sold business.

Individual Insurance Lapse Rates by Marital Premium Discount
The lapse rates for policies with a discount are lower than those for policies without one at the early durations. After five or six years, there is a slight divergence with a higher lapse rate for policies with a marital discount.

Lapse Rates by Geographic Region
The lapse rates for policies issued in the West are generally higher than for other regions for both individual and group business; however, levels tend to begin to converge quickly after policy year 8 for Group, while the West continues to show materially higher lapses through policy year 17 for Individual business.

Definition of Terms

Duration: Duration is calculated as the number of years between the termination date and issue date. The participating company provides both dates. In calculating the duration, a one-month grace period after the coverage anniversary is assumed. For example, if coverage terminates between 1 and 13 months after the issue date, the duration is 1. If coverage terminates between 14 and 25 months after the issue date, the duration is 2, and so forth.

In-Force: Coverage is considered in-force if the termination reason code is specified as in-force at the end of the observation period. In-force business includes coverage issued from 1984 to 2006. The observation periods are calendar years 1984 through 2007.

Lapse: An individual's coverage is considered lapsed if it was terminated by the individual's 2007 coverage anniversary with one of the following reason codes:

- Terminated for non-payment of premiums (and not in-force)
- Terminated for expiration of benefits
- Terminated as a result of termination of the group
- Terminated as a result of conversion
- Terminated for other reasons

Coverage is not considered lapsed if:

- Terminated as a result of death
- Terminated after the 2007 coverage anniversary

Lapse Rates: Lapse rates in this Report are calculated as the number of lapses divided by the total lives exposed (in-force). Each active life at the start of the experience period contributes a full year to the exposure. Lapses, therefore, contribute a full year to both the numerator and denominator of the lapse rate calculation.

Lapse rates are calculated by dividing the sum of all of the contributing companies' lapses by the sum of all of the contributing companies' exposure. The division to calculate a lapse rate is performed as a last step. Therefore, companies with larger exposure receive greater weight than companies with smaller exposure.

In this Report, lapse rates are broken out by the following categories:

- Policy Duration
- Policy Type (Individual versus Group)
- Issue-Year Cohort & Policy Type
- Issue-Age Cohort
- Attained Age
- Type of Underwriting & Policy Type
- Gender
- Elimination Period
- Benefit Period (limited versus unlimited)
- Benefit Escalator Clause
- Premium Payment Mode
- Policy Quarter
- Distribution Type
- Marital Premium Discount
- Region

Discussion

Appendices F-1 through F-12 contain detailed data on exposures and lapses for each of the breakdowns discussed in this Report. These discussions contain graphs and tables developed using the data in the appendices that highlight observed patterns and trends. Important note: Many cells contain only a small number of lapses, generating results that cannot be considered credible. In the following graphs and tables, data from any cell with fewer than 100 lapses has been omitted. Complete data may be found in the appendices accompanying this Report.

Lapse Rates by Issue Year Cohort, Policy Type and Duration (Appendix F-1)

Figure 2 shows lapse rates by duration for all issue years and policy types. The lapse rates drop quickly from an initial level of about 9% until duration 17, after which they begin to slowly rise.

For comparison purposes, the lapse rates reported in the prior two reports are also shown. Lapse rates in the current Report are lower than those in the prior reports, especially at the later durations.

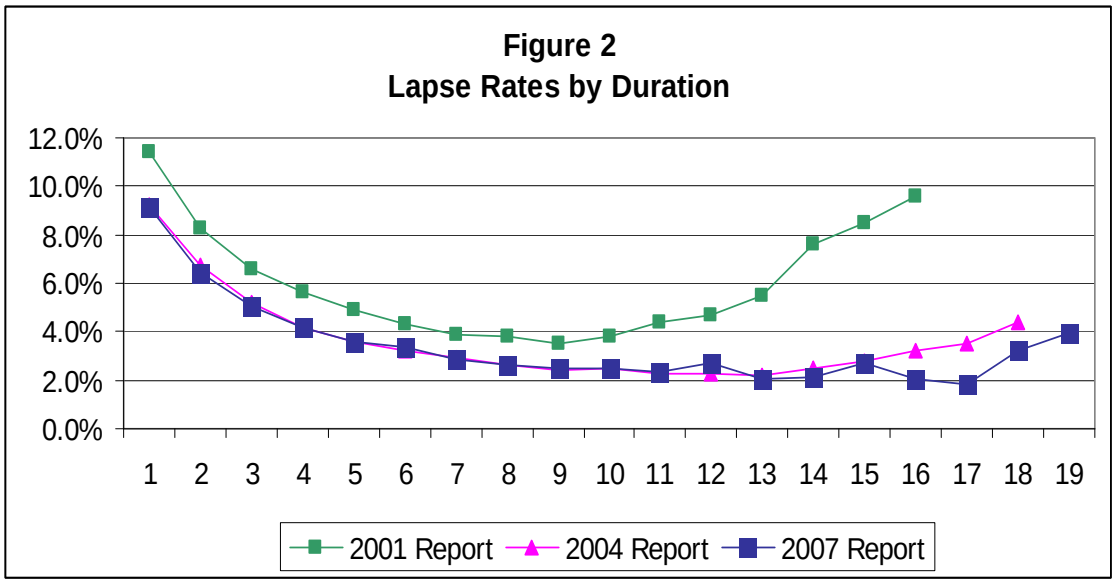
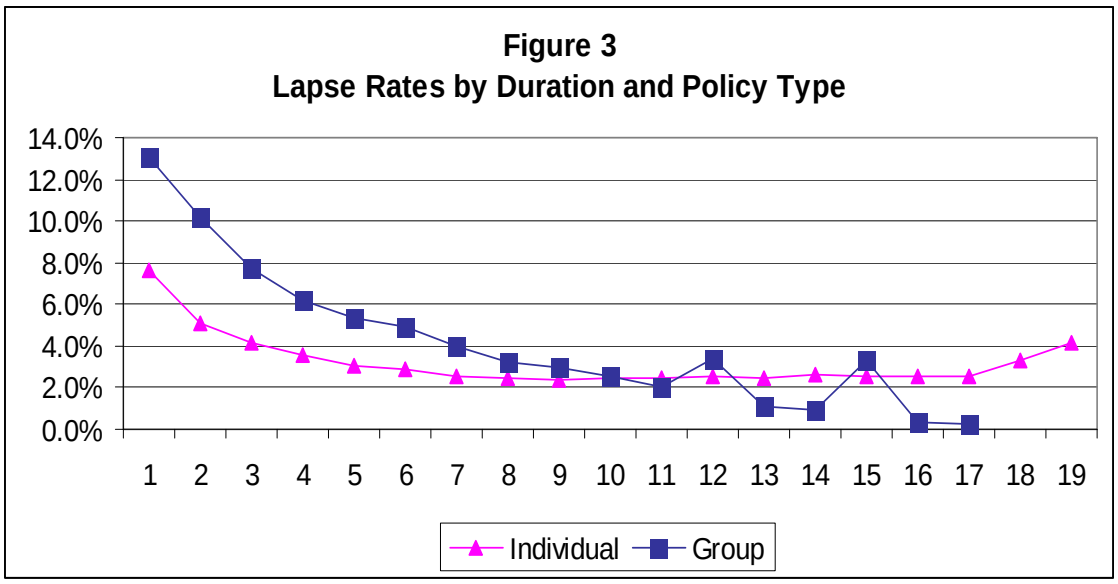


Figure 3 shows the pattern of lapse rates by duration for Individual policies and Group policies. The Group insurance lapse rates start at a higher level, but decrease more rapidly than Individual insurance lapse rates. With the exception of what appear to be data anomalies for a few durations, after the 10th duration, Group lapse rates become lower than those of Individual policies. Interestingly, the Individual lapse rates begin to slowly rise after duration 17, while the Group lapse rates continue to fall to a level below 1%.

In the prior Report, Individual lapse rates were also observed to increase at later durations. The Committee found evidence that this pattern was at least partly caused by unreported deaths being recorded as lapses. However, with this Report, there appears to be some improvement in this area.

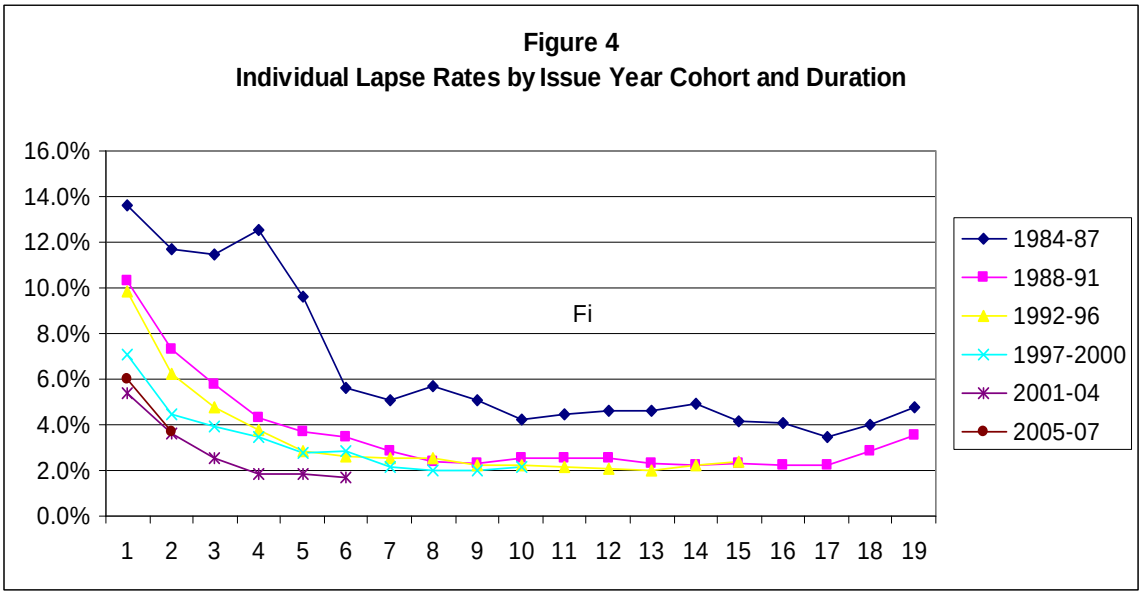


Figures 4 and 5 show lapse experience by issue year cohort for Individual and Group policies, respectively.

Lapse rates for Individual policies generally are lower as the issue year becomes more recent. It is possible the higher lapse rates on the older Individual issues could be a result of rate increases that have been made on these policies. There continues to be a peak in the reported lapse rate at duration 4 for issue years 1984–1987, which we attribute to an anomaly in the data.

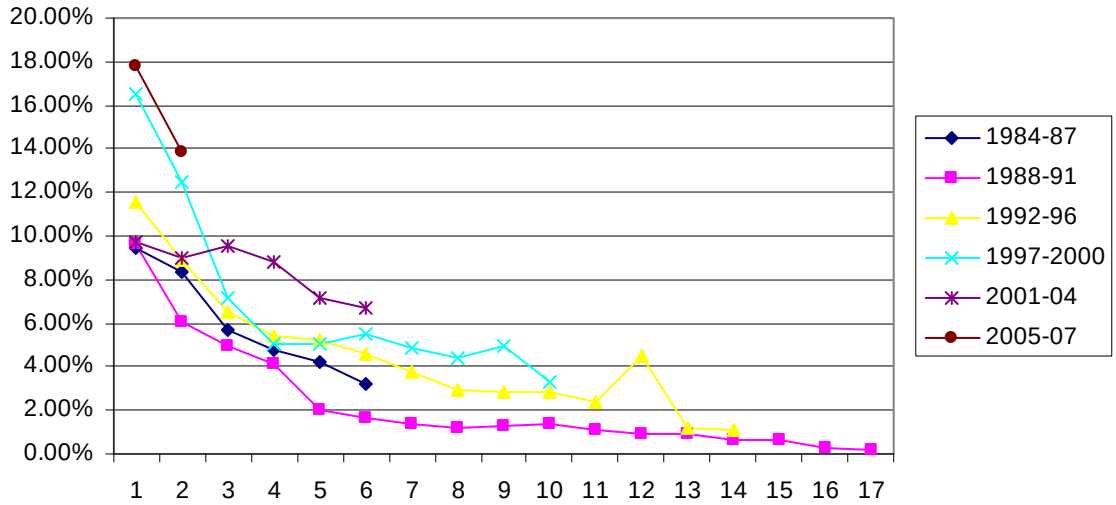
From Figure 3, the overall ultimate Individual lapse rate appears to be just above 2%. If one is pricing new business today, it is important to note that business issued in 2001 and later appears to be heading more quickly toward ultimate lapse rates of 1 to 2% or even lower.

Figure 4
Individual Lapse Rates by Issue Year Cohort and Duration



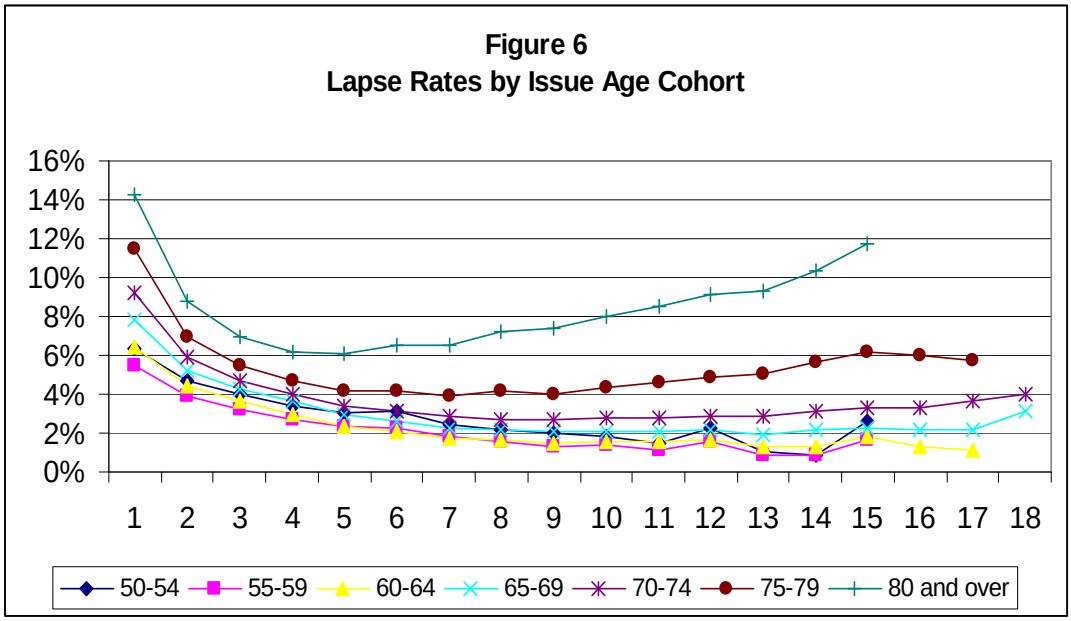
As shown in Figure 5, Group insurance lapse rates show no clear pattern by issue-year cohort, except that the lapse rates for the first two years of the 1997–2000 and 2005-2007 cohorts are higher than those of the other issue-year cohorts.

Figure 5
Group Lapse Rates by Issue Year Cohort and Duration



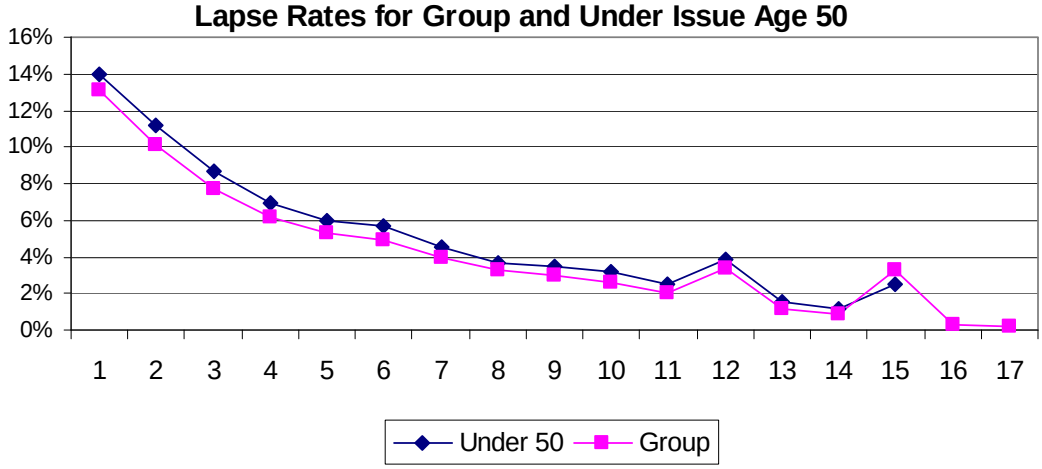
Lapse Rates by Issue Age Cohort, Attained Age and Duration (Appendix F-2)

Figure 6 shows the pattern by duration for various issue age cohorts. The issue-age cohorts show a consistent pattern of higher lapse rates as the issue age gets older. In addition, there is a distinct pattern of higher reported lapse rates at the later durations for the oldest issue ages. This pattern is likely at least partly attributable to unrecorded deaths being counted as lapses.



The pattern for the "Under 50" issue-age cohort is significantly different from that of all the older issue-age cohorts, and has been omitted from Figure 6, so the remaining patterns may be seen more clearly. The "Under 50" lapse rates closely track the pattern of Group insurance experience shown in Figure 3. This can be seen in Figure 7 below, which shows the "Under 50" lapse rates relative to the Group insurance lapse rates for all issue-age cohorts combined. This is consistent with the fact that Group insurance has the dominant share of the LTC market at issue ages below 50. In fact, Group insurance contributes 82% of the exposure in Appendix F-2A for the "Under 50" issue-age cohort versus less than 25% of the exposure overall.

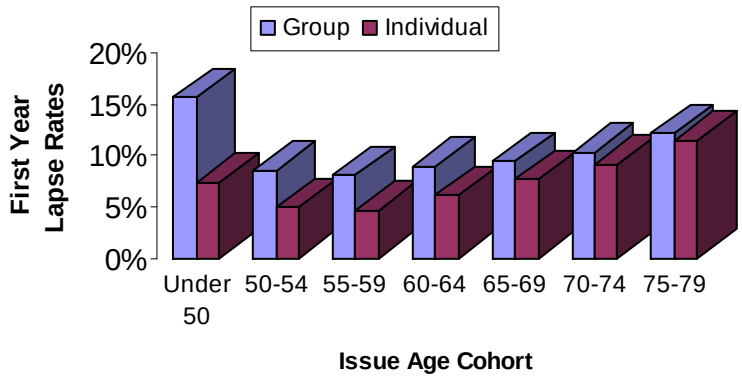
Figure 7
Lapse Rates for Group and Under Issue Age 50



The pattern shown in Figure 6 for issue ages 50 and above of higher initial lapse rates as the issue-age cohort gets older is generally consistent for both Individual and Group insurance. However, initial lapse rates for the youngest issue-age cohort, those below 50, are significantly higher than those for the age 50-54 cohort. Figure 8 shows these patterns for both Individual and Group insurance.

One possible explanation for the higher initial lapse rates under issue age 50 is that, at those ages, there is a higher portion of business sold on a guaranteed-issue basis. Another possible explanation is the youngest insureds are more likely to second-guess the need for coverage of a financial need that seems unlikely to happen until much later in their life.

Figure 8
First Year Lapse Rates by Issue Age Cohort and Policy Type



Appendix F-2B shows lapse rates split by attained age, rather than issue age, and by policy type.

Figure 9 shows overall lapse rates at each attained age between 30 and 96. With the exception of a small but distinct "bump" at age 66, the lapse rates are remarkably level for attained ages in the 50's, 60's, 70's and 80's. When the experience is split by policy type, the age 64 bump appears in both Individual and Group experience. This seems likely to be the result of the financial assessment and planning activities that often take place around this time in the insureds' lives. The additional lapses are hopefully not the result of a mistaken belief that enrolling in Medicare at age 65 will cover a person's LTC insurance needs.

Figure 9
Lapse Rates by Attained Age and Policy Type

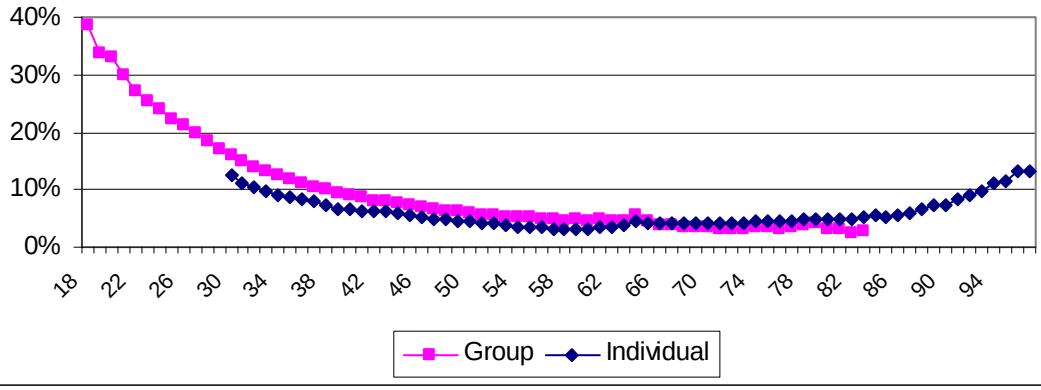
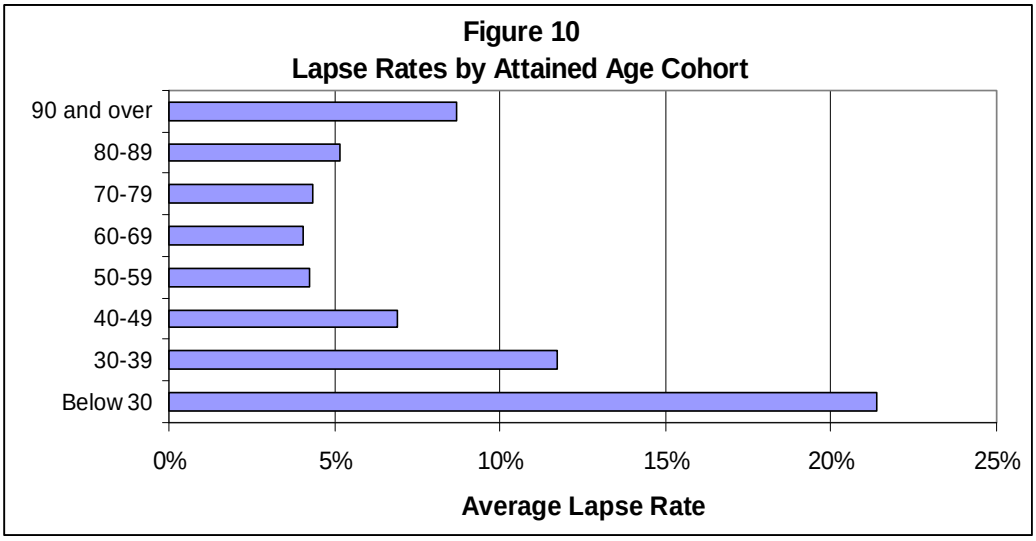


Figure 10 summarizes the results into decennial attained-age cohorts, highlighting the level nature of the overall lapse rate between ages 50 and 89. The higher reported lapse rates at ages 90 and above may be at least partly the result of unreported deaths.



Lapse Rates by Type of Underwriting, Policy Type and Duration (Appendix F-3)

Appendix F-3 shows lapse rates broken down by type of underwriting, policy type and duration, and further splits the Group Policy Type into Employee and Non-Employee portions.

Figures 11 and 12 show lapse rates by type of underwriting for Group and Individual policies, respectively. Figure 12 does not include any data on guaranteed-issue policies, since Appendix F-3 contains little data for guaranteed-issue experience of Individual policies. For Individual insurance, the data shows a consistent pattern of higher lapse rates for the less stringent form of underwriting, particularly in the earlier durations. Interestingly this Report indicates that for Group insurance, policies underwritten on a simplified issue basis have exhibited slightly lower rates of lapse in the first ten years than policies that were fully underwritten.

The greater persistency associated with stricter underwriting might be explained by the fact that those who endured a more rigorous underwriting process presumably did so because they felt the value of the insurance was worth it. Those receiving guaranteed issue (Group) or simplified issue (Individual) have a simpler enrollment process and may be more inclined to reconsider their decision to purchase the coverage. Also, people who buy Group plans or apply under simplified issue (which may lack preferred risk discounts) may re-write to more attractive Individual plans containing marital, preferred health or other discounts.

Figure 11
Group Lapse Rates by Underwriting Type

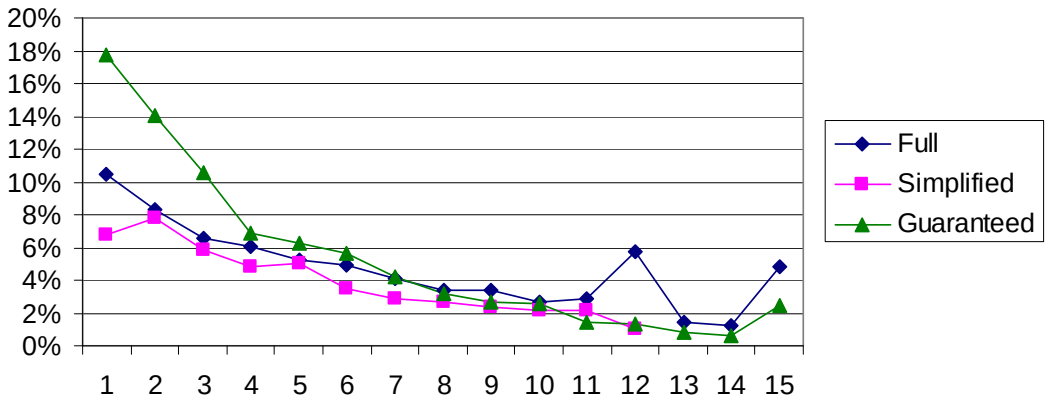


Figure 12
Individual Lapse Rates by Underwriting Type

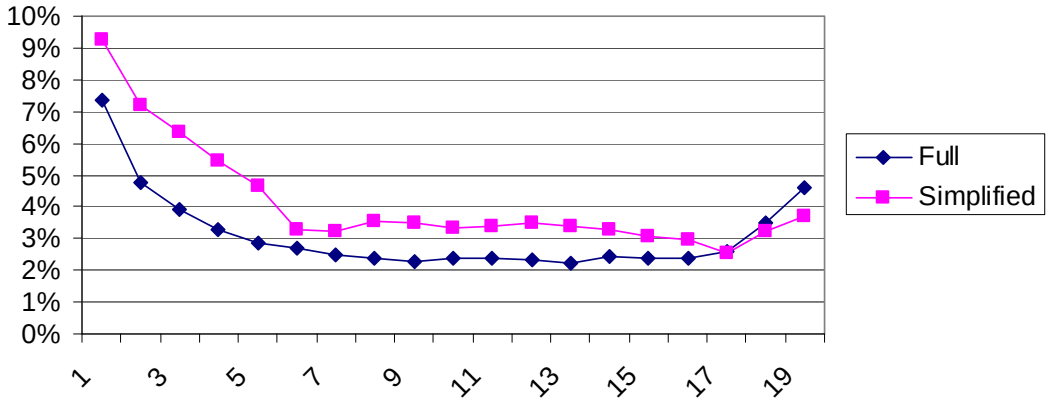


Figure 13 shows first-year lapse rates and exposures by underwriting type for Group insurance experience split into employee and non-employee portions.

As expected, the vast majority of the guaranteed-issue exposure represents experience on employee lives. However, there is a surprisingly large amount of employee experience that had full underwriting, and a surprisingly small amount of non-employee experience with full underwriting.

Note the reported first-year lapse rate for the guaranteed-issue employees is much higher than for the other underwriting methods, but the rate for guaranteed-issue non-employees is much lower. There may be some anti-selection for the guaranteed-issue non-employee business as claims experience has been poor to date.

Figure 13
Group First Year Exposure and Lapse Rates
Split by Employee and Non Employee

	First Year Exposure		First Year Lapse Rate	
	Group Employee	Group Non-Employee	Group Employee	Group Non-Employee
Full	770,955	108,400	11.0%	6.6%
Simplified	115,865	127,823	4.5%	10.8%
Guaranteed	735,957	40,609	18.4%	5.2%
Other		12,470		12.0%
Total	1,622,777	289,302	13.9%	8.5%

Lapse Rates by Gender (Appendix F-4)

Exposures coded for gender are about 59% female and 41% male. Note the "all genders" totals do not match the totals of some of the other tables. This is because records with unknown genders have been excluded entirely from Appendix F-4.

In total, lapse rates do not differ greatly by gender. However, the reported lapse rate for males becomes increasingly less than the rate for females at the oldest durations. This pattern is shown in Figure 14 below beginning at duration 13.

Figure 14

Lapse Rates by Gender

Duration	Male	Female	Total
1	9.1%	9.2%	9.2%
2	6.4%	6.4%	6.4%
3	5.0%	5.1%	5.1%
4	4.2%	4.2%	4.2%
5	3.6%	3.6%	3.6%
6	3.4%	3.3%	3.3%
7	2.9%	2.9%	2.9%
8	2.6%	2.7%	2.7%
9	2.4%	2.5%	2.5%
10	2.4%	2.5%	2.5%
11	2.3%	2.4%	2.4%
12	2.7%	2.8%	2.7%
13	1.8%	2.2%	2.1%
14	1.8%	2.3%	2.1%
15	2.5%	2.9%	2.7%
16	1.6%	2.3%	2.0%
17	1.4%	2.1%	1.8%
18	2.8%	3.4%	3.2%
19	3.9%	4.0%	4.0%
Total	5.2%	5.2%	5.2%

Lapse Rates by Elimination Period (Appendix F-5)

Appendix F-5 shows lapse rate experience by elimination period, policy type and duration.

Lapse rates by elimination period for Individual insurance only are shown in Figure 15. The data clearly shows a trend toward lower lapse rates as the elimination period becomes longer. The pattern of lower lapse rates for policies with longer elimination periods generally continues through the first five durations with the differences narrowing after that. The higher lapse rates for the short elimination period business could be related to the affordability of this more-expensive coverage. Another possible explanation is that more rate increases have been made to business with little or no elimination period.

Figure 16 shows the pattern of lapse rates by elimination period for Group insurance only. For Group business, the largest amount of exposure (70%) is in the 90-day elimination period group, followed by 12% Unknown, 10% in the 30-day period and 5% in elimination periods greater than 100 days. For Group insurance, the trends are much less clear than for Individual insurance.

Figure 15
Individual Lapse Rates by Elimination Period

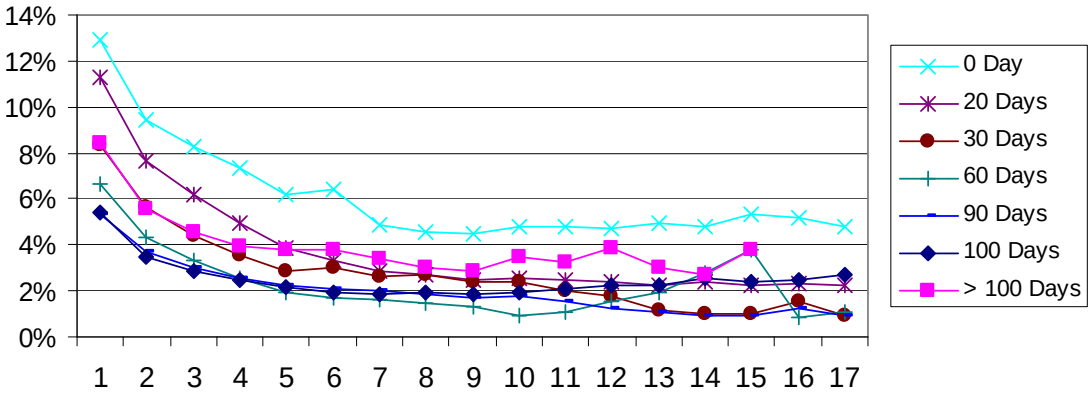
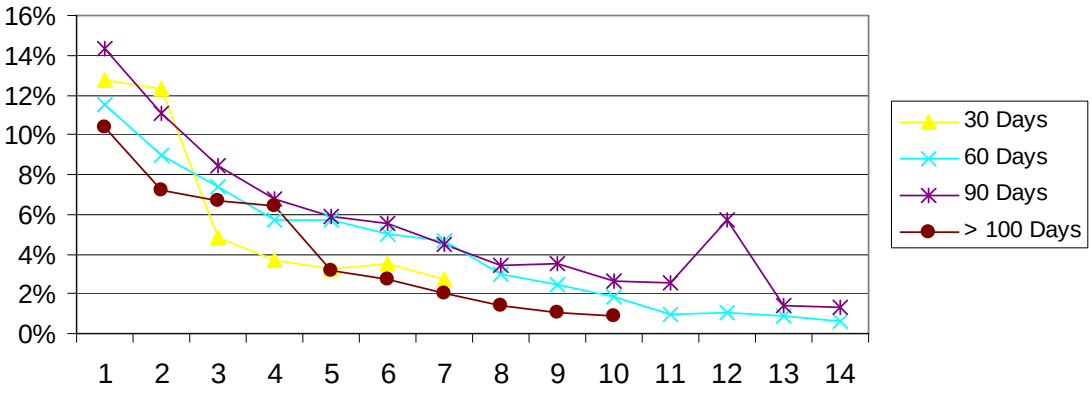
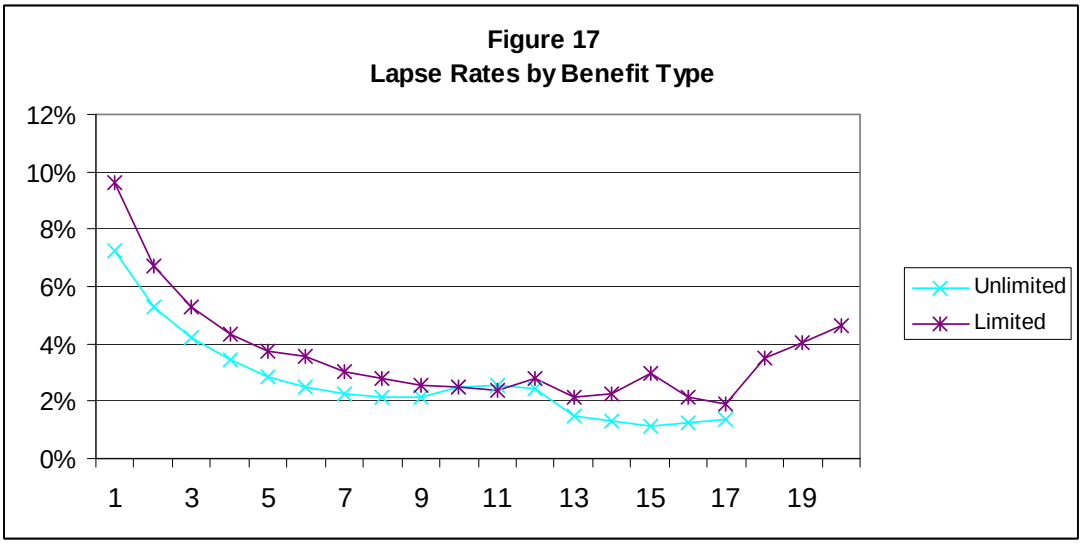


Figure 16
Group Lapse Rates by Elimination Period



Lapse Rates by Benefit Period, Policy Type and Duration (Appendix F-6)

Figure 17 shows the lapse rates contained in Appendix F-6A for policies with limited benefits versus those with unlimited benefits. There appears to be an emerging pattern of lower lapse rates at all durations for policies with unlimited benefits.



A different picture emerges if the Individual and Group businesses are separated. For Individual business, the lapse rate for unlimited is slightly lower than the rate for limited business at almost all durations. This is shown in Figure 18 below. Figure 19 below presents the results for Group business where there appears to be very little difference in experience in the early durations, followed by slightly higher lapse rates for policies with limited benefits at the later durations.

The higher lapse rates for Group unlimited plans could be driven by affordability, or could be the result of rate increases that have been made on some of the business sold with an unlimited benefit period. In this event, some insureds could have chosen to switch to more affordable coverage with a limited benefit period.

Figure 18
Individual Lapse Rates by Benefit Type

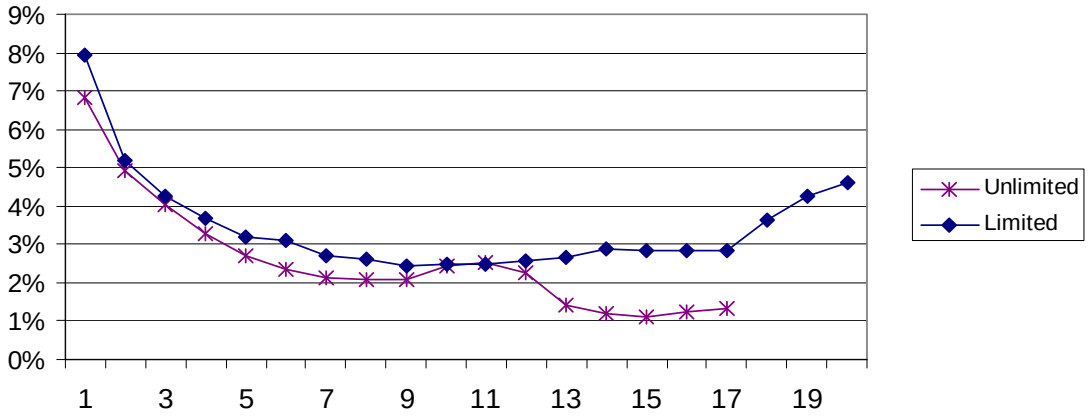
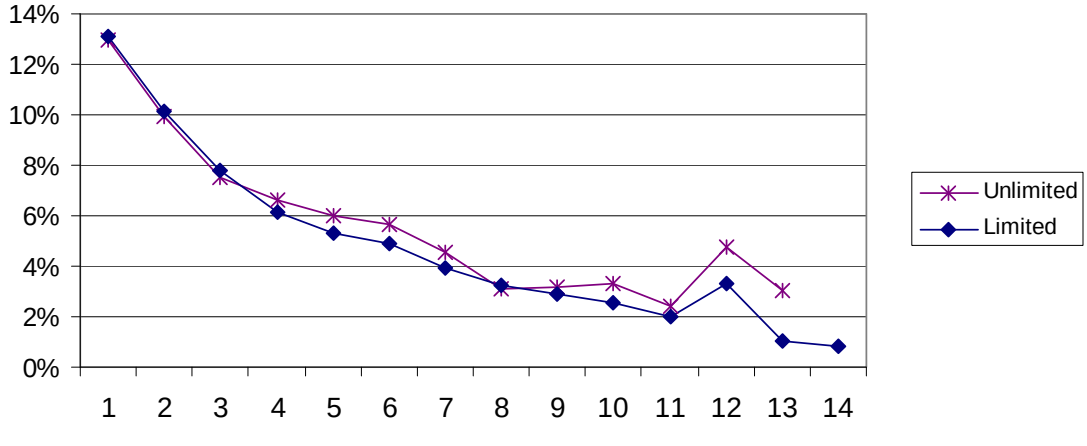
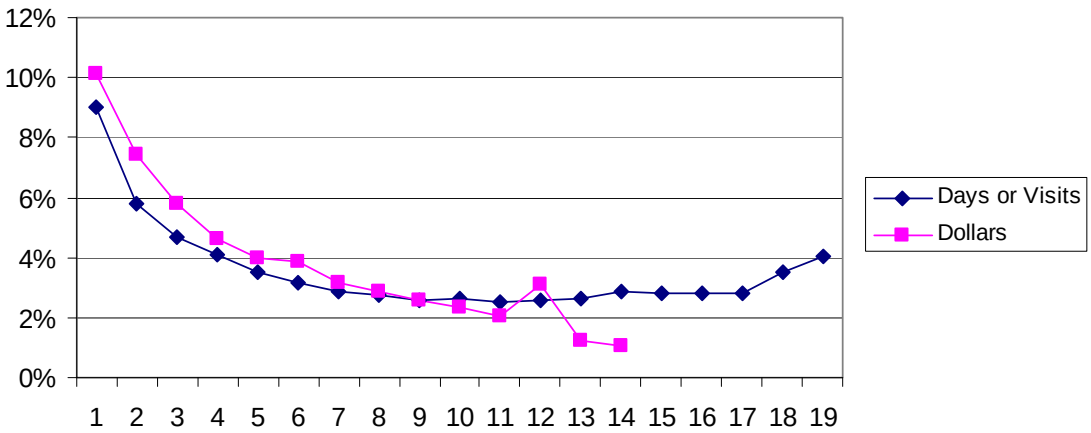


Figure 19
Group Lapse Rates by Benefit Type



Appendix F-6B breaks the "Limited" category policies into those, whose limits are expressed in terms of dollars, and those expressed in terms of days or visits, and are compared in Figure 20. At durations 1 through 9, the lapse rate for policies with limits expressed in terms of dollars is higher than for those expressed in terms of days. After duration 10, this relationship is reversed. This pattern is at least partly explained by the relative amounts of Individual and Group exposure in each of these categories. A comparison of Figures 20 and 3 suggests that most of the "Days or visits" exposure is Individual, and that most of the "Dollars" exposure is Group. This is, in fact, the case: the "days or visits" data is almost all Individual; the "dollars" data is approximately two-thirds Group.

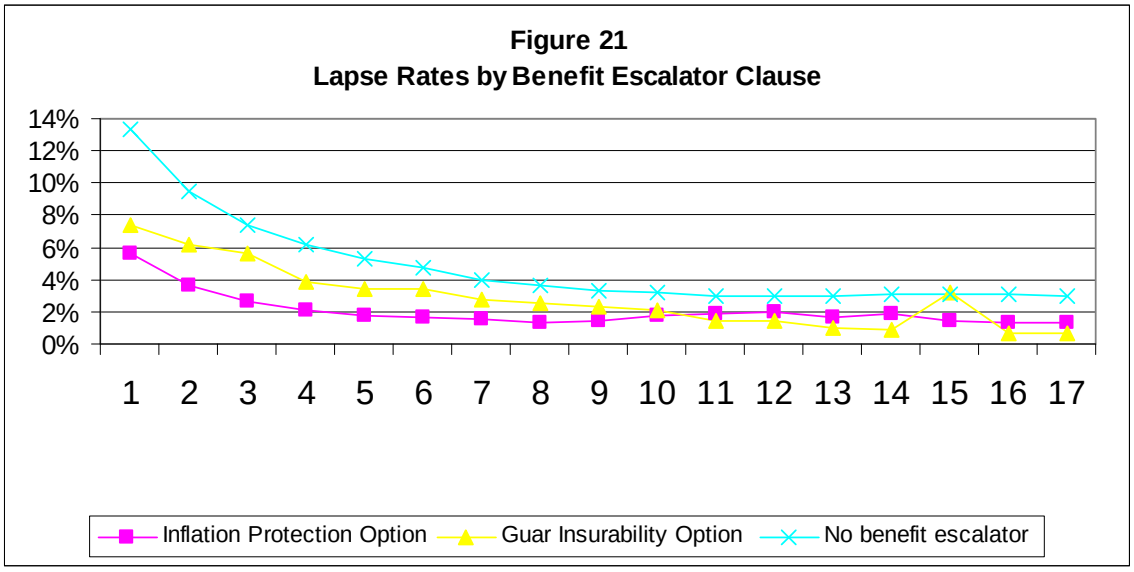
Figure 20
Lapse Rates by Type of Benefit Period



Lapse Rates by Benefit Escalator Clause (Appendix F-7)

Lapse data split by type of benefit escalator clause is shown in Appendix F-7. Figure 21 below shows the lapse rates for policies with no benefit escalator clause are higher than for policies with such a clause, though the difference becomes smaller at the later durations.

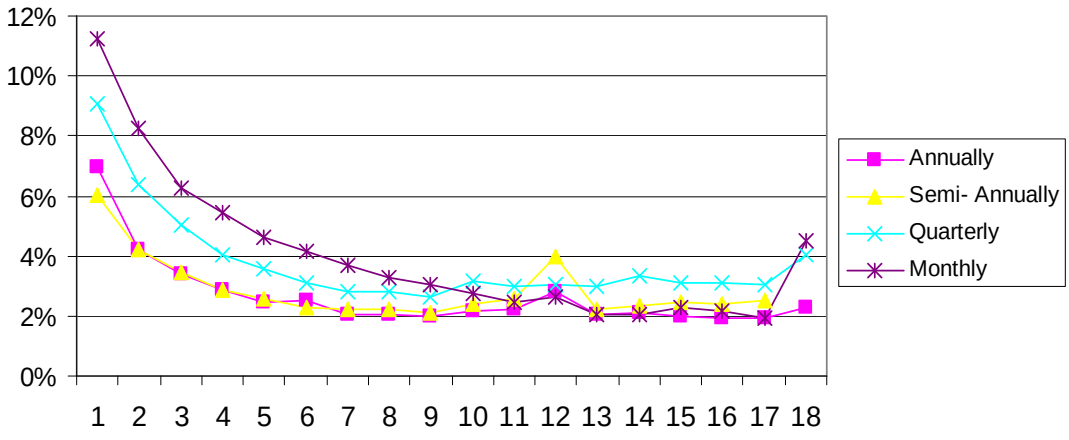
It has been speculated that policies with a future purchase option feature may experience increasing lapse rates after a number of years, as the increasing cost to keep benefit levels up-to-date becomes more difficult to afford. As with the 2004 Report, no such trend is apparent, at least through the first 17 durations.



Lapse Rates by Premium Payment Mode (Appendix F-8)

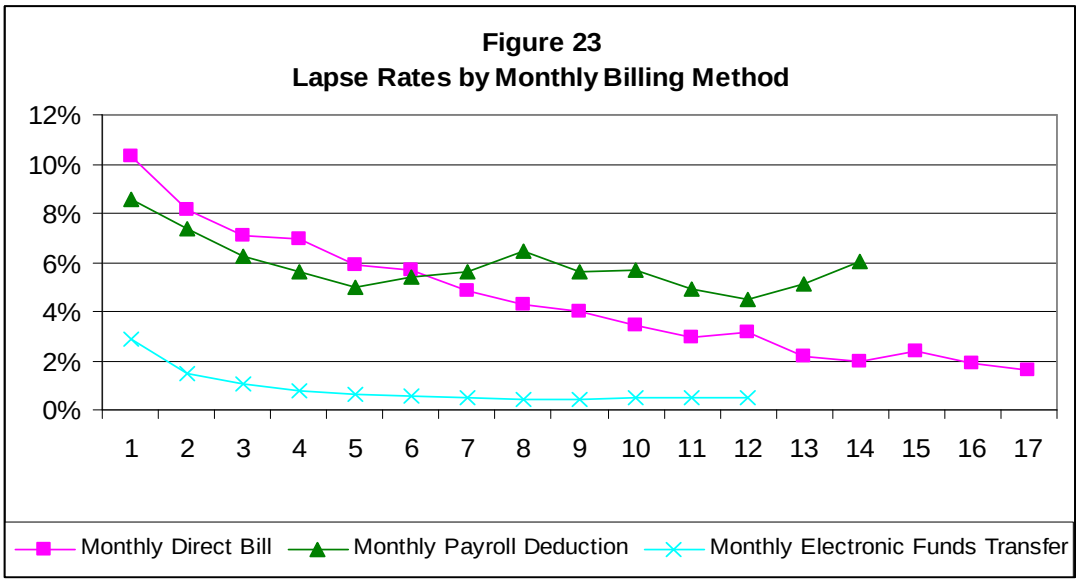
Figure 22 shows the pattern of lapse rates for four different frequencies of premium payment. With the possible exception of quarterly-pay business, no large differences in the ultimate rates of lapse between premium payment modes are apparent, though the data does suggest that policies with a monthly or quarterly payment frequency have higher rates of lapse in the early durations.

Figure 22
Lapse Rates by Premium Payment Mode



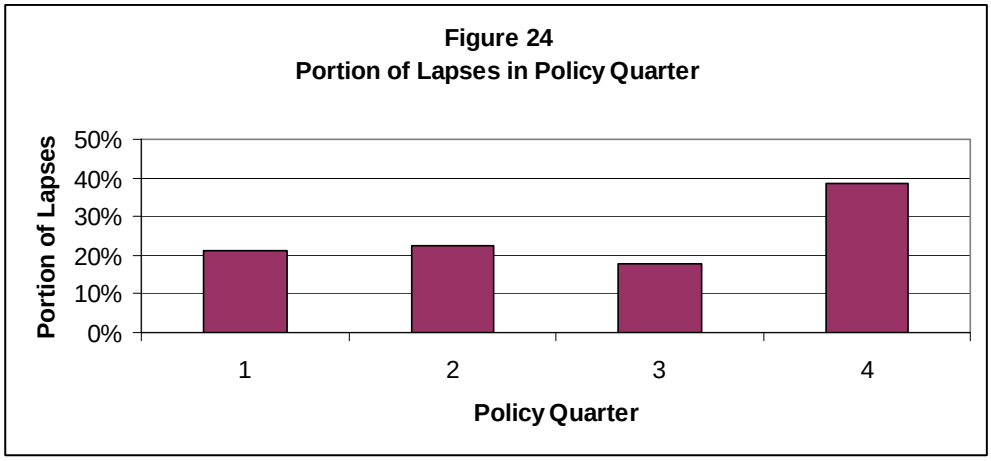
Lapse rate data was requested by billing type, as well as by billing mode. For the monthly billing mode, there was a limited amount of data reported by billing type, with one-third of the exposed lives coded as "unknown." Figure 23 shows lapse rates by monthly billing type for those types reported.

Lapse rates are significantly lower for EFT than for direct-billed or payroll deduction policies. This could be a result of the automatic nature of the EFT payment method, compared to the need to write a check each month. Interestingly, the lapse rates for the other "automatic" monthly payment method, payroll deduction, are not significantly different than those for direct-billed policies for the first 7 durations. This comparison could be distorted because, by definition, the payroll deduction cohort is all Group insurance, which Figure 3 shows has higher overall early lapse rates than Individual insurance. Also, there could be additional lapses that occur at the time an employee changes jobs and must move off of payroll deduction.



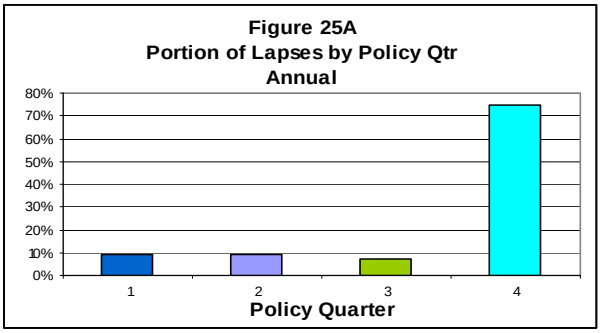
Lapse Rates by Policy Quarter (Appendix F-9)

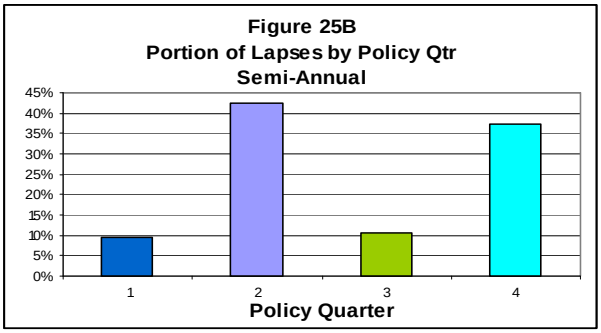
Figure 24 shows that 38% of all lapses occur on or near the policy anniversary. Note that because of the definition of duration, the reported fourth quarter lapse rate includes lapses that occur in the month prior to anniversary, the month of anniversary and the month following anniversary.

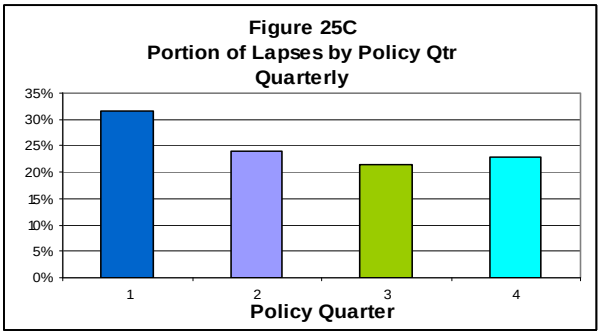


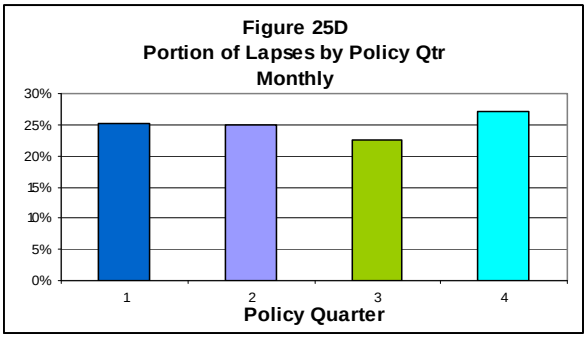
In the first year, 43% of all lapses occur in the fourth quarter. In the following years, between 35-38% of all lapses occur in the fourth quarter.

The observed pattern of lapse by policy quarter varies significantly with the frequency of premium payment, indicating clearly that the premium-paying decision is a major driver of lapse rates. This is illustrated in Figures 25A, B, C and D below that summarizes the data used to create Figure 24 into its annual, semi-annual, quarterly and monthly premium mode components.







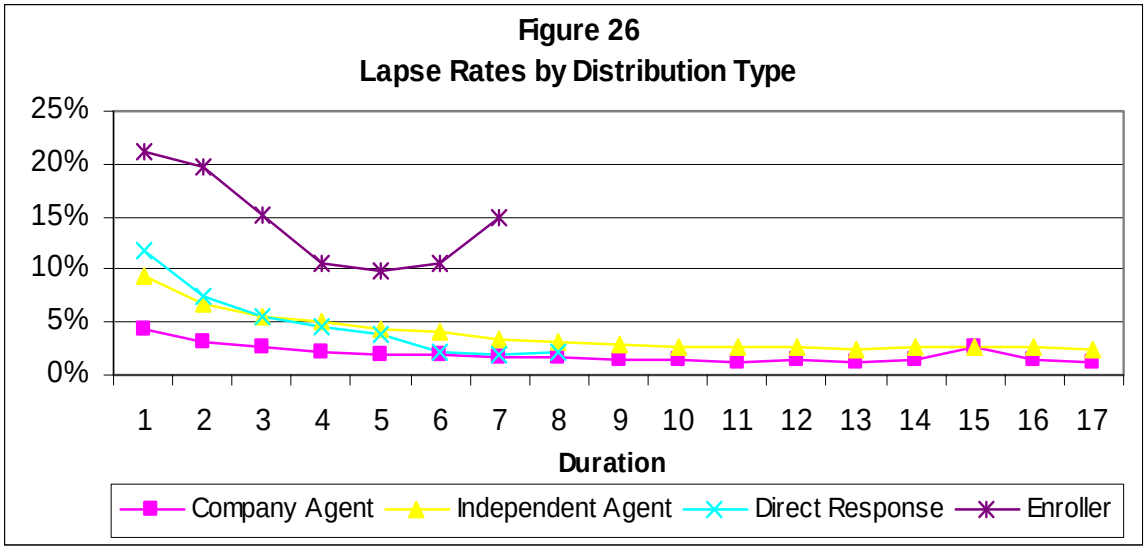


Lapse Rates by Distribution Type (Appendix F-10)

Lapse rates by distribution type are shown in Figure 26. The lapse rates for business sold through Enrollers are significantly higher than for other distribution types. This is in direct contrast to the results of the prior Report where Enroller lapse rates were generally lower than those of other distribution types.

The lapse rates for Company Agent sold business are the lowest across all durations, followed closely by direct response and independent agent business.

Figure 26
Lapse Rates by Distribution Type



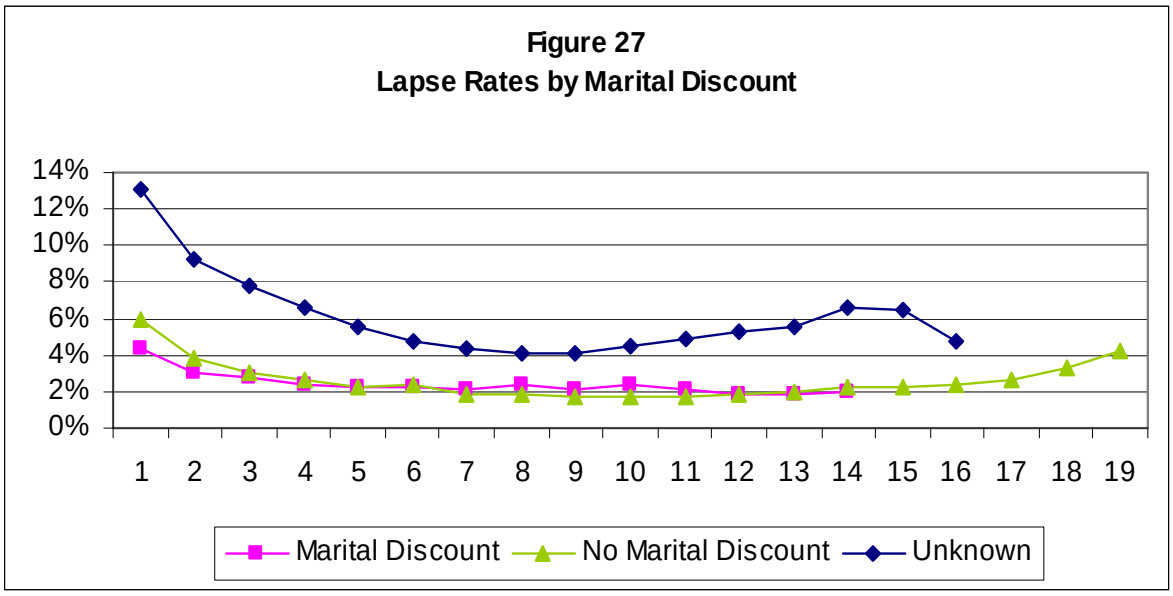
Lapse Rates by Marital Premium Discount (Appendix F-11)

Appendix F-11 shows lapse rates by the presence of a marital premium discount and gender.

Note that Appendix F-11 contains data for Individual policies only, since virtually no Group business had a marital discount present.

Figure 27 shows lapse rates by presence of a marital discount. The lapse rates for policies with a discount are quite close to those for policies without one. During the first two durations, lapses are slightly higher for policies without a marital discount; however, this difference narrows significantly after year 3.

Lapse rates for the marital discount category "unknown" are distinctly higher in the early durations. In contrast to the 2004 Report, the amount of exposure for this category is now the smallest, with the largest being those with no marital discount. The data coded as "unknown" is, on average, older than the data coded as with or without a marital discount. This could, at least in part, explain the higher early lapse rates, since Figure 4 shows that early duration Individual insurance lapse rates are higher for the older issue year cohorts.



For those policies with a marital discount, female exposure is 8% higher than male exposure. Interestingly, for those without a marital discount, female exposure is twice as large as the exposure for males. This suggests that relatively more unmarried females than married ones have identified a need for LTC insurance.

Figure 28 shows the relative rate of lapse between genders differs by the presence of a marital discount. For policies with a marital discount, the male lapse rate tends to become higher than the female lapse rate over time; for those without a marital discount, the opposite is true.

Figure 28
Ratio of Male to Female Lapse Rate by Marital Discount

Duration	With Marital Discount	No Marital Discount
1	103%	98%
2	104%	93%
3	106%	98%
4	105%	92%
5	107%	91%
6	110%	98%
7	112%	85%
8	119%	82%
9	113%	79%
10	121%	81%
11	117%	82%
12	105%	89%
13	96%	89%
14	112%	83%
15		83%
16		81%
17		80%
18		84%
Total	**106%**	**93%**

One possibility for these results is that females tend to drive the LTC sale, including the sales to married couples. Therefore, in these situations, the husband may not see as strong a need for the policy and so might be more likely to lapse, especially if the wife can keep the marital discount. The unmarried male, on the other hand, was not driven to make the purchase by someone else, and is, therefore, more likely to recognize the value of the policy and is less likely to lapse.

Lapse Rates by Geographic Region (Appendix F-12)

Appendix F-12 shows lapse rates by the geographic region of the country, as well as policy year. Breakdown by geographic region is new to this Report.

Note that more than half of the exposure base is currently coded as "unknown" region, followed by 15% for the Southern region, 10% for the West and Midwest and 8.5% for the Northeast.

Figures 29 and 30 present lapse experience by region. Note that rates of lapse are highest for LTC policies issued in the West. Also, while Group lapse rates converge after policy year 8 or 9, Individual lapse rates for the West are materially higher than those of other regions through policy year 17.

Figure 29
Group Lapse Rates by Geographic Region

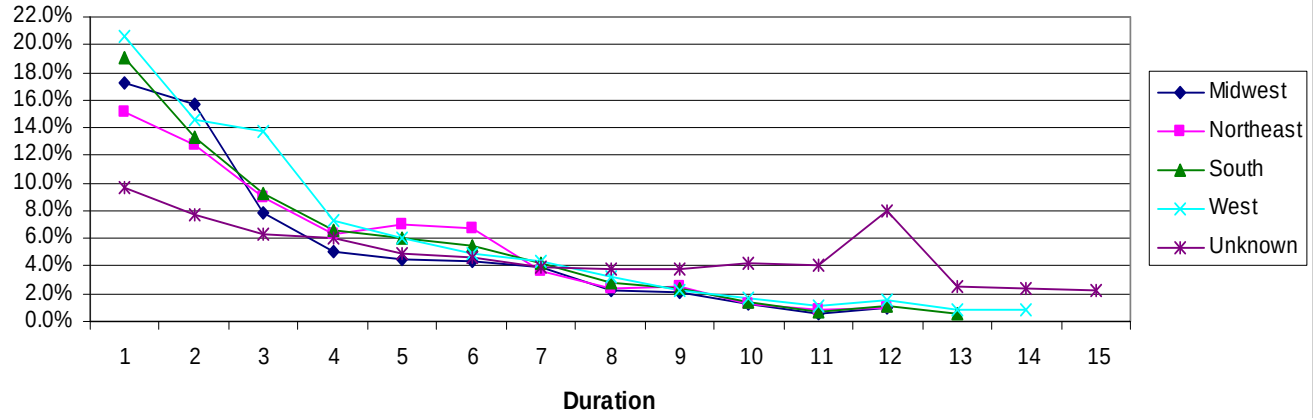
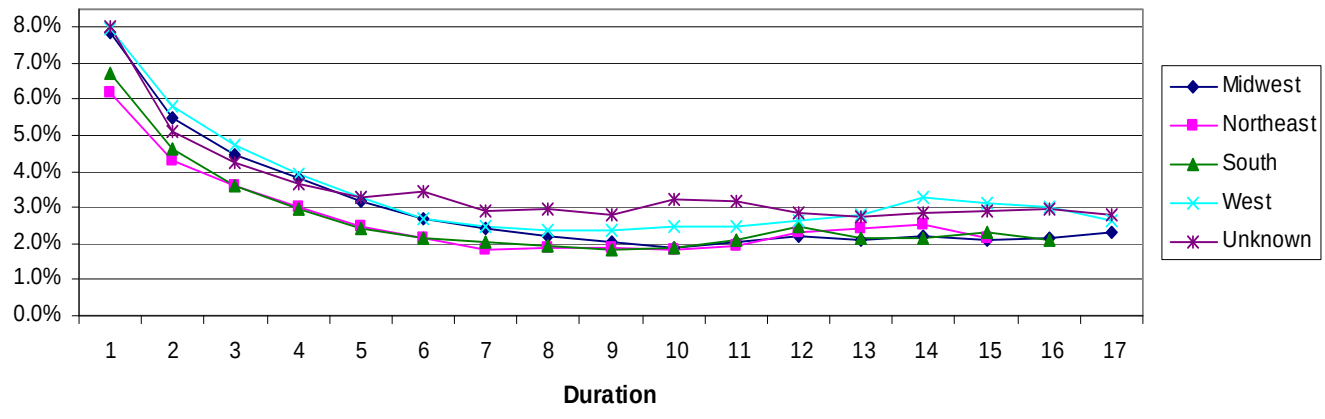


Figure 30
Individual Lapse Rates by Geographic Region



I10. Section VII - Home Health Care Policies

Home health care (HHC) policies provide benefits for expenses incurred primarily while the insured is receiving care in a non-institutional setting, usually in the home. Benefits normally include homemaker services and professional health care services. However, adult day care, respite care, caregiver benefits and other alternative benefits may be provided by the policy.

In this study, home health care policies were identified from insured records that indicated home care coverage was provided, but there was no coverage for nursing home care. In addition, policies which had a claim where the initial care was in a nursing home or in an assisted living facility were excluded as home health care policies.

The instructions for this study included a field in the claim record to indicate the initial level of care for a claim. Benefit payment information may be coded for nursing home benefits, assisted living benefits, home care benefits and other benefits. Another set of fields for all benefits was available and some claim records included information in only these fields, not specifying the type of care. Even though the initial type of care for a claim is specified, the claimant may move to a different type of care as a claim progresses, even to nursing home or assisted living. While the home health care policies were identified as those policies with no coverage for nursing home, some claims still included benefits showing payments for nursing home and assisted living. One possible explanation for these claim payments are that they were paid under an alternative plan of care or some other flexible program.

This new section on home health care policies and their claims is being added to this report in order to provide more detailed information on home health care policies. This type of coverage is becoming more prevalent in the LTC industry. The claim data in this section looks at claims from HHC policies and from comprehensive policies. Claims from these types of coverage are studied from the perspective of when home care is the initial type of care being received, and when the initial type of care is from any setting of care, to investigate how the impact of having coverage for only home health care differs from having coverage for both nursing home and home health care, which would be the case with a comprehensive care policy. The initial level of care for a HHC policy may not be home care as the policy may provide other benefits or benefits again may be paid under an alternate plan of care.

Demographics

In this study, 1,651,149 lives were identified as having home health care policies out of the total of 9,262,945 lives for the whole study, or 17.8%. Figure 1, shown below, compares the number of lives that have HHC policies with the total number of lives in the study by gender for HHC policies with the number for all LTC policies in the study:

Figure 1: Number of Policies by Gender and Coverage Type

Gender	Home Care Policies	HHC Gender Portion	All LTC Policies	All LTC Gender Portion	Ratio
Female	909,330	55.1%	5,240,940	56.6%	17.4%
Male	741,819	44.9%	4,022,005	43.4%	18.4%
Total	**1,651,149**	**100.0%**	**9,262,945**	**100.0%**	**17.8%**

The percentage of female lives covered under HHC policies (55.1%) is similar to, but slightly lower than, that for all LTC policies (56.6%). The data for Figure 1 is taken from Appendix B-4.

With each issue-year cohort, HHC policies have become a larger portion of the new business issued. HHC policies were relatively new in the early 1990's, while nursing home oriented policies were written for many years before that. HHC policies were not issued in larger numbers until mid-1990. The average policy duration for HHC policies is 3.1 years compared to 4.5 years for all LTC policies included in the study.

In Figure 2 below, the portion of HHC policies issued increased from 0.0% in the 1984-87 issue-years' cohort to 38.1% in the 2005-07 issue-years' cohort of all LTC policies issued. The data shown in Figure 2 is taken from Appendix B-10.

Figure 2: Number of Policies by Issue Year Cohort

Issue Year Cohort	Home Care Policies	All LTC Policies	Ratio of HHC Policies to All
1984-87	103	295,587	0.0%
1988-91	19,008	1,134,612	1.7%
1992-96	167,672	1,648,940	10.2%
1997-01	588,854	3,131,174	18.8%
2002-04	484,124	2,034,026	23.8%
2005-07	391,401	1,027,567	38.1%
Total	**1,651,072**	**9,271,906**	**17.8%**

Comparing the number of exposure years for HHC polices to all LTC policies also shows that HHC policies are becoming a more significant part of the LTC market. In Figure 3 below, the portion of lives exposed for HHC policies has become increasingly more prevalent, and for the 2005-07 experience-years' cohort, exposure increased to over 26.4% of all LTC policies. The data for Figure 3 is from Appendix D.

Figure 3: Exposure Years by Exposure Period

Exposure Year Cohort	Home Care Exposure Years	All LTC Exposure Years	Ratio
1984-87	104	376,460	0.0%
1988-91	31,065	3,060,938	1.0%
1992-96	356,617	7,519,022	4.7%
1997-01	1,584,234	14,235,778	11.1%
2002-04	2,015,079	11,792,447	17.1%
2005-07	1,854,420	7,030,330	26.4%
Total	**5,841,519**	**44,054,975**	**13.3%**

By attained age, the exposure years for HHC policies at the younger ages are a larger portion of the exposure years for all LTC policies. The data in Figure 4 below shows the exposure years by attained-age cohort and the ratio of the HHC policies exposure years to all LTC exposure years. The ratio decreases by attained-age cohort until about age 74, then increases to about 9% at the later ages. Some of the higher ratios at the younger ages are probably due to younger duration of the policies, but there may be a perceived lack of need. At the older ages, there probably are affordability issues. Other factors are probably causing this difference.

Figure 4: Exposure Years by Attained Age

Attained Age Cohort	Home Care Exposure Years	All LTC Exposure Years	Ratio
< 40	1,097,515	2,699,912	40.7%
40 – 49	1,085,465	3,985,966	27.2%
50 – 59	1,318,783	7,774,671	17.0%
60 – 64	582,756	5,758,542	10.1%
65 – 69	523,672	7,360,685	7.1%
70 – 74	463,884	7,089,804	6.5%
75 – 79	395,922	5,280,606	7.5%
80 – 84	263,070	2,913,001	9.0%
85 – 89	92,990	991,798	9.4%
90 +	17,462	199,990	8.7%
Total	**5,841,519**	**44,054,975**	**13.3%**

The portion of HHC policies to all LTC policies by region is significantly higher in the Northeast region of the country (23.4%) and lower in the Midwest (7.4%). The data in Figure 5 shown below details the exposure years by region of the country:

Figure 5: Exposure Years by Region of the Country

Region	Home Care Lives Exposure Years	All LTC Exposure Years	Ratio
Midwest	408,139	5,480,988	7.4%
Northeast	561,698	2,399,847	23.4%
South	703,803	6,169,392	11.4%
West	617,766	4,246,011	14.5%

HHC policies are less likely than other types of LTC policies to have a provision to escalate benefits after the policy has been purchased. Almost two-thirds of HHC policies have no benefit escalator benefit, while only about one-third of all LTC policies do not have a benefit escalator. Only a minimal percentage of HHC policies provide for increased benefits under a guaranteed option to purchase additional insurance. For those that do have a benefit escalator, the most common version has benefits that increase annually (even after payments begin) without a premium increase. The data for Figure 6 is from Appendix B-15 and shows the distribution of policies by type benefit escalator provision, including when there is none:

Figure 6: Benefit Escalator Provisions

Benefit Escalator Provisions	Home Care Policies	All LTC Policies
None	64.6%	32.5%
Benefits increase annually even after payment begins – premium doesn't increase	25.6%	33.3%
Insured has guaranteed option to purchase additional insurance	0.2%	14.3%
Other Provisions	9.1%	2.2%
Unknown	0.4%	17.7%

HHC policies are less likely to have a marital discount than other LTC policies. Adjusting for the unknowns, 52.6% of HHC policies have no marital discount, while 48.3% of LTC policies have no marital discount.

Incidence Rates

Incidence rates have been calculated for HHC policies where home care is the initial care, and for all claims regardless of the type of initial care, and then compared to Comprehensive policies which may also have home health care as an initial type of care.

In Figure 7 below, where the initial care is home care, the incidence rates for HHC policies and Comprehensive policies are plotted on a line graph using a logarithmic scale. The graph shows the incidence rate by attained-age cohort. In the under age 40 cohort, the incidence rates are very close, with the rate for Comprehensive policies just slightly higher than the rate for the HHC policies. In the 40–49 attained-age cohort, the incidence rates are almost identical. In subsequent age cohorts, then, the incidence rates for HHC policies increase faster than those for the Comprehensive policies, and are significantly higher for HHC policies than for the Comprehensive policies in the age 85+ cohort. The fact that Comprehensive policies also have nursing home and may have assisted living benefits available suggests that other types of care besides home care may not be as important at the younger ages. However, at the higher ages for Comprehensive policies, other types of care become more important and would be more likely to be used since they are available. The data for Figures 7 and 8 is taken from Appendix H2 for the HHC policies and H3 for the comprehensive care polices.

Figure 7

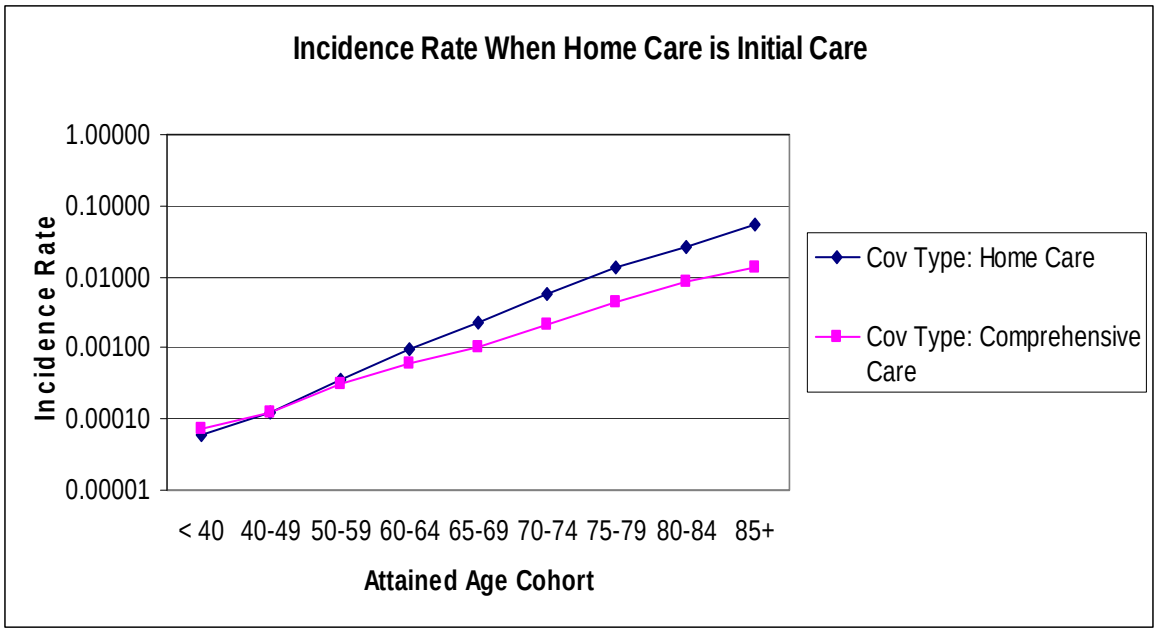
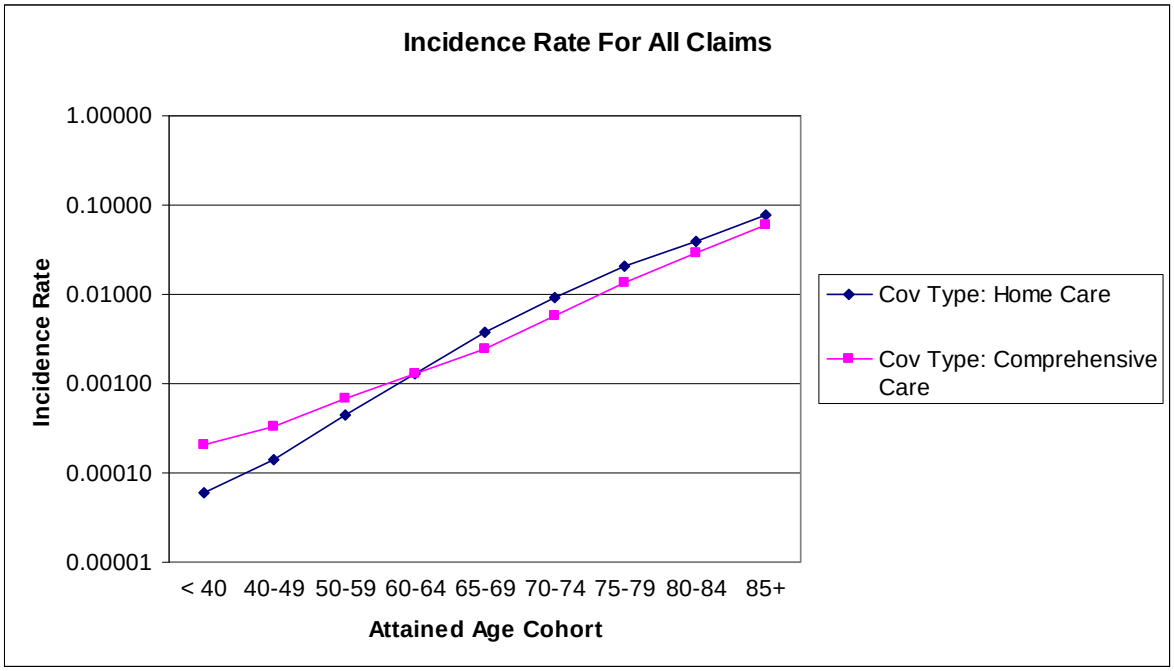


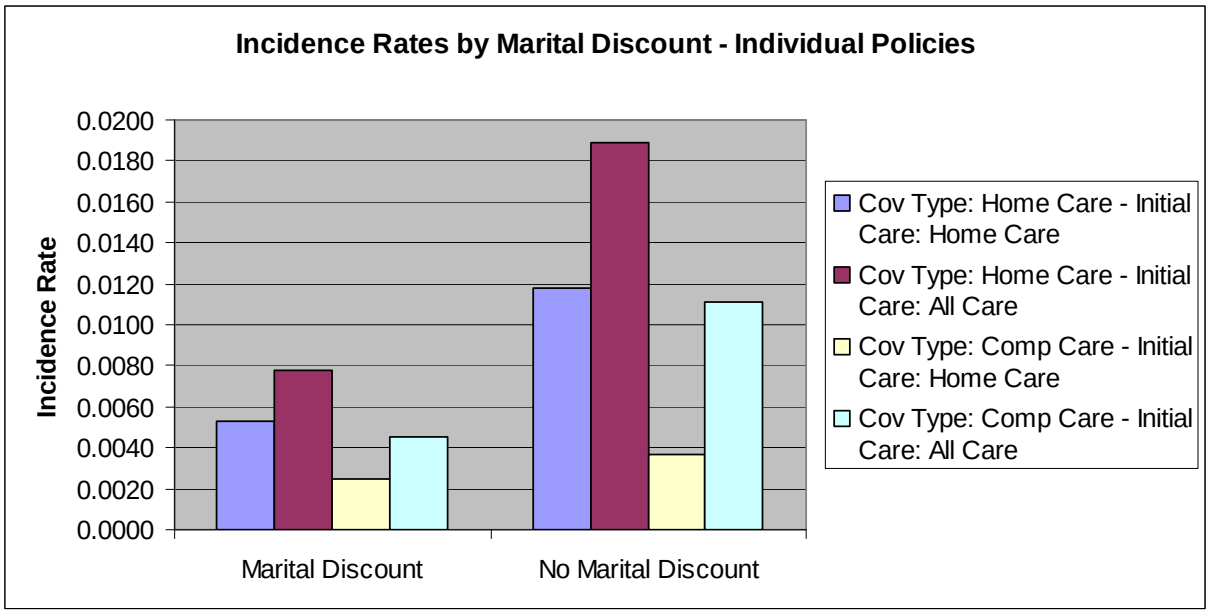
Figure 8



The graph in Figure 8 shows the incidence rates when all claims are considered for all types of initial care. In the youngest age cohort, the incidence rate for the Comprehensive Care policies is significantly higher than the incidence rate for the HHC policies. In the 60–64 age cohort, the rates are about the same, and the incidence rate for HHC policies is again higher at the later attained-age cohorts. However, the difference is not as great as when the initial type of care is home health care.

In summary, when comparing HHC policies to Comprehensive Care policies where home health care is the initial care, the incidence rate is almost the same at the youngest age cohort, and the Home Health Care incidence rate is significantly higher than the rate for the Comprehensive Care policies at the highest age cohort. However, when all claims are considered, the incidence rate for Comprehensive Care policies is significantly higher than the rate for HHC policies at the youngest age cohort, and almost the same at the highest age cohort.

Figure 9



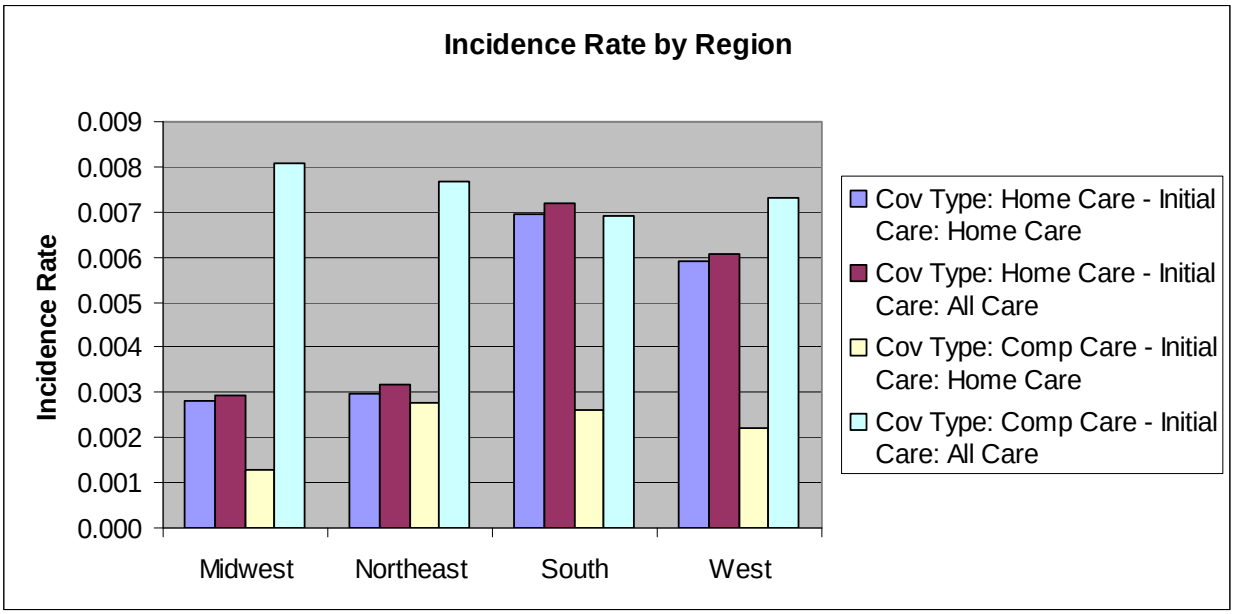
The data in Figure 9 shows the incidence rates based on marital discount status for individual policies. The group policies have been excluded from this analysis because only a very small portion of group policies have a marital discount. Group policies are a larger portion of the HHC policies than the comprehensive policies. The traditional view of lower frequency for those with the discount holds true for both HHC policies and comprehensive policies. This is true for both when home care is the initial level of care and for all claims. The data for Figure 9 is taken from Appendix H10 for the HHC policies and H11 for the comprehensive care polices.

The incidence rate by gender shows the rate for females to be more than double the rate for males for HHC policies, both on an initial care basis of home care and for all claims. The data by gender is taken from Appendix H4 for the HHC policies and H5 for the comprehensive care polices.

In Figure 10 below, incidence rates have been calculated by region of the United States for HHC policies and for Comprehensive Care policies where initial care is home care, and then for all care.

The incidence rates for HHC policies in the Midwest and Northeast are both about 0.003, while the incidence rates for HHC Policies are much higher in the South and West, 0.007 and 0.006, respectively. For the Comprehensive Care policies, home care makes up a larger portion of all claims in the South and West than in the Midwest and Northeast; however, for all claims, the incidence rates are slightly less. The data for Figure 10 is taken from Appendix H12 for the HHC policies and H13 for the comprehensive care polices.

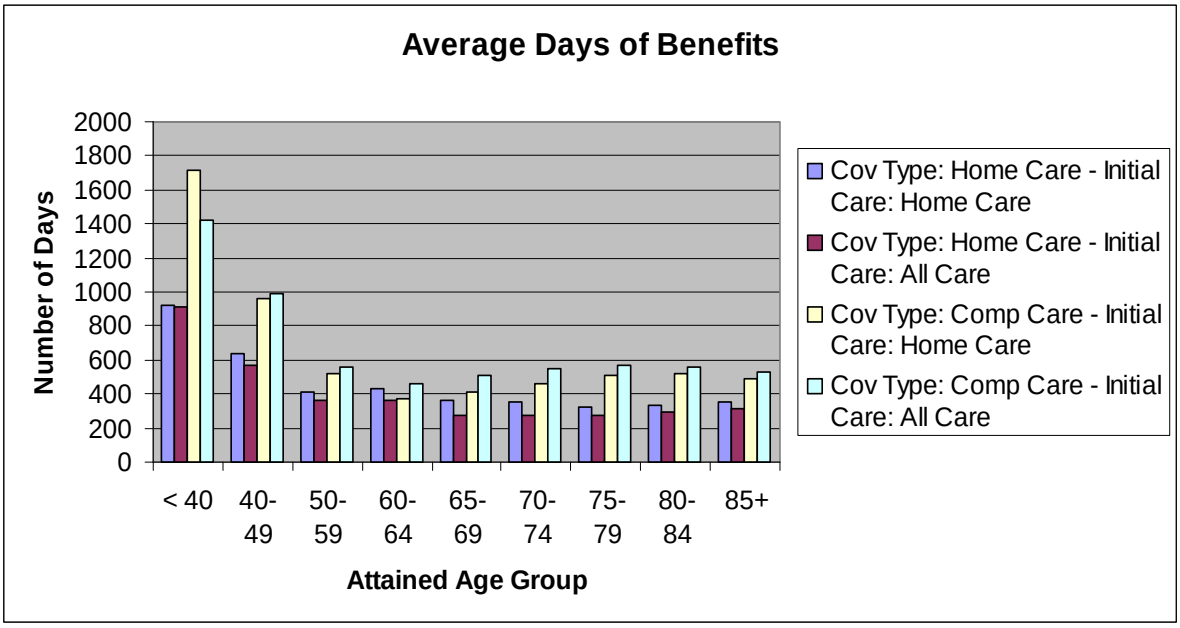
Figure 10



Average Days of Benefits (ADOB)

The average days of benefits are calculated by dividing the sum of the number of days of benefits paid for a cohort of claims by the number of claims in the cohort. The ADOB varies significantly for various cohorts. For a home health care claim, this would usually be referred to as the average number of visits and, for nursing home claims; it would be referred to as the average length of stay. In this situation, the days of benefits can refer to one or the other or include both for the same claim.

Figure 11



The average days of benefits by attained-age cohort are shown above in Figure 11. For HHC policies, the average days of benefits generally decreases with increases in attained age. For Comprehensive Care policies, the average days of benefits initially decrease, then increase slightly for ages 65 and over, until experiencing a small decrease at ages 85+. The difference between the average days of benefits for HHC policies and Comprehensive Care policies is much larger at the younger attained ages than at the older ages. The data for Figure 11 is taken from Appendix H2 for the HHC policies and H3 for the comprehensive care polices.

The average days of benefits by elimination period is shown in Figure 12. The number of days generally increases with the number of days of the elimination period because those who satisfy the longer elimination period tend to have more serious conditions, which require a longer stay beyond the elimination period. The average number of days for HHC policies is shorter than for Comprehensive policies, both when initial care is home care and for all type of initial care.

Figure 12: Average Number of Days by Elimination Period

Elimination Period (Days)	Home Health Care Policies		Comprehensive Care Policies	
	Initial Care is Home Care	All Claims	Initial Care is Home Care	All Claims
0	301	258	372	371
20	294	254	588	546
30	399	388	568	531
60	523	509	525	607

The average days of benefits for HHC policies are greater for females, 570 days, compared to males, 515 days, but less than males for Comprehensive Care policies, 290 days and 303 days, respectively. This data is taken from Appendix H4 for the HHC policies and H5 for the comprehensive care polices.

Figure 13: Average Days of Benefits by Region of the Country

Region	Home Health Care Policies		Comprehensive Care Policies	
	Initial Care is Home Care	All Claims	Initial Care is Home Care	All Claims
Midwest	399	387	516	567
Northeast	472	458	522	581
South	298	294	475	564
West	395	391	470	530

In Figure 13 above, the ADOB by region is tabulated. The longest ADOB days are in the Northeast region and shortest in the South for HHC policies. The biggest difference in ADOB between HHC policies and comprehensive polices is in the South. The data for Figure 13 is taken from Appendix H12 for the HHC policies and H13 for the comprehensive care polices.

Based on marital discount, the average days of benefits are shorter for those with the marital discount than for those without it. For HHC policies, the ADOB is 276 days for those with the discount and 297 days for those without it. For Comprehensive Care policies, the ADOB is 523 days with the discount and 598 days for those without it. This data is taken from Appendix H10 for the HHC policies and H11 for the comprehensive care polices.

Average Cost of Claim

The average cost of claim is calculated by dividing the sum of the benefits paid for a cohort of claims by the number of claims in the cohort. The average cost of claim is dependent on the number of days of benefits and the amount of daily benefits payable. While these are relevant factors, the total amount paid provides some insight into the cost of the various types of care.

The average cost of claim is significantly less for HHC policies than for comprehensive policies, both for claims in which home care is the initial level of care and for all claims in all of the demographic views shown below. Also, the average cost of claim is almost always less for all types of care than when the initial care is home care.

In Figure 14, the average cost of claim by attained age is shown. The average cost generally decreases by attained age; however, the average cost remains fairly constant after age 75 for HHC policies. For comprehensive policies, the average cost decreases to about age 60 and then increases until about age 80. The data for Figure 14 is taken from Appendix H2 for the HHC policies and H3 for the comprehensive care polices.

Figure 14: Average Cost of Claim by Attained Age

	Home Health Care Policies		**Comprehensive Care Policies**	
Attained Age	**Initial Care is Home Care**	**All Claims**	**Initial Care is Home Care**	**All Claims**
< 40	68,310	67,297	77,343	72,722
40 – 49	47,821	43,173	57,430	55,408
50 – 59	36,118	30,470	47,785	44,533
60 – 64	38,378	30,852	37,109	43,024
65 – 69	28,685	20,505	42,534	50,791
70 -74	26,922	19,841	48,320	54,846
75 -79	23,188	18,148	52,639	56,318
80 – 84	22,645	19,079	50,017	52,951
85 +	22,994	19,808	41,622	45,581
All Ages	**24,576**	**19,850**	**47,923**	**52,010**

The average cost of claim by gender is shown in Figure 15. The data shows a higher cost of claim for males for HHC policies but lower for comprehensive policies. The data for Figure 15 is taken from Appendix H4 for the HHC policies and H5 for the comprehensive care polices.

Figure 15: Average Cost of Claim by Gender

	Home Health Care Policies		Comprehensive Care Policies	
Gender	Initial Care is Home Care	All Claims	Initial Care is Home Care	All Claims
Female	23,928	19,231	48,902	54,798
Male	26,344	21,614	45,798	46,942

Figure 16 shows the average cost of claim by marital discount. For both HHC policies and comprehensive policies, the average cost is higher without the marital discount than with it. The data for Figure 16 is taken from Appendix H10 for the HHC policies and H11 for the comprehensive care polices.

Figure 16: Average Cost of Claim by Marital Discount

	Home Health Care Policies		Comprehensive Care Policies	
Marital Discount	Initial Care is Home Care	All Claims	Initial Care is Home Care	All Claims
Marital Discount	24,302	19,158	49,829	52,982
No Marital Discount	26,453	20,698	54,421	64,881

The average cost of claim is the highest in the Northeast region and lowest in the South region of the country for HHC policies. For comprehensive policies, the highest cost region is also in the Northeast and the lowest cost region is the Midwest. The Figure 17 below shows the average cost of claim by region of the country for HHC policies and comprehensive policies. The data for Figure 17 is taken from Appendix H12 for the HHC policies and H13 for the comprehensive care polices.

Figure 17: Average Cost by Region of the Country

	Home Health Care Policies		Comprehensive Care Policies	
Region	Initial Care is Home Care	All Claims	Initial Care is Home Care	All Claims
Midwest	25,062	24,341	39,458	48,682
Northeast	48,692	47,320	57,269	71,067
South	21,946	21,710	42,311	55,296
West	28,453	28,200	41,002	51,640

Appendix

The appendix worksheets show, in greater detail, most of the information illustrated above. There is a summary worksheet which contains the information used for the Incidence Rates, Average Lengths of Stay and Average Cost of Claim sections.

For each type of demographic view, there is a worksheet showing the cohort, and the amount of exposure and number of claims for that cohort. The amount of exposure and the number of claims are calculated using worksheets in Appendix D, Incidence Rates. In the demographic worksheets, column D and later columns, the number of claims and information about those claims is broken down based on the type of initial care received. This information is taken from Appendix C, Claim Characteristics. Sometimes, the total number of claims by initial care is slightly more than the number of claims from Appendix D because some claims have a claim incurred date that is after the associated policy's termination. These claims are not included in Appendix D, but are included in Appendix C.

An incidence rate is calculated based on each type of initial care and for all types of initial care combined. The number of days, the average days of benefits and average cost of claim are shown for all benefits combined, as well as individually for nursing home, assisted living, home care and other care. Please note that some claim records did not indicate whether the benefit was paid for one of the above four specified benefits, therefore, the type of care is unknown. The portion of days that are nursing home or assisted living (NH/AL) is calculated by summing the number of days for nursing home and assisted living and dividing by the number of days for all care combined. The portion of days that are other benefits (Non-NH/AL) is similarly calculated by summing the number of days for home care and other care and dividing by the number of days for all care combined. These portions may not add up to 100% because of the unknown benefit days. The number of claims and claim detail for all claims are then broken down by whether the claim is closed, still open as of the end of the study observation period or its disposition is unknown.

1984 - 2007 Long-Term Care Intercompany Study
I11. Appendix A - Contributors

Aegon USA, Inc.
Aetna
AFLAC
Allstate
American Pioneer
American Progressive
Bankers Life and Casualty
Combined Insurance
Constitution Life
Continental Casualty Company
Country Life Insurance Company
CUNA Mutual
Genworth/GE Capital Assurance
John Hancock
Knights of Columbus
Mass Mutual
MedAmerica
Medico Life
MetLife
Mutual of Omaha
Mutual Protective
Northwestern Mutual
Penn Treaty
Pennsylvania Life
Physicians Mutual
Prudential
Pyramid Life
Southern Farm Bureau
State Farm Life
Thrivent
Thrivent Financial for Lutherans
Time Insurance Company
Transport Life Insurance
Union Bankers
Unum