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COURSE 8 HEALTH, GROUP LIFE, AND MANAGED CARE STUDY NOTE

INDIVIDUAL DISABILITY INCOME INSURANCE IN THE UNITED STATES

by

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Individual Disability Income Insurance in the United States

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Introduction

The history of individual disability income insurance (IDI) in the United States (U.S.), particularly over the last 30 years is a fascinating case study on how questionable product and risk management decisions on an industry-wide basis can lead to enormous financial losses. It is also a story of the efforts required to return an industry to profitability.

Since the early years of the twentieth century, IDI insurance experience has been cyclical. Many times these cycles were driven by economic conditions. However, companies typically over-reacted during the good times and the bad times. The period 1976-2000 stands out in terms of the amount of IDI business that was sold and the losses that were incurred. The IDI market recovered in many ways during the last five years, 2001-2005, although in terms of the volume of new sales and the number of active IDI carriers, the market is considerably smaller. This study looks at the economic and market conditions that were behind the expansion and subsequent decline of the IDI market and the ways in which the principles of sound risk management were too often ignored. It also examines the results in terms of financial losses and market consolidation.

The lessons derived from this study of the U.S. IDI market are applicable beyond the U.S. border. The Canadian and the United Kingdom insurance markets provide products that are comparable to the U.S. IDI products, and many of the same market forces affecting the development of the U.S. IDI market have been observed in these countries. However, the lessons reach beyond a specific product type and can apply to almost any

form of insurance where the competitive environment and market conditions could force unsound risk management decisions.

This paper describes briefly IDI insurance in the U.S. prior to 1976, but focuses in more depth on the period 1976-2005, dividing this period into five 5-year periods. In order to describe the sales activity of IDI carriers during this period of time, the new premiums of 70 IDI carriers were tracked over this 30-year period. The list of these companies is provided in Appendix A. Although there were other companies selling IDI business during this period, these 70 companies comprise at least 95% of the total market.

The following appendices are referenced throughout the paper:

- Appendix A – List of 70 IDI Carriers Referenced in the Paper
- Appendix B – Combined New Premiums for Years 1975 – 2004 for the 70 IDI Carriers
- Appendix C – Ranking of the 20 Top Carriers by New Premium for 1975 and Each of the 5-Year Periods from 1976 to 2004
- Appendix D – IDI Carriers Exiting the IDI Market by Period of Exit
- Appendix E - Consolidated Statutory Noncancellable Financial Results for 8 of the Top IDI carriers
- Appendix F - Historical Interest Rates for a 10-year Treasury Bond and Annual CPI-U Inflation Rates for Years 1965 to 2004
- Appendix G - Summary of Results of the IDEC report on IDI Claim Trends during the 1990s

This paper assumes that the reader has some prior knowledge of the types of products, contract provisions, and premium classifications that are typically offered in the IDI market. The reader may want to refer to Chapter 3 ("Individual Disability Income Benefits" by W. Duane Kidwell, F.S.A.) of the Individual Heath Insurance textbook, edited by Francis T. O'Grady, F.S.A. and published by the Society of Actuaries.

The Prologue: Pre-1976

Even prior to the mid-1970s, the IDI market had a widely cyclical history. Competition in the IDI market had become intense by 1920, and many of the IDI products at that time were under-priced for the assumed risks. Emerging losses and the devastating impact of the Great Depression forced many companies to withdraw from the market. For those companies that remained, their disability contracts became very restrictive.

In the 1950's, a number of companies entered the IDI market with some caution. Renewability was not necessarily guaranteed to the policyholder, and many IDI products had aggregate benefit limits, so that once paid benefits reached this limit over the life of the policy the coverage ceased. However, agents saw a growing need for disability insurance and pressed their companies to meet it. Benefit periods were lengthened and monthly indemnities increased. The aggregate benefit limit was ultimately eliminated and renewability guaranteed.

IDI products are generally categorized as *noncancellable* or *guaranteed renewable.* Both types guarantee renewability to the policyholder. Noncancellable IDI products, however, guarantee premiums for the life of the contracts; in contrast, companies reserved the right to adjust the premiums of guaranteed renewable policies after issue on a class basis. In general, noncancellable IDI products have been more prevalent for the white collar and executive/professional occupations, and the guaranteed renewable policies for blue/gray collar occupations.

The blue collar and middle-income markets represented a majority of the IDI market during the 1950's and 1960's. However, with the advent of government disability plans such as the U.S. Social Security Disability Program in 1965 and several state cash sickness plans, government was satisfying a significant portion of the need for disability insurance among the blue collar and middle income occupations.

In terms of in-force premium, the IDI market has been approximately 10% of the individual life market. In spite of the apparent need for disability insurance, the product has not been as easy to sell as life insurance. Many life agents have been reluctant to sell disability insurance because of the complexities of the contracts and additional demands presented by disability underwriting.

In the 1960s and 1970s, a few companies gained reputations as specialists in this business. These specialist companies included Paul Revere Life, Provident Life & Accident, Massachusetts Casualty, Massachusetts Indemnity, Monarch Life and Union Mutual. However, many of the individual life companies also offered IDI products. Appendix C shows the top 20 IDI carriers ranked by new sales premium in 1975. The top 10 companies comprised about 46% of the total market, and the top 20 companies comprised 75% of the market. The IDI market was controlled by relatively few companies as compared to the individual life market. This has been subsequently true over the 1976-2005 period, but the make-up of the top 10 IDI carriers has changed some over each of the 5-year periods.

Beginning in the mid-1970s, some companies began to introduce several new product features, designed specifically for the higher income markets, which evoked considerable controversy and concern about their implications for the future of the IDI market. Two of the most controversial were the "pure" own occupation definition of disability ("pure own occ") and residual benefits.

Under an own occ definition of disability, an insured is disabled if unable to perform the principal duties of his or her own occupation due to an accident or sickness. Prior to the introduction of pure own occ, the own occupation definition of disability applied for the first two to five years of the disablement and was then followed by the inability of the insured to perform the principal duties of any occupation for which he/she is suited by education, training and experience. An alternative definition of disability required the insured to be unable to perform the principal duties of his/her own occupation and to not be gainfully employed.

Pure own occ, which was offered to the top occupation classes, extended the initial own occ period for the length of the benefit period (which was to age 65 for many policies). In effect, the "not gainfully employed" condition was dropped from the alternative definition of disability described above. For example, a surgeon, who could no longer perform a certain type of physically demanding surgery due to an accident or sickness, might be able to shift his or her practice to a different type of surgery and make the same compensation while collecting disability benefits. For many involved in IDI insurance, this liberalization shook the fundamentals of good risk management by providing the insured with a financial incentive to stay on claim. Disability products were no longer just insuring against the loss of income but were now insuring against the loss of occupation.

The second major product enhancement was the residual benefit, which was introduced during the mid-1970s. Some companies introduced the residual benefit as a more reasonable alternative to pure own occ. Prior to the introduction of residual benefits, disability benefits were fixed for the length of the benefit period. If the insured were totally disabled (i.e., satisfied one of the definitions of disability described above), then the disability benefit would equal the monthly indemnity of the policy. With residual benefits, the insured could be partially disabled, but not totally disabled, and receive a reduced disability benefit. For example, consider an insured earning $5,000 monthly with an IDI policy with a face amount of $3,000 per month with both total and residual benefits. If totally disabled, the insured would receive a $3,000 monthly disability benefit. However, if partially disabled and able to earn $2,500 monthly, the disability benefit would be 50% of the $3,000, or $1,500 per month.

Key to the design of the early residual benefits was the requirement that the insured must have been totally disabled for a specified qualification period of 30, 60 or 90 days, before eligible to receive residual benefits. Thus, residual benefits were viewed by many in the IDI business as a way to encourage claimants who were totally disabled to return to work and ultimately full recovery, possibly reducing claim costs in total. Others feared a risk

in the potential utilization of the residual benefit as a way to support early retirement. For example, a bad back, which an insured may have been nursing for many years, could now become the reason for cutting back on the number of hours of work that the insured was willing to do as he or she approached retirement. The insured could then qualify for the tax-free residual benefits to add to his or her reduced earnings. Proponents of residual benefits argued that the total disability qualification period was a safeguard against such early retirements.

The introduction of the pure own occ and residual benefits reflected the willingness of IDI carriers to introduce new, potentially riskier benefits with little or no historical experience as a basis for pricing. Product innovation often requires insurers to "go out on the limb" regarding the projection of future claim costs. The risk associated with this practice has been particularly significant with noncancellable IDI products, since there is no opportunity to correct premiums after policies are issued. The premium rates, limited by competitive pressures and statutory minimum loss ratios (50-55%), have not generally reflected the level of risks that companies assumed.

The period from 1950 to 1970 was profitable for the IDI carriers in total. From 1970 to 1975, industry financial losses emerged. These losses have been widely attributed to the recession of the mid-1970s and the acceleration of claims under U.S. Social Security Disability Program, which at that time was paying disability benefits at levels that produced significant over-insurance, especially when they were combined with disability policies, which did not typically offset for Social Security benefits. The financial losses for the IDI carriers peaked around 1975.

Setting the Stage: 1976-1980

Following the recession of the mid-1970s, the economic conditions became more favorable for IDI carriers. Interest rates were on the rise providing substantially higher investment income for the IDI carriers. Inflation rates for both consumer prices and salaries had been at historically high levels since the early 1970s. Thus, IDI policies with

fixed disability benefits had a built-in financial incentive for claimants to return to work, because the purchasing power of the disability benefits would erode in an inflationary environment.

The problem of over-insurance created by the Social Security disability benefits was in the process of being repaired by Congress, and the number of new Social Security disability claimants was falling. This had a favorable impact on the loss ratios of the IDI carriers since IDI contracts at that time were not integrated with Social Security benefits. Even with this development, Social Security, along with worker's compensation and group disability coverage, was satisfying a greater portion of the disability insurance needs of the blue collar and middle-income occupations. Thus, the IDI market shifted away from the blue collar and middle-income occupations to the white collar and, more specifically, the professional and executive occupations. Many IDI carriers realized that the growth in the IDI market would come from the executive and professional occupations, whose incomes were high enough to justify and pay for greater benefit levels and richer contracts. As a result, noncancellable IDI products, which were typically sold to white-collar risks, grew to 86% of total sales by 1980 compared to 79% in 1975.

There were two types of insurance carriers who dominated the IDI market. First, there were companies that had developed significant specializations in IDI insurance, such as Paul Revere, Provident, Union Mutual and Monarch. Their primary form of distribution was through brokers, who were often agents of other companies. Prior to the mid-1970s, they were primarily career agent companies but sold more and more brokerage business as the market shifted to the professional/white collar occupations. The other type of insurance carriers dominating the IDI market consisted of large life carriers such as Prudential, Northwestern Mutual, and New York Life, which were successfully marketing IDI products through their own captive agents.

The maximum amount of coverage per insured was increasing significantly. At the beginning of 1970s, $3,000 of monthly indemnity was a typical maximum. By the end of

the decade, the maximum monthly indemnity for many carriers rose to $10,000. At least one company declared that they had no maximum amount. The increases in the size of coverage per life were facilitated by the presence of a number of IDI reinsurers: North American Re (now Swiss Re), Lincoln National and Paul Revere. Later in the 1980s, several other reinsurers such as Employers Re and Mercantile & General entered the market.

In the late 1970s, two IDI specialists, Paul Revere and Monarch, decided to lead the industry by discouraging or refusing to offer the sale of pure own occ products. They promoted residual benefits as an alternative to pure own occ. Their market shares subsequently suffered, as other IDI specialists and prominent life insurers continued to sell pure own occ to the top occupation classes.

Industry sales between 1975 and 1978 were essentially flat, but competition heated up in 1979 and 1980 with sales growing at a rate of 12.6% in 1979 and 17.7% in 1980. Annual growth rates of industry sales in excess of 15%, and over 20% in many years, were to continue until the mid-1980s. Appendix C lists the top 20 IDI companies ranked by their new sales premium over the 1976-80 period. The top 10 companies comprised about 58% of the total market, and the top 20 companies comprised 78% of the market. The IDI market was becoming more dominated by fewer companies. Five new companies (Connecticut General, Connecticut Mutual, Equitable, Mass Mutual, and Massachusetts Casualty) moved into the top 10 list over the 1975-80 period, indicating the growing interest in the IDI market.

The IDI market had emerged from the losses of the mid-1970s, so that by 1980 the market in general was showing consistent profitability. Improving claim experience and increasing interest rates were behind these favorable results. The predicted losses from the product liberalizations had not yet surfaced.

Competition Heats Up: 1981 – 1985

By 1980, interest rates had reached an all-time high. Inflation, although no longer double-digit, was still high. The economic recession of 1980-81 primarily affected blue collar and middle-income occupations, which were no longer a major market focus of the IDI carriers. Overall, the economic conditions were favorable for IDI insurance, particularly in the white collar and professional/executive markets.

More individual life carriers began to recognize the strategic possibilities that the IDI market could offer. Their interest was driven by the introduction and growing popularity of universal life products and cheap term insurance, which were successfully competing with whole life insurance. This trend was fueled by the historically high new market interest rates compared to the low portfolio interest rates reflected in the pricing and dividend scales of the whole life policies. The profitability of whole life insurance was further hurt by the increasing demand for policy loans at contractually low interest rates. The life agents' compensation was suffering from the lower commissions on the universal life and term life products compared to the levels paid on whole life insurance.

The IDI market offered companies and agents the opportunity to sell products that did not have the disintermediation risk facing individual life products, that had shown a recent track record of profitability, and that paid commissions that were much closer to the levels paid by whole life insurance. In addition, many life carriers were already selling IDI to some extent and, thus, had the administrative capability to manufacture IDI products. There were no apparent barriers at that time for many individual life carriers to enter or re-enter the IDI market.

However, to sell IDI products successfully, the life companies realized that not only must they offer the types of products provided by the IDI specialists; they would have to make them at least as competitive in both their contractual provisions and price. The IDI specialists were in turn threatened because many agents of these life carriers were their

brokers. By 1983, these competitive pressures forced Monarch and Paul Revere to provide pure (long term) own occ in their IDI product portfolios.

The entry or re-entry into the IDI market by a number of life carriers fueled a wave of new liberalizations, as a sense of "leapfrogging" overtook more risk-prudent provisions:

1. By the early 1980s, pure own occ and residual benefits together comprised the standard IDI product offering.

2. Companies began eliminating the total disability qualification periods in the residual benefits. "Zero-day" residual became the standard. The risk of using residual benefits to fund early retirement was largely overlooked.

3. The definition of monthly earnings prior to disablement in residual benefits became more liberal. A common definition defined prior monthly earnings as the greater of (a) the average monthly earnings over the prior 12 months or (b) the greatest average monthly earnings for any two successive years over the prior 5 years. These definitions were favorable for an insured whose income prior to disablement may have taken a downturn due economic reasons, and not necessarily health reasons.

4. Companies expanded the residual benefits to include recovery benefits, where the disability benefits would continue after the insured recovered and returned to full-time work, assuming a loss of income continued that could be attributable to the original accident or sickness. These recovery benefits were typically limited to 6 to 24 months.

5. Lifetime sickness benefits, in which the benefit period was extended for the life of the insured for disabilities due to sickness, were liberalized. Previously, the maximum coverage age for lifetime sickness benefits was age 50, so that an insured could not receive lifetime benefits due to a sickness incurred after age 50.

Competitive forces drove this maximum age to 55 and 60, and in a very few cases, to age 65. In some contracts, lifetime sickness benefits were available for sickness-related disabilities incurred after these ages but the monthly indemnity after age 65 was reduced. The lifetime sickness benefits became a potential funding vehicle for retirements.

6. Companies introduced cost-of-living adjustment (COLA) riders, which increased the maximum monthly indemnity every year that the insured was on claim. The amount of the annual increases were fixed (e.g., 5% - 8% per year) or tied to the CPI-U index. Those tied to the CPI-U index would have a maximum of 6% - 10% per year. Many COLA riders had a minimum annual increase of 4% per year, which was considered an unlikely low rate for the CPI-U index for that time. For claimants who had purchased COLA riders, the present and future threat of inflation no longer created a financial incentive to return to work.

7. Some companies introduced automatic indexing provisions, which allowed the amount of pre-disability coverage to increase with inflation without medical evidence of insurability and with only periodic financial checks.

In addition to such product liberalizations, companies continued to issue greater amounts of coverage per life through increasing the maximum amounts per insured to $10,000 and $15,000 and increasing the percentage of the insured's current income that would be covered by disability insurance. The effect of the product liberalizations and the higher amounts of coverage was to erode financial incentives for claimants to return to work. IDI underwriters also came under pressure to relax their rules and consider more exceptions in order to support growing sales.

Premium rates were also under competitive pressure. Companies were introducing nonsmoker premiums and multi-life discounts to employer-sponsored cases or professional associations. One very significant premium rate change, however, was the introduction of unisex rates. Because female disability claim costs are generally higher

than male disability claim costs at most ages under 55, IDI premium rates had always been gender distinct. Following the Norris Supreme Court decision in 1983, which said that employers could not discriminate by gender in providing employee benefits, a few key IDI carriers decided to make their premiums unisex, since their products were often sold in employer-sponsored multi-life situations. They also determined that normal pregnancy, in addition to complications of pregnancy, should be a covered sickness. In a matter of a few years, most companies offered unisex premium rates and covered normal pregnancy throughout the IDI products. Since products were mainly noncancellable, IDI companies assumed the risk that the percentages of female policies in the future would exceed their pricing assumptions. Furthermore, by covering normal pregnancy, companies were at risk that policies with short elimination periods would be purchased for the sole purpose of covering a pregnancy planned for the not-too-distant future.

Another development, which would be a major contributor to the severe losses of the 1990's, was the increasing focus of many IDI carriers on doctors and surgeons as their main target market. For some large IDI carriers, 30% to 40% of their new business was sold to the medical occupations. The doctors were highly paid and thus able to buy large amounts of coverage provided by the richest policies and riders. Further, doctors were highly motivated to work, thus producing low claim costs. These were very compelling factors in the continuing liberalizations of IDI products. In general, doctors continued to work with potentially disabling medical conditions rather than experience long disabilities.

The primary forms of distribution were through career agents and brokers, which were mainly agents from other companies. IDI specialist carriers like Paul Revere, Monarch, Provident and UNUM had both forms of distribution, although brokerage was the prevalent one. Several developments affecting distribution, which took place during this period, had implications for the future of the business:

1. Monarch had offered IDI products and services to other companies through private label arrangements, in which Monarch's products were filed on the client

companies' paper. Although Monarch had introduced this form of distribution in the 1970s, it made its new IDI portfolio available to several large life companies such as Penn Mutual and Hartford Life & Accident. As a result, these companies were able to enter the increasingly competitive IDI market with relatively little difficulty.

2. In the mid-1980s, Paul Revere entered into co-marketing arrangements with The New England, Prudential and Connecticut General, in which Paul Revere's IDI products were endorsed by the client companies for their own field forces. Both companies continued to sell their own IDI products, but their agents used the Paul Revere products for the up-scale markets and in more competitive situations.

3. Union Mutual (which was renamed UNUM following its demutualization in 1987) lost much of its sales momentum in 1983 when it terminated its career agency system and began building a new brokerage distribution system. Although the great majority of its IDI business came from brokers, Union Mutual's general agents had controlled it. As a result, Union Mutual struggled to maintain level sales for five years while its main competitors were increasing sales at annual rates of 20% or more.

New IDI sales grew at an average compound annual rate of 20% between 1980 and 1985. Appendix C shows the top 20 companies ranked by their new sales premium over the 1981-85 period. The top 10 companies comprised about 64% of the total market, and the top 20 companies comprised 82% of the market. The trend toward greater control of the IDI market by the top IDI carriers was continuing. In addition, other individual life companies such as Northwestern Mutual, Connecticut Mutual, National Life of Vermont, and Minnesota Mutual were emerging as serious players in this market.

Aided by low loss ratios on new business and interest rates that remained high, the financial results for the industry through 1985 continued to be favorable. Appendix E shows the consolidated history of the noncancellable IDI statutory results for 8 of the top

IDI carriers from 1980 to 2004, based on data from the NAIC Annual Statement. These results have been gathered by Mark Seliber and Duane Kidwell and reported annually in the *Disability Newsletter*, now published by Milliman, Inc.

Anticipated Losses Emerge: 1986 – 1990

Interest rates dropped below 10% in1986 and remained in the 7.5% to 9% range for this 5-year period. Inflation was consistently under 5%. Due to low inflation and the inflation protection features in many of the IDI products, the risk of inflation no longer produced the favorable impact on claim termination rates that it once had. The economic conditions were no longer as favorable to the IDI business.

As the IDI specialist companies continued to fight to increase their market share, product liberalizations continued:

1. Some companies revised their residual benefit provisions on new policies so that the loss of income formula only took into account current earnings from the insured's own occupation rather than current earnings from all sources. This change increased the loss of earnings incurred by the insured and resulted in higher residual benefits.

2. An "open-ended" recovery benefit was introduced in which recovery benefits could be paid for the remainder of the full benefit period.

3. Automatic indexing of the pre-disability coverage became a common contractual provision.

4. IDI companies refined the definitions of certain occupations into various specialties. For example, a trial lawyer would be considered disabled if unable to do trial work, although able to earn a living doing other forms of litigation. In

some cases, companies would prepare "specialty letters" to applicants recognizing their specific specialties should they become disabled.

Companies began to identify some sources of unprofitability, such as the 30-day elimination period (elimination periods of less than 30 days had been largely discontinued in the early 1980s) and some occupations such as dentists; as a result, they took action on new business by increasing rates with the 30-day elimination period and by moving dentists down in occupation class. For the rest of the rates, competition continued. The premium rates for elimination periods of 90 days and longer decreased.

Greater attention was being paid to the employer-sponsored multi-life market, particularly by the IDI specialist companies. Premium discounts were increasing with the base discount going from 10% to 15%, but much higher discounts (e.g., 25% to 35%) were available on the very large cases where agents' commissions were reduced. Because the IDI carriers were competing against group disability insurance in this market, they often issued IDI policies applying group underwriting principles on the larger cases. Guaranteed standard offers typically provided specified amounts of coverage (e.g., $3,000) per life if 100% of all eligible employees participated. Many companies refused to offer guaranteed underwriting to such cases, believing that forsaking individual underwriting would lead to certain losses. However, the IDI specialists were recognizing that the employer-sponsored market could be quite profitable, in spite of the higher premium discounts and guaranteed underwriting.

Discounts and guaranteed underwriting were also offered by some carriers to professional associations, which did not have the same risk characteristics as the employer- sponsored market. Low penetration rates in these associations often led to poor financial results.

The high growth rates in new premium enjoyed during the first half of the 1980s continued into 1986 but soon dropped off as companies felt the financial pinch from their product and underwriting decisions made earlier in the decade. A number of the individual life carriers who had become active in this market during the early 1980s

incurred increasing financial losses and realized that they did not have the necessary risk management resources and management information systems to identify the causes of the problems and to take the required actions. Some of these companies were beginning to re-assess the viability and potential profitability of the IDI market.

The financial losses beginning in 1986 were the result of a number of factors:

1. Claim termination rates were lower as the new IDI products eroded the financial incentives for claimants to return to work.

2. Claim incidence rates from mental disorders, which were treated contractually as any other sickness although much more subjective in nature, were increasing. The percentage of claims due to mental disorders increased from below 10% in the early 1980s to over 20% by the late 1980s for many companies.

3. Interest rates were dropping, which took away a significant source of profit for IDI carriers.

4. Many companies had not sufficiently developed their claims management expertise to effectively handle the more difficult claims that were emerging in the late 1980s.

5. Many companies were valuing claim reserves based on the new 1985 Commissioner's Individual Disability Table A (85 CIDA), which reflected lower claim termination rates than the old 1964 Commissioner's Disability Table (64 CDT). Thus, reported financial losses were emerging more quickly.

6. Physicians, especially some of the high paid specialties, began to behave differently as their incomes began to wane. They were no longer the most profitable occupation group.

In addition to the above factors, the risk of AIDS was getting considerable attention. Beginning in the mid-1980s, companies introduced blood testing of policies at underwriting to determine whether applicants had AIDS or were HIV positive. The most common blood-testing limit was set at $3,000 of monthly indemnity, although this was reduced to $1,000 - $2,000 by some companies in some high-risk states such as California. One IDI specialist carrier waited until 1989 to introduce blood-testing in their underwriting requirements. In this case, the need to gain market share apparently delayed an appropriate risk management decision.

Overall, AIDS claims for IDI carriers increased claim costs no more than 2%. The potential risk from HIV asymptomatic claims, particularly in the medical occupations, never transpired. The advent of blood-testing may have produced an offsetting beneficial effect. The blood-testing results were also producing valuable non-AIDS related medical information for the underwriters, such as cholesterol, liver enzymes, etc.

The average compound annual growth rate in new premiums over the 1986-90 period was less than 8%, compared to 20% over the 1981-85 period. From 1989 to 1990, the growth rate in new premiums was slightly negative. The top 20 IDI carriers ranked by their total new premium during 1986-90 are listed in Appendix C. The top 10 companies comprised about 61% of the total market, and the top 20 companies comprised 80% of the market. Combined of America was becoming more active in offering limited IDI benefit contracts to the blue collar and middle income markets. Most of the other IDI carriers, particularly the other top 20 companies, continued to be focused on the executive/ professional markets.

The financial losses for the industry (as seen in Appendix E for 8 top carriers) emerged in 1986 and would continue throughout most of the 1990s. During the 1986-90 period, 10 of the 70 companies decided to exit this business and no longer manufacture their own IDI products. These companies are listed in Appendix D. Except for Aetna and General American, these companies had not sold a significant amount of IDI business. Their combined market share of new premium in this and the previous 5-year period was only

3.7% and 4.4%, respectively. However, the exit of these companies from the IDI market signaled the beginning of a trend that would continue throughout the 1990s.

The Market Awakens and Then Erupts: 1991 to 1995

Interest rates were below 8% in 1991 and continued to drop while inflation remained under control. The economy was coming out of a recession that began in 1989, which affected more white collar jobs than the recession in the early 1980s. However, it was difficult to determine the financial impact of the recession since industry losses continued to grow as a result of the market excesses during the 1980s.

The years 1991 to 1995 witnessed catastrophic results for the IDI industry. The first half of this time period accelerated the transition in the nature of the market, while the second half shook its foundations.

During the first half of the 1991-95 time period, three main forces were at work: (1) market consolidation, (2) market segmentation, and (3) tighter underwriting requirements. As a result, the IDI business shrank significantly in terms of the number of active IDI carriers and the perceived "profitable" IDI markets.

During the 1991-96 period, 21 of the 70 IDI carriers exited the IDI business. Their combined market share of new premium in the previous 5-year period was almost 20%. Of these 21 companies, Monarch, New England and National Life of Vermont had been among the top 20 IDI carriers by new premium during the 1986-90 time period.

- Most of these exits followed companies' "strategic reviews" of their IDI lines of business within the IDI industry and among their other lines of business.

- Two companies, Monarch and Mutual Benefit, had corporate financial problems not related to their blocks of IDI business, which forced the companies to become insolvent or go into receivership.

- Many of the exiting companies entered into reinsurance arrangements with the top three IDI specialists (Paul Revere, Provident and UNUM) to whom they reinsured a major portion of the IDI risk and transferred the claim administration and sometimes policy administration. They also entered into either co-marketing or private label agreements with these companies in order to provide a competitive IDI product to their field forces with minimal risk to the companies.

As a result of the market consolidation, the major IDI specialists were expanding their market shares through reinsurance and marketing agreements with the exiting companies. However, in general, the amount of new sales produced by the exiting companies under the new marketing agreements with the IDI specialists dropped off significantly from their earlier levels. This was due to lower field allowances paid on IDI sales, which were not as generous as what the companies had originally provided, tighter underwriting standards imposed by the IDI specialists, and aversion of the IDI specialists to some of the more unprofitable markets that the exiting companies may have targeted (e.g., chiropractors and dentists). In addition, the exiting companies refocused their marketing efforts on their own core non-IDI products.

During the 1991-93 period, many IDI carriers were identifying market segments that were unprofitable and directing their marketing thrusts away from these segments towards more profitable segments:

- Business sold in the states of California and Florida had long been identified as very unprofitable. Companies were increasing premiums in the range of 10% to 25% on new business in these states and implementing tighter underwriting requirements. For many IDI carriers, these two states together represented 15% to 20% of their total in-force business, and consequently by discouraging sales in these states through tighter underwriting requirements and more restrictive contracts, their overall sales suffered noticeably.

- Companies, particularly the major IDI specialists, were recognizing that not all medical specialties were profitable. Those specialties with high levels of stress or manual duties did not perform as well as other types of physicians. Steps, such as occupational reclassification of certain medical specialties like orthopedic surgeons and emergency room doctors were initiated. These moves represented a major directional shift in the IDI market, which had for many years coveted any and all sales to physicians.

- Some companies introduced new products with 2-year benefit limits on claims arising from mental, nervous, alcohol or drug related conditions. At this time, these limits were optional with a price reduction if chosen.

In addition to market segmentation, companies began to tighten their underwriting requirements during the years 1991 to 1993:

- Companies recognized the many beneficial effects of blood testing, which was introduced in the mid-to-late 1980s as protection against the AIDS risk. These tests identified medical issues such as liver and cholesterol problems that the underwriters may not have obtained otherwise. Thus, the utilization of blood testing was expanded.

- Because of the rise of mental, nervous, and substance abuse claims, companies were taking a much harder stand on any histories of mental or nervous conditions and substance abuse identified during underwriting and refusing to issue policies in many circumstances.

- Documentation of applicants' financial income during underwriting had in general been weak throughout the industry and created problems at time of claim. In order to reduce the risk of misrepresentation of financial income, companies initiated tighter financial disclosure requirements during underwriting. Some companies offered premium discounts as incentives to those applicants who willingly provided financial documentation. Others simply required financial documentation from all applicants.

As result of market consolidation, market segmentation, and tighter underwriting requirements, industry sales stayed essentially flat during 1991 and 1992 and dropped by almost 8% in 1993. Overall, profits remained negative for the industry as reflected in the consolidated statutory noncancellable results of 8 large IDI carriers in Appendix E.

Companies were realizing that they needed to invest more in their claim management organizations. The following were some typical changes in IDI claim management:

- Companies added psychiatric resources to handle the influx of mental/nervous claims. These resources often included psychiatrists, psychiatric nurses, and claim professionals with years of experience handling such claims.

- Many companies were segmenting their claims beyond the mental/nervous to ensure that specialized resources handled the right claims. Such segmentation included distinguishing claims along geographic lines, by type of benefit and by size of the policy, because such claims often produced complexities requiring the skills of the most experienced staff members.

- A number of companies used claim settlements, whereby the future stream of disability benefits on claims were commuted to lump sum benefits. If done properly, claim settlements could be a win-win situation for the companies and the claimants. Unfortunately, some over-aggressive settlement practices by a few companies lead to litigation and very large damages against these companies.

- Accountants were hired by claims departments to analyze the complex financials associated with residual claims, where the pre-disability incomes and current incomes determined the disability benefit.

- By the mid-1990s, most companies had increased the professionalism in their claim areas, i.e., rehabilitation specialists, fraud units, investigation specialists, physicians

and accountants on staff. In general, the demand for experienced IDI claims professionals exceeded the supply.

The year 1993 was a turning point for the IDI industry:

- Provident, which had been the IDI leader throughout the 1980s, announced a $420 million pre-tax strengthening of its GAAP reserves on IDI business, as a result of deteriorating morbidity and decreasing interest rates. Provident followed this in late 1994 with an announcement that it would no longer issue noncancellable policies with the "pure own occ" (long term) definition of disability. It also announced that it would introduce a parallel set of guaranteed renewable premiums on all its IDI policies hoping that the lower premiums would be an incentive to applicants to choose this less risky form of renewability.

- The medical professions were undergoing a major re-structuring. For many years, the doctors' net incomes were flat or decreasing as the result of reduced Medicare reimbursements and higher malpractice premiums. Because of high medical costs and the increasing costs of medical insurance, forms of managed care, such as health maintenance organizations, were becoming more popular. Managed care placed significant controls over the doctors' ability to practice medicine. Further, managed care reduced patients' access to specialists, which led to major income decreases. Finally, in 1993 the Clinton administration began deliberations on the subject of national health care.

As a result of their dissatisfaction and frustrations over the current state and direction of the medical world, many doctors were looking at their IDI policies as a means of escape. Physicians typically purchased these policies when their incomes were much higher, and now the monthly indemnities of these policies covered close to 100% or more of their current incomes. These policies often had lifetime sickness benefit periods and cost-of-living riders. With the residual benefits, doctors could reduce their hours or stop working altogether and still maintain their incomes.

Medical conditions that may have been overlooked or tolerated by doctors during more financially rewarding times were now becoming the bases of new claims. The significant increase in doctor claims seemed to begin around 1993, although due to reporting lags, they did not generally emerge in companies' reported earnings until 1994.

Late in 1994, UNUM announced that it was strengthening its GAAP reserves on its IDI business by $200 million (pre-tax), largely attributable to the impact of doctor claims. Following this, UNUM announced that in 1995 it would introduce a totally guaranteed renewable policy series to replace its current noncancellable IDI products.

Industry sales in 1994 and 1995 dropped by 6% and 9%. Sales in 1995 were 23% below the highest year of sales in 1988. As a result of market consolidation, the top 10 carriers controlled 69% of the market share and the top 20 carriers controlled 85%.

Appendix E shows the substantial increase in losses for the industry for this period of time. For the 8 companies in the study, their combined statutory margin as percent of premium decreased from a negative 6% to 7% in the 1992-93 period to a negative 11% to 12% in the 1994-95 period, which represented the worst financial results over period 1976-2004. The relative impact on IDI reinsurers was even greater. Since most reinsurance was on an excess-of-retention basis, the reinsured business had a higher proportion of physicians who had purchased the largest IDI policies over the years.

The Slow Road to Recovery: 1996 to 2000

The U.S. economy was in the middle of its longest expansion ever. Interest rates continued to decrease, and inflation rates barely reached 3%. Entering the 1996-2000 period, the U.S. IDI business was suffering its worst and longest financial crisis since the Great Depression of the 1930s.

Product development and underwriting practices in the mid-1990s were characterized by a general retrenchment. Market consolidation continued as more IDI companies chose to exit. However, market consolidation took on two new forms as the traditional IDI reinsurers exited and a number of large IDI companies merged.

Companies remaining in the IDI market responded by restricting their IDI contracts and underwriting and increasing premium rates on new business:

- Most companies reverted to sex distinct premium rates, except for the employer sponsored IDI market for which they maintained a separate unisex product or separate rates on the same product.

- The premium surcharge for certain high-risk states like California and Florida was increased. The average premium surcharge for such states was approximately 25% in 1998. Some companies simply withdrew from these states.

- The premium surcharge for smokers was increased from 10% in the early 1990s to 25% on average.

- Many companies made the 2-year mental/nervous limitations in the benefit periods mandatory for non-multi-life business and high-risk states.

- Lifetime sickness riders were removed or significantly modified to reduce the risk. In some cases, they were replaced with annuity riders by which life annuities with payouts beginning after age 65 are funded while the insured is disabled.

- Although pure own occ was not removed as an option by most companies, its availability was restricted, particularly to the medical occupations.

- Open-ended recovery benefits in residual provisions were replaced by limited recovery benefits such as 24 months.

- Physicians were by and large moved down in occupation class or had special occupation classes created with much higher rates.

- The maximum issue and participation amounts available to physicians were typically decreased to $10,000 per month. This limit took into account the amount of disability coverage in force as well as the amount being applied for.

- Many companies initiated blood testing and/or financial documentation on all applications or set much lower limits in their underwriting requirements.

Guaranteed renewable IDI products gained some attention as the financial losses demonstrated the inherent vulnerability of noncancellable IDI products. During the 1990-95 period, guaranteed renewable products represented less than 10% of IDI sales. However, during the 1996-00 period, the percentage of guaranteed renewable products jumped to 21% of IDI sales.

Eleven of the 70 IDI carriers monitored for this paper exited the IDI market during the 1996-2000 period. Their combined market share during the prior 5-year period was approximately 16%. The list of exiting companies included MONY, New York Life, Equitable, Mass Casualty, and Royal Maccabees.

Most of the IDI reinsurers likewise exited the IDI market. Employers Re, Lincoln National, and Paul Revere first announced that they would no longer assume new IDI reinsurance business. Swiss Re merged with Mercantile & General and subsequently announced that they too would no longer assume new IDI reinsurance business. Currently, only two reinsurers remain active in assuming new IDI reinsurance business, Munich American and General Cologne. Both companies were new to the IDI reinsurance market and, as a result, were not encumbered by large unprofitable in-force blocks issued during the 1980s and early 1990s. With little competition, they were able to

exercise significantly more influence over their clients' product and underwriting decisions than the earlier IDI reinsurers could.

A series of mergers of direct IDI carriers have had a substantial impact on market consolidation:

1. In 1996, Mass Mutual and Connecticut Mutual merged. Both companies had been top-10 IDI writers over prior 20 years.

2. In 1997, Provident acquired Paul Revere.

3. In 1999, Provident and UNUM merged forming UNUMProvident.

As a result of market consolidation, key product decisions in the IDI market were being made by fewer companies. In the 1996-00 period, 68% of the market share of new premium was produced by the top 5 carriers, 84% by the top 10 carriers, and 95% by the top 20 carriers.

Total sales continued to decrease for a number of reasons during the 1996-98 years and were relatively flat over the 1999 – 2000 period:

- The traditional IDI market, particularly with companies' general aversion to the physician market, was significantly reduced.

- Tighter underwriting made it more difficult than ever to sell IDI products. Life agents, who had traditionally been reluctant to sell IDI business, had more reasons to avoid this market.

- Although companies who exited the market often entered into marketing arrangements with the remaining IDI carriers, their total IDI production usually dropped as their marketing focus turned to their core insurance products.

- The total sales of the major IDI specialists following their mergers reduced significantly as other IDI carriers saw opportunities to pursue their brokers.

The good news was that the industry financial results began to show signs of recovery. Appendix E shows the consolidated statutory profit margin for the 8 IDI carriers turning positive in 1999 and increasing in 2000. In some respects the improving statutory results have been helped by lower sales and thus lower surplus drain. However, the new business written during the 1990's has been much more profitable than business issued in the 1980s as a result of the contractual restrictions, higher premiums, and tighter underwriting initiated by most companies. In addition, development of stronger claim management resources has had a significant beneficial impact on the industry's bottom line. Finally, physician morbidity has improved somewhat compared to the high claim levels of the mid-1990s.

Stabilization: 2001 to 2005

The IDI industry was profitable in the aggregate during this period in spite of an economic recession and low interest rates. Morbidity remained stable although the low interest rates eroded profit margins.

Only one company, Nationwide, exited the IDI market during this period. Two mergers of active IDI carriers occurred: Berkshire/Guardian and Lutheran Brotherhood/Aids Association of Lutherans (renamed Thrivent). Berkshire, now a subsidiary of Guardian, became the second largest writer of traditional IDI business, next to UnumProvident, following the merger.

From the list of 70 IDI carriers in Appendix A, 46 have exited the business over the years. The exited companies produced over 40% of the sales during the 1980s. Although new sales of traditional IDI business stopped the decline witnessed during the mid-1990s, traditional sales during the 2001-2005 period increased slowly - at an annualized growth

rate of less than 2%. As a result, total premium income for this business has remained virtually level over this 5-year period. There have been few new entrants in the traditional IDI market.

In comparison, some carriers, (e.g., AFLAC, Colonial) who sold very little if any traditional IDI products, have had significant success in selling payroll deduction worksite DI policies, which typically offer short benefit periods (2 years or less) with simplified underwriting. (Worksite DI products are beyond the scope of this study note.) In 2004, individual DI worksite sales were comparable to traditional DI sales in total volume of new premium. The DI worksite product appears to be reaching a middle income market that traditional IDI carriers have not served well in general.

Traditional IDI products and rates did not undergo significant changes during this period following the corrective actions that were taken during the 1996-2000 period. Most of the IDI carriers are still focused on the white collar and professional/executive markets. The medical market, now offered more restrictive products than available in the early 1990s with significantly higher rates, is again a target market for some traditional IDI carriers.

Most of the competitive pressure has been focused on companies pursuing the employer-sponsored market, using IDI products in lieu of or in addition to group long-term disability (LTD) coverage. Some carriers developed IDI products specifically for the employer-sponsored multi-life market that offer traditional IDI guarantees with policy provisions that are more consistent with those found in group LTD products.

The most controversial aspect of the high level of competition in the employer-sponsored market is the growing practice of offering guaranteed standard issue (GSI) underwriting on voluntary employer-sponsored cases. GSI amounts on voluntary cases can exceed $5,000 per month with carriers expecting that no more than 30% of eligible employees participating. Whereas, GSI offers on fully participating cases have generally had good experience, the potential for anti-selection on voluntary GSI cases could be significant.

The Society of Actuaries (SOA), through its Individual Disability Experience Committee (IDEC), has compiled inter-company data on IDI morbidity trends during the 1990s, which will ultimately be the basis of new industry tables to replace the 1985 CIDA and Commissioner's Individual Disability Table C (CIDC) industry tables. The IDEC published its report on the SOA website. Appendix G provides the Summary of Results from the IDEC report describing key morbidity trends.

The results from the IDEC study provide statistical validation of many of the observations discussed in this study note. For example:

- Claim incidence rates on average generally declined during the 1995-99 period, reflecting a combination of improved underwriting and more restrictive products on new business and favorable economic environment throughout most of the 1990s.

- Claim incidence rates for medical occupations noticeably jumped during the 1993-95 period and then stabilized at a level (as percentage of 85 CIDA incidence rates) that was significantly higher than incidence rates for non-medical occupations.

- Claim termination rates during the 1990's were significantly lower than 85 CIDA termination rates during the first 18 months of disablement, and medical occupations had significantly lower termination rates than non-medical occupations.

- The impact of certain benefit provisions on claim incidence and/or termination experience was observed. Longer benefit periods produce lower termination rates. Policies with lifetime benefit periods incurred substantially higher claim incidence in addition to lower termination rates. Cost-of-living benefits typically resulted in lower claim termination rates.

- The employer-sponsored multi-life IDI market incurred significantly lower claim incidence than the IDI business that was sold individually, particularly from the non-medical occupations.

- Claim incidence rates for individually sold IDI business jumped at the end of the 2-year contestable period, showing how anti-selection can materialize in this business. In contrast, employer-paid multi-life IDI business that was issued using guaranteed standard underwriting did not show any material anti-selection in its incidence rates.

- Higher claim incidence was observed in business issued in California and Florida, which validates the higher premiums that many companies charge in these states.

The new valuation tables will most likely expand the range of variables currently reflected in the 85 CIDA tables (age, sex, occupation class, elimination period) to distinguish between medical and non-medical occupations, to reflect lower claim termination periods for longer benefit periods, as well as higher incidence rates for policies with lifetime benefit periods. Adjustment factors will accompany new valuation tables to reflect incidence differences by policy duration, by market (e.g., employer-sponsored multi-life versus individually sold business), and by key states. In total the new tables will better represent the dynamics of the IDI market.

Conclusions

The industry has successfully eliminated the losses experienced during the 1990s and regained positive, albeit, moderate profits, through instituting stronger risk management principals in its products, underwriting and claims management practices. At the same time, traditional IDI business, with continued emphasis on the professional and executive markets, currently produces 55% of the sales that it did during the late 1980s. The return

to profitability along with the myriad of lessons learned from a difficult history has yet to encourage many new entrants to the traditional IDI market.

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APPENDIX A

70 Individual DI Carriers

Aetna L&C
Aid Association of Lutherans
American United Life
Bankers Life & Casualty
Benefit Trust
Berkshire Life
BMA
CN A
Columbus Mutual
Combined of America
Connecticut General
Connecticut Mutual
Country Life
Crown Life U.S.
Equitable
Farm Bureau (Iowa)
Fidelity Mutual
Franklin Life
General American
Great-West U.S.
Guarantee Mutual
Guardian Life
IDS Life
Illinois Mutual
Indianapolis Life
ITT Hartford
John Hancock
Life of Georgia
Life of Virginia
Lincoln National Life
Lutheran Brotherhood
Mass Mutual
Massachusetts Casualty
Met Life
Minnesota Mutual
Monarch Life
Monumental Life
MONY
Mutual Benefit Life
Mutual of Omaha
National Life of Vt.
Nationwide Life
New England Life
New York Life
Northwestern Mutual
Northwestern National Life
Ohio National
Pacific Mutual
Paul Revere
Penn Mutual
Pilot Life
Principal Financial
Provident Companies
Provident Mutual
Prudential
Royal Maccabees
Security Mutual of NY
Shenandoah Life
Standard
State Farm Mutual
State Mutual (now Allmerica)
Time (WisconsIn)
Travelers
Union Central
United of America (Chubb)
UNUM (formerly Union Mutual)
USAA Life
Washington National
Western Life
Woodmen A&L

APPENDIX B

Combined New Premiums for Years 1975 – 2004 for the 70 IDI Carriers

	NC	GR	Total	Annual Growth Rate	% Noncan
1975	98,210	25,980	124,190		79%
1976	93,389	20,289	113,677	-8.47%	82%
1977	94,671	17,106	111,777	-1.67%	85%
1978	95,404	17,730	113,134	1.21%	84%
1979	108,402	19,003	127,405	12.61%	85%
1980	128,829	21,181	150,011	17.74%	86%
1981	154,295	22,064	176,359	17.56%	87%
1982	184,010	23,244	207,255	17.52%	89%
1983	232,842	25,470	258,312	24.64%	90%
1984	273,278	26,737	300,015	16.14%	91%
1985	350,800	28,526	379,326	26.44%	92%
1986	414,294	50,531	464,825	22.54%	89%
1987	445,752	67,587	513,338	10.44%	87%
1988	483,673	65,077	548,750	6.90%	88%
1989	519,090	43,027	562,117	2.44%	92%
1990	511,021	38,596	549,617	-2.22%	93%
1991	518,776	35,063	553,839	0.77%	94%
1992	511,416	36,745	548,161	-1.03%	93%
1993	461,360	44,626	505,986	-7.69%	91%
1994	429,226	48,446	477,672	-5.60%	90%
1995	378,563	55,070	433,633	-9.22%	87%
1996	295,596	66,212	361,808	-16.56%	82%
1997	270,495	68,987	339,482	-6.17%	80%
1998	256,560	69,463	326,023	-3.96%	79%
1999	265,848	75,248	341,096	4.62%	78%
2000	269,759	73,936	343,695	0.76%	78%
2001	270,219	80,764	350,983	2.12%	77%
2002	279,119	81,609	360,728	2.78%	77%
2003	288,897	77,629	366,526	1.61%	79%
2004	298,513	73,026	371,539	1.37%	80%
1976-80	520,695	95,309	616,005		
1981-85	1,195,226	126,041	1,321,267		90%
1986-90	2,373,830	264,818	2,638,648		90%
1991-95	2,299,341	219,950	2,519,291		91%
1996-00	1,358,258	353,846	1,712,104		79%
2001-04	1,136,748	313,028	1,449,776		78%

APPENDIX C

Ranking of the 20 Top Carriers by New Premium for 1975 and Each of the 5-Year Periods from 1976 to 2004

Ranking of 20 Top IDI Carriers by New Premium for 1975		Ranking of 20 Top IDI Carriers by New Premium for 1976-80		Ranking of 20 Top IDI Carriers by New Premium for 1981-85	
1	Paul Revere	1	Provident Companies	1	Provident Companies
2	Provident Companies	2	Paul Revere	2	Paul Revere
3	Bankers Life & Casualty	3	Union Mutual	3	Northwestern Mutual
4	Union Mutual	4	Northwestern Mutual	4	Union Mutual
5	Prudential	5	Equitable	5	Equitable
6	New York Life	6	Mass Mutual	6	Mass Mutual
7	Monarch Life	7	Connecticut General	7	Monarch Life
8	Northwestern Mutual	8	Monarch Life	8	Connecticut Mutual
9	Met Life	9	Massachusetts Casualty	9	National Life of Vt.
10	Travelers	10	Connecticut Mutual	10	Minnesota Mutual
11	Connecticut General	11	New York Life	11	Guardian Life
12	MONY	12	Guardian Life	12	MONY
13	Mass Mutual	13	MONY	13	New York Life
14	Aetna L&C	14	Bankers Life & Casualty	14	New England Life
15	Massachusetts Casualty	15	Prudential	15	Massachusetts Casualty
16	Connecticut Mutual	16	Aetna L&C	16	Royal Maccabees
17	Mutual Benefit Life	17	Illinois Mutual	17	Aetna L&C
18	Guardian Life	18	Lincoln National Life	18	Illinois Mutual
19	Illinois Mutual	19	Mutual Benefit Life	19	Lincoln National Life
20	Lincoln National Life	20	Minnesota Mutual	20	John Hancock

APPENDIX C

Ranking of the 20 Top Carriers by New Premium
for 1975 and Each of the 5-Year Periods from 1976 to 2004

Continued

Ranking of 20 Top IDI Carriers by New Premium for 1986-90		Ranking of 20 Top IDI Carriers by New Premium for 1991-95		Ranking of 20 Top IDI Carriers by New Premium for 1996-00	
1	Provident Companies	1	Paul Revere	1	UnumProvident
2	Paul Revere	2	Provident Companies	2	Northwestern Mutual
3	Northwestern Mutual	3	UNUM	3	Mass Mutual
4	Monarch Life	4	Northwestern Mutual	4	Guardian Life
5	UNUM	5	Mass Mutual	5	Combined of America
6	Equitable	6	New York Life	6	IDS Life
7	New York Life	7	Equitable	7	Principal Financial
8	Connecticut Mutual	8	Connecticut Mutual	8	Met Life
9	Mass Mutual	9	Guardian Life	9	Berkshire Life
10	Combined of America	10	Combined of America	10	State Farm Mutual
11	Royal Maccabees	11	New England Life	11	Illinois Mutual
12	Aetna L&C	12	Royal Maccabees	12	Minnesota Mutual
13	MONY	13	Massachusetts Casualty	13	New England Life
14	Guardian Life	14	MONY	14	Union Central
15	New England Life	15	IDS Life	15	Mutual of Omaha
16	State Mutual (now Allmerica)	16	Lincoln National Life	16	Ohio National
17	National Life of Vt.	17	Principal Financial	17	Massachusetts Casualty
18	Minnesota Mutual	18	Minnesota Mutual	18	Franklin Life
19	John Hancock	19	National Life of Vt.	19	Aids Association of Lutherans
20	Massachusetts Casualty	20	State Farm Mutual	20	Equitable

Ranking of the 20 Top Carriers by New Premium
for 1975 and Each of the 5-Year Periods from 1976 to 2004

Continued

Ranking of 20 Top IDI Carriers
by New Premium for 2001-04

1	UnumProvident
2	Berkshire Life
3	Mass Mutual
4	Northwestern Mutual
5	Met Life
6	Combined of America
7	Principal Financial
8	IDS Life
9	Standard
10	Woodmen A&L/Assurity
11	Union Central
12	Illinois Mutual
13	State Farm Mutual (Ill)
14	Mutual of Omaha
15	Thrivent
16	Ohio National
17	Country Life
18	Minnesota Mutual
19	Franklin Life
20	Bankers Life & Casualty

APPENDIX D

List of the IDI Carriers Exiting the IDI Market
By Period of Exit

Columbus Mutual	1981-86	New York Life	1996-00
Pacific Mutual	1986-90	Connecticut General	1996-00
Pilot Life	1986-90	ITT Hartford	1996-00
Benefit Trust	1986-90	MONY	1996-00
Western Life	1986-90	Lincoln National Life	1996-00
Life of Virginia	1986-90	Equitable	1996-00
Monumental Life	1986-90	Washington National (Conseco)	1996-00
Northwestern National Life	1986-90	BMA	1996-00
Life of Georgia	1986-90	Royal Maccabees	1996-00
Aetna L&C	1986-90	Massachusetts Casualty	1996-00
General American	1986-90	Minnesota Mutual	1996-00
Provident Mutual	1991-95	Farm Bureau (Iowa)	1996-00
New England Life	1991-95	USAA Life	1996-00
United of America (Chubb)	1991-95	New York Life	1996-00
Mutual Benefit Life	1991-95	Nationwide	2000-04
Guarantee Mutual	1991-95		
Great-West U.S.	1991-95		
Time (WisconsIn)	1991-95		
Indianapolis Life	1991-95		
National Life of Vt.	1991-95		
John Hancock	1991-95		
Prudential	1991-95		
Crown Life U.S.	1991-95		
Shenandoah Life	1991-95		
Security Mutual of NY	1991-95		
Fidelity Mutual	1991-95		
Monarch Life	1991-95		
Penn Mutual	1991-95		
Travelers	1991-95		
State Mutual (now Allmerica)	1991-95		
American United Life	1991-95		
CNA	1991-95		

APPENDIX E

Consolidated Statutory Non-cancellable Financial Results for 8 of the Top IDI carriers

	1980	1981	1982	1983	1984	1985
Earned Premium (in millions)	$395.2	$454.7	$527.4	$611.4	$714.4	$836.0
Premium Growth	N/A	15.1%	16.0%	15.9%	16.8%	17.0%
As a percent of premium:						
Incurred Claims	43.5%	44.2%	46.5%	46.9%	48.1%	50.3%
Policy Reserve Increases	17.1%	16.8%	15.0%	12.9%	13.3%	9.9%
Benefits & Policy Reserve Increase	60.6%	61.0%	61.5%	59.8%	61.4%	60.2%
Commissions	22.2%	23.3%	24.0%	24.2%	24.9%	26.0%
Expenses	22.7%	24.0%	25.7%	26.6%	27.4%	26.8%
Taxes, Licenses & Fees	3.3%	3.4%	3.5%	3.4%	3.6%	3.6%
Commissions, Expenses & Taxes	48.2%	50.7%	53.2%	54.2%	55.9%	56.4%
Net Investment Income	20.9%	21.4%	21.1%	21.8%	23.1%	24.4%
Margin (before Dividends & FIT)	12.1%	9.7%	6.4%	7.8%	5.8%	7.8%

	1986	1987	1988	1989	1990
Earned Premium (in millions)	$962.9	$1,129.8	$1,304.6	$1,503.6	$1,762.5
Premium Growth	15.2%	17.3%	15.5%	15.3%	17.2%
As a percent of premium:					
Incurred Claims	56.5%	58.1%	64.1%	63.7%	64.7%
Policy Reserve Increases	11.4%	12.3%	12.6%	11.9%	12.4%
Benefits & Policy Reserve Increase	67.9%	70.4%	76.7%	75.6%	77.1%
Commissions	26.4%	27.1%	26.1%	25.0%	25.0%
Expenses	27.8%	28.0%	27.0%	27.5%	25.9%
Taxes, Licenses & Fees	3.6%	3.7%	3.5%	3.4%	3.3%
Commissions, Expenses & Taxes	57.8%	58.8%	56.6%	55.9%	54.2%
Net Investment Income	23.6%	23.6%	26.9%	27.7%	26.9%
Margin (before Dividends & FIT)	-2.1%	-5.6%	-6.4%	-3.8%	-4.4%

APPENDIX E

Consolidated Statutory Non-cancellable Financial Results
for 8 of the Top IDI carriers

Continued

	1991	1992	1993	1994	1995
Earned Premium	$1,981.2	$2,163.6	$2,314.3	$2,466.8	$2,594.7
Premium Growth	12.4%	9.2%	7.0%	6.6%	5.2%
Incurred Claims	69.1%	77.1%	79.9%	91.1%	96.0%
Policy Reserve Increases	12.3%	12.1%	13.4%	13.5%	12.7%
Benefits & Policy Reserve Increase	81.4%	89.2%	93.3%	104.6%	108.7%
Commissions	23.7%	22.0%	22.6%	20.9%	20.5%
Expenses	25.0%	23.6%	21.6%	19.2%	17.3%
Taxes, Licenses & Fees	3.2%	3.2%	3.2%	3.1%	2.9%
Commissions, Expenses & Taxes	51.9%	48.8%	47.4%	43.2%	40.7%
Net Investment Income	28.7%	30.3%	32.1%	32.5%	34.7%
Margin (before Dividends & FIT)	-4.6%	-7.7%	-8.6%	-15.3%	-14.7%

	1996	1997	1998	1999	2000
Earned Premium	$2,687.1	$2,702.4	$2,673.8	$2,692.4	$2,771.7
Premium Growth	3.6%	0.6%	-1.1%	0.7%	2.9%
Incurred Claims	103.7%	101.0%	108.3%	101.6%	103.8%
Policy Reserve Increases	10.3%	11.2%	9.3%	7.5%	6.5%
Benefits & Policy Reserve Increase	114.0%	112.2%	117.6%	109.1%	110.3%
Commissions	17.7%	15.0%	13.7%	13.0%	11.5%
Expenses	16.0%	17.9%	19.9%	21.0%	18.9%
Taxes, Licenses & Fees	2.8%	2.9%	2.7%	2.5%	2.6%
Commissions, Expenses & Taxes	36.5%	35.8%	36.3%	36.5%	33.0%
Net Investment Income	37.1%	42.7%	49.4%	49.8%	51.8%
Margin (before Dividends & FIT)	-13.4%	-5.3%	-4.5%	4.2%	8.5%

APPENDIX E

Consolidated Statutory Non-cancellable Financial Results
for 8 of the Top IDI carriers

Continued

	2001	2002	2003	2004
Earned Premium	$2,770.7	$2,788.0	$2,815.9	$2,737.3
Premium Growth	0.0%	0.6%	1.0%	-2.8%
Incurred Claims	107.8%	114.6%	114.3%	117.6%
Policy Reserve Increases	3.1%	1.7%	3.2%	1.8%
Benefits & Policy Reserve Increase	110.9%	116.4%	117.5%	119.3%
Commissions	11.5%	11.4%	11.0%	10.5%
Expenses	18.6%	18.8%	19.2%	19.0%
Taxes, Licenses & Fees	2.8%	2.6%	2.5%	2.4%
Commissions, Expenses & Taxes	32.9%	32.8%	32.7%	31.9%
Net Investment Income	58.6%	59.6%	59.3%	56.4%
Margin (before Dividends & FIT)	14.9%	10.4%	9.1%	5.2%

APPENDIX F

Historical Interest Rates for a 10-year Treasury Bond and Annual CPI-U Inflation Rates for Years 1965 to 2005

Year	Yields on 10-Yr T-Bills	Change in CPI-U Index	Year	Yields on 10-Yr T-Bills	Change in CPI-U Index
1965	4.28	1.9	1986	7.67	1.9
1966	4.93	3.5	1987	8.39	3.6
1967	5.07	3.0	1988	8.85	4.1
1968	5.64	4.7	1989	8.49	4.8
1969	6.67	6.2	1990	8.55	5.4
1970	7.35	5.6	1991	7.86	4.2
1971	6.16	3.3	1992	7.01	3.0
1972	6.21	3.4	1993	5.87	3.0
1973	6.85	8.7	1994	7.09	2.6
1974	7.56	12.3	1995	6.57	2.8
1975	7.99	6.9	1996	6.44	3.0
1976	7.61	4.9	1997	6.35	2.3
1977	7.42	6.7	1998	5.26	1.6
1978	8.41	9.0	1999	5.65	2.2
1979	9.43	13.3	2000	6.03	3.4
1980	11.43	12.5	2001	5.42	2.8
1981	13.92	8.9	2002	4.61	1.6
1982	13.01	3.8	2003	4.02	2.3
1983	11.1	3.8	2004	4.27	2.7
1984	12.46	4.3	2005(thru Oct)	4.25	5.6
1985	10.62	3.6			

APPENDIX G

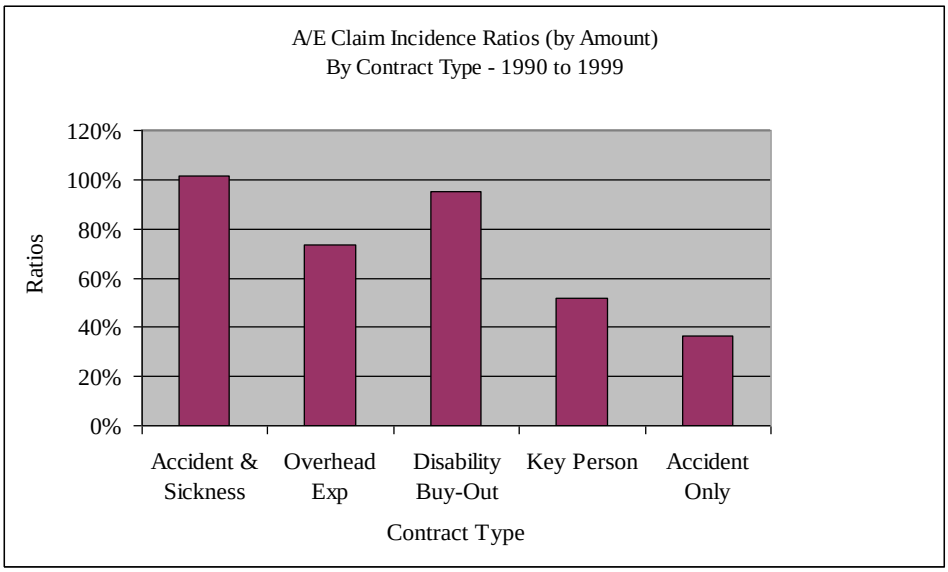
Summary of Results of the IDEC Report

On IDI Claim Trends During 1990's

This appendix summarizes some of the more significant results from the IDEC study. References to occupation class refer to the four 85 CIDA occupation classes. Most of the analyses are based on the (face) amount of policies and claims and not on count. The expected basis is the 85 CIDA table.

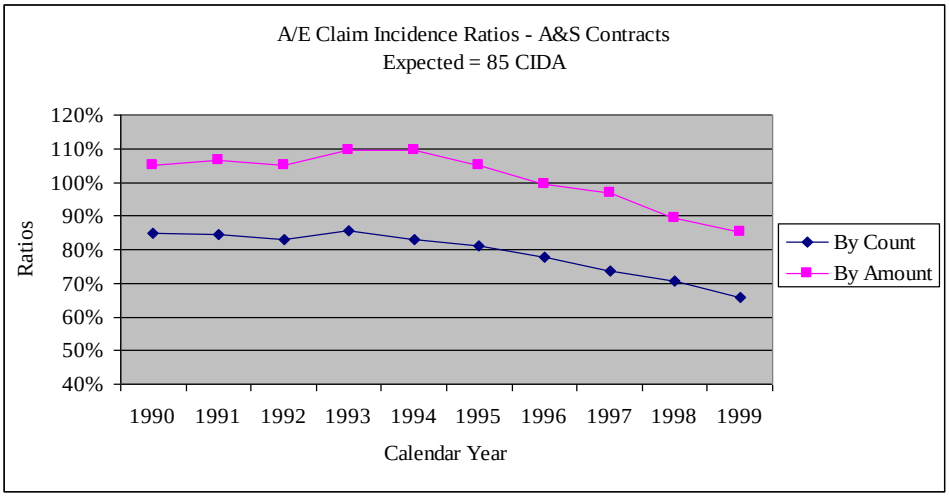
1. In general average claim incidence experience over the 1990-99 time period was equivalent to or lower than 85 CIDA claim incidence.

Chart 1



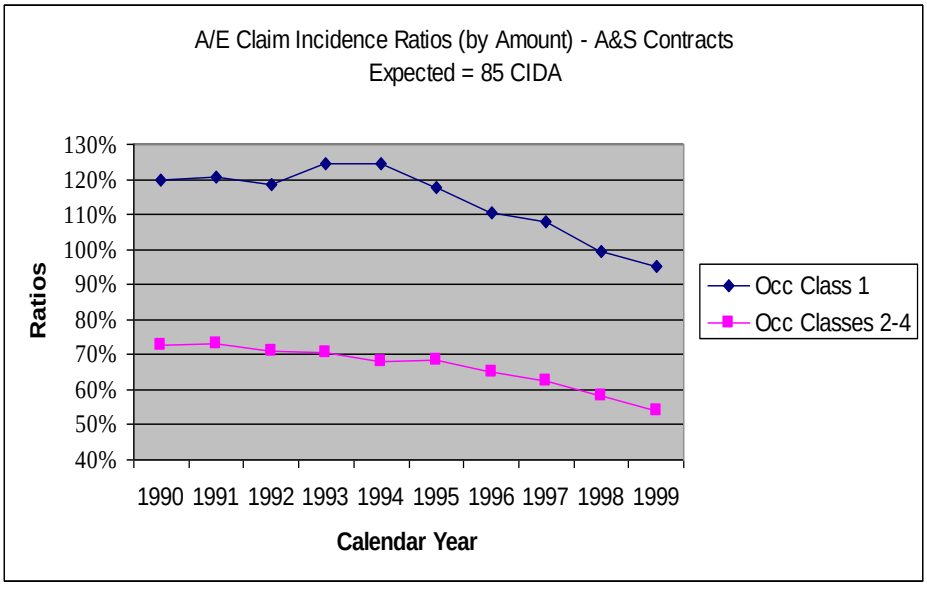
2. Claim incidence rates improved steadily after 1994 relative to 85 CIDA incidence.

Chart 2



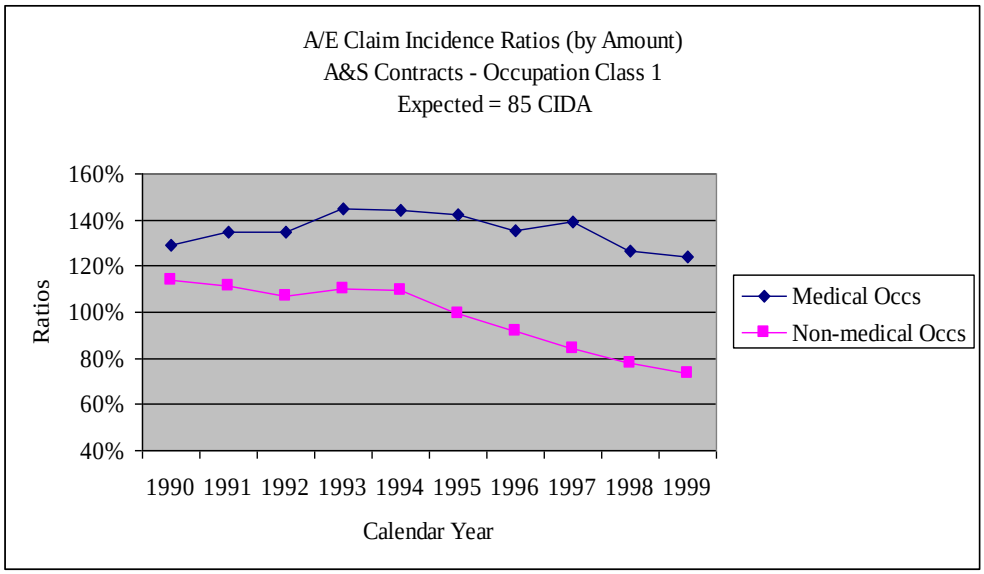
3. Blue/grey collar occupations experienced significantly better claim incidence experience relative to 85 CIDA than the white collar/ professional/ executive occupations.

Chart 3



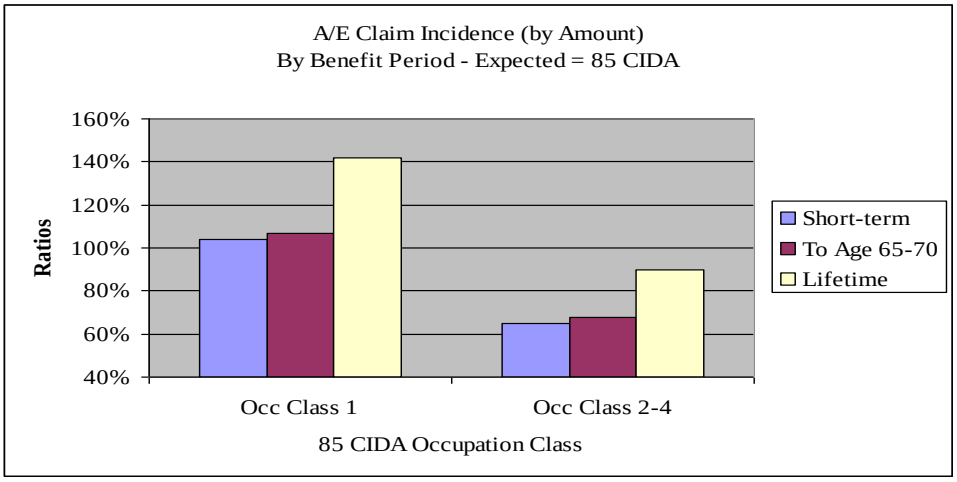
4. Non-medical occupations experienced a 35% drop in claim incidence rates between 1990 and 1999. Medical occupations experienced increasing claim incidence ratios between 1990 and 1995 and moderately decreasing claim incidence thereafter.

Chart 4



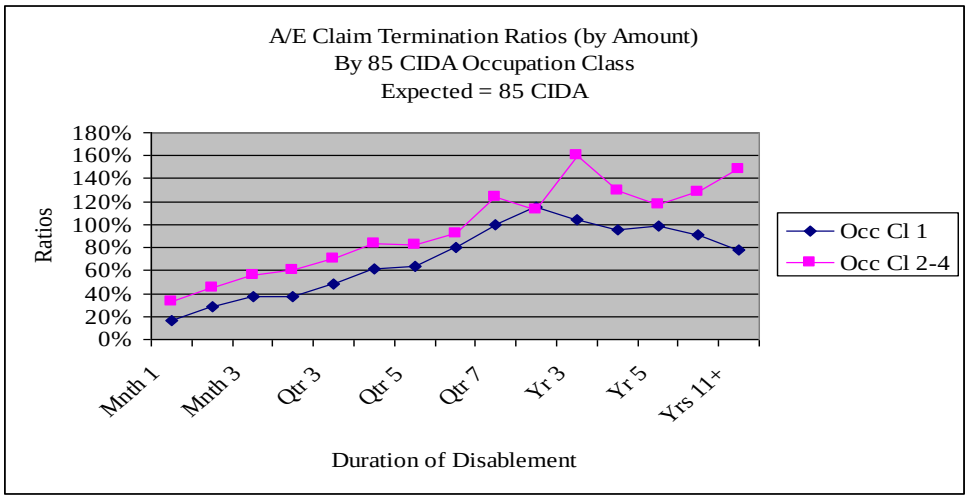
5. Claims with lifetime benefit periods have significantly higher claim incidence than claims with either short-term or To Age 65-70 benefit periods.

Chart 5



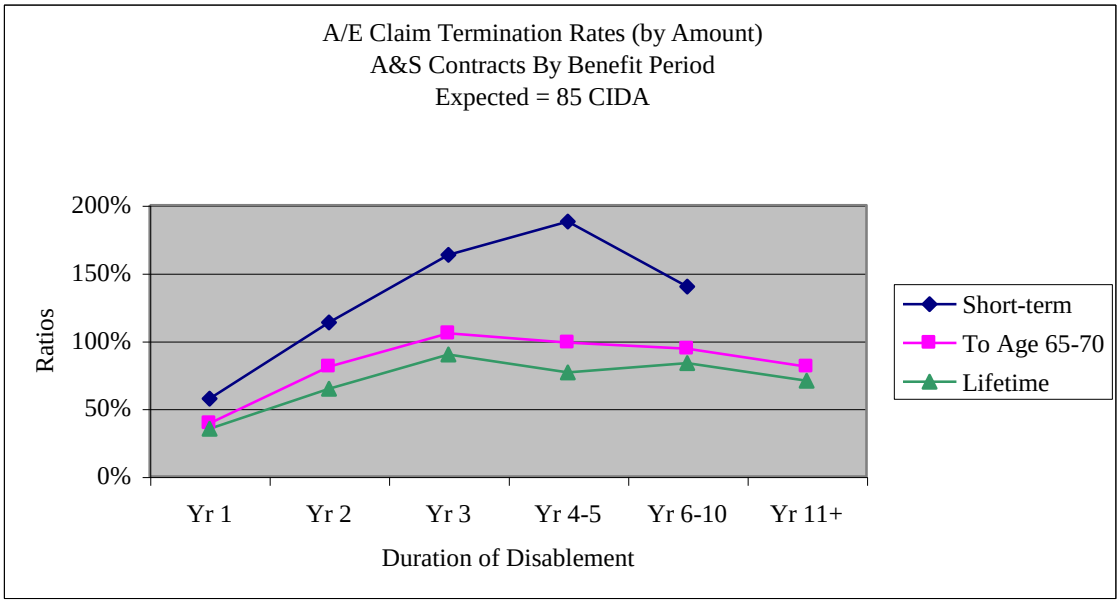
6. Claim termination rates are generally below 85 CIDA termination rates for the first 18 months of disablement. For Occupation Class 1, claim terminations fall below 100% of 85 CIDA termination rates after year 3.

Chart 6



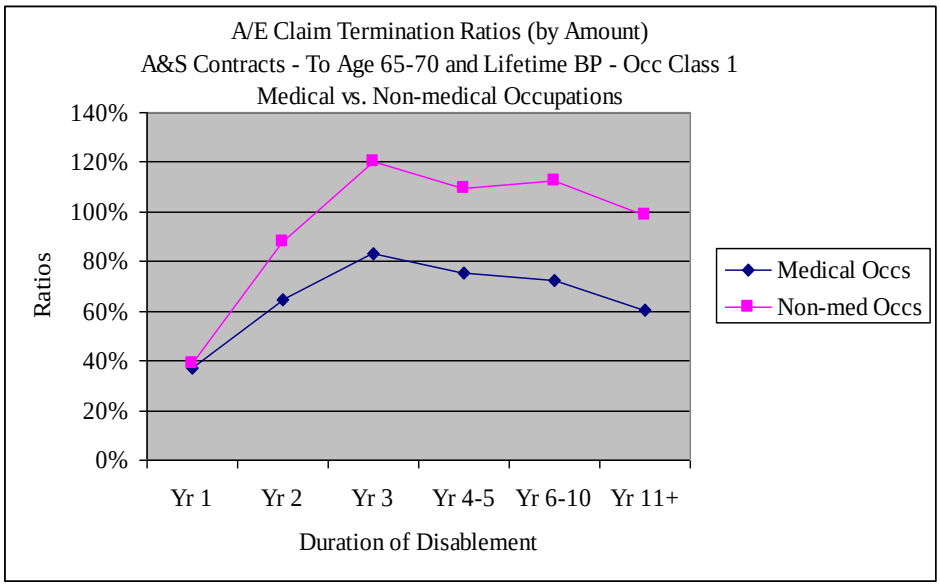
7. Longer benefit periods produced significantly lower claim termination experience.

Chart 7



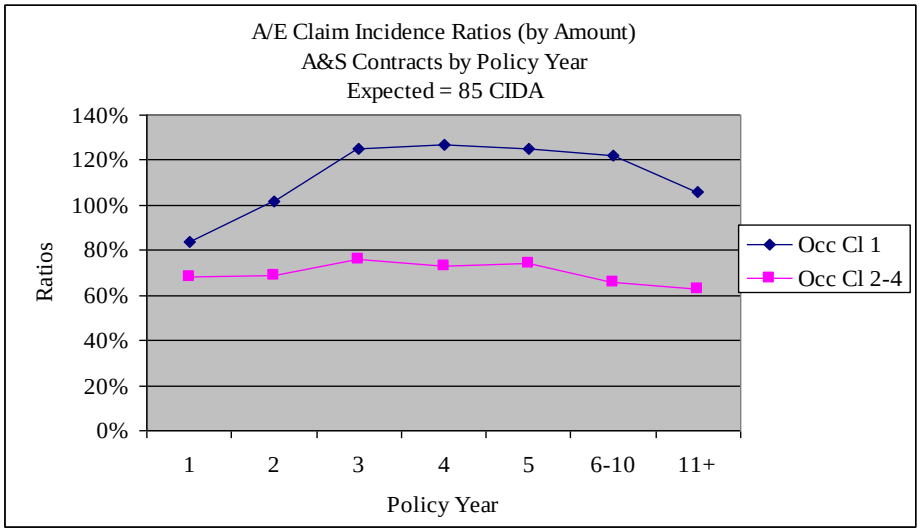
8. Medical occupations had significantly lower claim termination experience than non-medical occupations.

Chart 8



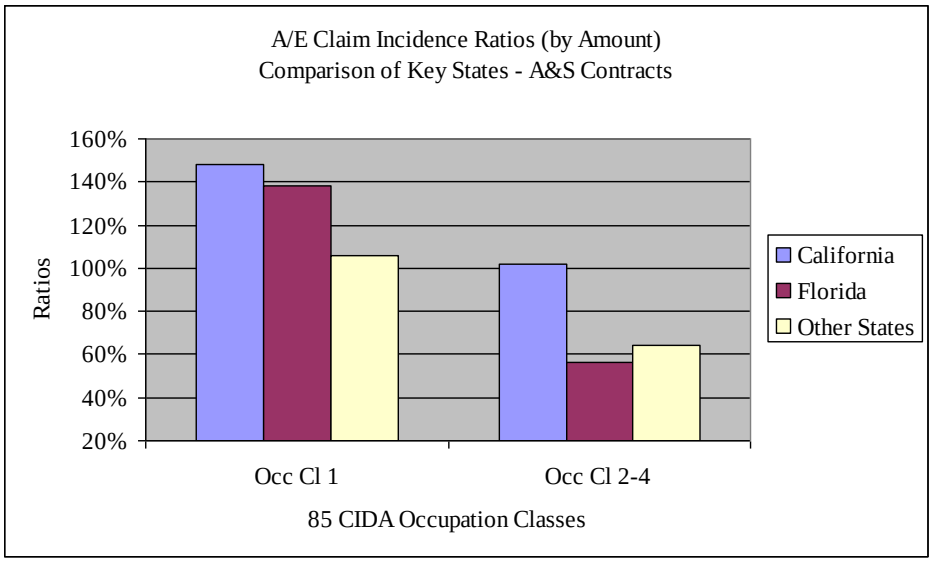
9. A/E claim incidence ratios by policy year in occupation class 1 (white collar, professional, executive occupations) reflect the impact of the 2-year contestable period, followed by higher incidence ratios that grade down gradually as a percent of 85 CIDA over at least the next 8 years. Claim incidence ratios by policy year in the other occupation classes are much flatter.

Chart 9



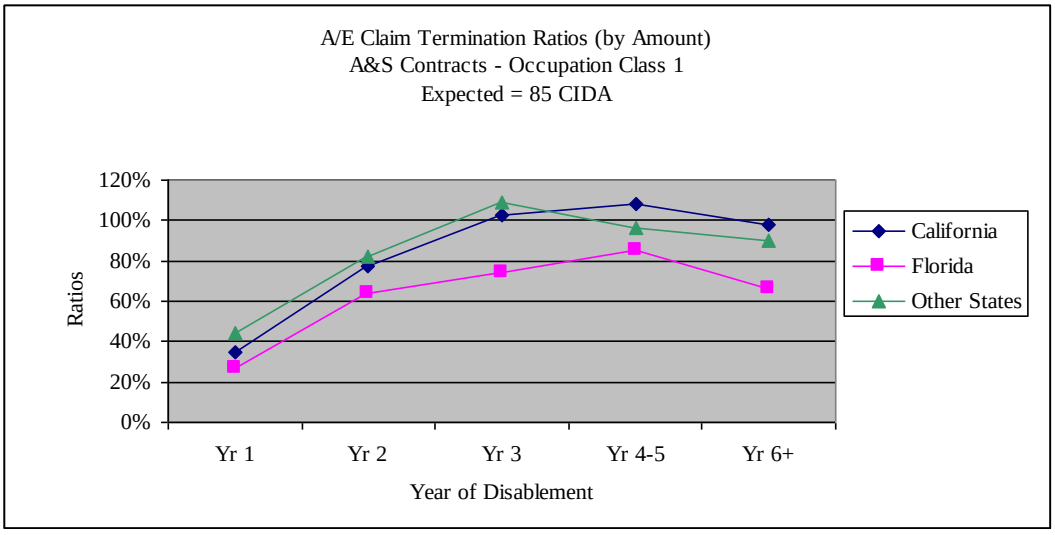
10. California and Florida have significantly higher claim incidence experience in Occupation Class 1 than all other states combined. In the other occupation classes, Florida claim incidence experience is somewhat better than the experience of other states combined, but California incidence remains relatively high.

Chart 10



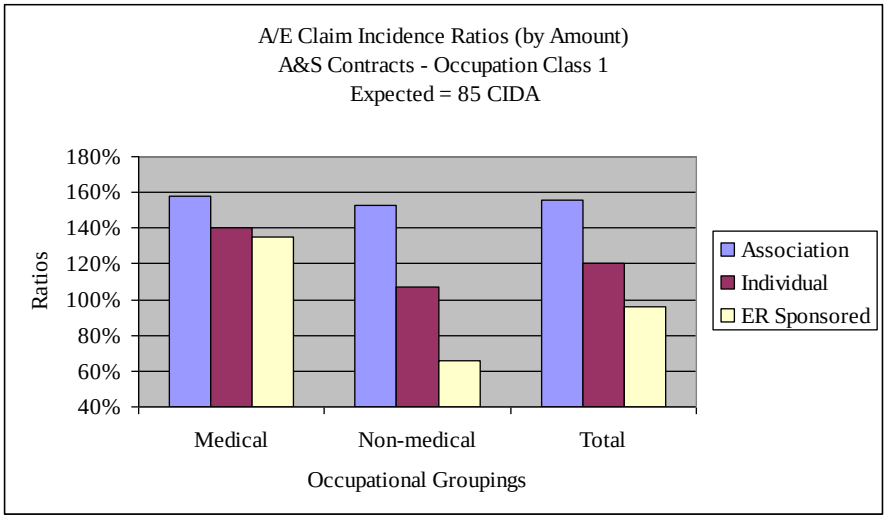
11. In general, claim termination experience in Florida is lower than claim termination experience in California or all other states combined. California claim termination experience is more consistent with that of all other states (excluding Florida) combined.

Chart 11



12. Significant differences in incidence experience exist among Individually Sold business, Employer Sponsored multi-life business, and business purchased through Association endorsements. In Occupation Class 1, Employer Sponsored claim incidence was 80% of Individual claim incidence: 62% for Non-medical occupations and 96% for Medical occupations. Overall, Association claim incidence for Occupation Class 1 was 130% of Individual claim incidence.

Chart 12



13. Guaranteed standard issue (GSI) underwritten business in the Employer Sponsored market produced claim incidence rates that were slightly worse claim incidence during the first three policy years than the incidence rates for normal underwritten business in the Employer Sponsored market. In policy years 4-10, GSI underwritten business had better experience than normal underwritten business in the Employer Sponsored market.

    Both GSI and normal underwritten business in the Employer Sponsored market produced consistently lower claim incidence rates than normal underwritten business in the Individually Sold market. A large portion of the Employer Sponsored GSI business was employer paid (with 100% participation of eligible lives) versus voluntary employee paid (with less than 100% participation of eligible lives). The IDEC study was unable to distinguish between employer paid and employee paid Employer Sponsored business.

Guaranteed-to-Issue (GTI) underwritten business in the Employer Sponsored market produced claim incidence rates that were higher than claim incidence of either GSI or normal underwritten Employer Sponsored business, but were consistently lower than normal underwritten Individually Sold business.

Chart 13