HEALTH CARE INDUSTRY MARKET UPDATE

Managed Care

March 24, 2003

Dear Friends of CMS:

As the regulators of over $500 billion per year of Medicare, Medicaid, and S-CHIP funds, we believe it is incumbent on us to better understand the finances of our contractors, health providers, and other related businesses that provide services to the more than 70 million beneficiaries these programs serve. Health plans, hospitals, nursing homes, home health agencies, medical device manufacturers, and pharmaceutical companies are just some of those whose finances depend heavily on these public programs.

I have always been surprised at how little Wall Street and Washington interact—and how companies often provide different financial information to each. I am a strong believer in adequate funding for our major partners in these programs, but I do not think they should be saying one thing to investors and another to regulators (as it is occasionally in their interest to do). If health plans or providers need help, we should have a thorough understanding of their real financial status to assess the true level of need. Many investment banking firms conduct detailed analyses of major health providers, both for the equity investors in for-profit companies, and for the debt holders of for-profit and nonprofit entities. Health systems typically provide these investors with clear financial data. These data can be used by regulators and legislators to assess funding adequacy or the need for regulatory reforms.

CMS' Office of Research, Development & Information (ORDI) has gathered research reports from the major investment firms, summarized their analyses, and condensed them into a short, and hopefully, understandable format. Our goal is to provide objective summary information that can be quickly used by CMS, HHS, Congress, and their staffs that oversee these programs. The primary person at CMS assigned to this task is Lambert van der Walde. Lambert previously worked for Salomon Smith Barney in New York and is experienced with corporate financial analysis and research review. Also on the team is Kristen Choi who previously worked for JPMorgan in New York in health care equity research.

This Market Update focuses on managed care organizations, updating our first report about this sector published November 28, 2001. Understanding of this sector is especially important as policy makers consider new and existing health plan options in both Medicare and Medicaid. In coming months, we will continue to review the major provider and supplier sectors. Though I am proud of this effort, and believe it will add to understanding of the programs, we welcome comments on the content and format of this report. We want to make this as consumer friendly as possible for everyone who reads it. Please provide comments to Lambert van der Walde at lvanderwalde@cms.hhs.gov or Kristen Choi at kchoi@cms.hhs.gov.

Sincerely,

Tom Scully

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

HEALTH CARE INDUSTRY MARKET UPDATE

Managed Care

March 24, 2003

Tom Scully
Administrator

Office of Research, Development & Information:

Lambert van der Walde
lvanderwalde@cms.hhs.gov

Kristen Choi
kchoi@cms.hhs.gov

Jennifer Higgins
jhiggins@cms.hhs.gov

Wall Street's View of Managed Care

The managed care industry continues to benefit from an upswing in the underwriting cycle by pricing premiums ahead of projected medical costs.

- **Profit margins for the publicly traded managed care companies are expanding but remain in the low single digits, from an average 1.8% in 1999 to 4.4% in 2002.**
- **Analysts expect 2003 to mark the third consecutive year of double-digit premium increases. Employers continue to shift more costs onto employees.**
- **The commercial market has moved towards more open and flexible plans, with 70% of enrollees in PPO or POS plans compared to 26% in HMOs in 2002.**
- **Commercial managed care organizations have reduced Medicare managed care (Medicare+Choice) revenue exposure over the last several years.**
- **Medicaid managed care plans covered 58% of beneficiaries in 2002. Analysts expect Medicaid HMO enrollment to grow but have concerns about the potential impact of state deficits.**

CONTENTS

EXECUTIVE SUMMARY

Profit margins continue to grow for both for-profit and nonprofit managed care companies.

The managed care industry continues to benefit from an upswing in the underwriting cycle. Profit margins are expanding but remain in the low single digits. For the publicly traded companies, profit margins increased from 1.8% in 1999 to 4.4% in 2002. Similar margin improvement has been observed among the Blue Cross Blue Shield plans, the publicly traded Medicaid HMOs, and Kaiser Permanente, the largest nonprofit HMO in the country.

Medical costs are expected to rise 11%-12% in 2003.

Premiums for commercial health plans have risen at double-digit rates for the past two years (up 11.0% in 2001 and 12.7% in 2002). Some investors are concerned and believe that employer resistance will slow the rate of premium increases. The publicly traded managed care companies, however, project that average premiums will rise 12% to 13% while medical costs will rise 11% to 12% on average in 2003. Most of these companies expect to maintain or expand profit margin levels. Analysts also have observed an increase in benefit buydowns or cost shifting. (Benefit buydowns are benefit reductions or increased employee cost-sharing designs.) While buydowns reduce overall revenues for the managed care company, this cost shifting can also lower both utilization and overall costs of health care services by increasing patients' out-of-pocket costs.

Over two-thirds of commercially insured Americans are enrolled in PPO or POS plans.

The commercial market has moved towards more open and flexible plan designs, a shift that analysts expect to continue. In 2002, over two-thirds of commercial enrollees were enrolled in PPO or POS plans, compared to only one-quarter in HMOs. Turning away from the direct utilization controls of HMOs, PPOs and other hybrid plans incorporate other mechanisms to control utilization and costs, such as tiered pharmacy and provider co-pays. The number of employers that incorporate disease management into health plan designs rose to 50% in 2003 from 44% in 2002, according to Goldman Sachs. Analysts also expect the commercial market to continue shifting toward self-funded plans, which are not subject to state-mandated benefits under ERISA and can better control costs.

Managed care enrollment is declining in Medicare…

Health care costs in many parts of the country continue to exceed available Medicare+Choice (M+C) payments. As a result, many M+C plans have reduced benefit packages or exited from certain markets altogether. In late 2001, Wall Street analysts typically were less optimistic about companies with high M+C participation but now seem less concerned as M+C has become a declining revenue source for most of the sector.

… while growing rapidly in Medicaid.

Medicaid managed care enrollment has grown rapidly, increasing from 40% of Medicaid beneficiaries in 1996 to 58% in 2002. Medicaid managed care includes comprehensive benefit plans such as primary care case management, prepaid health plans, and HMOs, as well as more limited plans such as mental health or partial hospitalization programs. Analysts believe that Medicaid is the only market where HMO enrollment will grow.

The Salomon Smith Barney managed care index has declined 1.1% year-to-date (as of 3/13/03) compared to a decline of 5.4% for the S&P 500. In recent quarters, sector performance has suffered partially due to investor concern about reserves and related earnings quality. Despite the confusion, however, most analysts are confident in the quality of reported earnings by the managed care sector. Strong cash flow has generated excess capital, which is typically used to retire debt, repurchase stock, and invest in technology.

WALL STREET'S VIEW

The managed care sector continues to benefit from an upswing in the underwriting cycle. Managed care is an insurance business subject to the natural swings of the underwriting cycle. Companies must price their insurance products well in advance of when medical services are rendered in the following year. Managed care profitability thus relies on accurate predictions of medical cost trends. When premium growth exceeds medical cost growth, the underwriting cycle is on the upswing; the opposite is true in a downswing. Those companies that have better actuarial ability to forecast medical expense trends can reduce the volatility of the underwriting cycle.

Wall Street expects profit growth in 2003.

Charles Boorady of Salomon Smith Barney writes, "As background on the profit cycle, industry margins declined from 1994-1999, and we are now in the third year of cyclical margin expansion." Boorady writes, "For 2003, we expect premium acceleration and medical cost abatement to set a backdrop for record margin-driven profit growth."

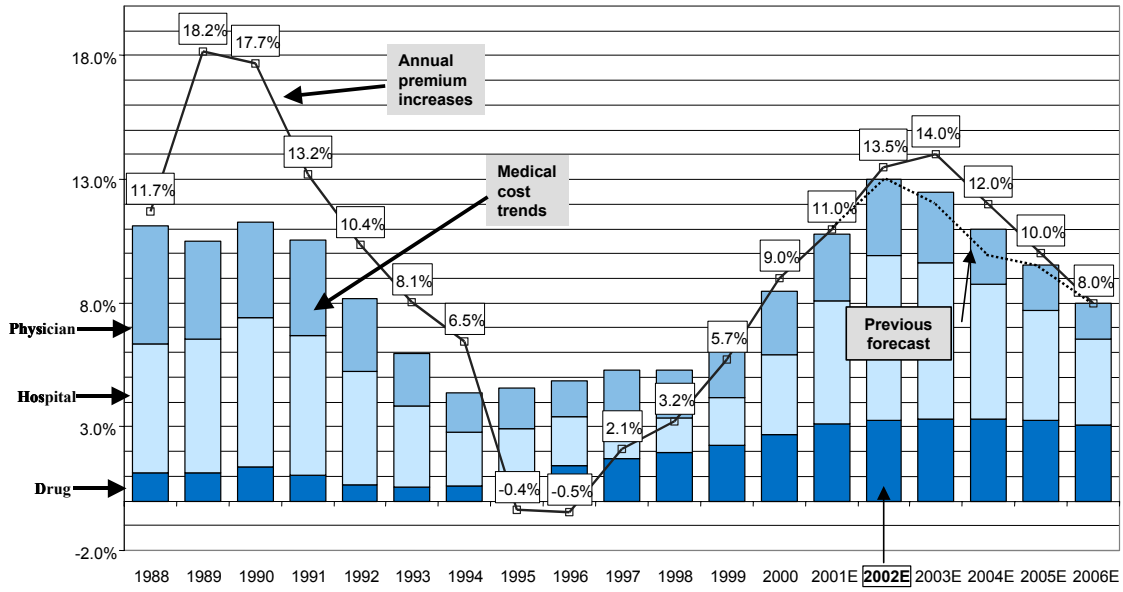
While the near-term outlook is positive, some investors debate whether premium increases have peaked. Investors are cautious as to the sustainability of the current positive trend. John Rex of Bear Sterns writes, "With each passing year, investors increasingly question the sustainability of margins and fear the potential impact of the inevitable decelerating premium increase environment."

Some investors have been concerned that premium increases have peaked. Average increases in health plan premiums have accelerated in recent years: up 8.3% in 2000, 11.0% in 2001, and 12.7% in 2002, according to Kaiser. Premium increases are expected as medical costs rise, but investors are concerned that the *rate* of premium increases will slow as employers are pressured to reduce costs including benefit expenses. Credit Suisse First Boston (CSFB) believes, "Employers simply can't absorb double digit rate increases *every* year…." Boorady cites the uncertainty behind achieving premium increases in a weak economy to be the industry's biggest risk today. Roberta Goodman of Merrill Lynch writes, "We have heard (*ad nauseum*) concerns that 'the pricing cycle is peaking'… [although] managed care stock performance has *minimal* correlation with pricing trends."

Most analysts, however, emphasize that the industry continues to show strong pricing discipline by pricing insurance premiums ahead of projected medical cost trends. Rex discourages overemphasis on pricing deceleration, and writes, "[I]t is the margin or 'spread' story upon which we should focus, and we see evidence that the majority of health plans continue to price at, or slightly above, existing cost trend levels." For 2003, most managed care companies expect strong average premium increases of 12% to 13%, higher than average expected medical cost trends of 11% to 12%, allaying some concerns over a peaking pricing cycle. Salomon Smith Barney analysis shows that premium and cost trends have been closely matched over the past several years, and estimates that premiums will rise faster than costs through 2005.

Analysts expect health plans to price premiums ahead of cost trends.

Figure 1: Premium versus Cost Increases



Source: Salomon Smith Barney Research estimates based on data from CMS, Milliman USA, AAHP, and KPMG. As of February 27, 2003.

Analysts interpret this strong pricing discipline as a sign that the industry has learned from previous mistakes. The last severe down-cycle of the managed care industry was from 1994 to 1999. During this time, industry margins eroded due to aggressive price competition to attract enrollment. Many of the irrational pricers of the mid-1990s no longer exist. Joshua Raskin of Lehman Brothers points out: "Despite all the speculation as to what could drive yields lower, we have yet to hear anyone suggest that managed care companies are engaging in a price war or looking to gain [market] share."

Benefit buydowns, which shift health care costs from employers to employees, are expected to increase in 2003.

There has been a meaningful increase in benefit buydowns in 2003, which tends to increase investor concern about actuarial accuracy. With rising health care costs and a weak economy, employers are seeking to mitigate premium increases by shifting costs onto employees through benefit buydowns. Buydowns include higher premium cost-sharing, higher co-payments and/or co-insurance, and increased use of tiered co-pays for prescription drugs. By increasing the employee's financial stake in the cost of health care, buydowns can also reduce the rise of premiums by discouraging unnecessary utilization of health care services.

By reducing the rise of premiums, benefit buydowns also slow overall revenue growth for the managed care company. Scott Fidel of JPMorgan expects buydowns to increase 3.0 to 4.0 percentage points in 2003, compared to 1.0 to 2.0 percentage points in 2002. Raskin writes, "When the prevalence of benefit buy-downs escalates, it becomes an underwriter's game and the companies who have good data collection and pricing discipline are better positioned to grow profitably versus their competitors."

Most managed care companies forecast an increased medical cost trend of 11% to 12% in 2003. Medical costs, or benefit expenses, are typically composed of inpatient hospital services, outpatient hospital services, physician services, and prescription drug spending. If growth in medical costs decelerates faster than expected, this could contribute to higher profit margins.

Analysts debate whether the medical cost trend is abating. Goodman predicts, "We expect medical cost trends to rise… although there are factors pointing to potential moderation or even deceleration of the rate of increase." CSFB believes, "While a slowdown in [growth of] pharmaceutical costs will benefit managed care, it comes at a time when provider costs, which account for 40-45% of total medical expenses, are rising at the fastest rate in a decade, and we believe the overall cost trend will remain likely unchanged." Despite the speculation, most managed care companies have continued to incorporate an increased cost trend of about 11 to 12% when pricing health plans. Fidel believes that managed care companies "remain conservative and disciplined in their approach to pricing."

Analysts are calling for increased accounting disclosure regarding reserve levels, which have a major impact on reported earnings of managed care companies. Investors understand that managed care companies have certain discretion when reporting earnings. This flexibility stems from the fact that reported medical expenses in a given quarter include estimates of claims that have been incurred but not reported (IBNR). Companies must establish reserves in order to recognize claims to be paid in the future, and most states set reserve requirements for plans operating in that state. Few companies break out IBNR claims, and thus it becomes difficult for investors to analyze reserve adequacy as well as the impact of reserves on reported earnings. [1]

Investors' attention on reserve levels has led to additional industry disclosure.

Concerns over reserves have troubled managed care stocks recently, although many companies reported earnings above expectations. CSFB believes, "[If] we learned anything last year, it might be that hitting, or even beating the numbers is not always enough…. The market's response to the past few quarters argues for a lot more detail on reserves, as investors are paying closer attention to the quality of earnings, and demanding greater disclosure." Fourth quarter earnings reports were filled with additional reserve disclosures. Although William McKeever of UBS Warburg notes, "Investors have been confused by the additional [reserve] information," he summarizes, "[T]he companies remain conservative in their reserve setting, and we believe some investors have overstated the risks on this issue."

Many managed care companies have shifted their business mix towards self-funded products or other non-risk lines of business. The largest managed care companies have been actively pursuing fee-based and specialty services businesses, "which offer more predictable and dependable revenue and earnings streams" than risk-based business, according to Fidel. Large employers also have shown preference for self-funded plans, under which the employer itself assumes the risk of loss for its members. Employers enjoy more benefit design control, which can result in better benefit cost trends, over self-funded versus risk products. Matthew Borsch of Goldman Sachs believes that this shift is a key reason for future moderation of the industry's profit cycles, since the industry has "less earnings exposure to unanticipated changes in medical cost trend as a greater proportion of earnings are driven by fee-based (self-insured) and specialty products."

[1] For further discussion of reserve analysis, see pages 27-30.

Analysts note that consolidation in health plans continues, especially among Blue Cross Blue Shield plans. Managed care companies are driven to consolidate through increasing economies of scale, investment in technology, rising costs of medical claim insurance, and increasing state statutory capital requirements. Consolidated health plans create larger membership blocks, increasing bargaining leverage with providers and leveraging administrative costs. "Competitive capacity has been significantly reduced as a result of the last down cycle, which led to the failure of many provider-sponsored health plans and the exit of national firms from their weaker markets," notes Borsch. The number of HMOs has declined from 643 in 1999 to only 490 in 2002.

Analysts expect industry consolidation to continue.

Fidel writes, "We expect to see industry consolidation in both the Blue [Cross Blue Shield] domain and with the commercial insurers." Fidel predicts that the number of Blue plans will decline from 42 currently to around 25 or 30 over the next five years, driven by the conversion of several Blues to for-profit status and the opportunity of merged Blue plans to leverage strong market share positions in their respective markets.

Nonprofit managed care plans have converted or are converting to for-profit status. Health insurance enrollment has historically been weighted toward nonprofit companies. However, several Blue plans have converted to for-profit status, changing the distribution of insured lives to the for-profit sector. Analysts generally believe that this trend brings greater rationality to the managed care industry. Boorady writes, "In our view, as more nonprofits and mutual companies convert to for-profit status, it will instill more efficiency and pricing discipline in the industry and elongate the positive underwriting cycle." There are four publicly traded, for-profit Blue managed care companies (Anthem, Cobalt, WellPoint, and WellChoice), which cover 26 million lives in 14 states, or 29% of all covered Blue lives. Several more are attempting to convert to for-profit status due to an acquisition or on a stand-alone basis pending approval from state legislatures or regulatory authorities.[2]

[2] On March 5, 2003, the Maryland insurance commissioner denied CareFirst's application for conversion and sale to WellPoint. (WellPoint first announced the proposed transaction on November 20, 2001.) The Maryland Insurance Administration found that the proposed transaction was not in the public interest, based on several disqualifying factors and several mandatory considerations relating to the integrity of the process that were not satisfied. This decision becomes effective 90 days following the announcement, is then subject to vote by the Maryland legislature, and may be followed by an appeals period.

INDUSTRY OVERVIEW

Managed care is a general term for a health care system that manages health care delivery in order to improve quality and control costs. A managed care organization (MCO) is an entity that finances and manages health care delivery through networks of doctors, hospitals, and specialty providers.

The spectrum of managed care runs from strict HMOs to more flexible PPOs.

Types of managed care plans include health maintenance organization (HMO), preferred provider organization (PPO), and point-of-service (POS). The HMO structure is the least flexible. HMO members typically choose a primary care physician from a network of providers with which the plan has negotiated contracted rates. The primary care physician acts as a gatekeeper to any specialty physicians or services. HMO premiums are therefore usually lower than those for other types of plans. PPOs, on the other hand, allow self-referral (eliminating the gatekeeper role) and allow members to select physicians from either a broader preferred provider network or, for a higher out-of-pocket cost, out of network altogether. PPO beneficiaries typically pay for the additional flexibility with a higher monthly premium than they would in an HMO. A point-of-service (POS) plan blends the HMO and PPO models, typically requiring patients to select an in-network primary care physician, but allowing self-referral and out-of-network physician access with higher deductible and co-insurance costs than referred in-network options.

All of these managed care products, and their hybrids, seek to rein in the higher costs associated with a traditional fee-for-service (indemnity) model of health care insurance, but are often a trade-off between cost and flexibility. Traditional fee-for-service plans provide the same reimbursement regardless of provider. Premiums for fee-for-service plans are generally more expensive than those for managed care plans.

Figure 2: Types of Health Plan Designs and Enrollment

Product	Access	2002 Enrollment* Percentage
HMO	Network only	26%
POS	Network or out-of-network	18%
PPO	Network or out-of-network	52%
Indemnity	Open	5%

*Includes private, employer-based market. Figures may not add due to rounding.
Source: Credit Suisse First Boston and Kaiser/HRET Survey of Employer-Sponsored Health Benefits: 2002.

History

HMOs trace back to the 1930s, when select groups of patients or communities, such as lumber workers, began to cooperate with certain providers to establish pre-paid rates for healthcare services. These early HMOs were non-profit plans, as were the traditional indemnity insurers such as Blue Cross and Blue Shield. The for-profit health care industry has its roots in the late 1960s when government spending, a strong economy, and pricing flexibility spurred growth. In the 1970s, demand for health care services continued to increase, encouraged by increased hospital capacity and the purchase of high-tech equipment.

During the 1980s, as demand for health care services continued to increase, so did costs. As explained in more detail below, many employers attempted to control costs by applying the HMO model on a broad scale to large groups of employees. The resulting decrease in patient choice caused a "backlash" against restrictive managed care plans in

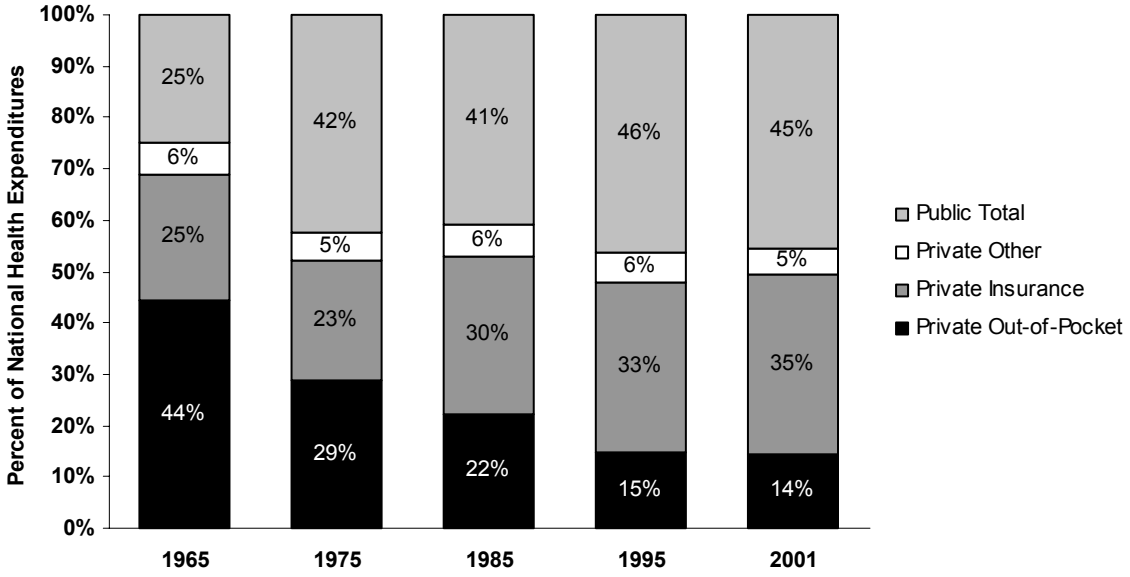
the commercial market in the 1990s. Although commercial enrollment recently has favored less restrictive managed care plans, employers today often offer a range of health plans at different costs, allowing the individual to choose what type of health plan best suits his or her needs. Many traditional HMO plans continue to serve their communities well, with notable examples including Kaiser Permanente and Group Health Cooperative.

The Rise of HMOs in the 1980s

During the 1980s, employers' growing concern over rising health care expenditures fueled demand for managed care plans. Private health insurance funding of total health expenditures rose due to benefit expansion and enrollment increases. Meanwhile, private health insurance was also attempting to reduce unnecessary hospital use. In addition, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) limited hospital costs and set the stage for the prospective payment system (PPS) enacted the following year that established new limits on Medicare payments for inpatient hospital costs. During the early years of PPS, Medicare payments were initially higher than hospital costs. When PPS payments were adjusted downward to better reflect actual costs, this also caused private sector spending as a percent of total expenditures to rise. In 1975, private insurance accounted for 23% of total national health expenditures of $130 billion. Ten years later, private insurance accounted for 30% of total national expenditures of $427 billion.

Figure 3: National Health Expenditure Funding Shifts to Public and Private Insurance Payors

As a percent of national health expenditures, private insurance spending has risen to 35% while out-of-pocket spending has declined to 14%.



Source: CMS, Office of the Actuary, National Health Statistics Group. Figures may not add due to rounding.

Private insurers passed these rising costs along to the major purchasers of health insurance, the employers. Employers viewed the HMO model as a solution to the problem of rising health care costs. As HMOs gained traction in the 1980s, many HMOs converted to for-profit status and traditional fee-for-service insurers bought or launched their own HMO plans. In the early 1990s, health care providers including hospitals and physician groups also began sponsoring their own HMOs, offering discount premiums to gain enrollment and therefore service volume at their facilities. This eventually contributed to a pricing war that compressed industry profit margins during the industry's last downswing in the mid-1990s. Many of these provider-sponsored plans no longer exist.

HMO capitation has fallen out of favor with physicians.

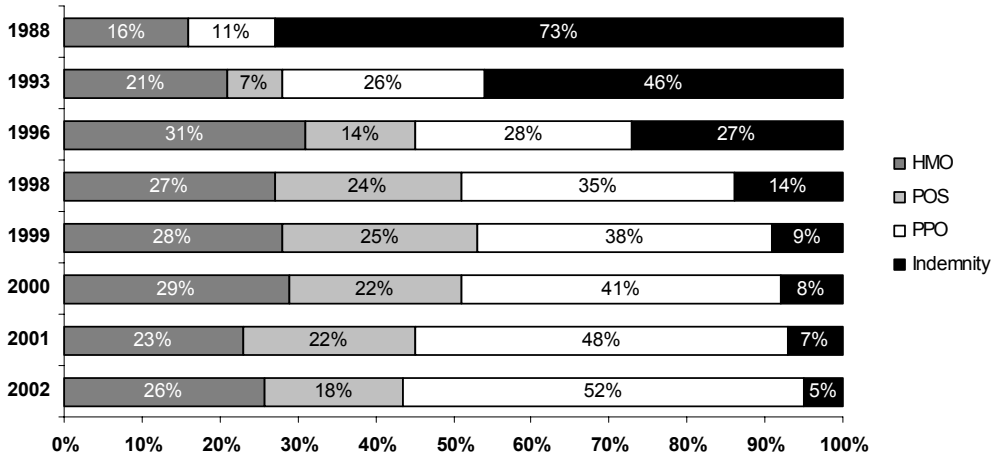
To control costs, HMOs negotiate capitated rates with providers. Capitated rates are per capita amounts that are fixed per member regardless of the number or nature of services provided to that member. Although some physician groups initially encouraged capitation in the mid-1990s, physicians' acceptance of capitation has decreased recently. Physicians became dissatisfied with payment rates, strict management of medical practice by health plan administrators, and other financial risks. Scott Fidel of JPMorgan writes, "Capitation requires a provider to take on a certain level of risk for each member, and many providers do not have the underwriting and actuarial skills, as well as strong information systems and access to capital, that are necessary to successfully manage this process."

Movement toward PPO and POS Plans

Combined PPO and POS commercial enrollment was 70% in 2002.

In the mid-1990s, consumers began seeking less restrictive managed care plan designs. Managed care organizations introduced more "open" health care delivery models including PPO and POS structures. From 1993 to 2002, combined PPO and POS enrollment for covered workers more than doubled from 33% to 70%, while conventional fee-for-service indemnity enrollment declined from 46% to 5%. HMO enrollment has declined from its 31% peak in 1996, but has remained relatively steady at an average of 27% over the past five years. In total, managed care plans have continued to grow while traditional fee-for-service indemnity plans are declining as a percent of the commercial market. Roberta Goodman of Merrill Lynch predicts, "PPOs and hybrids will continue to be more successful in the marketplace than traditional gatekeeper HMOs."

Figure 4: Health Plan Enrollment for Covered Workers by Plan Type, 1988-2002



Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits: 2002.

Consumers have continued to choose managed care plans with greater choice, despite their higher cost. William McKeever of UBS Warburg notes, "Even with a slower economy, employers have not shown interest in increasing HMO enrollment," the cheapest of all the managed care plans. Fidel writes:

> While the HMO product is the most cost-effective and would thus appear to be the most attractive option for employers during difficult times, this product continues to find disfavor with many employees. For employers, their approach is evolving to where they will allow the employee to choose whatever product they prefer, but make them cover the higher costs associated with open-access plans through higher cost shifting and member share.

Unlike the commercial market, 89% of Medicare beneficiaries are in traditional indemnity plans.

Compared to only 5% of enrollees in the commercial market, 89% of Medicare's 41.5 million beneficiaries were covered by the traditional fee-for-service plan in 2003.[3] The remaining 11% of beneficiaries were covered by Medicare managed care plans known as Medicare+Choice (M+C) coordinated care plans. M+C enrollment is declining as health plans exit from many markets.[4]

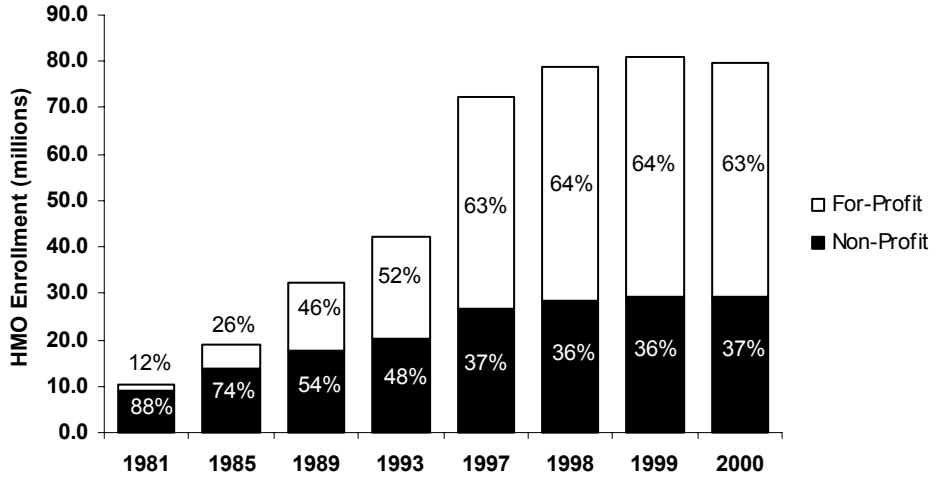
Medicaid HMO enrollment is rising.

In Medicaid, the number of beneficiaries enrolled in managed care is growing rapidly. Forty-eight Medicaid programs offer managed care options. Forty-two of these require managed care enrollment for beneficiaries. Fidel is optimistic: "The one HMO segment that continues to see robust growth is Medicaid, which should grow enrollment in the 12-15% range in 2002 and 2003."[5]

Industry Landscape

Managed care organizations are structured as either for-profit or nonprofit entities. In 1981, 88% of HMO enrollees participated in nonprofit plans. The nonprofit proportion declined through the mid-1990s, but has been relatively steady at about 36% to 37% over the past several years. According to Kaiser, for-profit growth was due both to the emergence of new for-profit companies as well as conversions of nonprofit companies to for-profit status.

Figure 5: Distribution of HMO Enrollment, by Ownership Status, 1981-2000



Source: InterStudy quoted by Kaiser Family Foundation.

Blue Cross Blue Shield Association

The Blues provide health insurance for nearly one-third of Americans.

The most recognized brand name among health plans is Blue Cross Blue Shield, which represents a federation of 42 member plans each of which owns exclusive rights to the brand name in a specific region. Blue Cross Blue Shield plans (collectively known as the "Blues") cover 86 million members, or about 30% of the U.S. population, and paid $125 billion in claims in 2001, or 26% of total claims covered by private insurers. "Based on

[3] Medicare fee-for-service enrollees can go to non-participating providers for an additional cost. Approximately 5% of Medicare physician spending goes to non-participating physicians.
[4] For further discussion of Medicare managed care, see pages 39-41.
[5] For further discussion of Medicaid managed care, please see pages 42-43.

enrollment data," writes McKeever, "the Blue Cross Blue Shield plans have typically the highest market share" in a specific region.

The Blues have enjoyed a recent resurgence, after losing membership in the 1980s and early 1990s as competing HMOs grew more popular. During this time, enrollment in Blue plans declined as they developed managed care products beyond their traditional indemnity plans. Today, all Blue plans now offer at least one HMO and PPO product. In addition, as enrollment has shifted away from restrictive HMO plans to more open and flexible networks, the Blues have had the advantages of broader and better-priced provider networks, more experience to predict cost trends within "open" design plans, and dominant local market shares to achieve better economies of scale. Blue strength has traditionally been in small group and individual markets. However, the creation of the BlueCard product, which connects each Blue plan with other Blues' provider networks and discounts, has helped the Blues make significant inroads in the large group and national accounts business.

Some Blues have converted or are converting to for-profit status. Blues can convert to for-profit status through either a formal conversion process or an acquisition by a for-profit Blue member. (Under national Association rules, only a Blue member can acquire another Blue member.) However, most Blue plans still retain their historical nonprofit status. Today there are only four publicly traded, for-profit Blue companies: Anthem, Cobalt, WellChoice, and WellPoint. These four companies cover 26.2 million lives in 14 states, or 29.2% of all covered Blue lives. Other Blue plans that successfully converted to for-profit status have been acquired (*i.e.*, WellPoint acquired RightCHOICE and Anthem acquired Trigon). Still other Blue plans have attempted to convert, but may have faced significant legal and regulatory hurdles, typically related to appropriate fulfillment of their public benefit obligation and state common law restrictions on conversions of charitable trusts.

The four publicly held Blues cover 26.2 million Americans.

For-profit status, according to Matthew Borsch of Goldman Sachs, can lead to more disciplined pricing and decision-making. In addition, even those Blue plans that do not convert to for-profit status are encouraged to increase efficiency to keep up with their publicly traded Blue peers.

Kaiser Permanente

Kaiser Permanente is the largest nonprofit HMO in the United States and is headquartered in California. Kaiser covers 8.4 million members in nine states and Washington, D.C., with enrollment concentrated primarily in California. Kaiser's operating units include the nonprofit Kaiser Foundation Health Plan, Kaiser Foundation Hospitals, and the Permanente Medical Groups, and are affiliated with the Group Health Cooperative based in Seattle. The Kaiser network includes over 11,000 physicians in 423 medical offices and 29 medical centers. Fidel, "Due to its history, size, and influence, we view developments at Kaiser as a useful proxy for trends in the nonprofit managed care segment."

The extensive Kaiser network includes over 11,000 physicians.

For-Profit Publicly Traded

The major for-profit, publicly traded managed care organizations are shown in Figure 6 below.

Figure 6: Publicly Traded Managed Care Companies

($ in millions)

Company	Ticker	Market Cap
UnitedHealth Group	UNH	$26,393
WellPoint	WLP	10,443
Anthem	ATH	8,490
Aetna	AET	7,052
Cigna	CI	6,061
Health Net	HNT	3,139
FirstHealth	FHCC	2,540
Oxford Health Plans	OHP	2,280
Mid-Atlantic Medical Services	MME	1,805
Coventry Health Care	CVH	1,768
WellChoice	WC	1,700
Humana	HUM	1,522
PacifiCare Health Systems	PHSY	795
Amerigroup	AGP	546
Cobalt	CBZ	520
Sierra Health Services	SIE	363
Centene	CNTE	285
American Medical Security Group	AMZ	160
Magellan Health Services	MGLH	2
Total		$75,863

Source: Bloomberg. As of March 17, 2003.
Note: Market capitalization is a measure of a company's value or size, calculated by multiplying share price by the number of shares outstanding.

Strong local market share can help managed care plans negotiate favorable rates with providers.

Some of these managed care companies employ a regional strategy and focus on building market share and network breadth within a specific geographic area. Because health care delivery is local, dominant market share in a specific region can be an important competitive advantage. Strong local market share can help managed care companies negotiate favorable rates with providers. CSFB believes that the three most important aspects of managed care are risk underwriting, provider network management, and medical utilization management, and all three are best handled at the local level.

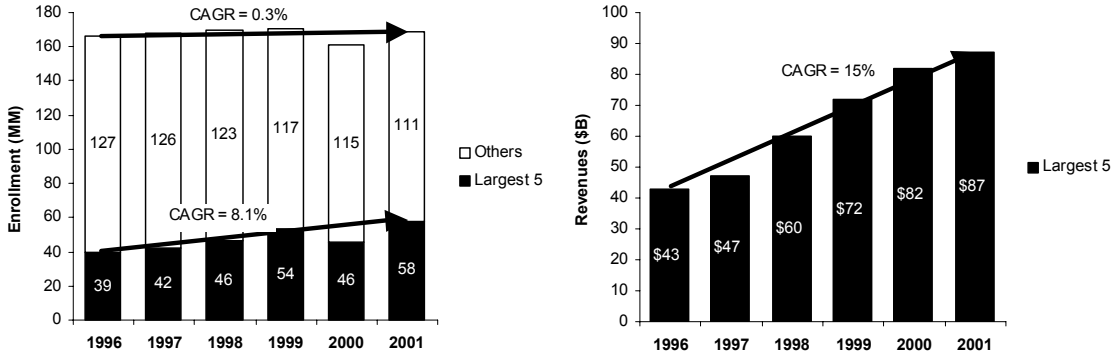
Nationally focused MCOs, however, can build economies of scale and better serve employers who have geographically dispersed employees. Goodman notes, "The industry has important economies of scale at both the local and corporate level, including the significant fixed costs associated with information systems, sales and marketing programs, actuarial and underwriting capabilities, medical management programs, and customer service." In addition to leveraging infrastructure, the larger MCOs also may be better capitalized to weather the financial risk of the underwriting cycle, regulatory risk, and litigation risk.

Health insurance enrollment levels are tied to employment levels.

On an enrollment basis, the overall U.S. health insurance industry has been shrinking due to higher unemployment and small employers dropping coverage. However, at the same time, large, well-run companies are still rapidly increasing enrollment. John Rex of Bear Sterns points out, "[W]ith industry enrollment being essentially a zero-sum game (tied primarily to employment levels), heftier losses for [some] players could translate into better results for others." Thus, increasing enrollment trends for the largest MCOs suggest decreasing trends for the smaller MCOs. According to Goldman Sachs, enrollment in the top five largest firms has grown an average 8% over the past five years, compared to only 0.3% for all firms combined. Over the same period of time, combined revenue for the top five firms has grown an average of 15%, as shown in Figure 7.

Figure 7: Enrollment and Revenue Growth for Top Five Managed Care Firms, 1996-2001

Top five managed care organization revenue growth has outpaced enrollment growth.



Source: Company data, Goldman Sachs Research estimates.
Note: Enrollment is for commercially insured population only. Companies include five largest companies by current market capitalization (UnitedHealth, WellPoint, Anthem, Aetna, and Cigna). CAGR is compound annual growth rate.

INDUSTRY PERFORMANCE

Profit

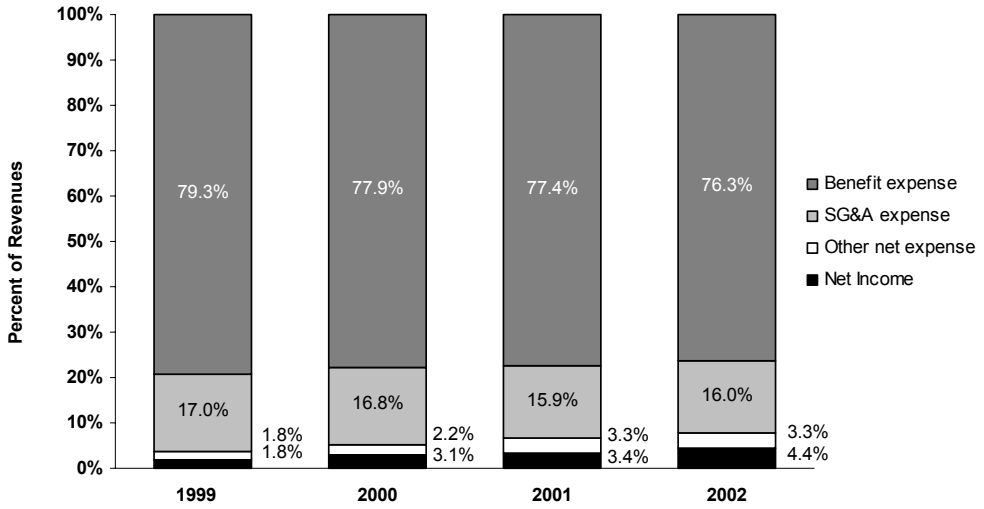
Net income, or profit, is the revenue that remains after accounting for all operating expenses and non-operating expenses (such as interest expense and taxes). This is the total profit or "bottom line." Net income is the amount a business can reinvest in itself and, in the case of a for-profit company, may distribute to shareholders.

Publicly Traded Companies

Figure 8 breaks down the average expenses and net income as a percent of total revenue of all publicly traded managed care companies. In 2002, the average managed care company used 76% of revenues to pay for health plan benefits (*i.e.*, benefit expenses), a 3.0 percentage point decrease since 1999. Average sales, general, and administrative (SG&A) expense was 16.0% of revenue in 2002, 0.1 percentage point higher than 2001 but 1.0 percentage point less than 1999. Other net expenses, including depreciation, amortization, net interest, and taxes were 3.3% of revenues. The average net income or profit margin for the average managed care company was 4.4% in 2002 compared to 1.8% in 1999. More detail on revenue and expense trends is provided below.

Figure 8: Average Expenses and Profits for Publicly Traded Managed Care Companies

Benefiting from a continuing upswing in the underwriting cycle, managed care profit margins continue to rise.



Source: Historical figures from company reports and analyst models.
Notes: Companies include Aetna, AmeriGroup, American Medical Security Group, Anthem, Cobalt, Centene, Cigna (health, life & disability operations only), Coventry, First Health, Health Net, Humana, Mid-Atlantic Medical, Oxford Health, PacifiCare, Sierra Health, UnitedHealth, WellChoice, and WellPoint. All figures exclude one-time charges and adjust for FASB 142, which eliminated amortization of goodwill in GAAP estimates effective January 1, 2002.

Merrill's Goodman notes, "Managed care companies participate in a low margin business and, thus, changes in margins are the most important drivers of earnings performance and relative stock performance." Analysts emphasize the importance of improving margin trends—in other words, lowering expenses as a percent of revenues—over growing enrollment or new customers. Salomon's Boorady believes that it is logical for a MCO to price products in such a way that expands margins rather than increases enrollment for three key reasons: 1) it demonstrates underwriting discipline, 2) a one percentage point improvement in margins has a greater impact on profitability than 5% to 8% internal enrollment growth, and 3) it makes strategic sense to maximize higher-return opportunities from technology investments.

Profitability in the managed care sector is largely determined by the difference or "spread" between pricing and cost trends. If growth in medical costs decelerates faster than expected, this could contribute to higher profit margins. Profitability thus relies on accurate predictions of medical cost trends in order to adjust premiums to maintain or increase profit margins. Goodman calls this "the industry's greatest financial challenge" since 1995. Those companies that have better actuarial ability to forecast the medical cost trend can reduce the volatility of their underwriting cycle.

Goodman also points out three notable observations in her analysis of managed care industry margins:

1) There is no such thing as a historical "industry average margin" because margins are cyclical, rising when the spread is positive and contracting when the spread is negative.
2) There is significant variation in company-specific margins, whether one looks at any given year or over time.
3) While improved versus the 1996-2001 period, 2002 margins are well below the peaks reached in 1994-1995 and thus, arguably, have meaningful room for improvement. This is consistent with medical loss ratios[6] that are only now approaching cycle averages.

In 2003, most analysts expect premiums to rise slightly more than medical cost trends, which should cause margin expansion. Boorady believes, "Strong pricing and a slowdown in health spending inflation should lead to record profits in 2003."

Blue Cross Blue Shield Plans

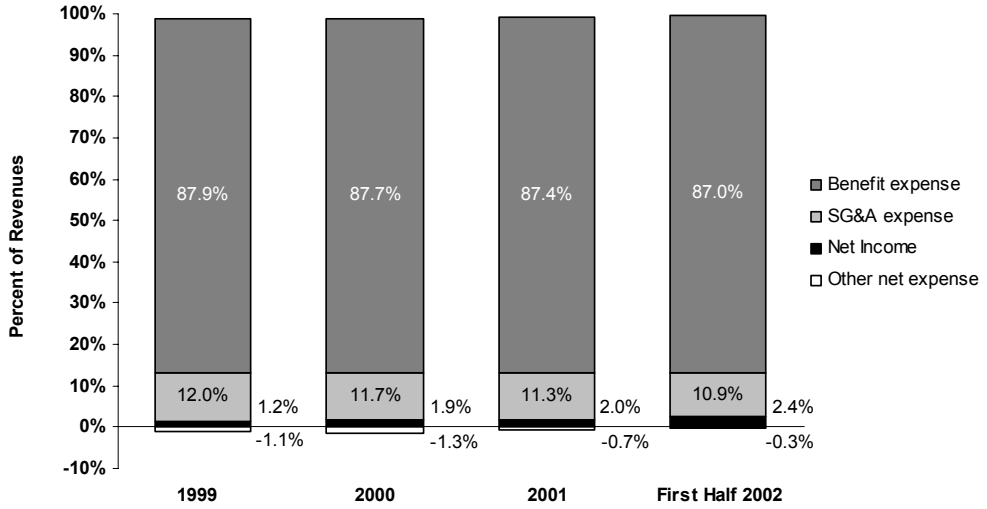
Consolidated financial information of Blue Cross Blue Shield health plans demonstrates trends similar to their publicly traded peers. These Blue data include both nonprofit and for-profit, publicly traded plans. Because these data are consolidated and not averaged, they are not directly comparable to the averaged data for the publicly traded companies shown in Figure 8 above.

The Blues spend one-third less on SG&A as a percent of revenue compared to their publicly held peers.

Like their publicly traded non-blue peers, BCBS plans are experiencing a slight decline in benefit expense as a percent of revenue, from 87.9% in 1999 to 87.0% for the first half of 2002. Over the same time period, BCBS plans' SG&A as a percent of revenue declined slightly from 12.0% to 10.9%. As a percent of revenue, this is about one-third less than that of their for-profit, publicly traded peers. This is partially due to high brand recognition and entrenched market share, competitive advantages that decrease marketing needs. Other net expenses, including depreciation, amortization, interest expense, and taxes are more than offset by interest income, and therefore contributed to earnings. Like the publicly traded managed care companies, BCBS plans are also enjoying an improvement in net income or profits, reaching a 2.0% profit margin in 2001 compared to 1.2% in 1999. Complete 2002 data is still unavailable, but for the six months ending 6/30/02, net margin had improved to 2.4% compared to 2.0% over the comparable previous year period.

[6] For further discussion of medical loss ratios (MLRs), see pages 21-24.

Figure 9: Consolidated Expenses and Profits for Blue Cross Blue Shield Plans



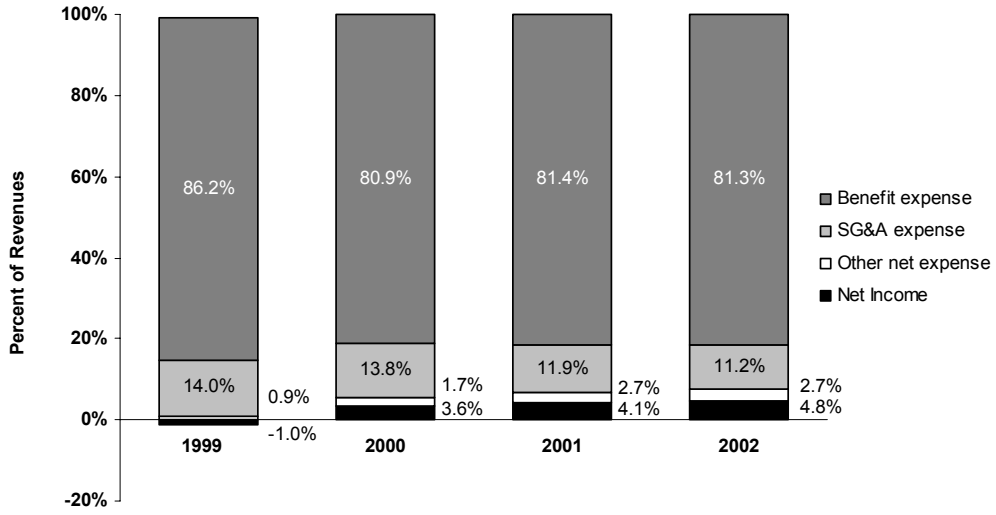
Source: BCBS Association.
Notes: 2002 data for six months ending June 30, 2002. Figures include data for both for-profit, publicly traded and nonprofit Blue plans. Negative "other net expense" occurs due to investment income exceeding other expenses in that category.

Publicly Traded Medicaid HMO Plans

Medicaid HMOs have achieved impressive margin growth.

There are two publicly traded plans that compete exclusively in the growing Medicaid HMO market: AmeriGroup and Centene. Compared to their publicly traded and Blue peers, these Medicaid HMO plans have experienced a larger reduction in benefit expense as a percent of revenue, from 86.2% in 1999 to 81.3% in 2002. Over the same time period, Medicaid HMOs' SG&A as a percent of revenue has also decreased from 14.0% to 11.2%, similar to levels found in Blue plans. Other net expenses, including depreciation, amortization, interest expense, and taxes were 2.7% of revenues in 2002. Medicaid HMO plans, like their publicly traded and Blue peers, are also enjoying an improvement in net income or profits, reaching an average 4.8% profit margin in 2001 compared to –1.0% in 1999.

Figure 10: Average Expenses and Profits for Publicly Traded Medicaid HMOs

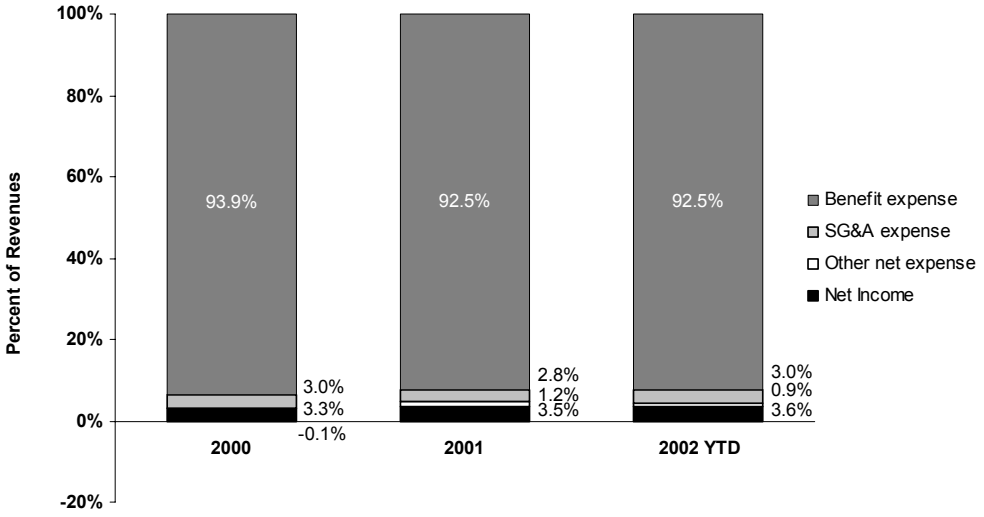


Source: Historical figures from company reports and analyst models.
Note: Companies include AmeriGroup and Centene.

Kaiser Permanente

Kaiser Permanente, the largest nonprofit HMO in the U.S., has also seen an improvement in profit margins, increasing from 3.3% in 2000, to 3.5% in 2001, and 3.6% for the first three quarters of 2002. Although audited data for the full year 2002 is not yet available, initial data show that full-year profit margins dropped to 2.3%, reflecting higher pension-related benefits and lower returns on non-operating investments (although excluding a non-recurring charge related to infrastructure technology). As a nonprofit managed care organization, Kaiser reinvests all of its profits back into the organization.

Figure 11: Kaiser Permanente Annual Earnings, 2000-2002 YTD



Source: Kaiser Permanente.
Note: 2002 year-to-date data as of September 30, 2002. Net operating income excludes extraordinary items.

Revenue

Managed care companies typically have two main revenue streams: premiums and administrative fees. Publicly traded MCOs such as American Medical Security Group, AmeriGroup, Cigna, and Cobalt also report investment income as part of revenues, which ranged from 0.9% to 3.4% of total revenues in 2002. Most managed care companies report such income after calculating operating income.

Premiums

Premium revenue growth depends on changes in premiums, benefit buydowns, and net enrollment. According to Kaiser, average increases in commercial health plan premiums have accelerated in recent years: up 8.3% in 2000, 11.0% in 2001, and 12.7% in 2002. Managed care companies also provide premium and cost trend guidance to investors. In Figure 12 below, Salomon Smith Barney's compilation of company-provided guidance suggests that, on average, 2002 commercial premiums rose 14.0% compared to cost trends of 12.8%.

Figure 12: Commercial Premium Increase and Cost Trend Guidance

	Average Annual Premium Increase			Cost Trend		
	2001	2002	2003E	2001	2002	2003E
Aetna	12.0%	19.0%	NA	17.0%	14-15%	NA
Anthem	14.0%	15.0%	> cost	13.0%	12-14%	12-13%
Cigna	11.5%	14-15%	14-15%	12-13%	13-14%	13-14%
Coventry	11.0%	15.0%	15.0%	9.6%	10-11%	14-14.5%
HealthNet	10.0%	15.0%	14.0%	10.1%	14.5%	11-11.5%
Humana	10-11%	12-14%	13-15%	10-12%	11-13%	12-14%
Oxford	8.0%	9.6%	9-10%	8.0%	11-12%	9-10%
Pacificare	11.5%	15.0%	NA	16.0%	14.0%	NA
UnitedHealth	13.0%	13.0%	13.0%	12.0%	12.0%	12.0%
WellChoice	NA	8-11%	8-11%	NA	8-10%	8-10%
Wellpoint	9.0%	10.5%	NA	8.0%	10.5%	NA
Average	**11.1%**	**14.0%**	**14.0%**	**11.7%**	**12.8%**	**NMF**

Source: Salomon Smith Barney. As of February 27, 2003.

Benefit buydowns reduce revenue growth and may reduce utilization.

An increase in benefit buydowns in 2003 is affecting premium revenues. Benefit buydowns are benefit reductions or increased employee cost-sharing which effectively reduce the premium increase to the employer. While buydowns reduce overall revenue growth, buydowns can also lower utilization of health care services by increasing patients' out-of-pocket costs. The RAND Health Insurance Experiment found that per capita costs for a plan with no out-of-pocket costs were 45% higher than those in a plan with 95% coinsurance and $1,000 annual maximum out-of-pocket. Higher beneficiary cost-sharing slows medical expense growth, resulting in fewer episodes of care, particularly use of outpatient services, which tend to be more discretionary than inpatient services. The uncertain net effects of buydowns elevate the importance of actuarial skill.

As employers shift more costs onto employees, this could reverse a long-time trend in national health expenditures. Since 1965, national health expenditures have surged from $41 billion to over $1.4 trillion while the percentage of those expenditures paid by individuals out of pocket dwindled from 44% to only 14% and have been shifted to both employer and especially government payors (see Figure 3 on page 9).

Demographic enrollment mix can have a large impact on a particular company's revenue growth. For example, according to Humana's 2001 results, the average premium per member per month was $616 for a Medicare risk enrollee, $197 for a commercial enrollee, $98 for a TRICARE enrollee, and $89 for a Medicaid enrollee.

Non-Risk Fees

Traditional managed care plans are fully insured plans, in which the health plan assumes underwriting risk on behalf of employers. However, self-funded plans have increased in popularity among employers. Unlike a fully insured plan in which the managed care company fully indemnifies the policyholder against loss, a self-funded plan requires the policy holder (*e.g.*, the employer) itself to assume the risk. Self-funded plans, also known as "non-risk" plans, offer more predictable earnings streams for managed care companies, who are contracted to process claims and provide other administrative services. In these cases, the managed care company may provide services such as provider networks, stop-loss insurance to the employer, medical cost management, pharmacy benefit management, and claims processing in exchange for revenues often described as "administrative fees."

Goodman describes several reasons employers have preferred self-funded plans:

> We expect the employer shift to self-funding to continue…. The reasons are unchanged: employers have greater benefit design under ERISA than under state regulation and in particular are exempt from state benefit mandates and, as a result, benefit cost trends are more favorable. They also benefit from a more favorable regulatory and legal structure under ERISA than under many state laws.[7]

UBS Warburg's McKeever estimates self-funded plans represent 47% of total health insurance membership, and forecasts this penetration to rise to 56% by 2003 as employers respond to the double-digit increases in fully insured products.

Investment Income

Managed care companies generate interest income on investment capital.

As insurance companies, managed care companies are required by many states to maintain certain levels of capital relative to the amount of risk premiums that they write. Managed care companies who write risk-based premiums therefore typically hold interest-bearing assets and generate interest income in excess of interest expense incurred on borrowed funds. The amount of capital required is relative to the quality or riskiness of the asset. For example, Treasury bonds are considered high quality (low-risk) asset, and thus the value of Treasuries held to meet capital requirements would be less than if a riskier asset, such as corporate bonds, were held. Companies may choose to report investment income either as revenues or as a separate line item after benefit and SG&A expenses have been subtracted.

When interest rates are low, interest income decreases, impacting sector performance. Lehman's Raskin points out that in 2001, the managed care companies under his coverage saw an aggregate interest expense decrease of $2 million, which "pales in comparison" to an aggregate interest income reduction of $372 million compared to the prior year. Raskin has analyzed the declining contribution of investment income on revenue and net income, as shown in Figure 13. Although operations have improved, lower investment income makes it difficult to compare performance to previous years in which interest rates were higher.

Figure 13: Decline in Investment Income, 1999-2002

	1999	2000	2001	2002
Revenue	$108,350	$129,982	$136,717	$143,619
Net Income	$3,486	$3,369	$3,376	$5,061
% of revenue	3.2%	2.6%	2.5%	3.5%
Investment Income	$5,466	$5,731	$5,556	$5,180
% of revenue	5.0%	4.4%	4.1%	3.6%
% of net income	156.8%	170.1%	164.6%	102.4%

Source: Company documents and Lehman Brothers estimates.
Note: Aggregate figures for Aetna, Anthem, Cigna, Cobalt, Coventry, First Health, Health Net, Humana, Oxford Health, PacifiCare, UnitedHealth, WellChoice, and WellPoint.

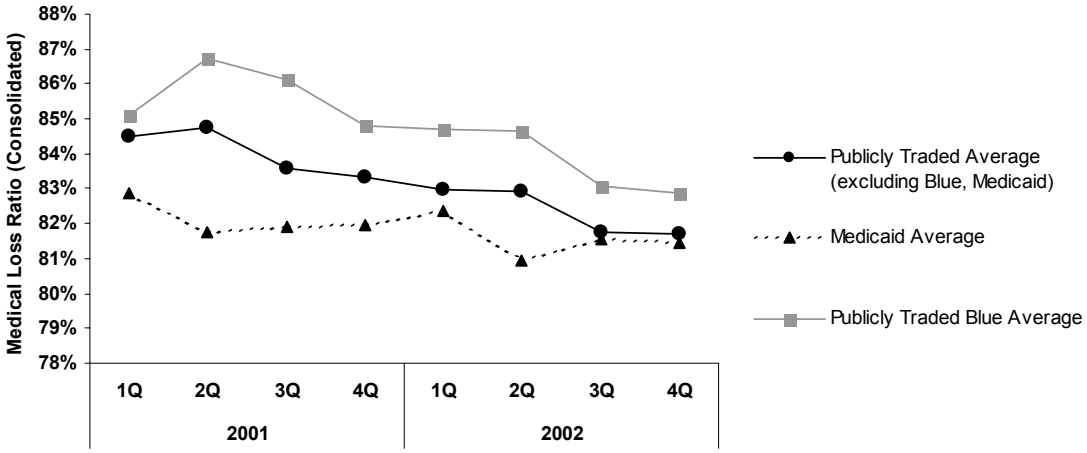
[7] The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans.

Medical Loss Ratio (MLR)

In addition to profit margin analysis, investors evaluate MCO performance by measuring the company's MLR.

Medical or benefit expenses are the costs of administering the benefits to health plan members. The MLR is the ratio between these medical expenses and the amount of money that was taken in by a plan from members, typically excluding non-risk and investment income.[8] An MLR is analogous to the cost-of-goods sold ratio for a manufacturing company. Medical loss ratios also depend on revenue mix: funded versus self-funded, commercial versus Medicare or Medicaid, etc. Managed care companies and their investors evaluate performance by measuring both the consolidated profit margin as well as the medical loss ratio for the company. Improving (*i.e.,* declining) MLR trends for the publicly traded companies are presented below.

Figure 14: Average MLRs for Managed Care Companies



Source: Historical figures from company reports and analyst models.
Note: Publicly traded average includes Aetna, American Medical Security Group, Coventry, First Health Group, Health Net, Humana, Mid-Atlantic Medical, Oxford, PacifiCare, and UnitedHealth. Publicly traded Blue average includes Anthem, Cobalt, WellChoice, and WellPoint. Medicaid average includes Amerigroup and Centene.

Cost Trend Components

Medical costs are generally comprised of inpatient hospital, outpatient hospital, physician services, and prescription drug spending. Each cost component will vary depending on a particular plan's benefit design and membership. Although estimates of both overall medical cost trends and cost trend components vary by analyst, Lehman Brothers estimates are shown below as an example. For the overall industry, Raskin estimates that inpatient services account for 35% of total spending, outpatient 20%, physicians 30%, and pharmacy 15%. He estimates that overall cost trends increased 11.8% in 2002.

[8] MLR is slightly different from benefit expense as a percent of total revenues, as shown in Figure 8 on page 15. MLRs typically exclude revenues from non-risk fees and investment income. Benefit expense ratios as shown in Figure 8 include all reported revenue.

Figure 15: 2002 Cost Trend Components

Component	Medical Cost Trend	% of Total Spend	Total Contribution
Inpatient			
Utilization	3.5%		1.2%
Price	8.5%		3.0%
Total Inpatient	**12.0%**	**35.0%**	**4.2%**
Outpatient			
Utilization	9.0%		1.8%
Price	7.0%		1.4%
Total Outpatient	**16.0%**	**20.0%**	**3.2%**
Physician			
Utilization	3.0%		0.9%
Price	4.0%		1.2%
Total Physician	**7.0%**	**30.0%**	**2.1%**
Pharmacy			
Utilization	8.0%		1.2%
Price	7.0%		1.1%
Total Pharmacy	**15.0%**	**15.0%**	**2.3%**
Overall Trend			
Utilization	5.1%		
Price	6.6%		
Total Overall Trend	**11.8%**	**100.0%**	**11.8%**

Source: Lehman Brothers estimates. Figures may not add due to rounding.

Health plans pay a variety of providers and institutions that contribute to the cost of medical care for beneficiaries. The two fastest growing components of the medical cost trend in recent years have been prescription drug costs and outpatient services. Although cost trend component forecasts vary, Bear Stearns' Rex writes, "We expect further easing in pharmaceuticals and outpatient/diagnostics… and stabilized trend (that is similar to 2002 trend) for the physician and inpatients components."

Boorady observes that Medicare unit pricing is currently closer to commercial pricing than in the past, which should stop hospital cost shifting to commercial payers. Boorady also notes that the shift away from risk-sharing and capitation, which ended up being more costly than actuaries initially expected, will also trim the hospital expense growth rate. Finally, Boorady notes that there has been a period of "catch-up," which is to say that cost acceleration is ending. This recent slow-down is due to hospital-HMO contracts that generally have a three to five year duration.

Wall Street expects over-the-counter availability of Claritin to affect health plan coverage of all prescription non-sedating antihistamines.

Most analysts agree that prescription drug costs in particular should abate in 2003. According to CSFB, drug costs have accounted for one-third to one-half of the growth in plan spending over the past few years. Many pharmacy benefits have moved toward using a three-tier formulary which enrollees pay escalating co-payments for a generic drug, preferred brand, and non-preferred brand at the pharmacy. CSFB points out the most relevant example of cost shifting is "limiting coverage of prescription non-sedating antihistamines in 2003, following Claritin's shift to over the counter status." Claritin was approved for over-the-counter sale on November 27, 2002. As a result, many health insurers will no longer cover Claritin or Claritin-D. CSFB observes, "[G]enerally speaking, all prescription non-sedating antihistamines (Allegra, Allegra-D, Clarinex, Zyrtec, and Zyrtec-D) will either require pre-certification, be placed in the higher tier, and/or not be covered at all, effective January 1, 2003." Medco Health Solutions, Merck's pharmacy benefit management (PBM) subsidiary, has said its clients spend $1.3 billion on non-sedating antihistamines annually, including $600 million on Claritin. Medco alone

expects to achieve $500 million in savings in 2003. Further pharmacy savings are likely due to the recent entry of generic Prilosec in December 2002.

Besides utilization, the other component of rising drug expenses is, of course, price. Insurers may manage pharmacy benefits in-house to control costs or may contract with outside pharmacy benefit managers (PBMs). PBMs use volume purchasing to negotiate discounts and rebates from drug manufacturers. While the largest MCOs have the scale to manage their own pharmacy benefits, the smaller to mid-size plans will not likely receive the best discounts without outsourcing to an independent PBM. Analysts have begun to debate whether in-sourcing of PBMs has become a trend, after WellPoint acquired a private PBM in December 2000 called Precision Rx, and Aetna announced in October 2002 that it would be ending a mail order pharmacy contract with Express Scripts and would be making a future acquisition to meet this need.

Disease Management

Managed care organizations increasingly look toward clinical improvements, rather than direct utilization controls, to enhance their bottom line. One such mechanism is increased disease management. The Disease Management Association of America defines disease management to be "a system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant." These programs are typically targeted at patients whose medical conditions drive a disproportionate share of health care costs, including patients with chronic diseases (*e.g.*, diabetes, coronary artery disease) that have high comorbidities, or rarer diseases (*e.g.*, multiple sclerosis and rheumatoid arthritis) that are more complex and costly to manage. Coordination of care for high-risk individuals, who may have multiple chronic conditions, could reduce risks and avoid unnecessary medical costs through early intervention thereby eliminating higher cost services such as inpatient hospitalizations.

Disease management programs support both the patient and physician, encourage evidence-based practice guidelines, and continually evaluate patient outcomes to improve overall health. For example, a participating patient might be reminded to take his or her medication by a phone call from a staff nurse and receive educational materials about behavior modification. A physician might receive supplemental data on a participating patient, be alerted when that patient receives medical attention from another provider, and use clinical decision support software which incorporates national clinical guidelines.

In recent years, private sector payors have adopted disease management as a tool to control medical costs and improve care for specific populations. Health plan data is screened to identify those patients who are expected to most benefit from a particular disease management program. Prospective patient identification provides a baseline comparison in order to estimate cost savings. No consensus exists about how to calculate cost savings from disease management programs, although private sector payers continue to adopt disease management programs. A Goldman Sachs survey found that 50% of employers' plans will use disease management programs in 2003, up from 44% in 2002. Managed care companies have commented about the increased use of disease management:

> Enrollment in our disease management programs, which we feel enhance clinical outcomes and lower costs, increased 16% over last quarter….[T]he impact of these programs is particularly effective in the senior market. For example, in

> California, the congestive heart program has reduced hospitals days for enrolled members by 56%. For our commercial members, the program has been equally effective, producing a 65% reduction in hospital days from enrolled members.
> *– Brad Bowlus, President, PacifiCare Health Plans, October 31, 2002*

> We have talked on many occasions about our focus on active, balanced health care cost management initiatives…. We focus on health care cost categories that have high trends, often with an emphasis on the members who drive a disproportionate percentage of our health care costs, as well as providers who do not practice according to clinically accepted guidelines…. I am also pleased to note that we enrolled over 11,000 members in our new congestive heart failure program.
> *– Charles Berg, President and Chief Operating officer, Oxford Health Plans, October 29, 2002*

Health plans can offer disease management programs in two ways. First, the managed care company can build an internal infrastructure to support these programs. Second, disease management can be outsourced to contractors such as Accordant, AirLogix, American Healthways, CORSolutions, and Life Masters Supported SelfCare, which generated combined revenues of about $600 million in 2002. Contracts between health plans and disease management companies are often performance-based, in which the disease management company guarantees a certain level of savings. Guarantees of savings encourage uptake of disease management programs. In December 2001, Blue Cross Blue Shield of Minnesota and American Healthways signed a landmark, ten-year, *non*-risk arrangement. This case suggests that the health plan presumes these disease management services will provide cost savings over the long-term.

Disease Management for Medicare and Medicaid Beneficiaries

Nearly half of Medicare beneficiaries have three or more chronic conditions and the average Medicare beneficiary sees six different physicians in a given year. Forty-seven percent of the program's total expenditures are incurred by only 5% of the beneficiaries.

Given the prevalence of chronic diseases in this population, CMS has begun exploring disease management's potential benefits for Medicare beneficiaries. Like those in the private sector, Medicare's disease management demonstration projects hope to promote patient-centered, multi-disciplinary approaches to care, encourage use of information technology to support provision of evidence-based care, and focus on improvement of care processes and patient outcomes. These programs focus on chronic diseases because of the profound burden they impose on patients, particularly for racial and ethnic minorities who are disproportionately affected.

Figure 16. CMS Programs in Disease Management

CMS Program	Start date	Description
Case management demonstration	Fall 2001	To test whether intensive case management services for congestive heart failure and diabetes are cost-effective for improving clinical outcomes, quality of life, and satisfaction with services for high-risk Medicare fee-for-service beneficiaries.
Coordinated care demonstration	April 2002	To determine improvement in medical treatment plans, reduction in avoidable hospital admissions, and promotion of other desirable outcomes among Medicare beneficiaries with chronic diseases.
Disease management and prescription drug coverage demonstration	Fall 2002	To determine impact on costs and health outcomes to Medicare fee-for-service beneficiaries with advanced-stage congestive heart failure, diabetes, or coronary heart disease.
Capitated disease management demonstration	January 2004 (expected)	To use disease management interventions and payment for services based on full capitation (with risk sharing options) to 1) improve quality of services furnished to eligible beneficiaries including dual eligible and frail elderly, and 2) manage Medicare expenditures.
Medicaid disease management guidance	Upcoming	To guide states on how Medicaid programs can incorporate disease management services into benefit plans through use of waivers or state plan amendments.
ESRD disease management demonstration	Upcoming	To focus on beneficiaries with end-stage renal disease.
Population-based disease management demonstration	Upcoming	To target specific disease such as congestive heart failure, diabetes, and chronic obstructive pulmonary disease in selected areas with underserved and disadvantaged populations.

Source: CMS.

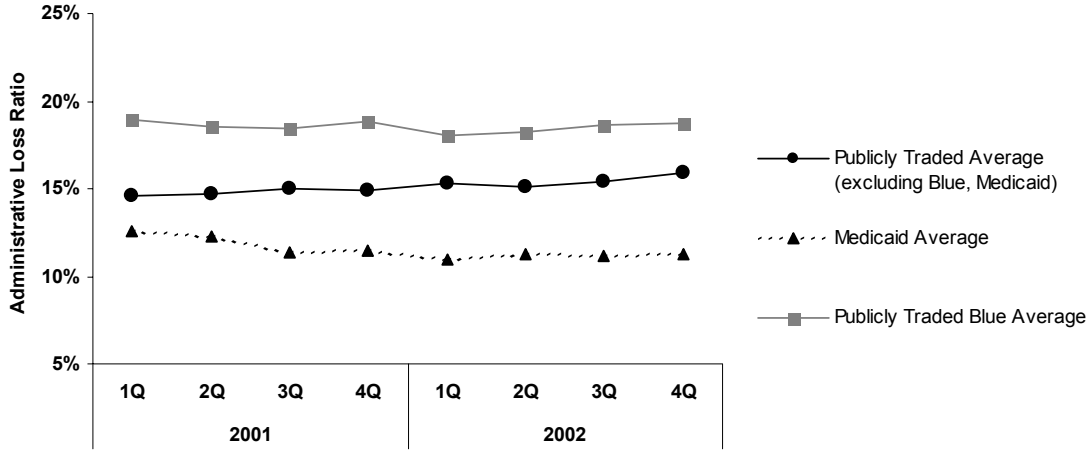
For the Medicaid population, some state agencies have been offering disease management since the late 1990s. Medicaid disease management programs most often focus on beneficiaries with asthma, diabetes, or congestive heart failure. Currently, approximately a dozen states provide disease management to their Medicaid population by either purchasing disease management from outside vendors (often with guaranteed savings) or building an internal infrastructure.

Administrative Loss Ratio (ALR)

Sales, general, and administrative (SG&A) costs are the overhead costs of operating a company. The managed care industry also refers to SG&A as "administrative losses," and as administrative loss ratios (ALRs) when expressed as a percent of revenues.

ALRs can vary significantly depending on business mix. For example, companies with many small group and self-funded plans tend to have higher ALRs than those companies that have large, risk-based membership. Overhead expenses may also be reduced by pre-existing investment in technology, infrastructure, or integration activity. Goodman writes, "[O]verhead efficiency gains were an important component of earnings growth in 1999 through 2002 and we expect continued benefits in 2003." Although efficiency has increased, overall SG&A spending has remained relatively steady for the publicly traded managed care companies over the past two years.

Figure 17: Average ALRs for Managed Care Companies



Source: Historical figures from company reports and analyst models.
Note: Publicly traded average includes Aetna, American Medical Security Group, Coventry, First Health Group, Health Net, Humana, Mid-Atlantic Medical, Oxford, PacifiCare, and UnitedHealth. Publicly traded Blue average includes Anthem, Cobalt, WellChoice, and WellPoint. Medicaid average includes AmeriGroup and Centene.

The major components of SG&A expenses are marketing, account and membership administration, medical and provider management, and corporate services. According to the Sherlock Company's survey of 22 health plans, account and membership administration accounted for over 40% of total SG&A costs, followed by marketing at 25%, corporate services (including executive compensation) at 23%, and medical and provider management at 11%.

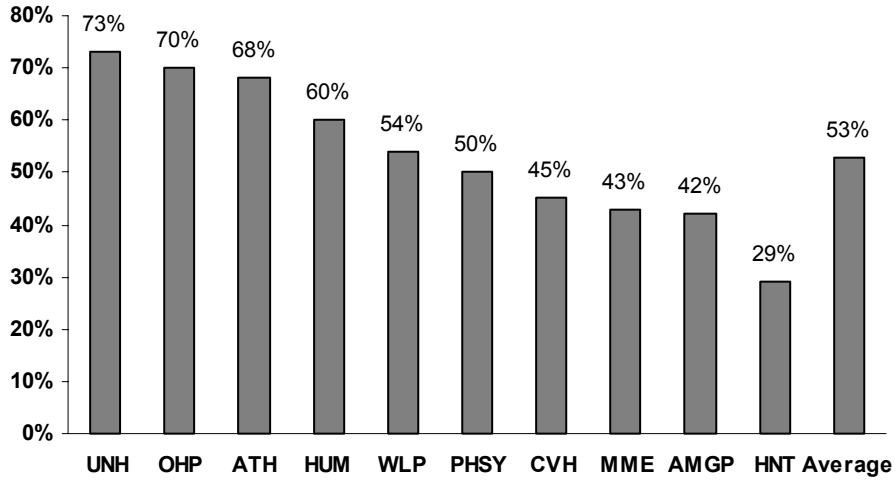
Figure 18: Administrative Expense Increases and Mix

	Percent Change				Mix of Costs PMPM	
	1999	2000	2001	Average	Value	Pct. Tot.
Marketing	9.7%	0.3%	9.3%	6.4%	$5.36	24.5%
Account and Membership Administration	14.6%	0.1%	10.1%	8.2%	9.02	41.3%
Medical and Provider Management	8.9%	-2.8%	2.5%	2.9%	2.40	11.0%
Corporate Services	-8.2%	15.6%	5.4%	4.3%	5.07	23.2%
Total	**8.2%**	**2.6%**	**7.9%**	**6.2%**	**$21.85**	**100.0%**

Source: Sherlock Company.
Note: PMPM is per member per month.

The most visible improvement in SG&A expense has been the increasing auto-adjudication of claims, *i.e.*, processing claims through computers without human intervention. In 2002, 68% of claims were auto-adjudicated, compared to 63% in 2001. Among a selection of the largest publicly traded companies, JPMorgan estimates that 53% of transactions were conducted through electronic data interchange (EDI). This electronic transfer of information has risen from 40% several years ago. These developments reflect an enormous investment in technological infrastructure over the past few years for the industry. McKeever estimates that the publicly traded companies' investment in technology could decrease SG&A ratios from 2.0 to 3.0 percentage points over a three to five-year period.

Figure 19: Percentage of Industry Transactions Conducted through EDI



Source: JPMorgan estimates.

Reserve Analysis

Roughly half of medical costs are estimated in earnings reports.

Medical costs account for 80% to 90% of the industry's total costs. CSFB estimates that roughly half of medical costs in a given quarter are known for certain at the time of earnings reports. The other half of reported costs must be estimated, due to the time lag that often occurs between when service is rendered and when medical claims are received and processed. Consequently, medical cost estimates are required to create meaningful financial statements. Estimates are based upon actuarial analysis and historical experience. Accurate estimates rely on significant actuarial skill. Confidence in the actuarial ability of a managed care company is often a key component of investors' opinions about the quality of that company.

Managed care companies must estimate those claims that have been incurred, but not reported (IBNR) each quarter. In other words, IBNR is an estimate of the amount of claims that a managed care organization will need to pay for services rendered in that quarter for which it has not yet received claims. These estimates are booked as a reserve liability on the balance sheet as part of medical claims payable, which expresses the amount the managed care company owes but has not yet paid to providers for providing medical services. (Most of medical claims payable are IBNR, according to CSFB, but medical claims payable also includes medical claims inventory and adjudicated but unpaid claims.) Few companies break out IBNR from medical claims payable. Most states require health plans to meet a certain reserve level.

IBNR is also included as part of medical or benefit costs reported on the income statement, and similarly, companies do not break out IBNR estimates from other reported expenses that have already been adjudicated. Because IBNR is included in reported expenses, these actuarial estimates affect reported earnings in the same quarter. That is to say that if IBNR claims estimates were lowered, then reported earnings on the income statement would be higher.

If a company reserves conservatively and in hindsight realizes that IBNR claims were over-estimated compared to actual experience, the company will recognize a gain equal to the difference in the current quarter. This is known as "releasing reserves," which has a beneficial impact on earnings and is considered "favorable retroactivity." Conversely if a company realizes in hindsight that IBNR claims were under-estimated compared to actual experience, then the company will recognize a loss equal to the difference, known as "strengthening reserves." While some investors have been concerned that favorable retroactivity "artificially" boosts earnings, Goodman notes that these "estimates are an integral part of the earnings reporting process, [and] not some unusual one-time event." Goodman points out, "From the standpoint of quality of earnings, we prefer to see consistently favorable retroactivity (i.e., redundancy of reserve estimates) accompanying strong cash flow from operations."

Investors may use medical claims payable, most of which is IBNR, to assess earnings quality. The most useful medical claims payable ratio is "days claims payable." Days claims payable is the medical claims payable divided by the average daily medical expense, or in other words, the number of days it would take to pay all outstanding medical claims. Days claims payable may be calculated at a given point in time, such as at the end of the quarter, or as an average over a given time period. These calculations are shown in Figure 20 below.

Figure 20: Days Claims Payable Calculation and Example

Formula			Example				
			UnitedHealth Group Days Claims Payable				
			($ in millions)				Dec-01
Ending days claims payable	=	Medical claims payable / Medical expenses / days in period	**Ending days claims payable**	=	$3,460 / $4,479 / 92	=	**71.1**
Average days claims payable	=	(Beginning medical claims payable + ending medical claims payable) / 2 / Medical expenses / days in period	**Average days claims payable**	=	($3,458 + $ 3,460) / 2 / $4,479 / 92	=	**71.0**

Source: CSFB and company data.

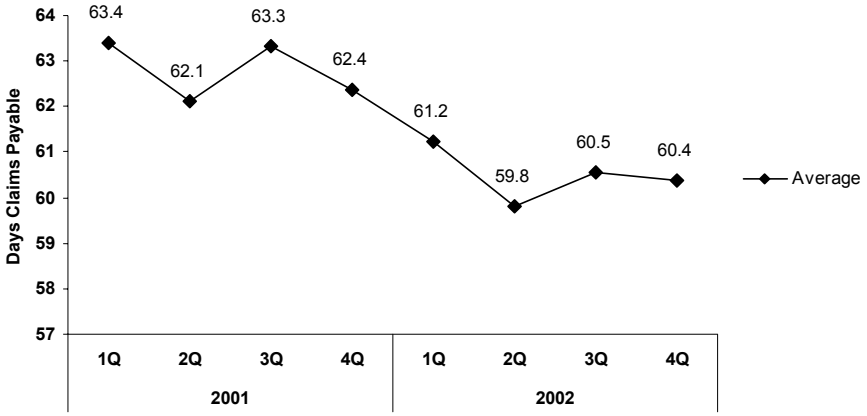
Declining days claims payable can be a warning sign to investors.

In an extremely simplified analysis, a declining days claims payable trend can be perceived to be a sign of weakening earnings quality. Very small downward trends in days claims payable can have a large impact on reported expenses and earnings, as seen in the example in Figure 22 on page 30. According to CSFB, "[A] steep decline in days claims payable is frequently a harbinger of major earnings trouble." Conversely, CSFB believes "All else held equal, if days claims payable rise, at least to a point, that's usually a good thing, because it means the company is being more conservative and holding back extra funds in reserves to pay future claims."

However, many other reasons can explain changes in days claims payable that have no relationship to earning quality. Analysts and companies alike have focused more on these

other reasons, as many managed care stocks have suffered as days claims payable has declined. Days claims payable for the average publicly traded managed care company has dropped from 63.4 days in first quarter 2001 to 60.4 days in fourth quarter 2002, according to Salomon Smith Barney.

Figure 21: Average DCP for Managed Care Company



Source: Salomon Smith Barney analysis. Companies include Aetna, Anthem, Cigna, Coventry, First Health, Health Net, Humana, Oxford Health, PacifiCare, UnitedHealth, WellChoice, and WellPoint.

Although reserve analysis can be quite complicated, there are a few major reasons—unrelated to reserve quality *per se*—which help explain falling days claims payable. One major reason for this trend is an industry-wide increase in electronic adjudication of claims. Electronic processing creates greater processing efficiency and a lower backlog, all of which lowers the medical claims payable outstanding. Rex writes, "A number of factors affect the days in claims payable metric, but bottom line, with a stable membership base, elapsed time from the service date to payment date should have the most impact." Claims payable may also be affected during slow holiday seasons or due to other timing issues related to payment of providers or pharmacy costs.

Decreases in days claims payable may also be due to lower reserves due to increasing volume of capitation. Capitation is the payment of a fixed per capita amount to a provider regardless of the nature or number of services provided. As a plan's capitated population grows, lower reserves may be held since the exact payment per member is already known. However, as a capitated population declines, a company would typically increase reserves until medical costs are better known.

Health plans may also hold higher reserves to account for factors that increase actuarial uncertainty, such as benefit buydowns or enrollment mix shift. Likewise, health plans might hold lower reserves if cost trends are projected to decrease.

Managed care companies significantly increased disclosure of information regarding medical claims payable and reserves during fourth quarter 2002 earnings calls. McKeever writes:

> Investors have been confused by the additional information [on reserves] that has raised some questions…. However, the bottom line is that the decline in days [payable] is not a yellow flag concerning industry fundamentals.

Example of Days Claims Payable Effect on Reported Earnings

For illustrative purposes only, CSFB provides an example of how favorable retroactivity can impact reported earnings. For this example, CSFB selected WellPoint, but the same concept applies to all other managed care organizations. In the fourth quarter of 2001, WellPoint reported medical expenses of $2,611 million and earnings of $0.83 per diluted share. If WellPoint were to have estimated that its future claims related to the third quarter were $10 million below what it actually reported in the third quarter, WellPoint would reduce fourth quarter reported medical expense by $10 million, which would increase reported earnings per diluted share to $0.87.

Figure 22: Hypothetical WellPoint 3Q01 Income Statement

($ in millions, unless stated otherwise)

	Dec-01 Q Reported	Dec-01 Q Example
Premiums	$3,192.8	$3,192.8
Management Service Fees	165.5	165.5
Investment Income	64.0	64.0
Total Revenues	$3,422.3	$3,422.3
Medical Expenses	$2,611.4	$2,601.4
Selling Expense	138.8	138.8
General & Administrative	448.9	448.9
Operating Income	223.2	233.2
Other Income (Expense)	(23.4)	(23.4)
Earnings before Interest and Taxes (EBIT)	199.8	209.8
Interest Expense	13.6	13.6
Pretax Income	186.2	196.2
Tax Expense	76.4	80.5
Net Income	$109.9	$115.8
Average Common Shares (basic)	127.5	127.5
Average Common Shares (diluted)	133.7	133.7
EPS (Basic)	$0.86	$0.91
EPS (Diluted)	$0.83	$0.87
Tax Rate	41.0%	41.0%

Wellpoint estimates future claims related to the third quarter were $10 million below reported. Fourth quarter medical expenses are reduced by $10 million, increasing earnings by $0.04 per share.

Source: Company data, CSFB estimates.

Following this same hypothetical example, the days claims payable analysis would be as follows. The $10 million reduction in estimated future medical expenses would reduce medical claims payable by $10 million. Using the days claims payable formula (shown in Figure 20), this reduction would lower days claims payable decline of only one-tenth of a day. CSFB argues this is why even slight trends in days claims payable can be important indicators of earnings quality.

Figure 23: Hypothetical WellPoint 3Q01 Days Claims Payable Worksheet

($ in millions, unless stated otherwise)

	Dec-01 Q Reported	Dec-01 Q Example
Medical Expenses	$2,611	$2,601
Days in Period	92	92
Medical Expenses per Day	$28.38	$28.28
Medical Claims Payable, actual	1,935	1,925
Medical Claims Payable, average	1,874	1,869
Days Claims Payable (average)	66.0	66.1
Days Claims Payable (ending)	68.2	68.1

The $10 million reduction in medical expenses is reflected here, and also reduces claims payable by $10 million. Ending days claims payable is down, but only by 0.1 of a day.

Source: Company data, CSFB estimates.

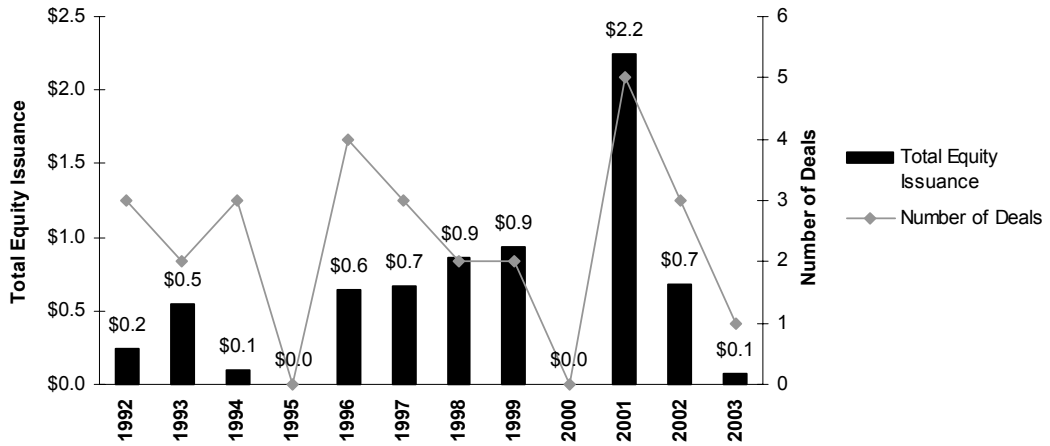
ACCESS TO CAPITAL

Equity and Debt Issuance

Capital sources for health plans include the equity and debt markets. Managed care organizations may choose to tap into the public debt and equity markets, especially when funding acquisitions or refinancing existing debt. Figures 24 and 25 show the equity and debt issuance for the managed care industry since 1992. Both the number of deals and amount of equity and debt issued peaked in 2001 due to Anthem's initial public offering (IPO) and large debt offerings by Aetna, United, and WellPoint.

Figure 24: U.S. Equity Issuance for the Managed Care Industry, 1992-2003 YTD

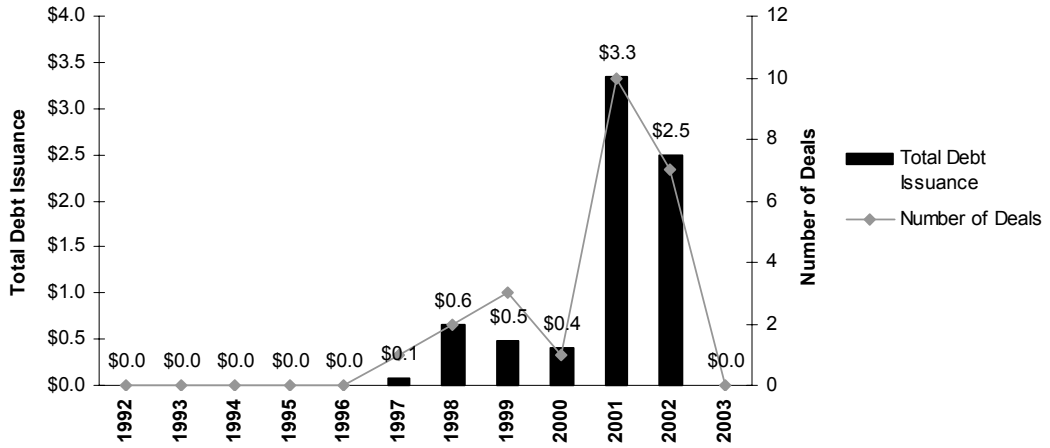
($ in billions)



Source: Goldman Sachs analysis of Securities Data Corporation data.
Note: Includes public, private, and 144A common stock offerings for managed care companies. As of February 25, 2003.

Figure 25: U.S. Debt Issuance for the Managed Care Industry, 1992-2003 YTD

($ in billions)



Source: Goldman Sachs analysis of Securities Data Corporation data.
Note: Includes public, private, 144A, convertible, and non-convertible debt offerings for managed care companies, as of February 25, 2003.

Health plans are able to fund a significant amount of their capital needs through premium revenue and investment income. Plans that price their products appropriately do not need additional capital to expand membership because premium revenue for new members is collected before medical expense is incurred.

Uses of Capital

Historically, managed care organizations may have used capital to carve out a larger share of existing markets. Roberta Goodman of Merrill Lynch writes, "While most companies are generating excess capital (strong cash flow typifies the industry), they have been using such capital to improve the balance sheet (retire debt, repurchase stock)…. Few have been using their capital to expand health plan activities."

Technology investment

Much of managed care capital investment is targeted toward investment in information technology. Goodman writes, "We think that significant investment in systems and processes will be necessary (although perhaps not sufficient) for success. And, because the industry leaders are not resting on their laurels (so to speak), we think those companies that have under-invested or handled the process poorly are at risk of market position erosion." Scott Fidel of JPMorgan writes:

> In relation to technology, we believe the health industry should be viewed as being at a similar point in its history as the consumer banking industry in the 1980s and 1990s, before the ubiquitous introduction of ATMs and other electronic-based transaction systems. While important data and information now flow seamlessly across different financial services companies through industry-wide systems, the health care information flow continues to be highly fragmented and incompatible. The difference here is that while inefficiencies in the financial system lead to the loss of savings and financial security, similar inefficiencies in health care could result in the loss of life as well as money.

MCOs are investing in information technology infrastructure to comply with HIPAA.

Charles Boorady of Salomon Smith Barney believes that the reason managed care technology upgrades lag behind those of financial institutions is due to the fact that many of the standards are only now being promulgated as part of HIPAA. The administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA, Title II) require the Department of Health & Human Services to establish national standards for electronic health care transactions and national identifiers for providers, health plans, and employers. HIPAA also addresses the security and privacy of individually identifiable health information.[9] Adopting these standards will improve the efficiency and effectiveness of the nation's health care system by encouraging the widespread use of electronic data interchange in health care. Electronic processing of transactions is expected to significantly reduce labor and error-related costs.

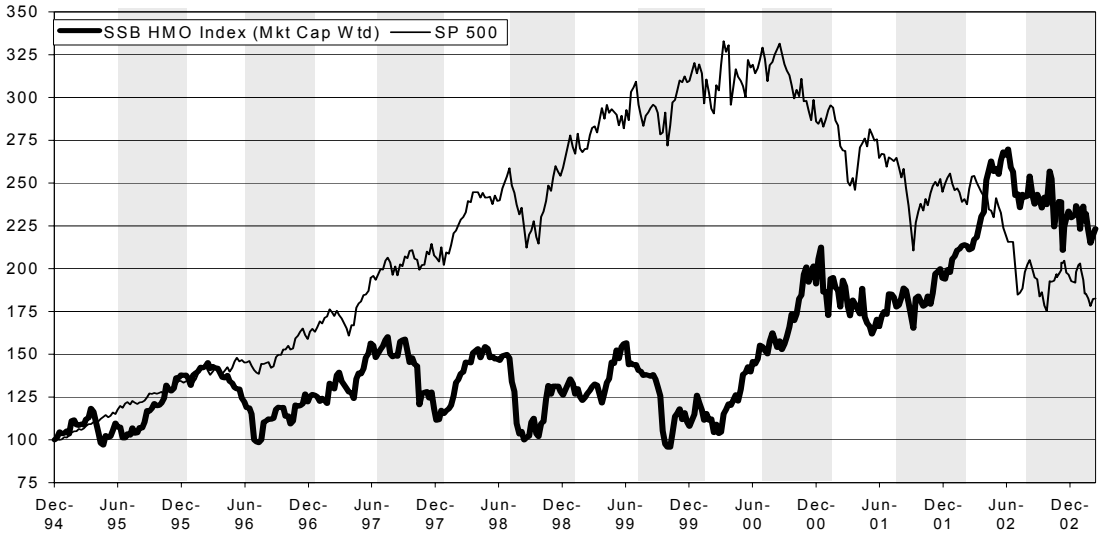
[9] CMS published the final rule governing "Modifications to Electronic Data Transaction Standards and Code Sets" on 2/20/03. The testing deadline is 4/16/03; the compliance deadline is 10/16/03.

Stock Market Performance

Managed care stocks did not enjoy the dramatic surges during the technology boom of the late 1990s but have weathered recent stock market declines better than the market as a whole. The Salomon Smith Barney managed care index has declined 1.1% year-to-date (as of 3/13/03) compared to a decline of 5.4% for the S&P 500. For this reason, Wall Street sees managed care as a good defensive sector in which to invest.

Figure 26: Managed Care Index vs. S&P 500 Index

Managed care stocks have been a relatively safe haven over the last few years.

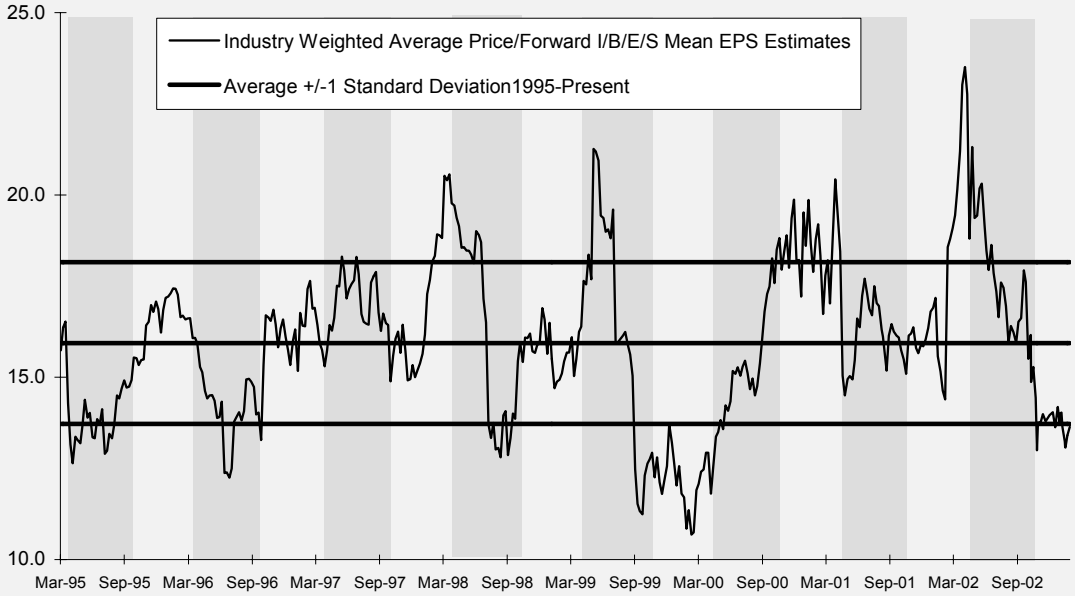


Source: FactSet, Salomon Smith Barney Research estimates. As of February 27, 2003.
Note: Adjusted to an index of 100 at December 16, 1994. Salomon Smith Barney Managed Care Index includes Aetna, Cigna, Coventry, Cobalt, First Health, Humana, Mid-Atlantic Medical, Oxford, PacifiCare, Sierra Health, Trigon, UnitedHealth, WellChoice and WellPoint.

P/E Multiples

One simple valuation measure used by analysts and investors is the price-to-earning (P/E) ratio or multiple. P/E multiples show what the market is willing to pay for a company's stock as a multiple of the earnings that the company generates. (To calculate P/E, the price per share is divided by the annual earnings per share.) P/E multiples can provide relative valuations between companies within the same industry. Similarly, industry average P/E multiples can also be used to compare relative valuations between sectors. P/Es tend to show that investors pay more for stocks with greater confidence in higher earnings expectations.

Figure 27: Managed Care Companies and S&P 500 Index, Weighted Average Forward P/E



Source: FactSet, Salomon Smith Barney Research estimates, as of February 27, 2003.
Note: Companies include Aetna, Cigna, Coventry, Cobalt, First Health, Humana, Mid-Atlantic Medical, Oxford, PacifiCare, Sierra Health, Trigon, UnitedHealth, WellChoice, and WellPoint.

Salomon's Boorady writes, "The Managed Care industry-weighted price to forward four-quarter earnings multiple closed at 13.2x [as of March 13, 2003], below its historical average of 15.9x, by our analysis. Currently, we find the industry is at the low end of its historical range of 13.7x and 18.2x. Relative to the S&P 500, the forward P/E is 0.65 based on GAAP S&P earning estimates and 0.81 based on S&P 500 operating earnings, compared to the historical average of 0.70 for GAAP earnings and 0.77 for operating earnings."

Merrill's Goodman writes, "In part, we think [below average P/E valuation] reflects general market issues (poor S&P performance, skittishness about the economy and world affairs) and rotation into sectors that have not performed as well in the last three years. But, we think it also reflects confusion over the so-called 'pricing cycle' and how to interpret reserve redundancies."

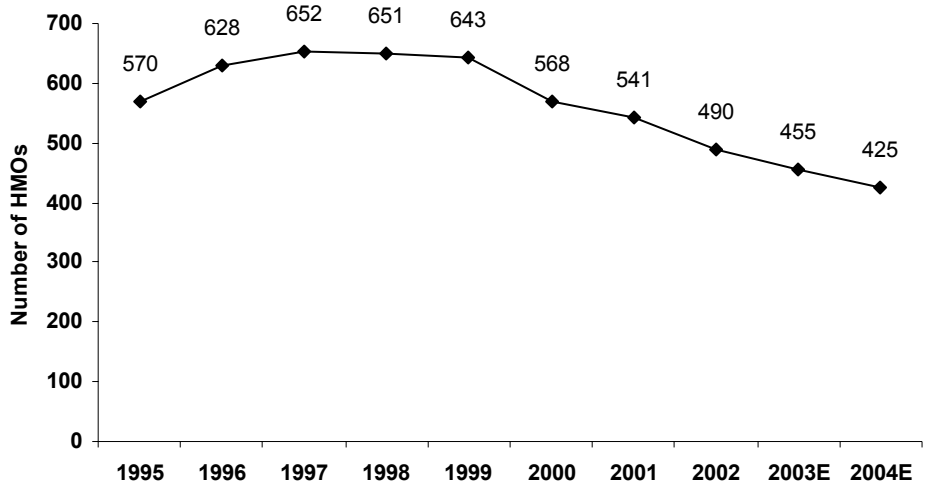
Bear Stearns' Rex writes, "Notably, since the beginning of the 1990s, the group has sold off numerous times, though comparable 'bottom' valuation levels to those we see today were generally accompanied by declining earnings and/or being in the eye of an unquantifiable regulatory or legal storm – none of which we believe is part of today's picture."

Merger and Acquisition Activity

Consolidation in the managed care industry has been an important way for insurers to continue long-term growth. During the 1980s, HMOs, with lower capital requirements and cost advantages, took share from traditional indemnity products. However, with the rise of consumerism and preference for flexibility, many of these plan sponsors have been merging in order to take advantage of scale for drug and technology costs. "The number of HMOs and PPOs operating in the United States is declining as consolidation of the industry continues… mostly among smaller plans with less than 50,000 members," writes William McKeever of UBS Warburg. In 2002, the number of HMO plans operating in the U.S. dropped 9.4%, from 541 in 2001 to 490 in 2002. Another reason for the decline in the number of HMOs is the exit of many provider-sponsored plans which discounted aggressively to win market share, but were ultimately unable to sustain this approach.

Figure 28: Number of HMOs Operating in the U.S.

HMOs are expected to continue to consolidate.



Source: InterStudy Competitive Edge and JPMorgan estimates.

Analysts expect consolidation particularly among the 42 companies that comprise the Blue Cross Blue Shield Association. Fidel predicts member plans will decline to around 25 or 30 over the next five years. This would continue a strong long-term trend on Blues consolidation, which went from 134 Blue plans in 1986 to 42 today.

Joshua Raskin of Lehman Brothers writes:

> The average multiple paid per member for deals announced in 1996 and 1997 was an estimated $975 per individual. For deals announced in 1998, that multiple dropped to $640 per member, and since that time, the average again fell to an estimated $525 per member, despite the recent Trigon acquisition at approximately $1,700 per member. Now, it is worth noting that the concept in valuing acquisitions based on the dollars paid per member also is potentially misleading, as there is no consideration in the inherent profitability of that block of business, nor an attempt to distinguish between types of member (for example, risk versus non-risk, commercial versus Medicare, etc.)

PAYORS

Private

Employers provided health insurance coverage for 63% of Americans, or 73% of insured Americans, in 2001. As rising medical costs have caused rising premiums, employers have shouldered most of these increases. Premiums for private health insurance (across all plan types, including indemnity) grew 8.3% in 2000, 11.0% in 2001, and 12.7% in 2002, according to Kaiser. The last time premiums have risen in this range was in 1993, when average premiums were up 8.5%.

Figure 29: U.S. Health Insurance Enrollment Data

(in thousands of lives, data as of March of the following year)

Source	2001	% of Total	2000	% of Total
Commercial	199,860	71%	201,060	72%
Employer-based	176,551	63%	177,848	64%
Government	71,295	25%	69,037	25%
Total Insured	240,875	85%	239,714	86%
Uninsured	41,207	15%	39,804	14%
Total population	282,082	100%	279,517	100%

Source: U.S. Census Bureau.
Note: Commercial Insured and Government Insured do not add to Total Insured because some enrollees are covered by both sources.

As premiums continue to rise, some investors are concerned about "employer push-back," or employers taking a tougher stance while negotiating with managed care plans. CSFB believes, "Employers simply can't absorb double digit rate increases *every* year, and are consolidating the number of vendors offered, and shifting more costs onto employees."

Benefit buydowns, which shift costs from employers to employees, are expected to increase in 2003.

In addition to taking a more aggressive stance with health plans, employers have increased the use of benefit buydowns, or cost shifting, to control rising health care costs. When employees have a greater financial stake in the cost of health care, the rise of premiums may also decrease due to reduction of unnecessary utilization of health care services. An employer survey conducted by Goldman Sachs found that more than 60% of employers planned to shift a greater percentage of costs to employees in 2002. To employers, the most attractive cost shifting strategy was higher employee premium contributions, and the least attractive was tighter network products. Other common forms of cost shifting are increased coinsurance, co-payments, and deductibles. A Hewitt Associates employer survey cites the cost shifting strategy that will be used most aggressively are higher co-payments for drugs, which parallels a movement towards tiered formularies for non-preferred brand, preferred brand, or generic drug at the pharmacy.

In addition to tiered pharmacy formularies, and varying co-payments for in-network and out-of-network physicians, employers have also begun to explore alternatives to traditional managed care products. In particular, "consumer-driven health care" is based on the concept of increasing consumers' participation in the decision-making process. While many plans might fit under "consumer-driven health care," in each case the individual has greater control over his or her own medical funds. Examples of these plans include defined contribution, open market purchasing, customized design, catastrophic plan with medical accounts, and multi-tier networks.

Some concepts, such as multi-tier networks with varying network co-payments, have begun to gain traction, albeit slowly. In 2002, about 5% to 10% of employers have introduced tiered cost-sharing arrangements for doctor or hospital visits. Merrill's Goodman observes, "[W]e see some experimentation with tiered networks (either hospital or physicians), particularly in markets with rapidly-rising provider unit costs (such as California)." However, one objection to this plan design is that health plans and patients must be provided with information regarding the quality of provider services, instead of choosing network providers based solely on cost.

Figure 30: Percentage of Covered Workers in HMO, PPO, and POS Plans Whose Plan Has Introduced or Has Considered Introducing a Tiered Cost-Sharing Arrangement for Doctor or Hospital Visits, 2002

	POS	PPO	HMO
Introduced Tiered Provider Benefits			
Yes	9%	5%	5%
No	90%	94%	95%
Don't Know	1%	1%	1%
Among firms not offering a tiered provider benefit, those who have considered introducing tiered benefits			
Yes	12%	10%	15%
No	86%	86%	83%
Don't Know	2%	4%	2%

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits: 2002.

While employers and managed care organizations seek new ways to control rising health care costs, changes are likely to be gradual. JPMorgan's Fidel comments:

> [C]hanges in health care delivery typically move at a glacial pace, and usually take longer than expected. Therefore, we expect growth in the consumer-driven products will likely be limited over the next one to two years, since employers are typically only willing to make incremental changes to their health care benefit offerings. While these products could provide a long-term growth opportunity for managed care companies and help reduce the medical cost trend over the next several years, we view their likely impact over the next 12-24 months as minimal.

Goodman makes additional observations:

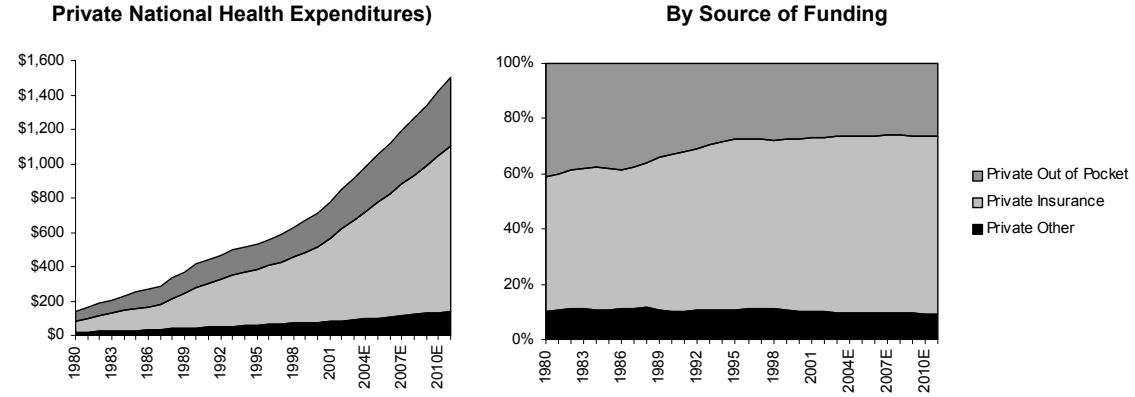
> [W]hile there are privately-funded venture stage companies that offer consumer-directed health plans, many of the publicly traded companies have such products in place and have sold some such business, including UnitedHealth Group, Aetna, WellPoint, and Humana.

Individuals

Cost shifting from employers to employees should generally reverse a fifteen year decline of out-of-pocket expenditures relative to private health expenditures. Consumers' out-of-pocket expenses have declined from 41% of privately funded health care costs in 1980 to 26% in 2002, as shown in Figure 31.

Figure 31: Out-of-pocket Expenditures as a Percent of Private Health Expenditures Has Declined

($ in billions)



Source: CMS, Office of the Actuary, National Health Statistics Group.
Note: First projected year 2002.

Figure 32: Average premiums and employee contributions, 2002

	Single		Family	
	% of Premium Paid by Workers	Average Monthly Premium Cost	% of Premium Paid by Workers	Average Monthly Premium Cost
HMO	17%	$230	26%	$628
POS	17%	$265	28%	$681
PPO	15%	$260	28%	$670
Indemnity	12%	$298	20%	$707
All Plans		**$255**		**$663**

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits: 2002

Public

In 2002, Medicare covered 40.4 million beneficiaries while Medicaid covered 42.8 million beneficiaries, some of whom were eligible for both Medicare and Medicaid. In 1999, approximately 6.5 million Americans were "dual eligibles," typically Medicare beneficiaries over the age of 65 who qualify for Medicaid due to low income, or 17% of Medicare beneficiaries and 16% of Medicaid beneficiaries. In these cases, Medicaid supplements Medicare coverage for those services that are covered by Medicaid but not Medicare, such as most outpatient prescription drugs and non-skilled nursing home care. Medicare is the primary payor and Medicaid pays the remainder, up to a state's payment limit.

In 2001, over half of Medicare beneficiaries had supplemental private insurance through employer-sponsored plans or Medigap plans to provide additional benefits. Some Medicare beneficiaries receive a drug benefit through their M+C plan. Use of supplemental private insurance was also used by nearly one-fifth of Medicaid beneficiaries, according to the U.S. Census Bureau.

The federal government also provided health coverage for 8.7 million military-related beneficiaries under the TRICARE program, and 8.6 million federal workers, retirees, and dependents under the Federal Employees Health Benefits Program (FEHBP) in 2001, according to the U.S. Census Bureau.

Medicare

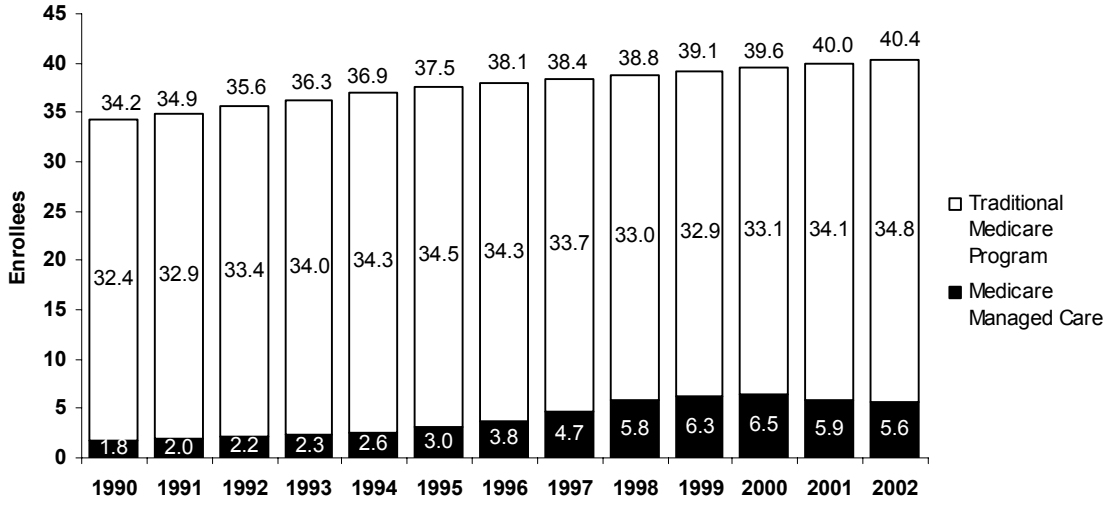
Medicare+Choice (M+C) is Medicare's managed care option that was created by the Balanced Budget Act of 1997. There are two types of M+C plans: Medicare managed care plans, such as HMOs, and Medicare private fee-for-service plans. (Medicare also established a PPO demonstration project in 2002.) To participate in M+C, beneficiaries must be eligible for Part A and have elected Part B benefits. M+C plans receive capitated payments for providing Part A and Part B services to beneficiaries which replace the amount Medicare would have paid under Parts A and B. M+C enrollees are responsible for both the Medicare Part B premium ($58.70 per month for 2003), which is retained by the Medicare program, and any additional premium collected by the M+C plan. M+C plans may also offer additional benefits, such as prescription drugs, eye exams, hearing aids, or routine physical exams.

M+C plans in many areas of the country face medical cost increases in excess of M+C payment increases, which are determined by statute and do not account for changes in an M+C organization's costs. This difference cannot always be made up by shifting the additional cost to beneficiaries because M+C enrollment by beneficiaries is voluntary and M+C organizations need to offer attractive premiums and benefits in order to draw participants. Therefore, many M+C organizations have had trouble creating the profit "spread" between premium increase and cost increases to drive margin expansion.

M+C enrollment has declined from its 2000 high of 6.5 million (16% of Medicare beneficiaries) to 2002 enrollment of 4.6 million beneficiaries (11%).

Figure 33: Medicare Managed Care and Traditional Enrollment, 1990-2002

(enrollees in millions)



Source: CMS ORDI Policy Planning and Analysis Group compilation of Medicare managed care monthly report data.

In recent years, many M+C plans have exited markets where they experienced financial losses.

Health care costs in many parts of the country continue to exceed available M+C payments. This has contributed to the exit of many managed care organizations from financially unviable markets over the last few years. Access to M+C plans has been declining for beneficiaries. In 1999, 74% of beneficiaries had access to at least one M+C plan; in 2003, this number dropped to 59%. A summary of announced M+C exits for calendar year 2002 by affected enrollees and grouped by states is shown in Figure 34.

Figure 34: M+C Enrollees Affected by 2003 M+C Exits, by State

State	Affected Enrollees	Total M+C Enrollees in Counties (All Plans)	Affected Enrollees, Percent of Total M+C Enrollees
Virginia	7,722	7,722	100%
Indiana	4,919	4,919	100%
Michigan	3,683	3,683	100%
DC	3,451	3,451	100%
South Dakota	1,596	1,600	100%
Minnesota	325	325	100%
Iowa	101	101	100%
Maryland	13,119	15,417	85%
Delaware	451	744	61%
Kansas	11,945	29,812	40%
Louisiana	5,760	14,594	39%
North Carolina	11,347	30,695	37%
Montana	14,922	46,235	32%
Texas	26,780	115,278	23%
Ohio	26,984	141,651	19%
New York	6,677	36,447	18%
Illinois	7,963	56,308	14%
Florida	25,597	182,699	14%
Massachusetts	10,914	118,589	9%
Oregon	500	7,565	7%
West Virginia	130	2,812	5%
California	26,752	798,932	3%
Pennsylvania	3,275	130,190	3%
New Jersey	299	32,478	1%
Tennessee	94	14,221	1%
Grand Totals	**215,306**	**1,796,468**	12%

Source: CMS.
Note: Enrollee counts are as of September 2002.

Insufficient payment increases in some markets have led to reduced benefit offerings and increased premiums.

Complete withdrawal from a market, of course, is a M+C organization's most drastic reaction to insufficient payment increases. Many other M+C plans are increasing out-of-pocket costs for beneficiaries and reducing benefits. The percent of beneficiaries who had access to zero premium M+C coordinated care plans dropped from 61% in 1999 to 29% in 2003. The average out-of-pocket costs for Medicare-covered services per M+C enrollee per month increased from $25 in 2002 to $34 in 2003. Average premiums (in addition to the Medicare Part B premium) for a basic M+C plan increased from $31 to $37 per month between 2002 and 2003. Access to prescription drug benefits through M+C has also declined for beneficiaries, from 65% in 1999 to 50% in 2003. In addition, the percent of beneficiaries with drug coverage in a basic M+C plan who have generic only coverage will rise from 30% in 2002 to 44% in 2003.

M+C Enrollment Impact on Managed Care Company Performance

As noted in the November 2001 CMS Health Care Industry Market Update on the managed care sector, the market recognizes that companies that participate in the M+C program face an uncertain revenue stream from the government. The managed care industry initially believed that the M+C program provided a new market for growth, but the unpredictability of the annual debate over M+C reimbursement changes has created significant risk to earnings. CSFB notes that as part of possible Medicare changes, "Improved funding to private Medicare plans would benefit several managed care plans with existing Medicare + Choice enrollment, like PacifiCare and Humana. It isn't likely to entice many new insurers to enter the market, though, unless the government could guarantee long term financial support for the program." Shown below are the top five companies by M+C enrollment.

Figure 35: Top 5 Companies by M+C Enrollment

Company	M+C Enrollment	Percent of Total M+C Enrollment
Kaiser	801,009	15%
Pacificare Health Systems	784,634	14%
Humana	349,963	6%
United Health Care	219,737	4%
Aetna-US Healthcare	121,448	2%
Top 5 Total	2,276,791	41%
Total M+C Enrollment	5,522,252	100%

Source: CMS ORDI Policy Planning and Analysis Group analysis of Medicare managed care monthly report, August 2002.

In the chart below, managed care companies are ranked by the percent of their 2002 premium revenue that is generated from their Medicare business segments. A year ago, Wall Street analysts typically were less optimistic about companies with high M+C participation but now seem to be less concerned about M+C exposure as it has become a declining revenue source for most of the sector. As seen in Figure 34 on page 40, managed care companies continued to exit markets for 2003, further reducing their Medicare exposure and investor concern.

Figure 36: Estimated Medicare Exposure by Percent of Premium Revenue

	M+C as % of Premium Revenue			Average Wall Street
	2000	2001	2002	Recommendation
PacifiCare Health Systems	56.6 %	58.5 %	54.0 %	2.67
Humana	33.9 %	27.6 %	23.8 %	2.00
Coventry	14.9 %	11.5 %	15.7 %	1.67
Health Net	20.2 %	16.6 %	12.9 %	1.89
Sierra Health Services	12.3 %	14.4 %	12.1 %	2.00
Oxford Health Plans	15.6 %	13.7 %	11.5 %	1.89
UnitedHealth Group	14.7 %	13.3 %	8.5 %	1.20
Aetna	18.6 %	10.0 %	6.7 %	2.13
CIGNA	13.9 %	6.4 %	5.8 %	2.78
WellChoice	n/a	n/a	3.7 %	1.57
Anthem	4.4 %	4.0 %	2.7 %	1.00
WellPoint Health Networks	1.9 %	2.1 %	1.8 %	1.10
Cobalt	n/a	4.2 %	0.0 %	2.00
First Health Group	0.0 %	0.0 %	0.0 %	1.86
Mid Atlantic Medical Services	0.0 %	0.0 %	0.0 %	1.00

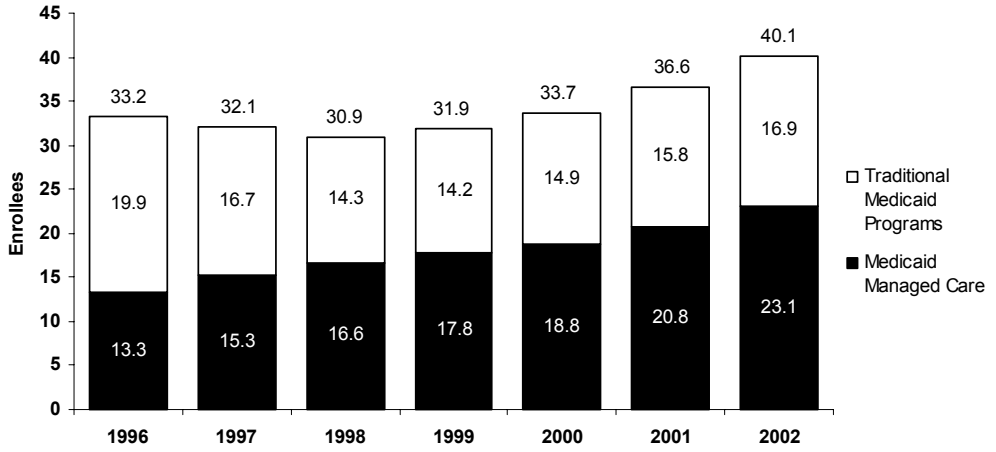
Source: Estimates calculated from Wall Street research and company filings, as of February 28, 2003
Note: Wall Street recommendation: 1 = buy, 2 = hold, and 3 = sell.

Medicaid

Medicaid is the federal-state partnership program that pays for health care services for certain groups of low-income persons. Forty-eight state Medicaid programs require at least some of their Medicaid beneficiaries to enroll in a Medicaid managed care program in an effort to reduce costs. As of June 30, 2002, Medicaid covered 40.1 million Americans. Medicaid managed care enrollment has grown rapidly, from 13.3 million or 40% of beneficiaries in 1996 to 23.1 million or 58% of beneficiaries in 2002.

Figure 37: Medicaid Managed Care and Traditional Enrollment, 1996-2002

(enrollees in millions)



Source: CMS, Medicaid Managed Care Enrollment Report.
Notes: Enrollment figures are point-in-time counts as of June 30. The unduplicated managed care enrollment figures include enrollees receiving comprehensive benefits and limited benefits. Enrollee figures are unduplicated for those beneficiaries enrolled in more than one managed care plan. Figures also include individuals enrolled in State health care reform programs that expand eligibility beyond traditional Medicaid eligibility standards.

For-profit companies have entered the growing Medicaid HMO market.

In the 1980s, the dominant managed care model was primary care case management (PCCM), in which primary care physicians became gatekeepers and care coordinators under a fee-for-service payment system. In the mid-1990s, prepaid health plans and Medicaid HMO products grew rapidly. There are a few investor-owned Medicaid managed care organizations, including AmeriGroup and Centene. The largest U.S. MCO, UnitedHealth, has an above average Medicaid exposure, and other commercial MCOs and some provider-sponsored plans also offer Medicaid specialized plans. Medicaid managed care enrollment includes limited benefit programs, such as dental-only or mental health-only coverage.

Medicaid HMOs are typically closed-delivery systems that are tightly regulated by care management such as restricted networks and pre-authorization requirements in return for assured access and cost predictability and control. Medicaid beneficiaries in fee-for-service programs are generally less likely to have been given regular medical or preventive care than the commercially insured population. Thus, first-time case management can often result in health outcome improvement, reducing stress on other parts of the health care system, such as avoidable emergency care treatment.

Figure 38: Types of Medicaid Managed Care Plans and Enrollment, 2002

(enrollees in millions)

Type of Managed Care Entity	Number of Plans	Number of Medicaid Enrollees
Prepaid Health Plan	159	10.2
Commercial Managed Care Organization	188	9.7
Medicaid-only Managed Care Organization	120	5.7
Primary Care Case Management	38	5.6
Health Insuring Organization	5	0.5
Other	25	0.2
Total Medicaid managed care (including duplicate enrollees)	535	32.0
Enrollees enrolled in more than one managed care plan		8.8
Total Medicaid managed care enrollees (excluding duplicate enrollees)		**23.1**

Source: CMS, Medicaid Managed Care Enrollment Report, 2002.
Notes: Figures include individuals enrolled in state health care reform programs that expand eligibility beyond traditional Medicaid eligibility standards.

Medicaid has been affected by the same rising medical costs seen in Medicare and the private sector. However, Medicaid spending growth has outpaced that of Medicare and that of the private sector for health care services since 1998. In 2001, Medicaid expenditures grew 10.8% compared to 7.8% for Medicare and 8.2% for private funding. Medicaid represents the second largest outlay in most state budgets (after education), estimated at 15% of total state budget spending. Medicaid spending is expected to climb 12.1% in 2003. Medicaid HMOs, while not immune to unfavorable cost trends, have not experienced the market withdrawals that have been associated with M+C plans.

Medicaid HMO plans have the potential to curb skyrocketing Medicaid costs, which may be attractive to those states that can negotiate affordable rates. But because of the severity of state deficits, some states may find it difficult to commit to managed care plan rates.

While analysts are optimistic that some of the large publicly traded companies have a particular opportunity to penetrate this market, state budget deficits may slow this growth. In addition, analysts believe that state budget concerns may decrease current Medicaid HMO rates.

SUMMARY

- Profit margins for the publicly traded managed care companies are expanding but remain in the low single digits, from an average 1.8% in 1999 to 4.4% in 2002. Similar margin improvement has also been observed among the Blues, Medicaid HMOs, and Kaiser Permanente.
- Analysts expect 2003 to mark the third consecutive year of double digit premium increases. The publicly traded managed care companies have projected that average premiums will rise 12% to 13% while average medical costs will rise 11% to 12% in 2003, in most cases maintaining or expanding profit margin levels.
- As premiums rise, employers are shifting costs onto employees through mechanisms such as higher employee premium contributions and higher co-pays for drugs, while continuing to offer open network plans.
- The commercial market has moved towards more open and flexible plans, with 70% of enrollees in PPO or POS plans compared to 26% in HMOs in 2002. To control medical costs, the commercial market has been reducing emphasis on gatekeeper models and adopting strategies such as tiered co-pays, disease management, and self-funding.
- Health care costs in many parts of the country continue to exceed available Medicare+Choice (M+C) payments. Commercial managed care organizations have reduced M+C exposure over the last several years, either by reducing benefit packages or exiting from certain markets altogether. Analysts seem to be less concerned about M+C exposure as it has become a declining revenue source for most of the sector.
- Medicaid managed care plans covered 58% of beneficiaries in 2002. Analysts believe that Medicaid is the only market where HMO enrollment will grow, but are also concerned about how state deficits will impact Medicaid HMO plan rates.
- Stock performance of the managed care sector has been better than the market as a whole over the past few years, but has suffered in recent quarters partially due to concerns about reserves and related earnings quality. Most analysts, however, believe the industry has been reserving consistently and conservatively. Their confidence is further bolstered by the sector's strong cash flow.

NOTICE AND DISCLAIMER: The CMS Health Care Industry Market Update is published at the direction of and solely for the benefit of the Centers for Medicare & Medicaid Services ("CMS") and the United States Department of Health & Human Services ("HHS") and interested health care policy makers in the Congress, the Federal agencies, and State governments. The CMS Health Care Industry Market Update is not intended to be, nor should it be relied upon in any way, as investment advice to any individual person, corporation, or other entity. CMS and HHS make no recommendations or advice with respect to any particular stocks, bonds, or securities or any particular industry sectors and make no recommendation whatsoever as to the purchase, sale, or exchange of securities and investments. While CMS and the Office of Research, Development & Information attempt to present appropriate factual data from a variety of sources, CMS makes no representation or assurances as to the accuracy or truthfulness of information or data published or provided by third parties used or relied upon in this report. CMS has no duty or obligation and does not undertake to independently verify the accuracy or truthfulness of information or data published or provided by third parties, nor does it have a duty to update any such data provided. Some sourced information is subject to copyright and is used by permission from the cited entities. Further use of such sourced information may be subject to approval by cited entities. Although cited entities obtained information from sources believed to be reliable, cited entities do not guarantee accuracy, and such information may be incomplete or condensed. All sourced figures and quotes included in this report constitute cited entities' judgment as of the original publication date of such information. Although the CMS Health Care Industry Market Update generally discusses health care policy and regulatory and enforcement matters, including regulatory policy and enforcement authority under the jurisdiction of CMS and HHS, the CMS Health Care Industry Market Update does not constitute in any way formal rulemaking or guidance or enforcement policy and procedures by CMS or HHS to any interested party. Information contained in the CMS Health Care Industry Market Update may be reproduced freely, provided that appropriate citation to authority is made.

If you would like to receive the CMS Health Care Industry Market Update via email, please send a request to: capitalmarkets@cms.hhs.gov, Subject: Market Update Distribution

The CMS Health Care Industry Market Update is also available on the web at: www.cms.hhs.gov/marketupdate