



A MILLIMAN GLOBAL FIRM

**Milliman** USA  
*Consultants and Actuaries*

**Health Insurance  
Underwriting Cycle  
Effect on Health Plan  
Premiums and Profitability**

April 10, 2003

MILLIMAN, USA

Richard Kipp, M.A.A.A.

John P. Cookson, F.S.A.

Lisa L. Mattie, R.N.

## **Executive Summary**

### **Introduction**

Health care cost trends are not the only factor influencing the change in health insurance premiums. Competition, legislation, regulation and difficulty predicting future costs are all contributors to the phenomenon called the underwriting cycle—a repeating pattern of gains and losses within the insurance industry. As the cycle plays out, expected trends and the associated premium increases tend to go above or below the actual rate of change in underlying health care costs. Today, as the cycle approaches another highpoint, we see improved profitability of Plans as premium growth exceeds the growth in the costs of health care claims for Health Plan enrollees.

The rate of premium growth for employer sponsored coverage has gone from a high of 18% in 1989—sparking a national debate on health care reform—to a low of 0.8% in 1996—a trend contributing to an opposite response, managed care backlash. Today as premium growth again climbs into the double-digits, it is important to understand the role this cycle plays as we formulate a policy response to current trends.

The Federation of American Hospitals and the American Hospital Association commissioned Milliman USA (Milliman) to prepare a report that would discuss this cycle and its impact on health insurance premiums from a national perspective. The generalizations presented here may not hold true for specific local markets. This report first discusses the underwriting cycle in general terms, and then describes some of the actions and reactions that Health Plans' typically exhibit at various points during a cycle. Lastly, the report discusses specific events of the 1990s that may have contributed to the pattern of insurance company profits and acted to exaggerate upward and downward swings in premium growth—swings that went well above or below the actual changes in underlying health care costs.

## Terminology

A health insurer or **Health Plan** accepts responsibility for paying for the health care services of covered individuals in exchange for dollars, which are usually referred to as **premiums**. This practice is known as **underwriting**. When a health insurer collects more premiums than it pays in expense for those treatments (**claim costs**) and the expense to run its business (**administrative expenses**), an **underwriting gain** is said to occur. If the total expenses exceed the premium dollars collected, an **underwriting loss** occurs. **Health care cost trends** refer to the rate of growth in health care claim costs.

To protect the interests of the beneficiaries of Health Plans, insurance regulators require that Health Plans have additional funds put aside over and above the amount they expect to have to pay out for health care services in a given period. These funds are known as **surplus** and serve to meet a company's **risk based capital** (RBC) requirements. The investment of these funds provides an important additional source of revenue for Health Plans, **returns on invested assets**.

## The Underwriting Cycle

Since at least 1965 the health insurance industry has exhibited a repeating pattern of several years of gains followed by several years of losses—a phenomenon often referred to as the underwriting cycle or insurance cycle. The underwriting cycle primarily emanates from the interplay of two features of the insurance market—uncertainty in predicting health care costs and the competitive environment.

Uncertainty comes because premium rates are generally set in advance of the period of coverage. The profitability of a Health Plan depends on its ability to predict—as much as 18 months in advance—the claim costs and expenses that it will incur for the individuals it covers. When health care cost trends change unexpectedly—as they often do—the premiums collected in a given year can exceed or fall short of the amount the insurer has to pay out in claims. When premiums fall short, not only do rates have to be raised to reflect the new level of expected claims costs, they may have to be increased to make up for the shortfall in premiums from the

prior year so that Health Plans can maintain required levels of reserves and/or offer returns to investors, depending on their corporate structure.

The competitive environment in which Plans operate also contributes to the underwriting cycle. When existing Health Plans set premium levels that exceed current expected expense and profit levels—as when they have raised premiums to account for past losses as described above—new competitors may be enticed to enter local or national markets with lower, but still potentially profitable, premium levels. These new entrants may deliberately set premiums lower than their competitors to gain market share. Existing firms respond by undercutting the new entrants. The intense competition that ensues eventually pushes premiums below costs causing some Plans to fail and/or exit the market. Once the market has stabilized, the remaining players turn their attention from gaining or protecting market share to restoring profitability. How this aspect of the cycle plays out will depend on specific local market conditions.

Other features of the health insurance business environment contribute to the volatility in profit levels and health insurance premiums. First, the economy affects the underwriting cycle in several important ways:

- Health Plans must maintain adequate surplus levels. They also have a claim reserve for claims incurred but not yet paid. These funds are invested and the return on this investment is another source of revenue. Gains and losses on investments can affect premium levels, adding another layer of uncertainty in determining what premium rates will be adequate in a given year. The high returns on invested assets during the boom of the 1990s allowed Plans to partially offset underwriting losses during the last low point of the insurance cycle. As the economy slowed, the evaporation of these returns was another contributing factor to the sharp increases in premium levels experienced over the past several years. Health Plans heavily invested in equities (e.g. stocks) were especially hard hit. For example, Blue Cross/Blue Shield plans with an average of 19.3% of their portfolios invested in equities (compared to 3.6% on average for publicly traded health insurers) faced a significant loss of investment income.

- Research indicates a strong wealth effect on health care spending—i.e., strong economic growth generally leads to more rapid growth in health care expenditures—though this effect tends to lag the period of growth. This effect played into the cycle experienced in the mid to late 1990s when a quickly growing economy led to low unemployment and significant competition among employers for workers. This situation led employers to be more responsive to the consumer backlash against managed care than they might otherwise have been. During the economic boom, employers responded to backlash by pressuring Plans to relax restrictions and expanding benefit offerings to include less restrictive options like PPOs and Point of Service Plans. As a result, claims costs rose. The impact of these changes on future claims costs were underestimated in setting premium rates and employers experienced lower premium levels until the actual trends were known.
- The economy also affects the number of uninsured, provider bad debt ratios, and the balance between employer/employee cost-sharing.

Second, there is a strong interplay between government policy and the private insurance market.

- Government legislative or regulatory actions can lead to increases in claims cost and administrative expense trends due to implementation of mandated benefits, or the tightening or loosening of other controls and requirements. Examples from the late 1990s that contributed to cost growth include: required minimum two-day hospital stays for normal deliveries; prudent layperson standards for emergency department access; Health Insurance Portability and Accountability Act (HIPAA) privacy and data requirements; and the relaxation of direct-to-consumer (DTC) drug advertising regulations in 1997 which contributed to a rapid increase in the demand for prescription drugs.
- Government programs such as Medicare and Medicaid can also have a significant impact on non-government health insurance trends. When government payment levels fall relative to costs, providers must look to private payers to make up the difference. When

government payment levels rise relative to costs, private payers benefit. This is often referred to as cost-shifting. For example, the Balanced Budget Act of 1997 significantly cut provider payments for Medicare and Medicaid. As these cuts continue to be phased in, providers face growing pressure to recoup these losses from private payers.

Finally, the various stakeholders—insurers, employers, consumers, providers, and policy-makers—interact in a competitive environment. At the highpoint of the last cycle, premium growth as high as 18.0% prompted the rapid growth of managed care as employers struggled to contain benefit costs and policy-makers threatened health care reform. Managed care put pressure on providers to cut costs and compete with one another on the basis of price to get a foot in the door in this growing market. High premium levels relative to claim costs and strong growth opportunities for managed care products enticed new entrants into many markets creating intense competition. This competition in turn led to underwriting losses for plans, but contributed to premium growth hitting a low of 0.8 % in 1996.

Today, as the underwriting cycle approaches another high point, we see improved profitability of plans as premium growth trends exceed health care claim cost trends. Thus the current level of premium growth is not only a reflection of rising health care costs, but also reflects the current stage of the underwriting cycle.

The Federation of American Hospitals and the American Hospital Association retained Milliman USA (Milliman) to write a white paper that describes the effect that the underwriting cycle has on health insurers' premiums and their profitability. As a firm, Milliman does not take advocacy positions as it pertains to any providers', insurers' or employer groups' opinion with regard to the merits or faults of the underwriting cycle as related to their organization. As such, any opinions expressed in this white paper are those of the authors.

This is an attempt at a factual representation of the cycle and its inner workings. The theories presented here are just that. Other analysts observing the same occurrences may have a different opinion. We encourage discussions of the underwriting cycle phenomenon. Its existence and an

organization's understanding of its behavior can play an important part in that organization's financial well-being.

This white paper is intended for the use of, and distribution by the Federation of American Hospitals and the American Hospital Association. However, this white paper shall only be released in its entirety. No summaries, excerpts or descriptions of this white paper shall be released without prior approval of Milliman of such summary, excerpt or description.

## INTRODUCTION

Health care cost trends are not the only factor influencing the change in health insurance premium rates. Competition, legislation, regulation and difficulty predicting future costs are all contributors to the phenomenon called the underwriting cycle—a repeating pattern of gains and losses within the insurance industry. As the cycle plays out, expected trends and the associated premium increases in a given year tend to go above or below the actual rate of change in underlying health care costs. Today, as the cycle approaches another highpoint, we see improved profitability of plans as premium growth exceeds the growth in the costs of health care claims for Health Plan enrollees.

Since 1989, the rate of premium growth for employer sponsored coverage has gone from a high of 18.0%—sparking a national debate on health care reform—to a low of 0.8% in 1996<sup>1</sup>—a trend contributing to an opposite response, managed care backlash. Today as premium growth again climbs into the double-digits, it is important to understand the role this cycle plays as we formulate a policy response to current trends.

The Federation of American Hospitals and the American Hospital Association commissioned Milliman USA (Milliman) to prepare a report that would discuss this cycle and its impact on Health Plan premiums from a national perspective. The generalizations presented here may not hold true for specific local markets. This report first discusses the underwriting cycle in general terms, and then describes some of the actions and reactions that Health Plans' typically exhibit at various points during a cycle. Lastly, the report discusses specific events of the 1990s that may have contributed to the pattern of insurance company profits and acted to exaggerate upward and downward swings in premium growth—swings that went well above or below the actual changes in underlying health care costs.

## TERMINOLOGY

A Health Plan accepts responsibility for paying for the health care services of covered individuals in exchange for dollars, which are usually referred to as **premiums**. This practice is known as **underwriting**. When a health insurer collects more premiums than it pays in expense



for those treatments (**claim costs**) and the expense to run its business (**administrative expenses**), an **underwriting gain** is said to occur. If the total expenses exceed the premium dollars collected, an **underwriting loss** occurs. **Health care cost trends** refer to the rate of growth in health care claims costs.

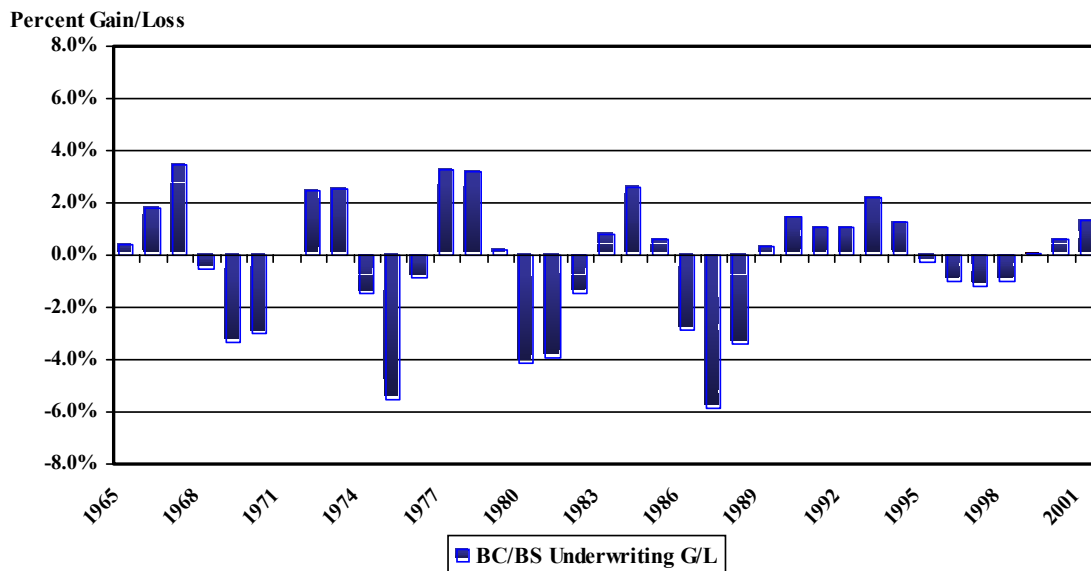
To protect the interests of the beneficiaries of Health Plans, insurance regulators require that Health Plans have additional funds put aside over and above the amount they expect to have to pay out for health care services in a given period; these funds are known as **surplus** and serve to meet a company's **risk based capital (RBC)** requirements. The investment of these funds provides an important additional source of revenue for Health Plans, **returns on invested assets**.

The terms **insurer**, **Plan** and **Health Plan** are used interchangeably throughout the document. The important conceptual point is that these organizations are the risk takers or underwriters whose financial results we discuss.

## **THE UNDERWRITING CYCLE**

Health Plan or Health Insurance Company gains and losses have been observed over a long period of time to follow a pattern of several years of profitability followed by several years of financial losses. This phenomenon is known as the underwriting cycle (Chart 1). The concept of an underwriting cycle<sup>2</sup> in health insurance is well accepted within the industry. It has been discussed in industry meetings and written about since at least the 1980s. The underwriting cycle is analogous to any business or economic cycle that varies over time.

**CHART 1  
BLUE CROSS/BLUE SHIELD UNDERWRITING  
GAIN/LOSS**



### Underwriting Gains and Losses

Underwriting results do not represent the complete profit picture. Health insurers also generate additional operating income from investment income including realized and unrealized capital gains. Net income reflects the sum of underwriting and investment income less income tax. There is also other (miscellaneous) income and expenses as well as net income from subsidiaries that may affect insurers' bottom lines. If premium revenues are rising faster than claim and administrative costs, then underwriting results improve. Conversely, if the insurer's claims and administrative expenses rise faster than the premiums charged, underwriting results deteriorate. Typically, some profit margin is built into target premiums. As a result, underwriting gains should occur unless administrative expenses and claim costs rise at a faster rate than premium revenues by more than the profit margin built into the premiums. For example, if a target 2% underwriting profit margin is built into premium rates, but claims and administrative expenses rise more than 2% faster than premiums, then an underwriting loss will occur.

Health insurance premiums are developed from three different components:

- the provision for medical claims,
- the provision for administrative expenses, and
- target profit margins.

These are all estimated in advance, and the accuracy of the estimates ultimately determines the underwriting results. Since overall health insurance loss ratios (medical claims divided by premium) typically range from 80% to 90%, fluctuation in the claims expense is a major influence on the underwriting results. Such fluctuations are typically driven by unanticipated claim cost trends, which usually result from unforeseen patterns (up or down) in utilization and/or provider reimbursement levels. Claim cost trends are usually measured as the annual rate of change in claim cost per capita, after adjusting for the effects of benefit changes, if any (e.g. an increase in deductible or cost sharing percentage).

Administrative expenses are usually less volatile and more predictable because insurers' budgets can generally be controlled. Major expense fluctuations usually only result from substantial enrollment losses in which fixed overhead can't be reduced along with the declining enrollment. Such impacts can also be felt during a significant shift in enrollment from one product to another, such as the shift away from HMOs in recent years. The costs of new product development and associated marketing may also have a temporary negative effect on insurers' underwriting results. Occasionally, unanticipated claim cost and administrative expense increases may also result from government mandates (such as compliance with the transaction standards and privacy requirements of the Health Insurance Portability and Accountability Act or requiring the same coverage for mental health benefits, as any other illness), as well as for other reasons.

The final component of premium rates is the target profit margin. This may be raised or lowered as insurers' desire to be more profitable or to be more competitive to gain market share. Often, however, competitive decisions don't necessarily result in a reduction in the target profit margin, but rather result in making optimistic assumptions about trends or claim costs, or optimistic assumptions regarding a new product's costs or cost saving initiatives. Use of optimistic assumptions often results from the reaction to competition from new players entering the market with unrealistically low premiums.

In essence, changes in underwriting results occur from: 1) intentional changes in profit margins as the market becomes more or less competitive (softer or harder), 2) unanticipated changes in administrative expense and claim trends, and 3) excessive optimism or pessimism in various premium rating assumptions not directly related to the target profit margin.

There are a number of overarching forces or pressures that tend to constrain the magnitude of the gains or losses observed during the cycle. If gains become excessive, some competitors or new entrants will be willing to cut premiums to gain market share, with the intent of increasing their total dollar profits. Conversely, if gains are lower than expected, the stock market will punish the for-profits by driving down their share prices. Insurers of all types—stock for-profits, mutual insurers, and non-profits (such as some Blue Cross Blue Shield (BCBS) plans and some HMOs like Kaiser) will be in jeopardy of letting their risk-based capital levels (surplus) drop below required levels. Surplus is the accumulated capital that results from underwriting and investment gains over time. Risk based capital (RBC)<sup>3</sup> requirements, imposed by state laws and Insurance Department regulations, oblige insurers to maintain sufficient surplus to cover the risks being assumed by the health insurance contracts. This is intended to prevent beneficiaries and providers from having their claims left unpaid in the event of an insurer shutting down its operations.

The following is an example to illustrate the impact of risk based capital (RBC) maintenance on target profit margins. Assume a Plan needs to maintain a surplus balance minimum of 20% of claims and administrative expenses to avoid the Insurance Department watch list or corrective action imposed under RBC requirements. The Plan's goal would be to maintain a sufficient

margin of surplus above the required level to avoid having a large cyclical loss drive its surplus below that required level. Next, assume 25% is the goal reserve level that is desired to be maintained long-term. If claims and administrative expenses are increasing at a 10% trend (assuming no enrollment growth) this would require the Plan to generate a net gain (underwriting and investment less taxes) of 2.3% of claims and administrative expenses to maintain the 25% goal reserve level. If alternatively the claims and administrative expenses trend increased to 20% (or an equivalent of claim trend plus enrollment growth occurred), a 4.1% net gain of claims and expenses would be needed to maintain the same 25% goal reserve level.

Generally, if financial losses are generated in a period, then subsequent periods will need to cut short further losses and possibly recoup some or all of the past losses to rebuild the surplus. However, there may be significant delays in realizing that the losses have occurred due to data reporting lags. This lag is further discussed below. Now a domino effect occurs because without knowledge of the losses, the actions necessary to cut them short and begin surplus recoupment through appropriate premium rate actions cannot begin.

Insurance contract rate guarantees, which are typically twelve months in length, tend to delay this recoupment process. We usually expect about an eighteen-month average lag because (1) the insurer must first obtain the data needed to understand what actual claim costs were, and (2) the insurer must wait to use this new data to formulate new assumptions to use in the calculation of future premium rates. This is an ongoing process of constant monitoring across time. As utilization patterns change and provider costs increase, the insurer must wait until the data is reported and analyzed to decide what premium rate setting actions are appropriate.

There are two primary components to the profitability of health insurers – underwriting gains and losses and investment income (including realized and unrealized capital gains and losses). Therefore, if an insurer must achieve a specific gain to satisfy stockholders minimum capital requirements or insurance regulations, whatever they cannot generate from investments must be generated through underwriting results. Federal Income Tax and other reductions to income average about 0.5% per year net, and must also be reflected in the equation. A for-profit

insurer's capital / surplus can also be increased by raising capital in the equity markets, if the markets are receptive.

Only 3.6% of the typical publicly traded Health Plan portfolio has been invested in Equity Securities and Common Stock.<sup>4</sup> In contrast, it was reported in a benchmarking study of Blue Cross/Blue Shield (BCBS) Plans (based on 17 Plans), that 19.3% of the average portfolio was invested in equities. It was further pointed out that the publicly traded Health Plans had longer maturities in fixed income securities.

During the period between 1965 and 1991, the cyclical pattern of gains and losses can be observed. Chart 2 shows a consistent pattern of three consecutive years of gain followed by three consecutive years of loss in the BCBS system. Gains in 1992 to 1994 extended the three-year positive cycle that began in 1989 to six consecutive years, breaking a thirty-year pattern. The gain period ending in 1994 was then followed by four years of underwriting losses, and, counting a 2002 gain (which isn't fully reported as of this writing) there have been four subsequent years of gain. Concomitant with these extended periods of gains and losses, the fluctuation of the highs and lows within the cycle became less extreme compared to the previous three decades.

**CHART 2**  
**BLUE CROSS/BLUE SHIELD UNDERWRITING**  
**GAIN/LOSS VS. HEALTHCARE TRENDS**

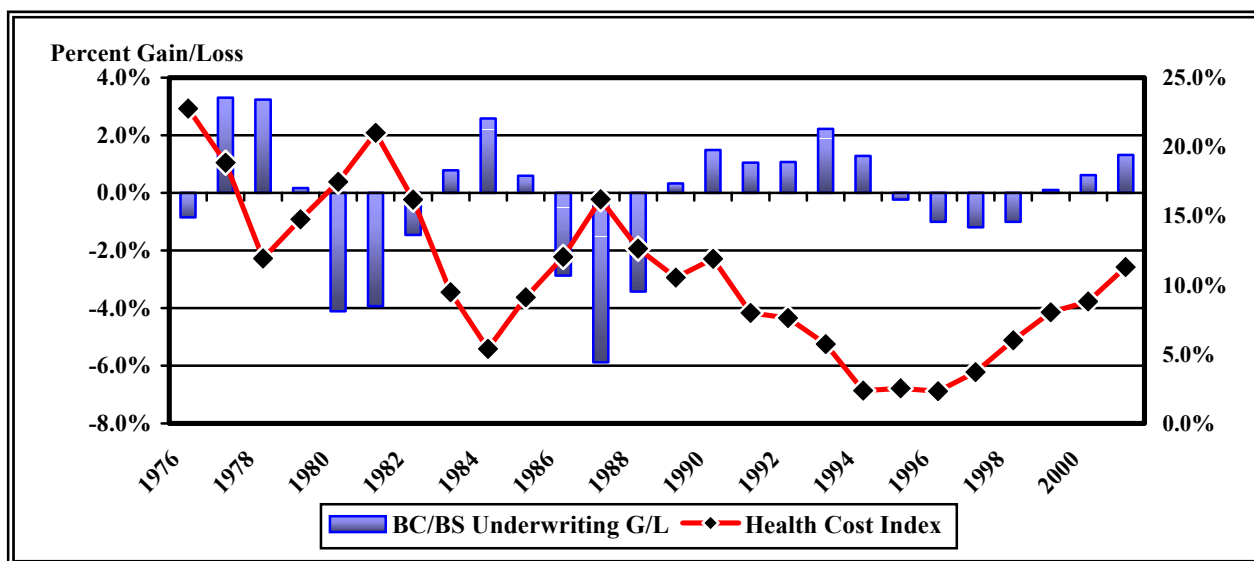


Chart 2 contrasts the pattern of BCBS system gains and losses since 1976 and the Health Cost Index (HCI) trend pattern that is a representation of healthcare cost trends. You can begin to see the counter cyclical pattern of the underwriting gains and losses versus the trends. As trends begin to rise, losses develop, and as trends fall, underwriting gains typically develop. However, this pattern has changed towards the end of the 1990s. During this period underwriting losses subsided and profits emerged. The gains increased while trends were also increasing. This was due to insurers attempting to improve their profitability after having eroded their surplus by aggressively pricing in reaction to the stiff competition in the mid-1990s in some markets.

There is no consistently reported long-term history of underwriting results for all health insurers that continues to the current time – other than for the BCBS system. However, commercial underwriting data was available until the early 1990s, and although this data was not strictly on the same basis as BCBS results, the patterns were quite similar to the BCBS results. In any event, the historical data has evolved over time, and the historical data may not be completely consistent throughout the reporting history.

Much of the volatility of underwriting results in the 1970s and 1980s was due to the volatility of claim cost trends during this time. The extended gains in the early 1990s were due to a consistent decline in claim cost trends from the late 1980s and the managed care effect.

In contrast, the underwriting losses in the mid to late 1990s were due to an unusual level of competitiveness for enrollment among insurers, including new entities, strong investment gains (about 2.5% of premium revenue) and reserve/surplus levels that resulted in optimistic rating assumptions. In short, the environment led to under-pricing of insurance products relative to claims and administrative expenses. Underwriting losses developed by 1995 even though trends remained flat until 1997. The upturn in claim cost trends beginning in 1997 contributed to even higher losses. This upturn was due in part to the growing backlash against managed care that resulted in Health Plans beginning to manage care less aggressively.

Because the for-profit stock prices of health insurers were hard hit<sup>5</sup> due to lower underwriting earnings in 1996-1997, and because risk based capital requirements had to be maintained, Health Plans raised premium levels at a much faster rate. Thus underwriting results and profits have improved since 1999. This ability to increase premiums was enhanced by the tight labor market, the generally favorable economy and employers' reluctance to make significant changes to their health benefits programs. Health Plans also had to make up for the reduction in investment income beginning in 1998. By 2001, investment income dropped by 50%, this loss of income had to be compensated for by increased premium levels relative to claims costs.

The results of individual insurers are likely to differ, sometimes substantially, from the underwriting gain/loss cycles of large industry groups. More extreme fluctuations of smaller individual insurers will tend to be smoothed out by others' results that are not so extreme or are on a different time cycle. Depending on the size of the individual Plan or insurer, and its policy towards managing the cycle, its financial results will vary from the overall system's results. However, the results for individual carriers tend to exhibit cyclical patterns that are similar to the overall system.



## Health Care Trends and Employer Costs

Evidence that healthcare claim trends lead health insurance premiums by about eighteen months can be obtained by comparing the Health Cost Index (HCI) trends against the Employment Cost Index – Health Insurance Premium trends. The HCI is derived from numerous public data sources and a proprietary methodology to represent the underlying trends of health care claim costs. It incorporates changes in utilization and intensity that are not reflected in the standard medical price indices. It also has projections of the direction and relative change in future healthcare trends based upon economic variables that explain the movement of healthcare costs. The Employment Cost Index – Health Insurance Premiums (ECI – HIP) is the government’s unpublished estimate of employers’ increase in health insurance premiums. This estimate is measured as a component of the employee benefit costs that are reported quarterly to the Bureau of Labor Statistics. The ECI-HIP reflects premiums paid by employers, and can be lower than insurers’ requested rate increases due to benefit reductions, shifting a greater share of premiums to employees, or shifting more employees to lower cost options. The ECI-HIP trends also reflect swings in the competitiveness of the environment. Chart 3 illustrates the twelve-month moving averages (MMAs) of the ECI-HIP versus the HCI.

**CHART 3**  
**HEALTH COST INDEX VS. EMPLOYMENT COST**  
**INDEX-HEALTH INSURANCE PREMIUMS**

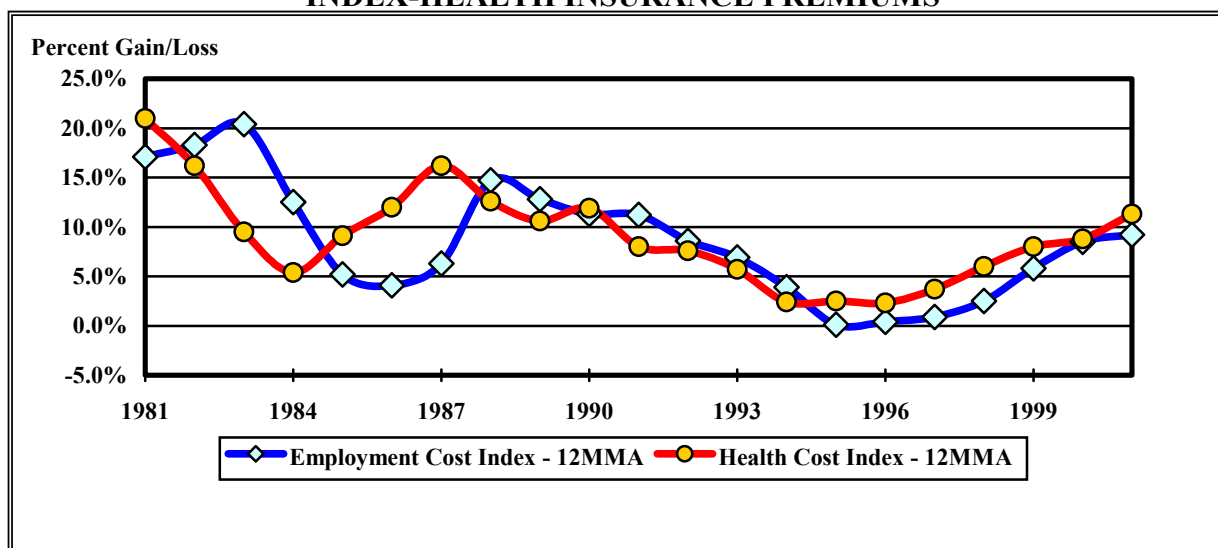
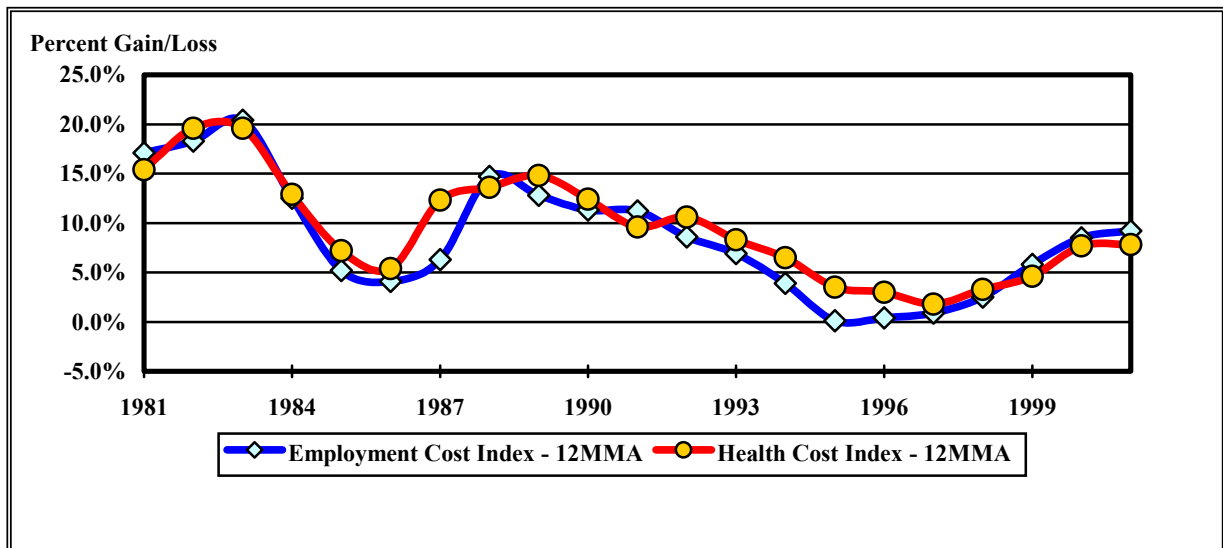


Chart 4 shows the HCI trends delayed by eighteen months. The close correspondence between these two graphs is indicative of the delay that exists between changes in claim cost trends and the insurers' recognition of these trend changes in premium rates.

**CHART 4**  
**HEALTH COST INDEX VS. EMPLOYMENT COST**  
**INDEX-HEALTH INSURANCE PREMIUMS**  
**DELAYED 18 MONTHS**



Since claim cost trends tend to follow up and down cycles with inflation and the additional effects of other economic variables, it tends to be one of the primary drivers of the underwriting cycle. Because the ups and downs of the trends are not easily predictable in advance, this leads to misestimates of claim costs, and fluctuations in underwriting results.

Besides the general uncertainty of trends, the impact of investment income can also contribute to the underwriting cycle. As described above, at a minimum an insurer must generate sufficient overall profits to maintain its risk-based capital requirements. Since this must be generated from investment income plus underwriting gains (net of taxes), the sum of these must be sufficient. Investment income is often unpredictable, particularly to the extent that any significant portions of assets are invested in equities or long-term securities. Investment results influence the level of

optimism or pessimism that is present in the underwriter's mind when establishing the assumptions used in setting insurance premiums.

## **FACTORS INFLUENCING THE NEED FOR UNDERWRITING GAINS**

Underwriting gains (premiums less claim costs and administrative expenses) are essential in maintaining a successful insurance business. For-profit insurers must generate sufficient profit margins to produce the desired return on equity or investment. However, even not-for-profit insurers must generate gains to remain viable.

As previously discussed, risk based capital (RBC) requirements require insurers to maintain sufficient surplus, as defined by insurance regulations, to cover the risks of insolvency. That is to be sure that an insurer can pay all the obligations specified in the health insurance contracts. Beyond certain fixed capital and surplus levels, RBC requirements increase proportionately with increasing expense and premium levels. Thus, as claim cost trends increase a health insurer's costs and premiums, their capital and surplus levels must be increased consistent with the RBC requirements. For non-profit insurers the only sources of this capital are underwriting gains and gains on investments. If an insurer's enrollment is increasing, this also increases costs and the required surplus levels, necessitating further gains.

Besides the fluctuations in claim cost trends and investment returns, a number of specific factors may influence the underwriting cycle.

1. **The Competitive Environment:** Plans operate in a competitive environment that also contributes to the underwriting cycle. When existing Health Plans set premium levels that exceed current expected expense and profit levels—as when they have raised premiums to account for past losses as described above—new competitors can be enticed to enter local or national markets with lower, but still potentially profitable, premium levels. These new entrants often deliberately set premiums lower than their competitors to gain market share. Existing firms respond by attempting to undercut the new entrants. The intense competition that ensues eventually pushes premiums below costs causing

some plans to fail and/or exit the market. Once the market has stabilized, the remaining players turn their attention from gaining or protecting market share to restoring profitability. Because of the need to replenish reserves after the period of losses, insurers end up setting premiums above expected claims trends and profit margins, and the cycle continues. How this aspect of the cycle plays out will depend on specific local market conditions.

The consolidation of the insurance market through mergers and acquisitions is intended to, and has reduced administrative costs through managed efficiencies and may also reduce the level of competition in the marketplace allowing insurers to increase premium levels.

2. **The Regulatory Environment:** The premiums in some segments of the market are controlled by law and by regulation set forth by state insurance departments. This varies in its impact by state, due to the relative assertiveness of a given state's regulators, and usually only applies to individual (including Medicare Supplemental) or small group insurance. These are not usually the largest segments of most health insurers' portfolio of business.

Government legislative or regulatory actions can also lead to increases in claim cost and administrative expense trends due to implementation of mandated benefits, or other controls and requirements. Examples would include required minimum two-day hospital stays for normal deliveries, and Health Insurance Portability and Accountability Act (HIPAA) privacy and data requirements (which although just becoming fully effective in 2003, have required considerable system enhancements and additional expenses over the past few years for insurers and providers alike).

3. **Economic Conditions:** General economic conditions also affect health claim cost trends that affect the underwriting cycle. Inflation generally gets passed along in provider prices and insurer administrative costs and, thus, into premium rates. Studies indicate a wealth effect on health care spending—i.e. strong economic growth generally leads to more

rapid growth in health care expenditures. Our studies tend to indicate a time delay of three to four years on average between real income growth and increased health care trends.

Economic conditions also affect the number of insured and the balance between employer/employee cost-sharing. This can also affect utilization rates and provider bad debt ratios.

4. **Medicare and Medicaid Payment Policies:** Government programs such as Medicare and Medicaid can also have a significant effect on non-government health insurance trends. When government cuts provider reimbursement rates beyond what can be offset by expense reductions, the balance of revenue shortfalls must be generated from other customers (i.e., the private sector), or provider margins will decline and losses may develop. When government payment levels rise relative to costs, private payers may benefit. This is often referred to as cost-shifting.
  
5. **Adverse Selection:** Medical care consumption differs by age, gender, access to care, health status, available supply and disposition to use health services. Although individuals and families cannot predict their health care needs exactly, they often have a relatively good sense of their near term needs. Once individuals are given a choice of benefits, or whether to insure or not, they will gravitate to the program of their perceived optimum economic value; one which produces their lowest out-of-pocket costs, considering both premium contributions and co-payments. This choice is based on inexact knowledge of both the value of the benefits and their actual health needs. Usually individuals do not make their choices with intent to abuse the system. Instead the choices made represent simple economic self-interest. However, as individuals strive to optimize their own situations, overall benefit program costs will rise. This is generally referred to as adverse selection. Adverse selection adds to observed claim cost trends as premium rate increases are rising, because as premium rates rise, the chance that individuals may change plans increases. This is due to the fact that staying and paying the higher premium rates is only attractive to higher utilizing individuals.

6. **Other Factors Affecting Claims Trends:** As mentioned previously, claim cost trend deviations from expectations are a major contributor to underwriting cycles. These deviations occur because not all elements of claim cost can be controlled in our open healthcare market. In addition to the factors discussed above, introduction of new technology, people's response to direct-to-consumer advertising, unanticipated effects of changes in utilization management policies, and unforeseen occurrence of large claims are all contributors to these deviations.

### **Cycle Impact on Employer Premium Rates**

As described above, health cost trends are the primary driving (but not the only) factors in the health insurance premium rates charged to employer groups. Also, as noted, there tends to be a lag (we estimate about eighteen months on average) between the point in time that underlying costs are estimated and the period the premium rates are in effect. The impact gets exaggerated, because not only do premium rates have to be raised to the new level of expected trend each year, but at a minimum, they must also be increased to adjust for the shortfall in premium rates that results from misestimated trends from the year before. The misestimates are commonly made because of the data/knowledge lag.

An example might help illustrate this concept. Let's assume that at a given time, health cost trends have been stable for three or four years at 5%, and they take a sudden step up to 10% beginning in July of a given year. Also assume they will increase by an additional 2% for the next few years (i.e., to 12%, 14%, etc.), and that these claim cost trend increases will initially go unanticipated in premium rating (i.e., misestimated).

For most insurers the largest concentration of premium rate renewals tends to occur in January of each year. The discussion below will illustrate the impact on the insurers' experience and employers' premium rates. Similar scenarios can be developed for alternative renewal months.

### *Illustrative January Renewals*

Employers generally require the January renewal rates to be provided in advance. October is a typical notification month for January renewals. This gives the employer time to make benefit and contribution adjustments, to hold open enrollment activity, and to shop around. For the January premium rates, the insurer will likely be using an experience year (an accounting of claim costs for a twelve-month period) through the prior June, to meet the notification requirement. Due to the lag time in processing claims, 15% to 20% of the experience year's incurred claims are likely to be unreported at the end of the period. The insurer might use additional paid claims for July and August, to help make a more accurate estimate of the total experience period incurred claims, but there is still some uncertainty associated even with the experience period claims used to develop the premium rate.

Under this scenario, the insurer will be developing premium rates based upon data through June, and an observed 5% claim and expense trend for several years. The insurer would most likely expect the 5% claim and expense trend to continue, but, in our example, we know what the insurer doesn't – that the claim and expense trend will increase to 10% effective July 1 before the January renewal date. In this case, had the insurer known that the growth in claim and expense costs was about to accelerate, the insurer's premium rates for the January to December period would have been more than 8% higher than the 5% increase that would have been implemented. This is due in part to a 2.4% shortfall from the prior year's premium rates because of the unanticipated midyear trend increase. This will generate losses or reduced earnings and will reduce the insurer's risk-based capital protection.

For the next January renewal, the insurer will have observed the 10% increase in claims costs that began in July of the previous year, and which, had it been known in advance, would have been used in the prior January renewal. The 10% trend will be assumed in the next rate increase plus the 8% that would have been requested the prior year if the trend increase had been anticipated. This would result in an 18% premium rate increase for the employer, even though the insurer is assuming 10% trends. This 18% only brings premium rates up to our assumed adequate level for a 10% claim and expense trend. It does not provide for recoupment of the

losses being accrued for the periods when the premium rates were inadequate. In some cases, the insurer may try to recapture some or all of these losses, which would only serve to push the 18% premium rate increase even higher. This illustrates that when claim and expense trends are going up for an extended period, premium rate increases can often exceed the underlying growth in claims expenses for that same period of time.

Examining the second January renewal further, we find that these premium rates are also inadequate, because the claim and expense trends have jumped to 12% beginning the next July, (and to 14% the following July), while the insurer is using a 10% trend assumption that they have most recently observed. Thus, the insurer should have increased the premium rates an additional 3.8% to achieve the desired target, and avoid further losses or reduced margins during the second renewal year.

Usually at some point in the cycle the insurers become frustrated with under-rating and thus losing money, or concerned about jeopardizing their RBC position and then may try to anticipate further increases in claim cost and administrative expense trends. This can exaggerate the underwriting cycle even further.

An analogous but opposite effect occurs when claim and expense trends are coming down. Premium rate increases tend to be higher than necessary and increased underwriting gains accrue.

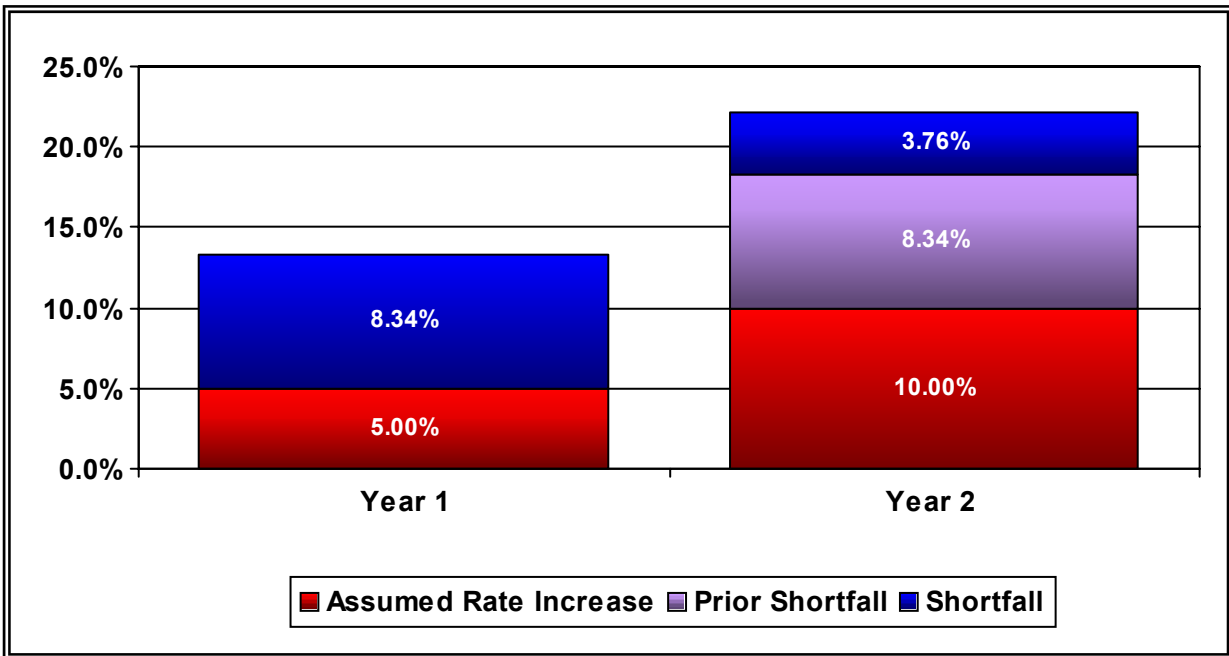
At those points in the cycle when premium levels exceed current claims costs—e.g. when trends are decreasing but Health Plans have kept premiums high to rebuild reserves—the market can become attractive to new entrants. New entrants often will enter a market with rates that are lower than existing competitors and that may or may not still be profitable. This can lead to intense competition and premium increases that are lower than the increase in claims costs.

It is the interaction of the delay in recognition of trend changes and the catch up and overreaction process with the competitive environment that is the primary contributing factor to the underwriting cycle.<sup>6</sup>



In Chart 5 we show graphically the true required premium rate, the initially calculated rate and the shortfall for each of the two renewal years discussed above.

**CHART 5  
ILLUSTRATION OF TREND INCREASE ON  
PREMIUM RATE INCREASES**



- Assumed Rate Increase – projection of the expected claim cost and expense trends for the premium coverage period
- Shortfall – unanticipated growth in claim cost and expense trends for the premium coverage period
- Prior Shortfall – recovery for prior period underestimates of claim cost and expense trends

## **Cycle Impact on Provider Payment Levels and Their Charges**

The cycle's impact on provider payment levels would seem obvious. During the part of the cycle where insurers are losing money, a great deal of downward pressure will be placed on payment levels. Insurers will raise provider payment levels during these times, but usually very modestly. To the extent the provider is a participant in a network product where set fee levels are agreed to and are not directly linked to charge levels, the pressure will be that much greater. To the extent the insurer has a provider payment mechanism that is linked to charges, such as a percent discount on charges, the payments will keep pace with the charge trends. These insurers will be least able to hold down provider rates. However, the number of insurers who contract on this basis is shrinking. In the situation where stop loss provisions apply, provider payments may increase at a faster rate.

As the insurers return to profitability they tend to be somewhat more liberal in raising their payment levels to providers, conversely, as margins erode they attempt to be more restrictive.

However, high rates of premium growth do not always equate to high rates of growth in provider payment. As explained above, when claim cost trends rise, the delayed recognition of this trend can lead to premium levels falling below claims costs and other expenses in a given year. This creates the need for higher premium increases in the next year so that premium levels can catch up with actual claims costs. Thus when claim cost trends are going up, premium rate increases can often exceed current increases in provider payment levels. Provider payment levels, as used here, refer to the cost of services alone and not total revenue dollars, which would include volume effects. Similarly, when claim cost trends are declining, premium rate increases can often be less than provider payment level increases. Provider increases are typically viewed as twelve month increases without the need for a "catch-up" component due to data lag uncertainty.

Often, it is not possible for insurers to anticipate the impact of provider reimbursement increases, especially when they are tied directly or indirectly to charges, over which they have no control and which are hard to measure. Utilization changes can also be difficult to predict. Health Plans have employed a variety of mechanisms to mitigate risk and attempt to manage total provider

compensation—the payment per service as well as the number of services used. A form of payment known as capitation pays providers based on the number people they provide care for rather than the number of services provided. This form of payment shifts risk for both utilization and cost per service from the insurer to the provider and creates an incentive to manage care. Health Plans can often negotiate fixed payment rates—per diem or per case—that can protect Plans from unexpected provider cost increases. If these rates are negotiated as part of multi-year contracts, provider rates can be even more predictable. Plans that control a high percentage of covered lives in a local market—i.e. can influence a provider’s volume— may be able to demand more favorable contractual terms than smaller Plans. Controlling cost increases and making them more predictable would greatly change one of the primary factors driving the cycle.

### **FACTORS IMPACTING THE UNDERWRITING CYCLE DURING THE 1990s**

Prior to the 1990s, health care spending was dominated by indemnity plans, not-for-profit hospitals and fee-for-service physician reimbursement. Health care spending was gaining as a percentage of the total Gross Domestic Product (GDP) and premium trend increases were in the double digits. What follows is a recounting of many of the anecdotes from the 1990s. The stakeholders that are accounted for here are hospitals and other providers, employers, employees, and Health Plans.

#### **The early 1990s**

In the early 1990s, the health care system encountered significant changes in response to escalating health care spending and premium trends coming out of the late 1980s. Managed care plans increased in dominance, with HMOs becoming the predominant product. Initially, the managed care organizations were successful in reducing premiums compared to their indemnity competition through reducing the price paid to providers per service and implementation of medical management techniques that reduced utilization of services.

Hospitals achieved a rapid and dramatic decline in length-of-stay, as well as decreases in inpatient costs per discharge. The prominent forces driving the decline in hospital utilization

were the introduction of case-based payments for Medicare in 1983 and then the rapid growth of managed care in the early nineties. During this period both public and private reimbursement structures changed (e.g. DRGs, per diems, capitation) providing strong incentives for providers to manage costs-per-service more efficiently. However, other factors were also influential, such as new technology that reduced or replaced the need for inpatient stays through the introduction of new and/or improved procedures, diagnostic screenings and drug therapies. Evidence-based medicine and the advent of clinical guidelines further supported the adoption of new clinical pathways and the shifting of services to the ambulatory and post-acute care settings.

By 1993, the proportion of hospital revenue generated from private insurance had dropped by 2% compared to 1989, partly attributable to the deep discounts and reduced utilization demanded by the HMOs and PPOs.<sup>7</sup> It should be noted, that hospitals achieved significant reductions in the rate of growth in costs per adjusted admission due to decreased lengths-of-stay, imposed restraints on hospital wage rate increases and reductions in excess capacity.

The rapid decline in inpatient utilization created excess hospital capacity. During the early period of managed care growth, hospitals provided large discounts to HMOs and PPOs in order to get a foothold in the rapidly growing managed care market and/or to fill beds that might otherwise remain empty. Since managed care contracts represented only a small portion of hospital volume, hospitals accepted deep discounts that at times even fell below full cost.

During the 1980s, the national spending on physician services doubled, attributed to a combination of increased volume of services provided and increased cost per service.<sup>8</sup> The 1980s observed significant advancements in medical technology such as earlier detection, less invasive techniques and shorter recovery periods, resulting in a greater proportion of the population receiving services. Other factors that contributed to the increase included improved provider efficiency, more comprehensive insurance coverage for services and the shift from the inpatient to outpatient setting due to implementation of Medicare's inpatient prospective payment system (PPS) in 1983. Physicians also purchased equipment, enabling them to provide additional diagnostic services in their offices. However, in the early 1990s, there was a further shift as physicians' reimbursement became increasingly affected by public and private payer

systems. In 1992, Medicare instituted fee schedule changes that resulted in fee reductions for invasive and diagnostic procedures and increases for cognitive services, such as office visits.<sup>9</sup>

During this same period, physicians were anxious to capture the ever-increasing portion of the commercial population that was transitioning to managed care products. As a result, physicians contracted with managed care networks and agreed to provide services for discounted prices or based on pre-paid capitation arrangements in return for directed patient volume. In addition to reimbursement reductions, managed care introduced additional medical management criteria based on medical necessity determination that reduced the volume of services provided.

During the early 1990's, pharmacy trend growth slowed, in part due to the influence of managed care. The implementation of cost containment initiatives such as drug formularies, pharmacy benefit managers (PBMs), manufacturer rebates and generic substitutions all contributed to restricting pharmacy cost trends.

The perceived threat of government intervention from health care reform also significantly influenced the behavior and decisions of many health care factions, such as insurers and pharmaceutical firms, causing them to restrain costs.

By 1993, health care spending trends were the slowest observed since the mid 1980s. Hospital costs were down, due to lower admissions, reduced lengths-of-stay, increased efficiency, technology advancements, and facility closures/consolidations that reduced excess capacity. Physician costs were slowing due to lower reimbursements and medical management initiatives such as pre-authorization and referral management. Pharmacy costs were down due to the launch of managed care initiatives such as formularies, availability of generic substitutions, etc.<sup>10</sup>

Despite these reductions in health care cost trends in the early 1990s, premium trends did not follow the same course—rather premium trends exceeded health care spending trends.<sup>11</sup> Although slower than the trends observed in the 1980s, premium trends outpaced general inflation.<sup>12</sup> However, by 1993, premium trends were the lowest since the 1986-1987 timeframe. (Although, these trends would drop even lower in the mid 1990's.) This difference in premium

and health care spending trends generated the gains that were experienced during the early nineties. In conjunction with this environment, plus a recession in 1990, the proportion of the under sixty-five population covered by employer-sponsored Health Plans had dropped to 62.4% in 1990 from 65.9% in 1989,<sup>13</sup> indicating rising uninsurance levels. In an effort to contain benefit costs, firms employed several strategies. These included increasing employee premium contributions for indemnity plans, increasing utilization management efforts, heightening coordination of benefit efforts, and promoting managed care plan selection. By 1991, greater than 54% of workers covered by employer-sponsored health plans were enrolled in managed care plans.<sup>14</sup> Meanwhile, the number of small firms offering any health insurance coverage had decreased.

Additionally, individual out-of-pocket payments for direct medical expenses in total changed dramatically during the late eighties and on into the early nineties, as indicated by Chart 6.

**CHART 6  
CONSUMER OUT-OF-POCKET LEVELS**

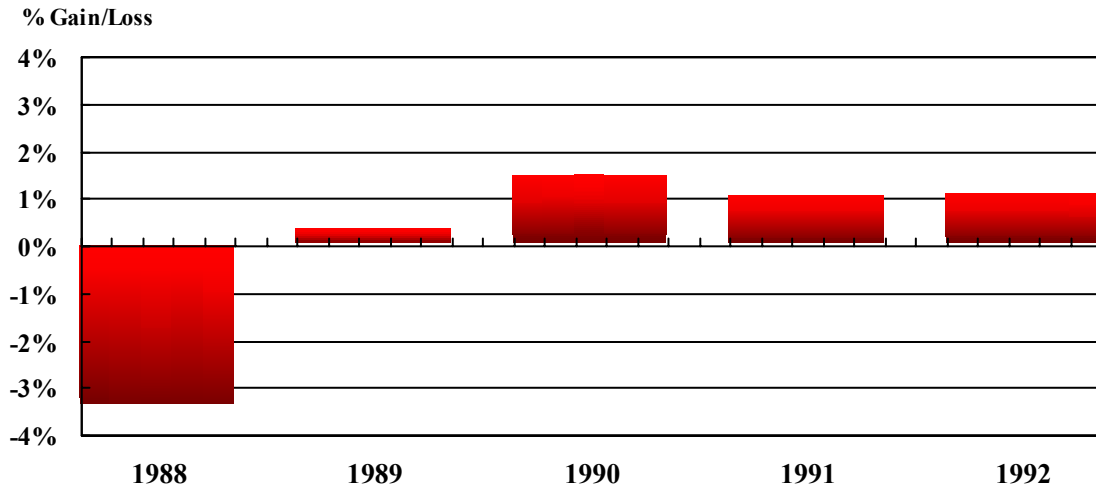
<b>Year</b>	<b>% of Health Care Expenditures</b>	<b>% of GDP</b>
<b>1930</b>	<b>87.5%</b>	<b>3.0%</b>
<b>1940</b>	<b>81.3</b>	<b>2.8</b>
<b>1950</b>	<b>65.5%</b>	<b>2.4%</b>
<b>1960</b>	<b>55.2</b>	<b>2.4</b>
<b>1970</b>	<b>39.7%</b>	<b>2.4%</b>
<b>1980</b>	<b>27.1</b>	<b>2.1</b>
<b>1990</b>	<b>22.5%</b>	<b>2.4%</b>
<b>1995</b>	<b>16.9</b>	<b>2.0</b>
<b>2000</b>	<b>17.2</b>	<b>2.0</b>

Overall, consumer out-of-pocket expenses or cost-share has remained very stable when expressed as a percent of GDP. However, as a percent of total health care expense it dropped significantly in the early nineties, to an all-time low in the mid nineties and flattened out during the late nineties. This is important for a number of reasons, not the least of which is the fact that this pattern reflects the hardening of the job market and the fact that employers were not passing on full premium cost increases to their employees.

In the early 1990s managed care products started to diversify into PPO and POS products to gain market share and satisfy employer and consumer demands. These product offerings had lower premiums than indemnity, but weren't nearly as restrictive as their HMO counterparts, providing a more palatable transition for employees migrating from indemnity to managed care plans.

Chart 7 shows a summary of this time period.

**CHART 7  
UNDERWRITING CYCLE SEGMENT 1988-1992**



**ACTIONS/REACTIONS OF THE STAKEHOLDERS**

Hospital	Physicians	Employers	Health Plans
<ul style="list-style-type: none"> <li>• Decrease in Days</li> <li>• Decrease in IP Cost/Day</li> <li>• Factors               <ul style="list-style-type: none"> <li>– Shift to outpatient</li> <li>– New technology</li> <li>– Introduction of clinical criteria</li> <li>– Medicare PPS impact</li> <li>– Early global capitation arrangements</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Benefited from new technology               <ul style="list-style-type: none"> <li>– Increased volume of services</li> <li>– High profit for services</li> </ul> </li> <li>• Purchased office diagnostic equipment</li> <li>• Medicare RBRVS</li> <li>• Managed care introduced               <ul style="list-style-type: none"> <li>– Discount prices</li> <li>– Capitation</li> <li>– Utilization restrictions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Employer-sponsored plans decreased</li> <li>• Implemented cost savings strategies               <ul style="list-style-type: none"> <li>– Increased employee indemnity premium contribution</li> <li>– Promoted restrictive Managed Care plans</li> </ul> </li> <li>• Rate increases still quite high</li> </ul>	<ul style="list-style-type: none"> <li>• Initially, HMO expansion</li> <li>• Started diversification               <ul style="list-style-type: none"> <li>– PPO</li> <li>– POS</li> </ul> </li> <li>• Premium trends higher than health cost trends</li> </ul>

**Overall Impact: Health Care Cost trends declining; lower than Premium trends. Net Result: Underwriting Gains.**



## The Mid 1990s

By the mid 1990s health care spending trends were the slowest since the mid 1980s.<sup>15</sup> In 1994 – 1997 the growth in total inpatient cost-per-case trend was below the rate of general inflation. Because hospital cost growth was also below the market basket rate of inflation (the factor used to determine Medicare payment increases) during this period, hospital losses on Medicare declined substantially.<sup>16</sup> For every dollar spent caring for Medicare patients in 1990, hospitals on average received 89 cents.<sup>17</sup> In contrast, by 1997 Medicare reimbursement to hospitals was slightly above cost (103.6%).<sup>18</sup> This improvement occurred despite Medicare updates less than market basket in each of these years. With Medicare paying its share of hospital costs (an unusual occurrence) the need for hospitals to attempt to recoup Medicare losses from private payers was reduced. Thus private payers benefited not only from the low growth in hospital costs, they also benefited from reduced payment levels relative to costs—a trend made possible by Medicare payment policies. The Balanced Budget Act of 1997, however, would change this picture by dramatically reducing Medicare payments.

At the same time, however, hospitals were faced with decreased utilization, low per diem rates and a shifting of services to ambulatory settings. Hospitals reacted by consolidating or forming relationships with neighboring hospitals and health systems to gain economies of scale, reduce excess capacity, improve access to capital, increase market presence and enhance purchasing power.

During this period, physicians accepted more risk through various capitation arrangements.<sup>19</sup> Much of the physician community was ill-equipped for transitioning from a fee-for-service environment to this “pre-payment” structure, which relied heavily on controlling utilization and sophisticated information technology to make a profit. Many physician organizations simply did not understand the level and nature of the risks they were assuming and entered into multi-year contracts at rates that were unsustainable. Those practices that accepted global capitation in particular were hit hard by rapid increases in pharmaceutical costs and in some cases even held the risk for legislative changes such as prudent layperson standards (which decreased the ability to manage Emergency Department utilization and associated costs) and other managed care

regulations. During this period there was a transition from many single practitioners towards the formation of large physician practices, motivated by anticipated economies of scale and additional bargaining leverage.

Not only were professional and facility providers feeling the squeeze of managed care on their revenue, but they were also incurring increased administrative costs to meet the managed care network participation requirements. In response, providers formed various types of intermediary organizations,<sup>20</sup> including Physician Hospital Organizations (PHOs), Independent Practice Associations (IPAs), and Managed Care Service Organizations (MSOs). These vertically integrated delivery systems (IDS) were intended to take on many of the responsibilities traditionally handled by the insurers including administrative and medical management oversight. Physicians, hospitals and payers joined these vertically integrated systems intending to capture the savings they thought achievable by establishing common goals, streamlining processes, enhancing patient care management, reducing administrative costs, and enjoying economies of scale. Few of these organizations achieved these goals.

During this phase, there was also a rapid rise in Physician Practice Management companies (PPMs). The PPM concept was to provide physicians' access to sophisticated information systems to manage practice performance, financial capital to expand provider networks and increased leverage to negotiate with the Managed Care Organizations.<sup>21</sup> PPMs placed much focus and effort on the acquisition of physician practices. There was limited information on practice valuation guidelines at the time, often resulting in high practice acquisition prices. By 1996 to 1998, some of these systems started to fail including some of the larger PPMs, such as FPA, MedPartners and Phycor.<sup>22</sup>

In the mid 1990s, pharmacy trends started to accelerate, with several factors assumed to be key contributors. Members were transitioning from indemnity plans with high co-pays, deductibles and co-insurance, to managed care plans that offered rich pharmacy drug benefits with very low out-of-pocket expenses. This was compounded by the relaxation of direct-to-consumer (DTC) drug advertising regulations in 1997, which resulted in more lenient broadcast guidelines to an

expansive consumer audience.<sup>23</sup> The DTC advertising increased consumer knowledge and contributed to the demand for prescription drugs.

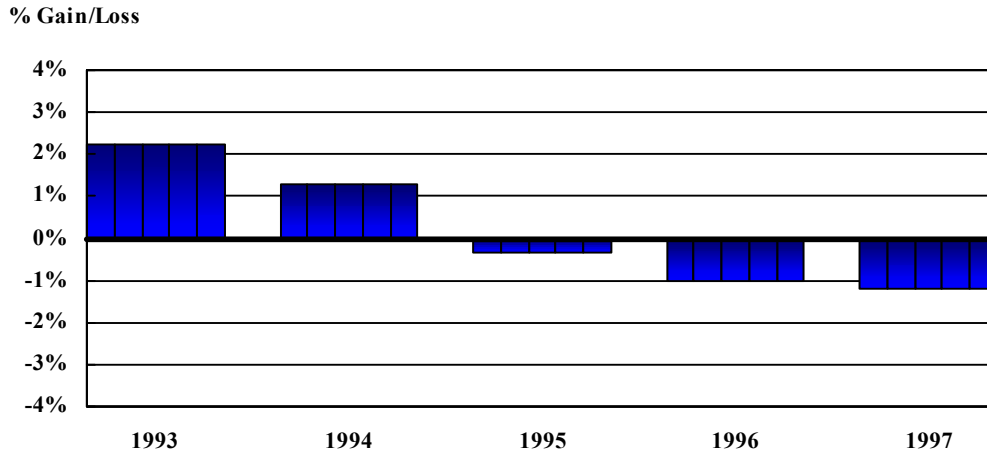
Employer-sponsored insurance continued to transition to managed-care products in an effort to contain premium costs. Enrollment of employees in traditional indemnity plans had dropped from 46% in 1993 to 18% in 1997. By 1997, only 19% of employers were offering indemnity-only products, compared to 50% in 1993. Additionally, in 1997 only 27% of health plan enrollees had an opportunity to enroll in a traditional plan (the only choice or in combination with a managed care product) compared to 59% in 1993.<sup>24</sup> Employees that were offered health plan options had incentives to switch to managed care plans to obtain the lower cost sharing (out-of-pocket expenses), but this also resulted in less choice of providers and other restrictions. One of the drawbacks of offering a choice of health plan products was that members tended to shift from one option to another based on what was most beneficial to their health care needs at the time. Members requiring high volume and intensity of health care resources tended to select the lowest priced plans when it came to out-of-pocket expenses. This resulted in adverse selection, meaning that some plans with the richest benefits ended up with a disproportionate share of the sickest patients, driving up their claim costs higher than anticipated. This drove some managed care plans out of the market.

The period between 1994 and 1998 had record low rates for premium trends. 1996 represented the low point in premium growth—0.8%.<sup>25</sup> At this time, insurers were offering highly competitive premium rates in an effort to enter new markets and gain market share. Many national Health Plans, as well as some local Plans, merged or developed affiliations to expand market share. When both of the merging firms had a substantial portion of their membership in the same market however, their market power increased in negotiations with providers and also led to the failure of some competing plans.<sup>26</sup>

Low premium growth was also supported by a strong investment environment that partially offset the underwriting losses that developed by 1995. By the end of the period, as the managed care products became less restrictive, utilization of services increased and health care claim cost trends exceeded premium increases, resulting in underwriting losses and withdrawal of insurers from some markets.

Chart 8 shows a summary of this time period.

**CHART 8  
UNDERWRITING CYCLE SEGMENT 1993-1997**



**ACTIONS/REACTIONS OF THE STAKEHOLDERS**

Hospital	Physicians	Employers	Health Plans
<ul style="list-style-type: none"> <li>• Deep discounts demanded by Managed Care</li> <li>• Shift over 65 population to post-acute</li> <li>• Continued shift to ambulatory care</li> <li>• Length-of-stay decreased</li> <li>• Acquisitions, mergers, conversions</li> <li>• New entities formed                             <ul style="list-style-type: none"> <li>- PHOs</li> <li>- IDSs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Increased Managed Care penetration</li> <li>• Increased capitation</li> <li>• Assuming risk</li> <li>• Transition to large group practices</li> <li>• Launch of PPMs</li> <li>• Alliances – vertical integration                             <ul style="list-style-type: none"> <li>- IDSs</li> <li>- PHOs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Less indemnity options offered</li> <li>• Increased Managed Care penetration</li> <li>• Less restrictive PPO and POS plans gained popularity as transition products from indemnity</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced premiums to gain market share</li> <li>• Early signs of managed care backlash by 1997</li> <li>• National &amp; Local mergers                             <ul style="list-style-type: none"> <li>- Market expansion</li> <li>- Market overlap</li> </ul> </li> <li>• Health Care cost trends slight increase at the end of the period</li> </ul>

**Overall Impact: Health Care Cost trends low, but starting to increase at the end of the period. Premium trends lower due to highly competitive market, Managed Care impact and assumption of low trends by insurers. Net Result: Underwriting Losses.**

## Late 1990s

In the late 1990s a number of factors converged to increase premium growth. After the low of 0.8% in 1996, premium growth was back in the double-digits by 2001.<sup>27</sup> The increase in premium levels during this period was the result of a complex interplay of economic conditions, government policies, and the competitive environments of the various stakeholders involved—Health Plans, providers, employers, and employees.

1996 represented the highpoint in HMO market share with nearly a third of employees enrolled in such plans.<sup>28</sup> Although employees typically incurred fewer out-of-pocket expenses with a managed care plan, the associated “trade-offs,” such as mandatory gatekeeper referrals, drug formulary restrictions and narrower provider network selections, were perceived as barriers and resulted in employee dissatisfaction. The strong economy and low unemployment at that time had created an extremely competitive labor market. As a result, employers, and the insurers who served them, responded to the growing managed care backlash by offering less restrictive managed care products, like PPOs and Point of Service (POS), that had broader networks, open access, etc. At the same time, employers were also exerting pressure on managed care insurers to keep premiums from rising. According to surveys conducted by KPMG, HMOs lost large group market share beginning in 1998.<sup>29</sup>

Even the HMO products became less restrictive in response to consumer demands and managed care backlash.<sup>30</sup> Some dropped restrictive medical management techniques such as pre-authorization, pre-certification and primary care referral requirements. Plans felt the threat of the passage of the patient bill of rights, other state and federal legislation and lobbying efforts, class actions suits on behalf of various parties, (e.g., physicians and consumers), reductions in enrollment, negative media attention, etc. Employers, who had traditionally aligned with plans in debates over managed care protections and cost containment initiatives, remained relatively silent during this period not wanting to be perceived as insensitive to employee demands as the labor market continued to tighten.

These changes not only resulted in increased utilization rates, but the broadening of networks also limited the ability of plans to negotiate lower reimbursement rates with providers in return for promises of directed volume. Other factors (such as the workforce shortage), also made it difficult for providers to sustain the low rate of cost growth experienced by private payers in the early to mid 1990s.

By the end of the decade, hospital length of stay rates had stabilized and the growth in cost per adjusted admission was beginning to creep up.<sup>31</sup> There were nominal differences in the admit frequency and length of stay trends for HMOs versus other organizations. (This was attributed to many factors including physician change in practice patterns, technology advances and the broad use of utilization techniques by all plans to stay competitive.) Much of the excess capacity had been weeded out, and a health care labor shortage was beginning to develop making it harder to push for additional productivity gains.

Compounding these issues were substantial reductions in Medicare and Medicaid provider payments from the Balanced Budget Act of 1997 (BBA). The goal of the BBA was to control Medicare spending growth and offer Medicare beneficiaries more health care plan options and access. The BBA significantly reduced hospital financial performance starting in 1998 and beyond. In 1997, hospitals' total Medicare payment to cost ratio was approximately 103.6%.<sup>32</sup> The BBA froze Medicare inpatient care rates for 1998 and reduced the annual increases for subsequent years compared to previous years' updates. The BBA also included payment reductions for skilled nursing, home health, and outpatient services as well as other changes that reduced overall Medicare payment levels relative to costs. According to the Medicare Payment Advisory Commission (MedPAC), by 2001, hospital total Medicare payments again fell below cost.<sup>33</sup>

The Medicare reimbursement changes caused hospital margins to decline and created the need to hold the line with private payers. By the late 1990s, managed care contracts represented a larger proportion of hospital revenue. Hospitals began to find that the deep discounts negotiated earlier with the now larger managed care companies were unsustainable, particularly in the post-BBA environment. By 1997, hospital consolidations continued, although at a significantly slower

pace. Hospitals started terminating financially deficient private payer contracts and/or demanding contract amendments to eliminate unprofitable capitation and shared risk arrangements. At the same time, the managed care backlash and consumer demand for choice caused Plans to expand their networks making it more difficult to promise hospitals directed volume in return for deep discounts.

During the mid 1990's, vertical integration entities, including PHOs, IPAs and IDSs had been formed to engage in various reimbursement arrangements with private insurers such as capitation and risk acceptance. However, by the late 1990s, most of these arrangements had failed, due to a multitude of factors, including over-valuation at acquisition, inadequate reimbursement rates, and insufficient member enrollment over which to spread risks and administrative costs. Many of these organizations had neither the expertise nor the information systems necessary to manage complicated risk contracting and capitation arrangements. Additionally, many of these entities had inherent issues with trust as well as different allegiances and motivations, sometimes resulting in internal opposition (e.g., physician versus hospital interests). By 1998 – 1999, many of these capitation arrangements, particularly the global reimbursement contracts, resulted in significant setbacks and failures for many provider groups. Physicians were also impacted by Medicare reform, which transitioned to new payments for practice expenses in 1999. In particular, the reimbursement for certain high volume surgical procedures fell sharply.

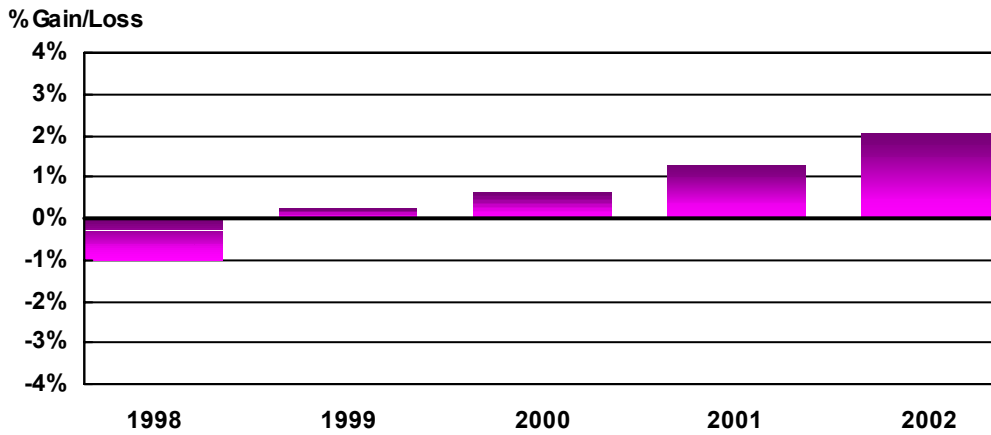
In the late 1990s, drug trend increases were in the 20% plus range.<sup>34</sup> In addition to the liberal managed care drug benefits and the impact of DTC advertising on consumer demand, other factors contributed to the escalating drug trends. New science, the expansion in evidence-based medicine and quality focused organizations led to the reduction in physician practice pattern variations and improved/increased consensus in drug prescribing patterns. Likewise, new drug therapies were introduced, including blockbuster drugs, and new lifestyle and “me too” drugs were promoted. The population was aging, resulting in more scripts per patient and more days of therapy being prescribed.



As a result, from 1995 through 1998, health care cost trends exceeded premium increases and losses increased. Financial problems contributed to a consolidation in the market, reducing competition and allowing Health Plans to raise premiums. This trend correction began to produce gains in 1999 and 2000 that have continued through until 2002.

Chart 9 shows a summary of this time period.

**CHART 9  
UNDERWRITING CYCLE SEGMENT 1998-2002**



**ACTIONS/REACTIONS OF THE STAKEHOLDERS**

Hospital	Physicians	Employers	Health Plans
<ul style="list-style-type: none"> <li>• BBA creates need to cost shift</li> <li>• Low per diem rates</li> <li>• Admits and LOS stabilized</li> <li>• Nominal differences between Managed vs. Non-Managed utilization                             <ul style="list-style-type: none"> <li>– Change in practice patterns</li> <li>– Technology variances</li> <li>– Broad use of UR techniques</li> </ul> </li> <li>• SNF + Home Health PPS implementation</li> </ul>	<ul style="list-style-type: none"> <li>• PPMs and Vertical integration entities fail                             <ul style="list-style-type: none"> <li>– Practice acquisition over-valued</li> <li>– Insufficient reimbursement</li> <li>– Difficulty managing risk</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Limited indemnity offered</li> <li>• Tight labor market</li> <li>• Responsive to employees</li> <li>• Demanded less restrictive products</li> <li>• Exerting pressure to hold premium rates down</li> </ul>	<ul style="list-style-type: none"> <li>• Managed Care Backlash                             <ul style="list-style-type: none"> <li>– Consumer dissatisfaction</li> <li>– Class action suits</li> <li>– Threatened legislation</li> <li>– Patient bill of rights</li> <li>– Negative media coverage</li> </ul> </li> <li>• Respond and Retreat                             <ul style="list-style-type: none"> <li>– Broader networks</li> <li>– Open access</li> <li>– Less restrictive UM</li> </ul> </li> <li>• Less investment income as economic growth slows</li> </ul>

**Overall Impact: Increasing Health Care utilization and costs; Premium trends increasing to compensate for earlier losses. Net Result: Underwriting Gains.**

- 
- <sup>1</sup> Kaiser Family Foundation and Health Research and Educational Trust, Employer Health Benefits, 2002 Annual Survey, Exhibit 1.2, p. 15.
- <sup>2</sup> Cookson, J. “Underwriting Gain and Loss Cycles” Chapter 33, p. 769-779 in *Group Insurance*, 3<sup>rd</sup> Edition, Winsted, CT: ACTEX Publications, 2000.
- <sup>3</sup> Cookson, J. “Risk-Based Capital Formulas” Chapter 34, p. 781-798 in *Group Insurance*, 3<sup>rd</sup> Edition, Winsted, CT: ACTEX Publications, 2000.
- <sup>4</sup> In a May 2001 PULSE Analysis by the Sherlock Company.
- <sup>5</sup> CNN, “HMO Profits to Flatline Upcoming Managed Care Earning Reports Look to be Unhealthy”, January 17, 1997.
- <sup>6</sup> Gabel, J., R. Formisano, B. Lohr, S. DiCario, “Tracing the Cycle of Health Insurance”, Health Affairs, Winter, 1991, p. 48-61.
- <sup>7</sup> Levit, Katherine R., et al, “National Health Spending Trends, 1960-1993”, Health Affairs, Volume 13, Number 5, p. 14-30.
- <sup>8</sup> Pope, Gregory C. and John E. Schneider, “Trends in Physician Income”, Health Affairs Volume 11, Number 1, p. 181-193.
- <sup>9</sup> Ibid.
- <sup>10</sup> Levit, Katherine R. et al, “National Health Spending Trends, 1960-1993”, Health Affairs, Volume 13, Number 5, p. 14-30.
- <sup>11</sup> Jensen, G., et al, “The New Dominance of Managed Care: Insurance Trends in the 1990s,” Health Affairs, Volume 16, Number 1, p. 125-136.
- <sup>12</sup> Sullivan, Cynthia B., et al, “Employee Sponsored Health Insurance In 1991”, Health Affairs, Volume 11, Number 4, p. 172-185.
- <sup>13</sup> Ibid.
- <sup>14</sup> Ibid.
- <sup>15</sup> Levit, K., et al, “Healthcare Spending in 1994 Slowest in Decades”, Health Affairs, Volume 15, Number 2, p. 130-144.
- <sup>16</sup> Centers for Medicare and Medicaid Services (CMS), “Health Care Industry Market Update – Acute Care Hospitals”, April 29, 2002.
- <sup>17</sup> MedPAC Report to the Congress: Medicare Payment Policy; A Data Book on Hospital Financial Performance, Appendix C, Table C-12, June 2000.
- <sup>18</sup> Ibid.
- <sup>19</sup> Simon, Carol J., David W. Emmons, “Physician Earnings at Risk: An Examination of Capitated Contracts” Health Affairs, Volume 16, Number 3, p. 120-126.
- <sup>20</sup> Miller, R., “Health Systems Integrated: A Means to an End”, Health Affairs, Volume 15, Number 2, p. 92-106.

- 
- <sup>21</sup> Reinhardt, Uwe E., “The Rise and Fall of the Physician Practice Management Industry”, Health Affairs, Volume 19, Number 1, p. 42-55.
- <sup>22</sup> Ibid.
- <sup>23</sup> Wilkes, Michael S., Robert A. Bell and Richard L. Kravitz, “Direct-to-Consumer Prescription Drug Advertising: Trends, Impact, and Implications”, Health Affairs, Volume 19, Number 2, p. 110-128.
- <sup>24</sup> Marquis Susan M. and Stephen H. Long, “Trends in Managed Care and Managed Competition 1993-1997”, Health Affairs, Volume 18, Number 6, p. 75-88.
- <sup>25</sup> Kaiser Family Foundation and Health Research and Educational Trust, Employer Health Benefits, 2002 Annual Survey, Exhibit 1.2, p. 15.
- <sup>26</sup> Feldman, Roger D., Douglas R. Wholey, and Jon B. Christianson, “HMO Consolidations: How National Mergers Affect Local Markets”, Health Affairs, Volume 18, Number 4, p. 96-104.
- <sup>27</sup> Kaiser Family Foundation and Health Research and Educational Trust, Employer Health Benefits, 2002 Annual Survey, Exhibit 1.2, p. 15.
- <sup>28</sup> The Kaiser Family Foundation, The Kaiser Changing Health Care Marketplace Project, “Trends and Indicators in the Changing Health Care Marketplace Chartbook”, August 1998, p. 14-24.
- <sup>29</sup> Ibid.
- <sup>30</sup> Blendon, R., et al, “Understanding The Managed Care Backlash”, Health Affairs, Volume 17, Number 4, p.80-93.
- <sup>31</sup> MedPAC Report to the Congress; Medicare Payment Policy, A Data Book on Hospital Financial Performance, Appendix D, March 2003, p. 266.
- <sup>32</sup> Ibid. p. 278.
- <sup>33</sup> Ibid. p. 278.
- <sup>34</sup> Dubois, Robert W., et al, “Explaining Drug Spending Trends – Does Perception Match Reality?” Health Affairs, Volume 19, Number 2, p. 231-239.