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Note on Financing of the U.S. Health Care Sector

This note, organized by sources of payments, introduces elements of the financing of health care in the United States. Following an overview of health insurance concepts, we discuss the structure of the industry and its pricing, channels of distribution, and drivers of change; different types of health insurance plans; and the burden on businesses and consumers of health care costs. We next review payments provided by the two largest government health care programs—Medicare and Medicaid—and their financing, attempts to control costs, and proposed legislative changes. The prevalence and causes of lack of insurance coverage are analyzed before briefly outlining some issues addressed by health care financing reform proposals.

Exhibit 1 diagrams the magnitude of health care funding in the United States in 2002. As it indicates, most of the money spent by households, companies, and governments was funneled through intermediary payers, primarily private or public health insurers. Health care spending from all funding sources reached \$1.55 trillion in 2002; the largest portion of which, \$496.5 billion, was for hospital care, with \$339.5 billion for physicians' services, \$103.2 billion for nursing home care, and \$162.4 billion for drugs. Federal, state, and local governments paid 46% of all expenditures, and private sources—including businesses and consumer out-of-pocket expenditures—the remaining 54%.¹

Overview of Private U.S. Health Insurance

History

The first health plans for U.S. workers were not designed to reimburse medical expenses—partly because physicians' abilities to treat or cure illnesses were very limited before 1900—but rather to compensate for loss of income when an accident or illness caused extended disability. The first plan offered to seamen by the U.S. Marine Hospital Service in 1798 called for compulsory salary deductions to pay for hospitalization. In 1863, Travelers Insurance Company offered death or permanent disability benefits and in 1899 Aetna and Travelers sold a temporary disability plan "occasioned by all diseases except tuberculosis, venereal disease, insanity, or disabilities due to alcohol or narcotics." The first group plan, organized by Montgomery Ward in 1910, was intended to protect workers from loss of income due to illness.

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The nature of insurance plans changed during the depression when hospitals failed because people were unable to pay their bills. Several hospitals initiated prepayment plans to guarantee revenues. In 1929, Baylor University Hospital enrolled Dallas public school employees, many of them women of child-bearing age, in a plan that guaranteed 21 days of hospital care for a premium of \$6 a year. Similar monthly payment plans to local hospitals soon became popular. Plans offered by individual hospitals eventually gave way to area-wide Blue Cross plans supported by the American Hospital Association. Begun in 1939, Blue Shield provided coverage for physician fees to hospitals. "The Blues," as they are known, were declared nonprofit and tax exempt.

Early on, insurers recognized that affordable premiums were linked to enrollee volume due to risk selection bias. Small plans could be disproportionately composed of those who anticipate a hospital stay. Insurers realized that costs would sky-rocket unless they enrolled many people, most of them healthy, to share the costs of illness. This phenomenon may be generally defined by enrollees' decision-making criteria when selecting a health insurance plan. A *biased* plan attracts enrollees who are more or less likely than the general population to require benefits. For this pool of enrollees, the insurer's objective is to balance the number of enrollees who will require more benefits with those who will require less benefits. A plan that insures a group of high-risk individuals, i.e., enrollees who will almost certainly incur many or infrequent but expensive health care services, experiences *adverse selection*. A plan that enrolls low-risk members has *favorable selection*. Selection bias plays an important role in explaining the disparity in premiums among different types of health care plans. Advocates of a single-payer health plan with universal coverage are attempting to avoid biased risk selection. Insurers also evaluate how the structure of a plan affects the behavior of enrollees. One such effect, *moral hazard*, occurs because insured people may use more health care resources or take greater health risks than uninsured people.

Employer-sponsored health benefits grew rapidly in the 1930s and 1940s, in part because several government attempts to provide health insurance failed—Theodore Roosevelt's 1912 election platform included national health insurance—and employee pools presented a good way for the Blues to minimize adverse risk selection. The theory was that employed populations were clearly healthier than unemployed enrollees. In most cases, employees paid the full premium and employers offered only administrative support in the form of payroll deductions. By 1945, 19 million people were enrolled in Blue Cross plans. Commercial (for-profit) insurers such as Aetna began to sell policies in substantial numbers during World War II. By 1960, enrollment in commercial plans exceeded that of Blue Cross (HIAA 1995).

Employee benefits in general and medical care in particular became widespread during World War II when wage and price freezes forced employers to compete for new workers on the basis of fringe benefits. "By 1948, 3 million workers were receiving health benefits negotiated by their unions and/or employers and employers contributed \$250 million toward such benefits."² While many European nations developed national health insurance plans, U.S. attempts to institute a national plan were effectively opposed by business, physicians, the Blues, and commercial insurers resulting in the employer-based system that still provides the majority of medical coverage in the United States.

In 1954, this trend was enhanced when the Internal Revenue Service Code clarified the tax exempt status of employers' premium contributions. Employees do not pay taxes on the value of health insurance benefits received and paid by employers. For example, a person in a 50% tax bracket who receives \$5,000 worth of health benefits obtains the equivalent of \$10,000 in taxable income. The Tax Code was also modified to allow corporations, but not individuals, to deduct health insurance

payments as a business expense.^a By 2003, tax exclusions on medical insurance premiums—\$99.3 billion for corporation and \$2.4 billion for the self-employed—represented the largest single loss of potential tax revenue for the U.S. government.³

Types of Plans

Conventional indemnity health plans Conventional indemnity health plans compensate the enrollee for loss or illness and are known as *fee-for-service* plans because they pay fees to providers based on the service provided. Providers compensated on a fee-for-service basis may have an incentive to provide more, possibly too much, care.

Health maintenance organizations (HMOs) were founded at about the same time as conventional plans—the Ross-Loos HMO (1929) and Kaiser-Permanente (1930s)—but their growth was limited by fierce opposition from physicians (Field and Shapiro 1993). By the 1970s, they enrolled fewer than 2 million. These plans gained popularity over time in part because they offered more benefits and/or lower premiums than indemnity plans. By 2002, they enrolled 178 million.

HMO models vary in the autonomy allowed physicians and the freedom of choice permitted subscribers. The five basic model options are:

- *Staff model.* Physicians are salaried and subscribers can see only these physicians ("in-network").
- *Group model.* The HMO contracts with a single physician group.
- *Network model.* The HMO contracts with two or more physician groups.
- *Independent practice association (IPA).* The HMO contracts with individual physicians, organized as an IPA, who are free to contract with other plans.
- *Mixed model.* Some combination of the four types above.

These models may be offered with different payment arrangements to the enrollee and/or to the provider. They are referred to as below, rather than as HMOs.

- *Point-of-service model (POS).* Allows subscribers to see physicians outside the network for an additional fee.
- The *Preferred provider organization (PPO)* is another practice concept in which a group of physicians and/or hospitals offer their services at reduced rates to third parties that can guarantee sufficient volumes of patients and prompt fee payments, such as a large employers or insurers.

The numbers of HMOs and their enrollments have been steadily declining. In 2001, the number of HMOs fell by 13.3% to 542 and enrollment declined by 8.3%, to 91 million. This decline was most apparent in the POS segment, which experienced a 10% membership decrease in 2001 (see Table 7 below).⁴

Managed care plans, other than the staff model, frequently pay providers a fixed fee per enrollee for all necessary services, a payment model known as *capitation*.⁵ Capitated providers may have an

^a Individuals who spend more than 7.5% of their income on health care may deduct the expenses. Department of the Treasury and Internal Revenue, IRS Publication 502, *Medical and Dental Expenses (Including the Health Coverage Tax Credit)*, 2004.

incentive to provide less, possibly too little, care. Managed care plans may also pay providers on a discounted fee-for-service basis.

Consumer-driven health care (CDHC) plans Based on the concept of consumer choice, under CDHC models, employers and other traditional payers fund choices of plans, providers, and coverage options, as well as savings accounts, called Health Reimbursement or Savings Accounts (HRAs or HSAs). Consumers select plans with the assistance of decision support tools, benefit administration processors, and Internet-based applications. The Federal Employees Health Benefits Program is a version of a CDHC plan that covers 8.6 million people. It is the largest employer-sponsored health plan in the U.S. It paid out more than \$24 billion in annualized premiums for 188 different plan choices across the U.S., and experiences cost increases that are generally lower than other types of plans.

With regard to HSAs, JP Morgan notes, "The idea is that with their own money at risk, employees should be more engaged in the decision-making process. The end goal is to create a consumer who is more responsible for his or her own health care, while reducing the administrative and logistical burdens placed on the employer."^{b,6} A number of established insurers and entrepreneurial firms began to offer these plans in 2001, with enrollments estimated between 500,000 to more than 1 million. In 2003, the most prevalent models offered an HRA and insurance for catastrophically expensive medical costs.⁷ By 2004, more than 3 million were enrolled.

Andy Slavitt, chief executive officer of HealthAllies, Inc., noted:

Discount, or "HealthAllies" services, are another type of CDHC plan. These designs offer members health care with discounted rates of 40% using the market leverage of the intermediary. No actual insurance is provided but in concert with HSAs or HRAs, the member may end up paying as little as 70% of retail rates. These products are often used in conjunction with lower cost plans to provide coverage to the un- and under-insured, at prices as low as \$500 to \$3,000 in the costly New York area.

Private Health Insurance Costs and Payment Sources

In the past decades, health care costs inflation has outstripped the growth rate of the Gross Domestic Product (GNP) index, except for a brief lull in 1994–1996, generally attributed to Hillary Clinton's health care reform proposals. In 2001, for example, the increase in per capita health care spending reached 10% as compared with a 1.8% increase in GDP. In that year, spending for hospital

^b The 2003 Medicare Prescription Drug Improvement and Modernization Act of 2003 introduced Health Savings Accounts (HSAs). As individual, consumer-owned, tax-free accounts, HSAs allow individuals to accumulate, invest, and spend money for qualified medical expenses over their lifetimes. Unlike HRAs and FSAs (Flexible Spending Accounts, see [Appendix](#)) employers, relatives, and employees can make tax-free, portable contributions to HSAs, with investment and roll-over characteristics similar to 401(k) plans. HSAs must be coupled with a qualified high-deductible health plan (no less than \$1,000 for individual coverage and \$2,000 for family coverage in 2005).

HSAs offer a low-cost alternative to employers (especially those unable to offer generous health benefits), uninsured, and underinsured individuals. Medium-sized and consumer-focused companies have demonstrated a strong interest in HSAs, while insurers, such as UnitedHealth Group, have chartered their own banks to introduce MasterCard benefit cards for eligibility verification and direct reimbursement from HSAs and FSAs. This transformation may create a new 401(k)-like industry that converges health care benefits and financial services. (HSAs replaced the Archer Medical Savings Accounts (MSAs), enacted in the late 1990s).

Politically, HSAs have both short- and long-term implications: short-term, the characteristics of portability and the employee contribution options may be expanded to HRAs; in the long term, HSAs create the option of tax-advantaged accounts that could allow significant changes to government-sponsored health insurance.

outpatients grew by 16.3%, followed by a growth rate of 13.8% in prescription drugs, 7.1% for hospital inpatients, and 6.7% for physician services.⁸

Since 1985, average personal, out-of-pocket health care costs have roughly doubled from \$1,100 to \$2,066 in 2000, representing a rise of disposable household income expenditures of from 4.7% to 5.4%, distributed among health insurance premiums (\$983); medical services (\$568); and drugs and supplies (\$515). These expenditures differed by age group: those 75 or older spent \$3,338 out-of-pocket (15.2% of total disposable income), while those aged 25–35 spent \$1,256 out of pocket (or 3.2% of disposable income).⁹ Coverage also differed by type of benefit with insurers paying 91.7% of hospital expenses but only 60% of the costs of drugs.¹⁰ The percentage that consumers paid out-of-pocket decreased from nearly 50% in 1960 to 17% in 2002.¹¹

Of the average hourly compensation of \$30.06 in 2001, employers spent an average of \$2.56 per hour for health insurance. This percentage had grown by 20% between 1991 and 2001, from 6.9% to 8.5%, with the largest proportion represented by unionized firms and the manufacturing sector, and the lowest proportion in the service and non-manufacturing sectors.¹² Despite rapidly increasing costs, employers had not increased employees' share of health insurance costs through 2001; but, the proportion of covered employees declined from 79% in 1980 to 65.5% in 2001.¹³ By 2002, however, more than half of all employers (55%) had shifted costs to employees, especially for drugs and premium contributions.¹⁴

Businesses spent \$334.5 billion on health care in 2000, 73% of it for health insurance. Employers also paid for workmen's compensation and disability insurance (7%), taxes for the Medicare Trust Fund (17%), and on-site provision of health care services (1%).¹⁵ As a percent of corporate pre-tax profits, health care spending averaged approximately 40%.¹⁶

Coverage and Eligibility

In 1940, 10% of the American population (12 million people) had health insurance. By 1980, largely because of war-time wage freezes and U.S. tax code changes, 76% of the nonelderly population was covered by some form of private health insurance plan and nearly all elderly were covered by Medicare. By 2002, 84.4% of the U.S. population was covered by insurance and 15.6%(or 45 million people) had no health insurance (**Table 1**).

Table 1 Health Insurance Coverage; 1990, 2002

	1990		2002	
	Number	Percentage	Number	Percentage
Total with Private Health Insurance	158.4	73.3%	197.6	68.6%
Employer coverage	138.7	64.2	174.0	60.4
Other private coverage	19.7	9.1	26.5	9.2
Total with Public Health Insurance	29.2	13.5	76.8	26.6
Medicare	3.5	1.6	39.5	13.7
Medicaid	21.6	10.0	35.6	12.4
Military	N/A	N/A	10.0	3.5
No Health Insurance	35.7	16.6	45.0	15.6

Source: U.S. Census Bureau, *Statistical Abstract: 2002*; U.S. Census Bureau, *Income, Poverty, and the Health Insurance Coverage in the United States: 2003*.

Employer-sponsored plans cover both employees and their family members. Employees not covered by a plan either worked at a company that does not offer health benefits, worked too few hours to qualify, choose not to enroll, or were excluded because of a pre-existing medical condition.

Employer-sponsored coverage options vary by employer size and category of worker (**Exhibit 2**). The largest enrollee pools worked in the government, finance, insurance, real estate, manufacturing, and mining sectors. In contrast, only 36% of agricultural employees receive health care benefits. Employers least likely to offer benefits were small service companies or firms with part-time, seasonal, or low-wage employees. Small business plan enrollees paid on average \$182 per month for health insurance, in contrast to \$130 per month for enrollees at larger firms.¹⁷

More than 90% of large firms offer health benefits to retirees. Pre-age 65 retirees are typically offered the same plan choices as current employees, while plans offered to retirees aged 65 or more are coordinated with Medicare options. Between 2001 and 2002, total costs for retiree benefits increased by 16%, while the costs of health care increased by 13.7%. In response, nearly half of all firms have capped retiree benefits and increased retiree premium contributions and cost-sharing; 20% have either terminated retiree plans or switched to consumer-driven health care defined-contribution plans; and more than 20% are considering terminating benefits for future retirees.¹⁸

Individual versus Group Coverage

Ten percent of insureds purchase policies in the individual (or non-group) health insurance market. Individual policies differ in coverage and costs from those sold to employers, as shown in **Table 2**. Enrollees are typically younger and less affluent than those in group plans, although 35% of individual policy owners earned more than \$50,000 a year.¹⁹ Nearly 20% of the self-employed and 17% of farm workers have individual policies.²⁰

Table 2 Characteristics of Individual and Employer-Sponsored Plans

Characteristic	Employer-based Plans	Individual Plans
Deductible, in-network ^a	\$138	\$1,550
Deductible, out-of-network ^a	354	2,235
Average monthly premium, Individuals	\$239	\$261 377 2,070 4,009
		25 years old 55 years old All ages (annual) All ages, family (annual)
Out-of-pocket maximum limit (percent having limit of less than \$2,000) ^a	56% ^b	57% ^c
Prescription drug coverage	97%	80%
Inpatient mental health coverage	94	63
Outpatient mental health coverage	96	48
Well-baby care	98%	55%
Well-adult care	93	74

Source: Donald A. Young and Thomas F. Wildsmith, "Expanding Coverage: Maintain A Role for the Individual Market," *Health Affairs*, Web Exclusive, October 23, 2002.

For individual insurance data see also eHealthInsurance.com and Quotesmith.com (August 2000). For employer-sponsored insurance data see also Henry J. Kaiser Family Foundation/Health Research and Educational Trust Survey of Employer-Sponsored Health Benefits, 2000.

^aSee section on "Financial Characteristics of Insurance Policies" for explanation of these terms.

^bForty-three percent have \$1,999 or less (in-network); 35% have \$1,999 or less (out-of-network).

^cFifty-seven percent have \$1,999 or less (in-network HMP/PPO/POS); 26% have \$1,999 or less (out-of-network FFS/PPO/POS).

Insurers that sell to individuals underwrite each enrollee usually on the basis of a physical exam. Insurers pay sales agents 10%–15% of revenues and spend 25%–40% of revenues on administrative costs as compared to approximately 10% for administrative costs associated with large group plans.²¹ Employer-based group plans typically pay 75% of medical bills, while individual policies cover only 63% of medical costs. This gap widens from the top 25% to the bottom 50% of all spenders.²²

Benefits

Benefits covered by group health plans nearly always include inpatient and outpatient hospital care and physician office visits and some include extended care, home health services, alcohol and drug abuse treatment, and outpatient prescription drugs (**Table 3**). Dental care is usually provided separately and typically includes reimbursement for preventive care, fillings, oral surgery, and dentures.

Table 3 Group Health Plan Benefits

Medium and Large Establishments: 1997^a

Full-time employees in private industry (excluding establishments with fewer than 100 workers).

Employee Benefit Program		All Employees	Professional, Technical, and Related	Clerical and Sales	Blue Collar and Service
<i>Insurance</i>	Medical care	76.0%	79.0%	78.0%	74.0%
	Dental care	59.0	64.0	59.0	56.0
<i>Health Promotion Programs</i>	Wellness programs	36.0	44.0	36.0	32.0
	Employee assistance programs	61.0	75.0	63.0	52.0

Small Establishments: 1996^b

Full-time employees in private industry (establishments with fewer than 100 workers).

Employee Benefit Program		All Employees	Professional, Technical, and Related	Clerical and Sales	Blue Collar and Service
<i>Insurance</i>	Medical care	64.0%	76.0%	69.0%	56.0%
	Dental care	31.0	40.0	35.0	24.0
<i>Health Promotion Programs</i>	Wellness programs	8.0	11.0	9.0	5.0
	Employee assistance programs	14.0	18.0	19.0	10.0

Sources: ^aU.S. Bureau of Labor Statistics, *News*, USDL 99-01, January 7, 1999.

^bU.S. Bureau of Labor Statistics, *News*, USDL 98-240, June 15, 1998.

Health Plan Cost Structure

Insurers set premiums based on expectations of the costs of medical benefits, administrative costs, and incidences of illness. Insurers' costs are related to the distribution of claim payments, the degree of uncertainty associated with those payments, and the returns that will be earned on premium assets over time for benefits payable years in the future, such as insurance for long-term care. Sources of uncertainty include the rates of diseases and accidents, medical inflation, and inflation in the economy as a whole.

Medical care expenses, referred to as the medical loss ratios (MLRs), as displayed in **Table 4**, accounted for 82.9% of 2004 revenues, while total administrative expenses accounted for 15.1%. The MLR includes accrual accounting estimates of claims incurred but not reported (IBNR), a measure closely studied by financial analysts to flag understatements, as occurred with U.S. Healthcare and Oxford. Analysts also flag increases in the number of days of medical claims payable for potential financial problems.

Table 4 Composite Financial Statements and Valuation Data for the Largest U.S. Health Insurers, 2000, 2004

	2000	2004
Valuation		
Price Earnings	21.5	18.5
Equity/Member	\$980	\$1,492
Income Statement		
Medical Loss Ratio (MLR)	84.7%	82.9%
Sales, General and Administrative Expenses	17.1	15.1
EBITDA	6.7	8.6
Average Growth Rate	23.0	29.2
Operating Margin	4.5	7.0
Net Margin	2.8	4.5
Balance Sheets		
Days in Medical Claims Payable	66.1	53.9
Debt/Equity	36.2	28.8
ROA	5.1%	6.9%

Source: Adapted from JP Morgan, *Managed Care 4Q04 Review and 2005 Outlook* (New York, NY: JP Morgan, March 2005): 31-43.

Table 5 analyzes the administrative expenses component for major public health insurers in 2002.

Financial Characteristics of Insurance Policies

Employer-sponsored insurance policies are differentiated by the following characteristics.

Employee contribution The amounts paid by employers for an insurance policy vary. In 1999, 15% of employees paid \$250 or more per month for family coverage.²³ The average payment was \$170.²⁴ Employers also subsidized insurance policies at different premium rates to induce enrollees to choose plans they think desirable.

Table 5 Benchmarks for Public Companies' Administrative Expenses: 2002

	Cost Per Member Per Month – By Function, All Products		
	25 th Percentile	75 th Percentile	Mean
Marketing	\$4.17	\$8.29	\$7.63
Medical and Provider Management	1.85	3.37	3.18
Account and Membership Administration	6.37	9.49	8.13
Corporate Services	3.68	7.16	6.38
Total	18.91	25.35	23.96

Source: Adapted from *Pulse Analysis* (Gwynedd, PA: Sherlock & Co., September 2002).

Co-payments and deductibles *Co-payments* are a percentage of the bill paid by enrollees and differ if a provider is in- or out-of-network. *Deductibles* are amounts paid by enrollees before insurance coverage begins.

Out-of-pocket and lifetime maximums Maximum amounts enrollees must pay annually out of pocket or over the life of the policy, before complete coverage begins.

Size of covered unit Plan prices vary depending on the number of individuals included in the coverage. Most employers calculate the average family unit based on 2.3 people.

Variations in these characteristics profoundly affect employers' costs. As demonstrated in **Table 6a**, a policy with a \$1,000 deductible and a \$3,000 out-of-pocket maximum can cost 43% less than one with no deductible and a \$1,500 maximum. **Table 6b** indicates the effects of different benefit coverage on premiums.

Table 6a Cost-Sharing Levels and Percentage Premium Reduction From Level 1 (single enrollee)

Cost-Sharing Level	Copay or Coinsurance (In/Out of Network)	Deductible: Single, In-Network ^a	Out-of-Pocket Maximum: Single In-Network ^b	Percent Premium Reduction from Level 1 ^c
1	\$15/30%	None	\$1,500	–
2	20%/40%	\$250	1,500	22.1%
3	20%/40%	500	1,500	27.6
4	20%/40%	1,000	3,000	34.6
5	30%/50%	500	1,500	37.7
6	30%/50%	1,000	3,000	43.2
7	50%/70%	500	None	44.3
8	50%/70%	1,000	None	48.4
9	50%/70%	2,000	None	53.6

Source: Hay Group's Mental Health Benefit Value Comparison model, Version 2.0.

^a Out-of network deductibles (not shown) are always two times in-network deductibles, except for level 3, which has no in-network deductible. For level 1, the out-of-network deductible is \$500. Family deductibles (not shown) are always three times single deductibles.

^b Out-of-network out-of-pocket maximums (not shown) are always two times in-network out-of-pocket maximums. Family out-of-pocket maximums (not shown) are always three times single out-of-pocket maximums.

^c Reductions are based on premiums for single coverage, averaged across full-benefit and pared down plans.

Table 6b Difference Between Full-Benefit and Pared-Down Plans

Benefit	Full-Benefit Plan	Pared-Down Plan	Effect of Pared-Down on Premium
Pharmacy	In network: \$10; out of network; \$25 (no distinction between generic and brand-name drugs)	In network: \$15 generic/\$25 brand-name; out of network: \$25 generic/ \$35 brand name	-6.7%
Durable medical equipment	\$0 in network; 30% out of network	Not covered	-.7
Mental health/substance abuse care	\$15 outpatient, 20 visits; \$0 inpatient, no limit on visits	Limit inpatient to 30 days	-.1
Preventive, hearing and vision care	\$15 or free; no limits or restrictions	No hearing, vision, or immunization benefits; other preventive care limited in quantity	-3.5
All care exceeding \$100,000 in insurer costs per year	Covered	Not covered	-2.9

Source: *Health Affairs, Online* by Jason S. Lee and Laura Tollen. Copyright 2002 by Project Hope. Reproduced with permission of Project Hope in the format Textbook via Copyright Clearance Center.

Premiums

In the early days, Blue Cross plans insured subscribers without requiring a deductible and reimbursed whatever services were needed. Commercial providers insured for specific services and paid benefits to policy holders, not providers. Policy holders could seek less expensive treatment and pocket the difference. Today, conventional indemnity insurers usually pay providers directly and require coinsurance that may amount to 20% of the bill. All plans limit their payments over an enrollee's lifetime. Because fewer than 2% of group health plans link deductibles to income, deductibles, typically ranging from \$100 to \$500 per year, are unlikely to discourage higher-income workers from frivolous use of services.

Average monthly premiums are generally lower for managed care plans. Premiums are not necessarily good indicators of actual costs, however, because cost sharing and benefits differ by plan type.

Table 7 displays different fee arrangements among employer-based groups and enrollments by types of plans.

Table 7 Enrollment and Average Yearly Per-Member Premiums by Plan Type, 1998, 2003

	1998		2003	
	Enrollment (in millions)	Premium	Enrollment (in millions)	Premium
Conventional Indemnity	23.6	\$2,420	8.8	\$4,326
Group/Staff HMO	45.5	2,025	41.7	3,587
Preferred Provider Organization	59.0	2,345	99.9	4,152
Point of Service	40.5	2,373	23.7	4,016

Source: Adapted from JP Morgan, *Managed Care Outlook* (New York, NY: JP Morgan, January 2003): 58.

Premium Rating Methods

Insurers may base their expected payments for individuals on actuarial charts that track the health care experience of persons of particular ages, genders, and other characteristics. Known as *experience rating*, this method calculates premiums based on previous expenses. When insurers use experience rating, insured pools tend toward *risk segmentation*, i.e., with low-risk individuals clustered in low-premium plans and high-risk individuals in high-premium plans. Risk segmentation may also occur when employees select among multiple offerings with different benefits and rates. Another method, *community rating* calculates premiums based on expected payments for an entire community, usually determined geographically. Community rates depend on how the boundary of the community is defined. In community rating, young and healthy enrollees subsidize older, sicker enrollees.

Until 1995, most health insurance plan premiums were based on experience ratings. Then underwriting laws enacted by New York, Oregon, Vermont, Maryland, and Maine required the use of community ratings. These laws were designed to increase coverage availability for small groups (organizations with 2 to 50 employees) and individuals excluded because of chronic illness. A New York State law, for example, required insurers to offer the same premium rates to all members of the community and prohibited excluding people with pre-existing conditions. As a result, rates dropped for older or chronically ill New Yorkers previously paying experience-rated premiums. Rates for younger, healthier people, however, increased so much that many chose to opt out of the plan. Unfortunately, a year after the reforms were enacted, 1.2% (or 25,477), fewer New Yorkers had private health insurance.

Underwriting Cycle

Premiums for medical care plans typically follow a six- or seven-year cycle, known as the *underwriting cycle*. "Phase I, the hard market, is characterized by rapid price increases and rising revenues for insurance companies as financial losses turn to profits; Phase II, stabilization, is reached as prices plateau, resulting in high underwriting profits and the flow of capital into the industry; eventually, [in Phase III] price competition leads to a buyer's market, rising losses for insurance companies, and more frequent company insolvencies; . . . the soft market."²⁵ These phases are linked to insurers' reserves. In Phase I, after suffering losses, insurers raise rates producing a growth in reserve capital for two or three years. Then premium rates are decreased for several years to gain new business. When reserves are diminished, the cycle begins again. The cycle may mask underlying trends in health care costs: The decreasing costs in Phase III are frequently only vestiges of a cyclic effect rather than the result of decreasing health care costs. This cycle exists for both not-for-profit and for-profit insurers.

Phases of the underwriting cycle are influenced by two characteristics: strategies to increase market share within a local market, and carriers' ability to accurately forecast changes in trends. Forecasting ability may be compromised by difficulties in financial accounting methods, level of computer systems sophistication, data base quality, and claims tracking. In 1997, Oxford Health Plans of New York, for example, posted a \$291 million loss and forecast a \$553 million loss for the first half of 1998. Independent auditors and the New York State Department of Insurance revealed that Oxford "simply lost track of claims and expenses and couldn't adjust rates because it didn't know how much money it was losing."²⁶ Kaiser Permanente also finished 1997 with a \$270 million loss. "Kaiser attributed and [publicly admitted] that much of its 1997 losses were due to the difficulty in tracking the cases of the flu epidemic in California."²⁷

The ease of entry into the health insurer market also affects the underwriting cycle. Most new insurers enter the market at the height of the underwriting cycle, when claims submissions are low

and premium receipts high. To gain market share, they offer low premiums and aggressively target large, price sensitive employer groups—and perhaps industries with healthier members (a practice known as *cherry picking*). They must also create a provider network. Because many hospitals and physicians are reluctant to join new health insurers for fear they cannot pay their bills, they may offer to pay providers more than established competitors.

New entrants can significantly alter not only the underwriting cycle, but the health insurer industry, and even the provider landscape. Most entrenched health insurers are reluctant to cut premiums; yet, if premiums are not reduced, they may lose business. It began aggressively expanding throughout Pennsylvania and mid-Atlantic states in 1988, the height of profitability in the underwriting cycle, by offering lower prices and targeting industries assumed to have healthier populations. Once U.S. Healthcare cornered the employer group market, it used its market size to drive hard bargains with hospitals and doctors. By the end of 1995, U.S. Healthcare had 2.8 million members and was adding membership at a vigorous 20% a year. (Aetna Health Care bought U.S. Healthcare in 1996.)

Treatment of Risk

Plan types also differ in how they treat risk. Insurers can avoid, retain, share or reduce the risks associated with current and potential enrollees to limit their exposure to costly claims. To avoid risk, insurers may require medical exams before agreeing to enroll a new member or refuse to cover expenses associated with medical conditions that existed before the patient joined the plan. Insurers may also exclude the costs of treatment for high-cost diseases or experimental treatments from their benefits package.

In some plans, risks are shared. For example, in Physician Hospital Organizations (PHOs), the member hospitals and physicians agree to a fixed reimbursement from an insurer. Under this payment method, hospitals assume all risks for hospitalization costs and physicians assume all risks for office visits.

Educating enrollees about healthy habits or providing preventive benefits, such as immunizations or smoking cessation programs, may also reduce risks.

Pricing for Different Customers

The most price sensitive customer in the health care insurance industry is presumed to be the small employer group of fewer than 500 employees. The small group sector experienced an 18%–22% premium increase between 1998 and 2002.²⁸ Small employer groups are less able to absorb premium increases and have less leverage with health insurers to negotiate rates. When new market entrants offer reduced premiums, small employer groups may quickly abandon entrenched insurers.

If a small employer cannot pass on premium increases to its customers in the form of higher retail prices, it will generally pass them on to employees through higher deductibles, higher coinsurance, higher co-pays, or limited benefits. In extreme situations, small employer groups may drop health insurance coverage entirely.

Small employer groups may band together in *purchasing coalitions* to obtain better rates, however, the effect of purchasing coalitions on lowering premium rates remains unclear.²⁹

In the long term, large employer groups can become as price sensitive as small employer groups. Although they can more readily absorb initial premium rates increases, even large employer groups will absorb premium increases for only so long.

Large employer groups affect the underwriting cycle by:

- demanding locked-in rates for a certain number of years.
- negotiating experience rating when premiums are high and community rates when premiums are low; and
- switching to new entrants that offer extended benefits and lower rates.

Employer groups are generally more price sensitive when:

- the management team has negotiated collective bargaining contracts that mandate certain types of health insurance and covered benefits; and
- the business requires a predictable expense flow, e.g. utilities.

Self-Funding Plans

To contain costs, many medium- and large-sized firms retain much or all of the risk by self-insuring. The percentage of companies that self-insure increases with the number of employees. As shown in **Table 8**, by 2003, 74% of jumbo firms (10,000 or more employees) and 53% of all firms had self-funded plans. Plans may be entirely funded and administered in-house, and include health care facilities operated by the company; but most are administered by insurers through Administrative Services Only (ASO) contracts or Minimum Premium Plans (MPPs). An ASO contractor assumes no risk and provides only benefit plan design, actuarial calculations, and claims processing. An MPP insurer administers the plan and assumes some risk. For example, under an MPP contract, an insurer designs the benefits package, administers the plan, and processes all claims. Claims are paid by the employer until they reach a predetermined limit when the insurer pays the rest (Connelly 1995).

Table 8 Percentage of Employees in Self-Funded Plans, 1996, 2003

	1996	2003
Small	24%	17%
Midsize	58	50
Large	66	71
Jumbo	67	74
All	56	53

Source: JP Morgan, *Managed Care Outlook* (New York: JP Morgan, January 2003); 63.

Self-funded employers insure against two types of risks: individual catastrophic and aggregate claims loss. Insurance for individual catastrophic claims protect employers against individual claims that exceed a predetermined limit, often \$250,000. Aggregate claims loss insurance protects

employers against claims in excess of the sum of all claims for a group. Firms may use any combination of individual and aggregate plans.

By self-insuring, employers reduce administrative and risk costs. They improve cash flow because conventional plans require premiums to be paid in advance, whereas claims payments under ASO contracts are delayed by 2–3 months. They also avoid state premium taxes assessed on commercial premium revenues. For example, an employer paying premiums of \$2,500 per employee for a conventional plan also pays taxes on that amount; whereas an employer paying ASO premiums of \$300 per employee and \$2,200 in claim payments, pays taxes only on the \$300.

Most firms also self-insure to avoid state benefits laws that usually include a long list of *mandated benefits* (hospice care, mental health benefits, or a second day of hospital care after a normal birth), as well as provider contracting arrangements, solvency requirements, defined claims settlement procedures, and obligatory participation in state pools for uncompensated care. The more than 1,400 mandated benefits that existed in 2002 caused an estimated 15% rise in premiums, representing nearly \$10 billion. One study reported that 20%–25% of the uninsured lacked coverage because of mandated benefits and another study indicated that roughly 20% of small firms would offer coverage if there were no mandates.³⁰

The exemption from state-imposed mandates for self-funded plans is defined in the Federal Employee Retirement Income Security Act (ERISA) of 1974. It preempts state laws for self-funded plans and does not establish comparable federal regulation.

Claims Payment Distribution

The distribution of claims payments is heavily skewed toward those who spend the most. As shown in **Table 9**, the top 2% of the population accounted for about 32% of total health care expenditures. The bottom 50% of the population has consistently accounted for 3%–4% of total spending. Because of the high concentration of claims payments at the top of this distribution, insurers have a strong incentive to identify and limit the enrollment of people who are likely to incur high medical costs.

Table 9 Total Health Expenditures for Noninstitutionalized Population, Ranked by Individual Expenditures, 1977 and 1996

Population Ranked by Expenditures	1977 Percent of Total Health Expenditures	1996 Percent of Total Health Expenditures
Age 30–64		
Top 2%	32.8%	31.5%
Top 5%	51.6	46.8
Top 10%	68.5	61.2
Top 30%	89.5	84.8
Top 50%	96.5	94.7
Age 65 and Older		
Top 2%	33.2%	21.6%
Top 5%	53.3	37.8
Top 10%	69.6	54.1
Top 30%	90.8	82.7
Top 50%	96.8	93.0

Source: Project HOPE analysis of *National Medical Care Expenditure Survey* 1977 and *Medical Expenditure Panel Survey* 1996 for AARP Public Policy Institute.

Consumers' Experiences with Insurance and Medical Care

Most insureds are more satisfied with their medical care than with their insurance. Only 23% rated their insurance as excellent while 51% gave care top marks.

Class-Action Lawsuits

Provider and subscriber class action suits claim that HMOs violated the Federal Racketeering Influence and Corrupt Organizations Act and the Employee Retirement Incomes Security Act (ERISA). (ERISA preempts all state laws related to "any employee benefit plan," except state laws that "regulate insurance.")

Many consumers have blamed managed care organizations for not honoring their obligation to provide health care. "For example, when Joyce Duriavig was diagnosed with a rare kind of cancer, her HMO wouldn't pay for her to be treated by a specialist at the University of Texas who was an expert in the disease. The HMO insisted that she see one of its own doctors in St. Louis, an oncologist with no experience treating her cancer."³¹ "Health plans typically argue that utilization review (UR) involves coverage issues, and is not the same as practicing medicine. But a Missouri court held that such UR decisions do constitute the practice of medicine—meaning that HMO medical directors may have to answer to state boards for their actions."³²

Provider lawsuits seek to represent a nationwide class of physicians who claim they are entitled to additional compensation by health plans. In 2002, CIGNA announced an after-tax charge of \$50 million–\$65 million to be paid upon settlement of Provider Track suits. CIGNA also announced steps to improve provider relations with prompt payments and claims reviews and to provide fuller explanations about payment procedures.³³ In April 2003, in response to consumer complaints about the narrowness of networks, the Supreme Court upheld states' rights to allow any willing provider to join a health plan.³⁴

Composition of the U.S. Health Insurer Market³⁵

The industry that provides core administration services to employers and purchasers of health care benefit coverage³⁶ is quite concentrated: the largest 10 carriers/insurers provide administration services ("coverage") to more than 100 million of the approximately 220 million Americans with health care benefits coverage. It is a rapidly changing sector that has consolidated significantly; the number of HMOs, for example, has dwindled from 651 in 1986 to 4 in 2003.³⁷ In 2004, WellPoint, the nation's largest insurer, was created from a merger of two plans, and UnitedHealthcare purchased Oxford, and in 2005, planned to purchase PacificCare.

Blue Cross Blue Shield (BCBS)

Blue Cross Blue Shield plans that represent a large share of the payer market are intimately tied to the development of the U.S. health care system.

The pioneering 1929 insurance program for Dallas public school teachers eventually became the Blue Cross Hospital Service Association and by 1935 offered 17 plans to 215,000 members. The 1939 California physician prepayment models (California Physicians Service), grew into the initial Blue

Shield Plan. Early attempts at broader coordination across Blues plans were thwarted by a fragmentation of interests that kept plans local. The merger of the Blue Cross and Blue Shield entities would not take place until 1982.

Since their inceptions, "The Blues" have both benefited and suffered from their close affiliations with government, physicians associations, and commercial carriers, as well as individual consumers. The Blues reaped the benefits of President Johnson's Medicare program by becoming core administration vendors for both Parts A and B of the Medicare program. But, the close affiliations with the American Medical Association and American Hospitals Association—that helped propel them to enrollments of 132 million Americans for hospital services and 87 million for surgical services in the 1950s—eventually deteriorated as they adopted cost containment practices and managed care programs like those offered by commercial payers. More recently, the Blues lost their tax-exempt status (1986), exposing them to competitive market forces that have intensified over the last quarter century.

Of the 110 autonomous Blues plans in 1987, 45 remained in 2001, covering 77.4 million members in aggregate. As competition intensified, many Blues merged and some even converted to for-profit, publicly-traded entities. In addition to the numerous combinations of BCBS entities, several payers established themselves as large, independently run organizations. A sample of the largest Blues payers in 2005 is given in **Exhibit 3**.

WellPoint, the nation's largest health insurer, was formed in 2004 from a merger of Anthem and WellPoint. The original WellPoint was the publicly-traded former Blue Cross of California that combined the Cerulean Companies (parent of BCBS Georgia) in March 2001 and represented a total of 12 million members in 2004. Anthem, Inc., included BCBS Indiana, Kentucky (merged with Indiana in 1993), Ohio (merged 1995), Connecticut (1997), New Hampshire (1999), Colorado (1999), Nevada (1999), and Maine (2000), covering more than 14 million Americans by 2004. In mid-2001, Anthem's board of directors approved a conversion plan from a nonprofit mutual—i.e., one owned by its policy holders—to a stock company.

Other Payers

In 2005, three of the larger health care payers were Aetna, UnitedHealth Group, and CIGNA; companies that evolved from traditional insurance businesses into national managed care behemoths. (See **Exhibit 4** for public payer metrics.)

Aetna Inc., formerly Aetna U.S. Healthcare Inc., (NYSE: AET) provided health care coverage to more than 13 million members, dental coverage to 11 million, and group insurance to 12 million in 2003 and posted total revenues of \$17.9 billion. One of the largest U.S. health care payers, Aetna's full service insurance carrier origins were merged with U.S. Healthcare's managed care business in 1996. Thereafter, Aetna acquired the NYLCare health business division of New York Life Insurance Company, in July 1998, and the health care segment of The Prudential Insurance Company in August 1999. While Aetna has shed its property and casualty insurance product lines (they dated back to the early nineteenth century) to focus on managed care products, it struggled to maintain profitability and meet financial analysts' expectations. It also drew the ire of physicians who objected to its allegedly late and stringent payments and bullying tactics. In September 2000, Aetna named John W. Rowe, MD., its chief executive officer. Rowe, previously chief executive officer of Mount Sinai New York University Health, announced a turnaround plan in late 2000 that included management changes, strategic focus on middle market business and an improved operating discipline to achieve profitability. As of 2005, Aetna maintained a \$22.9 billion market capitalization, up from \$3.7 billion in 2001.

UnitedHealth Group (NYSE: UNH) the second largest U.S. health care payer in 2005, boasting 12.6 million members and total 2004 revenues of \$37.2 billion. UnitedHealth had also grown through a combination of traditional insurance business and a younger managed care company. It started in 1977 as a managed care company and in October 1995 acquired MetraHealth (the January 1995 combination of the health care businesses of Metropolitan Life Insurance and The Travelers Insurance Group, two 100-year-old companies). It had also acquired several other smaller health plans and health care information/data firms. UnitedHealth's organizational structure consisted of five operating units: UnitedHealthcare, the managed care network's division serving small- to mid-sized employers and Medicare and Medicaid products; Uniprise, delivering health care products to large employers/organizations; Ovations, targeting Americans aged 50 years and older; Specialized Care Services, encompassing UnitedHealth's Behavioral, Dental, and Care/Disease Management businesses; and Ingenix, the information technology division. These business units have accountability for their respective markets' ability to leverage United Health's assets.

In the fall of 2003, UnitedHealth bought Golden Rule Financial Corp., for a reported \$800 million. Indianapolis-based Golden Rule was one of the first companies to utilize health savings accounts as well as offering financial services, life insurance, and general health insurance. The acquisition was perceived by analysts as a strong buy for UnitedHealth that was rumored to be positioning itself for HSA sales. In 2005, it purchased Definity Health for \$340 million; Oxford for \$4.6 billion, and PacifiCare for \$8.1 billion.

CIGNA, Inc. (NYSE: CI) provided coverage in 2004 to over 9.7 million and produced revenues of approximately \$18.2 billion. Like Aetna and UnitedHealth's businesses, CIGNA's health care division grew out of its 200 year old insurance businesses. CIGNA Corporation was formed in 1981 from the combination of Insurance Company of North America ("INA") and Connecticut General ("CG"). CIGNA's foray into the managed care arena came in 1987 with the conversion of Allied Signal, a large employer customer, from an indemnity medical program to a managed care plan. While much of CIGNA's growth was organic, in 1990 it acquired Equicor, then the sixth largest employee benefits insurer and in 1997, Healthsource. At the same time, it divested its Individual Life and Annuities business to Lincoln National (1998) and its Property and Casualty business to ACE Limited (1999). CIGNA's mid-2004 market capitalization was \$9.7 billion, down from \$15 billion in 2001.

Regional and Local Payers

Strong regional and local niche payers have established strong market positions and continue to compete with the Blues and national commercial payers. Local niche payers maintain smaller memberships but have well-established share and brand equity in their particular markets. Often, their competitive position is driven by the high quality of their networks.

Two of the more prominent regional payers were founded in California: Health Net Inc. (NYSE: HNT) and PacifiCare Health Systems (NYSE: PHS). **Health Net**, formerly Foundation Health Systems, began in 1979 and maintained a \$3.5 billion market value in 2003 based on 5.5 million members and revenues of \$11.1 billion. **PacifiCare** was the largest Medicare+Choice (Medicare managed care option) payer in the U.S. with approximately 700,000 Medicare+Choice members among its 3 million members. Since the 1997 Medicare payment reductions, PacifiCare has experienced financial challenges with the result that, by 2004 its market capitalization reached \$4.8 billion despite \$11.5 billion in revenues and operations in eight states.

Humana (NYSE: HUM) provided coverage to 7 million members in 2004, reported revenues of \$13.1 billion, and had a market value of \$4.7 billion. Humana began as a nursing home operator in

the 1960s, grew to the largest hospital company in the early 1980s, and in 1993 spun off its hospital business to focus on managed care operations.

Kaiser Permanente may be considered a regional carrier though its model is different from most payers. Kaiser uses Kaiser-owned hospitals and other bricks-and-mortar facilities as centralized points of care, in contrast to most payers that contract with independent physicians and hospitals. Most of Kaiser's physicians are organized into a group that contracts exclusively with its health insurance arm. Group plan members can generally receive services only at facilities owned by Kaiser and staffed by Kaiser physicians. With its origins dating back to prepayment plans for California construction workers in the 1930s, Kaiser managed care for over 8.2 million members in eleven states and the District of Columbia in 2004 and was the largest not-for-profit HMO in the United States. In the late 1990s, Kaiser sustained losses of nearly \$1 billion because of a troubled national expansion plan and consumer resistance to its group model.

UnitedHealthcare purchased Oxford for \$4.6 billion in 2004. **Oxford Health Plans** (NYSE: OHP) had attempted to grow into a strong regional presence but suffered severe financial problems in the late 1990s and reverted to a turnaround strategy in their current Tri-State (CT/NJ/NY) market. Due largely to their high-quality provider network, in mid-2004 Oxford maintained approximately 1.5 million members, \$5.34 billion in 2003 revenues, and a \$3.84 billion market value. Among other local niche payers that boast compelling network quality are Fallon Community Health Plan and Harvard Pilgrim Health Care, in Massachusetts. Each of these niche managed care organizations (except Oxford) have been recognized by *U.S. News & World Report* as among the 10 best HMOs in the country.

While these companies face substantial ongoing business challenges and threats, many local niche payers have held their market share with significantly smaller asset bases. Yet, Tufts Health Plan demonstrates the problems that smaller plans may incur. The 2004 \$3.8 million operating loss escalated to a \$13 million operating loss in just the first quarter of 2005. The plan has lost 23% of its membership over the past five years, dropping to just below 700,000.³⁸

Competitive Forces

The primary drivers of competition among payers are the caliber of their medical and administrative services, costs, provider networks for managed care products, and customer service quality.

Payers want to contract with the most cost effective market providers (physicians, specialists, and hospitals) to minimize the cost of care. Provider selection is not simply based on lowest-cost, however; high quality care, that reduces the incidences of complications, re-admissions and follow up visits, is the more desirable outcome. A key component of this selection process is the collection and analysis of accurate data. Managed care companies face quality concerns about their contracted provider panels. In the early 1990s, the National Committee for Quality Assurance (NCQA) evolved to evaluate and monitor the performance of managed care plans and NCQA accreditation has become a critical criterion for measuring health plan quality.³⁹

Projected costs of quality medical care vary with payment terms or contracts negotiated with provider organizations. They also depend on the underwriting policies (criteria for evaluating and pricing liability or coverage benefits) of the payer and, where relevant, the level of risk an insurer is willing to bear on behalf of a purchaser. Integrated delivery networks (IDNs) have agreed to capitation contracts, thus bearing some risk for health care costs as well as actually rendering care. Because capitated payment arrangements involve carriers' paying a fixed amount per month per

patient to IDNs or health systems for covered member, payers can shift some risk to the provider organization/IDN. Likewise, if an employer/purchaser chooses to self-insure, the payer does not bear any risk for health care costs but does have exposure to the costs of administering the self-insured employer's programs.

Competition among payers is also based on the administrative costs associated with benefit coverage, including processing claims and answering telephone calls and customer service inquiries, among other activities. These activities are frequently evaluated with performance metrics. For example, the time-to-process metric measures the speed of processing a claim received from a provider or member. Larger employers/purchasers demand performance guarantees from payer vendors to maintain certain levels of service during the term of the contract.

C Coalitions and associations In many markets, employer coalitions have become powerful influences and bellwethers closely monitored by payer organizations. Groups like Buyers' Health Care Action Group in Minnesota have developed unique employee choice models that incorporate quality measurements.⁴⁰ Other interested parties include CalPERS, Pacific Business Group on Health and the Leapfrog Group, a collection of many large U.S. employers that pursue initiatives to improve the quality of care as well as the role of payers. These entities pressure payers on issues such as quality and cost as well as on legislative developments. Similarly, payers have coordinated efforts through the American Association of Health Plans, the Coalition for Affordable Quality Healthcare, and other groups to exert political, social, and industry influence.

Drivers of Change

N Non-profit status Even though the Blues lost their tax-exempt status in 1986, some states continued to accommodate Blues plans. In the case of Empire BCBS, New York State created tax benefits (funded by commercial insurers) to offset Empire BCBS's operating losses through the early 1990s. And, under the Medicare program, the Blues received payments for actual administration costs as intermediaries. Despite these distinctions, as well as large historical market shares in many communities, the success and growth of commercial payers applied considerable pressure on Blues plans.

One study identified two main advantages of for-profit payers: access to capital and attractive management incentives. The former enables payers to finance critical investments in infrastructure and expansion opportunities, with the example of UnitedHealth Group's average annual expenditure of \$100 million for IT upgrades. As for the latter, Booz-Allen estimated a \$7.8 million differential in CEO compensation for for-profit payers compared to nonprofit payer CEOs, driven in large measure by stock options.⁴¹

As health care costs increased in the 1980s and 1990s, commercial carriers and entrepreneurs, such as U.S. Healthcare, introduced managed care products to control them. They also forced competitors to improve their internal operations and quality of service. These pressures tended to benefit commercial payers with the financial and operational discipline to focus on profit. In contrast, Blues payers were frequently required to provide coverage to all applicants (as the insurer of last resort) to maintain their favorable status. Moreover, their quality of operations created service challenges and dissatisfaction among provider organizations that manifested themselves at times with less aggressive financial discounts. In addition, some states required Blues carriers to maintain certain levels of staffing as part of their Blues credentials.

These competitive challenges pushed many Blues payers to pursue new strategies: consolidation to reduce costs and a newly awakened focus on profitability. In 1999, the pretax profit margin of

publicly traded Blues payers was 2.5%, while the overall Blues margin was 0.8% and some speculate that this trend will likely continue in light of increased competitive forces within the payer industry.⁴²

Consumer-driven health care Two new types of payers have entered this difficult market: new consumer-driven health care (CDHC) companies are attempting to capitalize on the current powerful consumer empowerment trends within health care and many financial services providers are closely considering opportunities for new payer models with money management features tied to funds allocated for health benefits.

CDHC payers such as Definity Health, Lumenos, and Vivius have received sizable venture capital investments and have developed payer models that place substantially more responsibility on individual consumers for managing their health care needs.⁴³ These offerings incorporate consumer choice, structured clinical knowledge to enable informed consumer decisions, and new technologies for greater administrative efficiency. These vehicles allow individuals to gain autonomy over the decision of how to spend funds dedicated specifically for health care. In 2004–2005, Definity was purchased by United for \$340 million and Lumenos by WellPoint for \$180 million.

Financial service firms, such as Fidelity, have identified CDHC approaches to be as potentially successful as the explosion of 401K offerings 30 years ago. Moreover, they envision a convergence of funds for personal consumption—whether intended for wealth or health management. Financial service companies have considerable expertise in customer service, highly automated administration, and data analysis skills to better address new health care consumers' needs. Fidelity, for example, has made considerable inroads into a benefits administration business that leverages its investment management capabilities.

The Internet Critical drivers of change are new technologies and Web-based applications. All payer constituencies—providers, employers, and consumers, as well as the payers themselves—are incorporating new software and information technology into their operations and business processes in an attempt to improve efficiency, profitability and satisfaction.

Along with the expanded choices delivered through new consumer-oriented products, the Internet offers consumers capabilities that enhance these new approaches: improved customer service with 24x7 access to benefit inquiries, claim status information, and other member self-service functions. Many health care consumer Web portals also provide this level of accessibility for medical information.

Another CDHC tool, provided by companies such as ChoiceLinx and Asparity Decision Solutions (Decision Innovations, Inc.), uses Internet-based applications that allow individuals to identify plan and benefit preferences. The software then identifies plans that meet their criteria. ChoiceLinx' solutions enable custom-designed coverage incorporating actuarial knowledge and financial parameters to manage members' and payers' risk exposure as well as supporting the calculation of custom-designed insurance policy costs at the point of design. Asparity's artificial intelligence technology applications, used by the Federal Employees Health Benefit Program and IBM, help users identify the plan attributes most important to them and then to select plans that most closely match these attributes. These business models deliver consumer empowerment and reduce administrative costs.

Employers and payers are also introducing and in many situations extensively using Internet-based benefit enrollment applications. These can be offered through consultants or other technology vendors all of which migrate from a paper process to an electronic one.

Leveraging the Internet to improve business processes and operating costs is another critical development being explored by payers. In addition to benefit enrollment applications, administrative transactions such as provider claim submission, claim payment, and member eligibility verification that require manual intervention and paper forms are early targets for implementation. Electronic claims submission has increased from 57% in 1996 to 67% in 2000, of a total of 5.1 billion claims annually. The percentage varies from 73% of the total by United to 29% by Healthnet.⁴⁴ While the overwhelming percentage of these claims are conducted through Electronic Data Interchange (EDI) vendors, many new and existing technology companies (as well as some payers) are aggressively developing Internet-based claims submission formats.⁴⁵ HIPAA legislation has mandated standard file formats for these types of transactions, a crucial variable to encourage more widespread adoption of electronic mediums.

Legislation The legislative environment continues to pressure payers. The Patients Bill of Rights and HIPAA mandates requiring plans to achieve compliance represent major business initiatives for payers and providers.⁴⁶

Brokers and Consultants for Employers/Purchasers⁴⁷

Employee benefit consultants and insurance brokers provide advice and guidance to employers when choosing payers/insurers.

In general, payers partition employers/purchasers into three broad categories: (1) the large or jumbo market (10,000 or more employees). They frequently require coverage in multiple states; (2) the middle market consists of companies in between the large and small market segments; and (3) the small market typically includes employers with 200 or fewer employees.

Large employers Almost all large employers use the leading benefit consultants to design self-insured policies and multiple health care products for their employees. Consultants compete for customers based on their prices/fees for services, demonstrated abilities to facilitate desirable human resource solutions, and personal relationships from past engagements. For both consultants and payers, the jumbo employer has significant leverage in pricing discussions.

Middle-sized employers The middle market is the most diverse in nature, ranging from fully-insured to self-insured policies and from single plan selection to multiple plan offerings. While these employers, on the whole, provide larger financial contributions to employee coverage than jumbo or small employers, they also strive for the lowest possible coverage cost. When these employers represent a sizable employee presence within a certain geographic area, they have more leverage in payer pricing or plan offerings.

Middle market employers most often use insurance brokers or smaller benefit consultants in choosing their plans and payers. Companies select a broker or consultant based on a number of variables: area of expertise, past history or resulting from a competitive process. Personal relationships play a major role in the selection process.

Various small employers Small employers, especially those with 50 or fewer employees, are subject to state regulations that require payers to file managed care products and their associated rating methodologies with each state insurance commission. Small companies that may not have a human resource manager, will likely choose one plan for all employees and will not contribute as much to the total employee cost as do larger employers (and may not offer or contribute to other coverage options such as dental and disability). Payers that offer only fully-insured coverage to small employers charge rates typically 8%–12% higher than for larger employers because they develop community-rated actuarial methods for small employers, as opposed to experience-rated

underwriting policies used for large, multi-regional employers. Small employers may hire an insurance broker for assistance in purchasing their insurance policies, although their decision is frequently driven purely by costs. Although the lowest cost plan will offer the least benefits, it nevertheless provides coverage employees may not purchase as individuals.

Fees Consultants and brokers offer two different approaches to providing advice on health care coverage selections: consultants charge per-project and brokers work on a commission basis. Large- or middle-market employers engage consulting firms to assist with evaluating current programs, considering new benefit strategies, and managing the vendor selection process. (See Exhibit 5 for a list of the largest consultants and brokers.)

Among the largest benefits consultants are Hewitt Associates, based in Lincolnshire, IL, and Towers Perrin, headquartered in New York City. Industry estimates peg annual 2003 revenues at \$2.156 billion for Hewitt and \$1.5 billion for Towers Perrin. Publicly-traded Watson Wyatt (NYSE: WW) produced \$702 million in 2004 revenues with a mid-2004 market value of \$832 million.

For these firms, benefits and human resource technology solutions were the fastest growing areas. Payers direct commission payments to brokers once premiums are collected from employers. Commission overrides, based on the volume of business a broker places with a particular insurer, provide additional broker compensation. Overrides enable payers to reward brokers for increased business and the maintenance of existing revenues; but they also create conflicting interests for brokers.

The Washington Legal Foundation maintains that these payments encourage brokers to shift customers to insurers from which they will profit in contingency fees (while the customer does not necessarily benefit). One large brokerage firm settled a 2004 lawsuit by Elliot Spitzer, New York State's Attorney General, agreeing to pay clients \$850 million.

While insurance brokers receive their revenue from payers in the form of commissions, these dollars may actually be funneled through General Agents before being redirected to individual brokers. Most brokers operating independent businesses are affiliated with a general agent to manage this process. Payers typically work directly with brokers of sufficient size (either overall brokerage size or sales volume placed with that particular payer) and use general agents who usually receive a larger commission percentage, to streamline broker distribution operations.

General agents receive a commission (typically 7%) for performing administrative duties including activities such as individual medical underwriting related to employers with under 100 lives, while brokers may receive a 5% commission directly from payers and take on the administrative role for employer groups larger than 100 lives.

Structure and Services

The insurance brokerage market is very fragmented with a small number of firms representing a sizable portion of the employer market, and a sizable universe of brokers operating largely as independent firms. The only real barrier to entry for the small brokerage model is the relationship with payers' decision makers (company management). Many brokers are former payer salespeople who have established employer relationships, developed domain expertise, and hope to gain career independence. Because of these personal relationships, broker of record status has a relatively high retention rate.

Among the larger brokerage and consulting firms, competition is based on the following variables:

- Domain expertise and demonstrated results.
- Relationships with payers that dominate certain markets.
- Distribution capabilities for numerous products and coverage options that meet employers' full range of insurance needs.
- Personal, established relationships with buyers.

Both consultants and brokers have expanded their service offerings in the areas of benefit administration—especially Internet-based technologies that simplify the benefits management process—and/or full benefits administration outsourcing. The tools once available only to consultants or large brokerage firms are now accessible by employers. Thus employer intermediaries have moved into different service areas to maintain their client bases.

Through Internet-based applications, a number of new companies have entered the market to assist brokers and consultants meet client needs. Some consulting firms have developed their own technology solutions: Hewitt introduced Sageo, an Internet-based health and welfare benefit solution application that, by 2003, although it failed to meet expectations, nevertheless, enrolled approximately 16 companies with more than 400,000 members; Towers Perrin offered employers Internet-based administration tools for benefits enrollment processes that can be leveraged in-house; and William M. Mercer Consulting, the consulting arm of MarshMacLellan Inc., and Buck Consultants of Mellon Financial Corporation, offer Web enrollment solutions that support employers' needs for improved efficiencies in benefits administration processes. Buck engaged WebMD's BenefitCentral application to offer clients Internet-based enrollment capabilities while Watson Wyatt developed less customized Internet-based solutions for customer solutions internally.

As consulting and brokerage firms expanded their service offerings, competition from other service firms became more pronounced, as well-established service and software companies entered the benefits arena. Fidelity, the world's largest money manager, quickly penetrated the benefits administration business to leverage and expand its 401K/defined contribution pension business. "(Employers are) looking to choose a full-service provider, because they can't continue to invest in systems and technology in order to offer their employees the latest tools and services. The cost to do that is accelerating quite a bit," said Jack Callahan, executive vice president of Boston-based Fidelity Outsourcing Services Co., a unit of Fidelity Investments.⁴⁸ Additionally, as consulting firms offer more comprehensive human resource solutions, they face encroachment from companies such as PeopleSoft and SAP with large market shares in the Human Resources Information Systems (HRIS) market and are dramatically improving their Web self-service capabilities. For the individual, the potential to centrally manage their retirement, health care and other benefits can be both convenient and valuable.

Government Funding of Health Care

The growth in the federal, state, and local governments' share of health care expenditures—they increased from 31% in 1987 to 45.6% in 2003—was mostly experienced by the two largest government health care plans—Medicare and Medicaid. Medicare is a federally-funded program and Medicaid is funded jointly by the federal government and individual states. Other public programs fund health care services for military personnel and their families, veterans, Native Americans, refugees, and disabled persons.

Medicare

Medicare is administered by the Centers for Medicare and Medicaid (CMS) and the Social Security Administration, both part of the U. S. Department of Health and Human Services. There are separate

trust funds for Parts A and B. In 1965, Congress included Title XVIII, "Health Insurance for the Elderly and Disabled" (also known as Medicare) among other amendments to the Social Security Act. The plan was initially proposed for the elderly poor but the final version provided benefits to all elderly regardless of income, with eligibility based on the work experience of the beneficiary or their spouse, as with Social Security. Thus, most persons over age 65 were covered. In 1973, benefits were extended to persons who received disability benefits for more than 24 months, end-stage renal disease patients, and certain others who elected to buy into the program. Hospice care, i.e., palliative care for the terminally ill composed of pain relief and supportive social services, was added in 1983. By 2003, Medicare covered 39.6 million people over aged 65, and Medicaid 2.5 million.

Coverage and eligibility Medicare combines Hospital Insurance, known as Part A, with Supplementary Medical Insurance to cover doctors' bills, known as Part B. Part A, largely paid through employer contributions reimburses costs for care provided in inpatient hospitals, rehabilitation or skilled nursing facilities (SNF), homes, and hospices. SNF care is limited to beneficiaries who have been hospitalized for at least 3 days and then only for a term of 100 days. SNF coverage is offered for persons with a life expectancy of fewer than six months.

Optional supplementary medical insurance (SMI) coverage enhances Medicare Parts A and B. Though nearly all Part A beneficiaries choose to enroll in Part B, SMI benefits include some physician services, diagnostic tests, radiology, pathology, transfusions of blood, drugs administered in the hospital, medical supplies, physical and occupational therapy, speech pathology services, and outpatient mental health.⁴⁹ The monthly premium for Supplemental Medical Insurance is \$54.

Like most conventional health insurance plans, Medicare covers a major portion but not all charges for medical care and enrollees pay premiums, deductibles, and coinsurance. About 12% of Medicare enrollees also qualify for Medicaid. Fewer than 12% of the Medicare-eligible population rely on Medicare alone for their health insurance needs. See **Table 10** for a brief overview of benefits.

Charges not covered by Medicare are paid either by the patient (or by Medicaid if the patient is poor) or by supplemental private insurance, known as Medigap. In 1990, Congress requested that the National Association of Insurance Commissioners develop a range of standardized Medigap policies. Although insurance carriers are not required to offer Medigap, if they do, their policies must adhere to one of ten standardized policies. Despite the additional coverage, elderly Americans spent on average 12.2% of their disposable income on health care, primarily for drugs and long-term care, as compared to 5.1% spent by nonelderly.

Insurance provided the least coverage for Medicare enrollees. Their out-of-pocket costs accounted for 29%–40% of their disposable incomes. (For the uninsured, personal out-of-pocket costs averaged 29% of income.)⁵⁰ The Medicare Prescription Drug Improvement and Modernization Act of 2003, which included prescription drug coverage, hoped to reduce this burden. As of May 2004, seniors could choose to enroll (availability varied by area) in one of many Medicare-approved discount drug card programs for an average annual fee of \$30 (some cards have a lower annual fee, others have no annual fee). The card offered savings of from 16%–30% on retail prescription drug prices, from 11.5%–17% on average retail prices for brand-name prescription drugs, and from 30%–60% on mail order and generic prescription drugs. Medicare participants may enroll in the prescription drug discount card if they do not receive outpatient prescription drugs through Medicaid. Discount drug cards are voluntary and low-income seniors may apply for a \$600 credit on their Medicare-approved drug cards for 2004 and 2005. Medicare pilot programs, including a \$500 million two-year six-state effort for a minimum of 50,000 patients, will cover a limited category of self-administered drugs. Congress has stipulated that no less than 40% of these funds are to be earmarked for oral cancer prescription drugs.

Table 10 Medicare Covered Services, 2005

Medicare Part A Covered Services	Co-Insurance Per Benefit Period ^a
Hospital Stays: semiprivate room, meals, general nursing and other hospital services and supplies. Does not include private duty nursing, private room (unless medically necessary.).	Deductible of \$876 for hospital days 1-60 \$219 per day for days 61-90 \$438 per day for days 91-150 (lifetime reserve days) ^b
SNF Care: semiprivate room, skilled nursing and rehabilitative services, and other services and supplies. Beneficiaries are eligible for SNF care after a three-day hospital stay.	\$0 for the first 20 days Up to \$109.50 for days 21-100 All costs beyond 100 days per benefit period
Home Health Care: part-time skilled nursing care, physical therapy, occupational therapy, speech language therapy, home health aide services, durable medical equipment, and medical supplies	No co-insurance for home health care services
Hospice Care: medical and support services from a Medicare-approved hospice for people with terminal illness, drugs for symptom control and pain relief, and other services not generally covered by Medicare. Hospice care is given in the home; however, short-term hospital and inpatient respite care is covered when needed.	\$5 co-payment for outpatient prescription drugs 5% of Medicare-approved payment amount for inpatient respite care
Blood: received at a hospital or SNF during a covered stay.	Payment is required for the first three pints of blood unless beneficiary or someone else donates blood to replace what is used.
Medicare Part B Covered Services	Co-Insurance Per Benefit Period
Physicians Services: surgical second opinions, diagnostic testing, physical therapy	\$100 deductible (once per calendar year) 20% of Medicare-approved amount after yearly Part B deductible 50% outpatient mental health care
Clinical laboratory Services: blood tests, urinalysis	\$0
Home Health Care: Part-time skilled nursing care, durable medical equipment (wheelchair, hospital bed)	\$0 20% of Medicare-approved amount for durable medical equipment
Outpatient Hospital Services: hospital services or supplies received as an outpatient	Varies according to service
Preventative Services: cancer screening: breast, cervical, prostate; Shots: flu, pneumococcal pneumonia, hepatitis B; Diabetes services: glucose monitoring	20% of Medicare-approved amount after yearly Part B deductible Flu and pneumococcal are free to patient

Source: www.medicare.gov.

^aBenefit Period: the way Medicare measures use of hospital and SNF services. A benefit period begins the day a beneficiary enters the hospital or SNF and ends when the beneficiary has received hospital or SNF care for 60 days in a row. If a beneficiary is admitted to the hospital after one benefit period ends, a new benefit period begins and the hospital inpatient deductible must be paid again. There is no limit to benefit periods.

^bLifetime reserve days: 60 days that Medicare will pay when beneficiaries are hospitalized for more than 90 days. These 60 days can be used once only during a lifetime. For each reserved day Medicare pays all covered costs except the \$406 daily co-insurance amount.

Though the Medicare bill aided low-income seniors in obtaining prescription drugs,⁵¹ both Republicans and Democrats objected to some of its features. The most controversial item was its reliance on competing pharmaceutical prescription benefit managers, rather than the Federal government, to control drug costs. Some members of Congress and health care analysts characterized the bill as a boon to the drug industry: Deutsche Bank noted that it would spur a significant sales volume increase and estimated increased profits of \$10 billion.⁵² Senator John McCain, R-Arizona, among others, also found fault with the bill's prohibiting reimportation of prescription drugs from Canada.

Financing As shown in **Table 11**, total expenditures for Medicare were \$265.7 billion in 2002, with about 39.1% of Part A funds spent on hospitalization. The proportion spent on hospitals has declined while expenditures for outpatient hospital services and home health care have steadily increased.

Table 11 Medicare Expenditures, According to Type of Service, 2002

Type of Service	Expenditures (in US\$ millions)
Total Expenditures	\$265.7
Total hospital insurance	\$152.5
Managed care	19.2
Inpatient hospital	104.1
Skilled nursing facility	15.3
Home health	6.3
Hospice	4.9
Administrative expenses	2.6
Total supplementary medical insurance	\$113.2
Managed care	17.5
Physician	44.8
Hospital	13.5
Home health	4.0
Durable medical equipment	6.6
Laboratory	5.0
Administrative expenses	2.2

Source: Adapted from National Center for Health Statistics, *Health, United States, 2004* (Hyattsville, MD: Public Health Service, 2004): 360.

In 2005, Medicare expenses for Part A were funded by a mandatory 2.9% payroll tax, paid by employees and employers, or by a 2.9% self-employment tax. Part B was funded directly by enrollees and matching general revenue contributions from the federal government.

Table 12 indicates that 2003 expenditures in the Hospital Insurance fund (Part A) were covered almost entirely by payroll taxes and return on equity. The Supplementary Medical Insurance fund depends heavily on contributions from general revenues.

Table 12 Payments, Benefits and Assets: Medicare Trust Funds and Percent Distribution, 2003

	Hospital Insurance Trust Fund (in US\$ billions)	Supplementary Medical Insurance Trust Fund (in US\$ billions)
Benefit Paid	\$152.1	\$123.8
Payroll Taxes and Premiums	159.2	27.4
General Revenues	—	86.4
Interest	15.8	2.0
Assets	256.0	24.0

Source: U.S. Census Bureau, *Statistical Abstract: 2005*, Table 131.

Medicare payments represent a significant share of the revenues of many health care organizations and are critical to the survival of many hospitals, particularly in many rural areas. As a result, Medicare provides additional payments to hospitals that are the sole community provider in rural areas. It also pays extra to hospitals that serve a disproportionately large number of low-income patients, known as Disproportionate Share Hospitals (DSHs), and to teaching hospitals. Hospitals that qualify for more than one of these extra payments often receive considerable revenues.

Medicare's growth rate generally exceeds that of national health expenditures by several percentage points, partly caused by increasing numbers of elderly enrollees. But on a per capita or per enrollee basis, which adjusts for the increase in volume, growth in Medicare spending continued to exceed that of the nation as a whole from 1980 to 1985 and since 1990.

Medicaid

Title XIX of the 1965 amendments to the Social Security Act established Medicaid at the same time as Medicare. It provided a vehicle for federal government assistance to states' medical care for the poor. The federal government established a framework for determining Medicaid eligibility. States must satisfy these minimum requirements but otherwise have considerable leeway in how they choose to design their programs. In 2002, it had 49.8 million recipients with average vendor payments per recipient of \$4,291.⁵³

Coverage and eligibility Eligibility requirements for Medicaid focus on poor families with children and the medically needy.

States may provide coverage to other groups, such as infants whose family income exceeds the poverty level, caretaker relatives or institutionalized persons with low incomes. Income thresholds for Medicaid vary by state. For example, in 2004, a family of three in which the mother was either pregnant or with children under age six were eligible for Medicaid in all states if their household income was less than \$20,241 (133% of the Federal Poverty Level).⁵⁴

Although Medicaid was designed as a health care program for the poor, its emphasis on eligibility for families with children means that not all persons with incomes below the poverty level qualify. Of the 31 million Americans living in poverty in 2000, Medicaid insured 12.4 million, leaving 9.2 million with no health insurance.

The bulk of Medicaid payments are for the disabled and elderly. As shown in **Table 13**, these two groups represented 11.6 million Medicaid recipients, roughly a quarter, and \$121.8 billion of the \$195

billion of 2004 expenditures. When elderly persons qualify for both Medicaid and Medicare, Medicare is the primary payer, and Medicaid pays Medicare premiums, deductibles, and copayments. The cost of nursing home care is paid by Medicaid. Some of these beneficiaries have dissipated their personal savings for medical care before turning to Medicaid, while others claim Medical indigence by transferring their assets to loved ones.

Table 13 Medicaid Recipients and Payments, by Type of Eligibility, 2004

Type of Eligibility	Total Recipients (in million)	Total Expenditures (in billions)
Total	42.8	\$194.7 ^a
Aged 65 or over	4.1	46.5
Permanent and total disability	7.5	75.3
Children	21.6	27.9
Adults	9.6	18.5

Source: U.S. Census Bureau, *Statistical Abstract: 2004*, Table 131.

^aIncluding administrative costs.

The federal government stipulates the minimum health services states must provide under Medicaid, including inpatient hospitalization, outpatient hospital services, services at rural health clinics, laboratory and x-ray tests, SNF care, physician services, home health care, nurse-midwife services, and pediatric nurse practitioners. Some states choose to provide additional services, such as prescription drugs or dental care.

Although states are required to offer all enrollees the freedom to choose any qualified provider, the Secretary of U.S. Department of Health and Human Services can grant waivers of this requirement. For example, waivers may be granted for promising experimental programs that could be adopted nationwide. They may also permit states to restrict the providers that Medicaid recipients use (i.e., managed care) and to extend benefits to individuals who do not normally qualify. In 2004, 60.7% of enrollees were in managed care with average annual payments of \$5,012.⁵⁵

Financing Unlike Medicare, Medicaid programs do not receive funds from payroll taxes or patient cost sharing (deductibles, premiums, or copayments). Although some states raise Medicaid funds by taxing providers, programs are primarily financed from federal and state general revenues.

In 2002, the federal government paid 57% of Medicaid and states paid the remainder. States typically reimburse providers for services at predetermined rates and then apply for matching funds (**Table 14**). The federal match is based on the mean income of each state, with wealthier states receiving less federal money.

Medicaid expenditures per enrollee have grown at higher average rates than for Medicare or for the nation as a whole. Further, the surge in the population which qualifies for Medicaid has fueled extremely high rates of growth in total state and federal expenditures. Some states are overwhelmed by these costs, as Medicaid consumes significantly larger portions of their budgets each year.

Table 14 Medicaid Expenditures on Vendors per Recipient, 1975–2001

	Total Recipients (in millions)	Expenditures Per Recipient	Average Annual Percent Increase
1975	22.0	\$ 556	
1980	21.6	1,079	14.20%
1985	21.8	1,721	9.80
1990	25.3	2,564	8.30
1995	40.6	3,501	6.40
2000	42.8	3,936	2.40
2001	46.0	4,053	2.90

Source: *Health United States, 2004*, Table 139.

Government Cost Containment Programs

Before 1983, Medicare payments to providers were based on actual costs. Because this *retrospective payment* method did not provide any incentive for efficiency, the Social Security Act Amendment of 1983 introduced the concept of a fixed sum paid in advance for each type of diagnosis, known as a *prospective payment*. Prospective payments were based on Diagnostic Related Groups (DRGs), a taxonomy of diagnoses comprising 509 categories originally proposed by researchers at Yale.

Because regulators could not find a consistent correlation between quality of care and price, there seemed to be justification for trying to set payment rates that would not depend solely on a given hospital's costs. No parameter—the number of beds, the length of a patient's stay, the number of admissions—correlated with costs paid to hospitals using retrospective reimbursement. Prospective payments based on the DRG were expected to discourage excess treatments and unnecessarily lengthy hospital stays. If a hospital provided care efficiently it could realize a gain on the standard DRG payment system. DRG payments are determined by Congress with recommendations from the CMS (part of the executive branch) and MedPAC (part of Congress). Hospital payments are based on a patient's diagnosis group and the severity of the illness. There are additional payments for hospitals that treat a disproportionate share of low income patients, teaching hospitals, and sole rural providers.

In 1989, Medicare's Physician Payment Reform Program (MPPRP) was established to regulate physician payments. MPPRP created a national Medicare Fee Schedule for physician services based on a resource-based relative value scale (RBRV). RBRVs set prices by evaluating the input resources for each physician service or procedure. There are more than 7,000 procedure codes.⁵⁶

A 1992 government study claimed that Medicare covered only about 90% of its patients' hospital costs, and Medicaid covered only 80%. For all services, Medicaid payments covered little of costs in some states, but up to 104% in others (Field and Shapiro 1993). The validity of these studies is hampered by the absence of meaningful cost information; but, if reimbursement does not cover costs for patients in public plans, providers are forced to shift those costs to patients in private plans, driving up rates for private insurance.

Health Financing Reform Proposals

All proposals for national health care reform aim to improve access to care, control costs and improve inefficiency in health care delivery. Many Americans cannot access health care and increasing costs have imposed considerable burdens on business, consumers, and tax payers. The growth in budgets devoted to health care by local, state, and federal governments has constricted other important programs and pressured governments to raise taxes. U. S. businesses have also felt these pressures; by 1989, corporate spending for health care benefits exceeded after-tax profits (Levit and Cowan 1990).

Uninsured

The high cost of health care also affects insured Americans. In 2003, 17.7% of nonelderly Americans lacked insurance. The uninsured have varied economic and demographic characteristics: about 55% are working adults and 20% are children.⁵⁷ As shown in **Table 15**, 32.5% of the uninsured had 2003 annual incomes of more than \$50,000. Most people who lack insurance cite the high cost of premiums as the main reason they are uninsured. Other significant factors include the loss of employment or employment with a firm that does not offer health insurance; a small percentage of the uninsured voluntarily decided not to purchase health insurance; and 3% are unable to obtain coverage because of a history of poor health. The growth in the number of uninsured also correlates inversely with real GDP growth rates.⁵⁸

Table 15 Health Insurance Coverage Status by Selected Characteristics, 2003

	Total	Private Insurance	Medicare	Medicaid	Uninsured
Male	49%	69.6%	13.4%	11.6 %	15.2%
Female	51	48.9	43.2	44.1	54
Age:					
Under 18 years	25.6	26.7	1.3	52.7	19.4
18 to 64 years	62.4	59.2	13.8	37.4	79.9
65 years and over	12.0	14.1	84.9	9.9	0.7
Race/ethnicity:					
White	80.7	81.7	86.2	68.9	75.0
Black	12.5	11.8	9.9	25.0	16.5
Asian	0.04	3.9	2.6	3.6	4.8
Hispanic origin	13.8	10.9	6.5	23.8	29.4
Household incomes:					
Less than \$25,000	22.0	19.9	46.9	58.3	33.9
\$25,000-\$49,999	26.5	25.3	29.9	27.7	33.5
\$50,000-\$74,999	20.5	21.3	11.7	9.0	15.8
\$75,000 or more	30.9	33.5	11.5	6.9	16.7
Persons below poverty	12.1	9.9	13.0	42.2	24.1

Source: "U.S. Census Bureau, *Current Population Reports*, pp. 60-223.

Uninsured persons consumed about \$1,629 per capita of medical care in 2004, as compared with an estimated \$2,975 for those with insurance.⁵⁹ Because the uninsured may seek health care when an illness becomes acute and often at inappropriate or unnecessarily expensive sites such as hospital emergency rooms, reducing the ranks of the uninsured could decrease cost shifting and the use of inappropriate sites for care.

Alternative Reform Proposals

Proposals for health care reform differ in how they attempt to increase access and control costs.

Benefits Some proposals call for standard benefit packages that all plans must provide. Standardized packages are said to be easier for consumers to compare and inhibit providers from designing plans that discourage enrollment of high-risk individuals. However, standard benefit packages also inhibit provider innovation and make it more difficult for insurers to respond to new technology developments or differences in regional health care needs.

Less comprehensive than standard benefit packages are mandated benefits required by the state; for example, New Jersey required all insurers to cover a second day in the hospital for a woman after a normal delivery. Long-term care is a much needed benefit not included in most. Of persons over age 65 in 1990, 43% were expected to use nursing home care, and of those, 55% to stay for more than a year (Kemper and Murtaugh 1991). The annual 2003 costs of \$65,000 for extended nursing home care was considerably beyond the resources of most of its users, given that the median family annual income among people over age 65 was about \$33,812. In the absence of long-term care insurance, many users dissipate their assets and are ultimately forced to turn to public assistance (primarily Medicaid) for assistance.

Recently, the number of private long-term insurance policies has grown. Most policies are offered through employers or sold individually as riders to commercial life insurance policies; by 2002, 8.2 million policies were in force.⁶⁰ General Electric Capital Assurance Company developed Long Term Care Insurance to offer seniors unable to perform certain daily activities, or with severe cognitive impairment. Long term care services can be administered in subscribers' own homes, nursing home or assisted care facilities. A long term care plan, such as that offered by GE Capital, can aid seniors in protecting their financial independence and quality of life by reimbursing them for the cost of covered services and care.⁶¹

Universal coverage Universal coverage can be achieved by several mechanisms. If national health insurance were adopted, the federal government would pay the premiums for all citizens. Alternative proposals would require all employers to provide health care for their workers and for the government to pay for the unemployed. Other proposals suggest that all individuals purchase health care policies on their own and for the government to pay for the poor.

Many reform proposals rely on employer-sponsored health care but differ in specific requirements, such as the proportion of premiums paid by the employer and whether or not part-time workers are covered. There are so-called "pay or play" schemes in which employers "pay" into a regional pool to fund employee' coverage or "play" by providing employees' health insurance.

Any willing provider In an effort to contain costs, some large health care insurers negotiate contracts with an exclusive group of suppliers, believing that exclusive contracts reduce costs through economies of scale. For example, Blue Cross Blue Shield of Massachusetts decided to use only one pharmacy chain in the state, CVS, to fill all prescriptions for which it paid, although other pharmacies offered to match CVS's prices. Such contracts are frequently overridden by "any willing

provider" legislation that stipulates that any supplier that agrees to the terms of a health plan's contract should be permitted to provide services. In April 2003, the Supreme Court unanimously voted to uphold a Kentucky law that forces HMOs to allow "any willing provider" to enter into a company's medical care network. The law, first adopted in 1994 and amended in 1998, does not allow HMOs to discriminate in their selection of local providers if the provider is willing to meet the guidelines set forth by the HMO. Those in favor of the law applauded the decision, as they believed it gives patients broader choices. HMOs, however, have stated that this decision will result in losses and make it more difficult for them to monitor quality of care and costs will increase as deals between HMOs and providers are affected.

Administrator Entities that administer health care policies and enforce regulations may be a government and/or a business. In most national health insurance reform proposals, the government administers and regulates all aspects of a plan. In reform proposals that rely on employer mandates, plans are administered by employers. Plans that include HSAs are administered by employers and individuals.

Assignment

1. Explain the following concepts and their impact on the cost of private health insurance premiums: Type of plan—indemnity, HMO, POS, PPO, consumer-driven; coverage; benefits; financial characteristics of insurance—co-pays, deductibles, maximums; group vs. individual coverage; claims distribution; risk ownership; cost structure; funding arrangement—fully insured, MPP, self-insured with ASOs; rating methods; underwriting cycles; different customer classes; the structure of U.S. health insurers; brokers and consultants; coalitions; Medicare and Medicaid enrollment and payments.
2. What factors explain the presence of uninsured in the U.S.?
3. How should the growth in market share of the following insurance plans affect the marketing, organization, and product selection of the following medical technology and services firms: tightly managed care; PPOs; consumer-driven health care plans; universal health care.

Massachusetts General Hospital?

HCA—a large chain of for-profit hospitals?

Medtronic—a firm that creates high-tech, implantable medical devices?

Forest Labs—a specialty drug firm?

Pfizer—a large pharmaceutical company?

Genentech—a large biotechnology company?

Appendix⁶²

Networks

The following varieties of health care delivery networks were used by managed care organizations.

1. Insurers *directly contract* with providers and create their own health care delivery network.
2. Managed care companies contract with existing provider-created *integrated delivery networks (IDNs)*.
3. Insurers contract with *preferred provider organizations (PPOs)*.

Before managed care, virtually any physician, health care service provider, hospital or nursing home, could join an indemnity insurer, like Blue Cross Blue Shield, Aetna, or CIGNA. Physicians were not screened for their qualifications, educational background, or malpractice history; nor were hospitals and nursing homes certified.

Direct Contracting

With the skyrocketing inflation in health services came the wide spread of managed care in the 1980s. Many HMOs managers thought that exclusive and specific provider networks would control cost and improve quality. Some created their own networks by directly contracting with individual providers and hospitals for the following reasons.

1. Limiting the number of health care providers that rendered services to managed care members would give the HMO greater leverage.
2. Simpler "proof of qualifications" of providers. Proof of qualifications included proof of medical school education, passing medical boards and having board-approved sub-specialties, staff privileges at local hospitals, and few physician-specific malpractice suits; and, for hospitals, JCAHO accreditation and few hospital malpractice suits.
3. Simpler medical informatic studies such as to identify the number of providers of specific specialties the managed care organization needed for subscriber populations in specific regions.

Contracting with Provider-Sponsored Organizations

In the middle 1980s and early 1990s, many HMOs contracted with provider-sponsored organizations, called *integrated delivery networks (IDNs)*. By contracting with IDNs, HMOs jettisoned the responsibilities and costs of creating their own health care delivery networks. Many provider-sponsored IDNs were created to consolidate bargaining power among providers when dealing with insurers. The three most common types of networks were *IPAs (Independent Physician Associations)*, *PHOs (Physician Hospital Organizations)*, and *IHOs (Integrated Healthcare Organizations)*.

An *IPA* is an IDN in which only physicians are integrated. IPAs in turn contract with individual providers for services either on a capitation or a fee-for-service basis and typically encompass all specialties but may be composed of only one specialty. An IPA may also be the physician

organization part of a physician hospital organization. The most common specialty networks are in mental health or behavioral health services, dental services, and chiropractic services. Among specialty networks are Vision Service Plan and American Chiropractic Network.

A physician hospital organization is a loose integration of physicians and a hospital formed primarily to negotiate with third-party payers.

An *IHO* is a vertically-integrated health care delivery system. IHOs frequently have an overarching parent entity, which may own: physician practices; several hospitals, including specialty hospitals, community hospitals and tertiary hospitals; nursing homes; free-standing surgical facilities; and sometimes an insurance function. Partners Health Care in Massachusetts is considered an IHO. Many vertically-run IHOs have failed because they lacked core competencies in each of their many constituent parts. For example, an IHO whose core competency is tertiary hospital management may lack the skills to run the nursing home component.

HMOs may contract with more than one of these organizations within a geographic region. In their contracts, HMOs often stipulate that the IDN is responsible for properly credentialing and qualifying the physicians within their individual networks; the contract payment arrangements apply for a specific period of time; and that the IDN pays individual physicians, nursing homes and hospitals within their respective structures.

Contracting with Preferred Provider Organizations (PPOs)

The three basic types of PPOs are:

Lease-type PPO: an organization that develops provider networks and rents them to one or more payers.

Managed PPO network: a specific plan design in which self-insured employers or health insurers contract for provider services and sometimes utilization management.

Integrated PPO plan: a PPO that directly enrolls its covered lives and adjudicates and pays claims.

In the early to mid-1990s some HMOs began to contract with lease-type or managed PPO networks to develop provider networks. These PPOs created nationwide physician and hospital networks where none existed. Customers for these PPO networks are multiple health insurers that may be expanding into new geographic territories. Some managed care organizations that contracted with lease-type or managed PPO networks were provided with their own case management, pharmacy benefits, or chronic disease management company but most did not. Physicians and hospitals within these networks are paid on a discounted fee for service basis.

The future of PPOs: In 2003, many PPOs faced financial difficulties. Although integrated PPOs had gained membership since 1999, their inability to manage risk, costs or medical care increased the number and amounts of claims. Many health insurers were concerned that lease-type or managed PPO networks lacked cost and quality oversight mechanisms.

Insurer Payment for Networks

When managed care organizations created their own networks, providers were paid either on the basis of *network fee schedules*, *shared risk capitation*, or *primary care capitation*. Capitation pays for a specific set of services on a fixed monthly fee per member. Some physicians share in the savings that accrue for reduced utilization of specialty services and hospital care. In provider-sponsored

organizations, the most common financial arrangement is *full risk capitation* or *integrated delivery system capitation*, that establishes prices for almost all services, thus transferring all financial risks from the health plan to the provider. From 1997 to 2001, there was significant decrease in capitation, caused by provider backlash.⁶³

The most common financial arrangements between PPOs and HMOs were flat rates for the use of the network or a percentage of premiums from employer groups.

Employer Evaluation of Networks

Employers use various criteria to evaluate networks, the most common was *geographic appropriateness*; i.e., providers should be located in the same zip code as the home address of the majority of members. Employer groups also examine the network quality, although there are no standard measures for quality. Many employer groups review HEDIS (Health Plan Employer Data and Information Set) criteria⁶⁴ sponsored by the National Committee for Quality Assurance (NCQA). Employers also review *choice*: how freely members obtain the medical care and services they feel they need. Employers have found that extremely restrictive managed care organizations and networks lead to irate employees.

Appendix

Key Characteristics	HSA	HRA	FSA
Funding Mechanism	<ul style="list-style-type: none"> -Funded accounts (asset) -Contributions by employer, employee, or both -Contributions cannot exceed deductibles—limit of \$2,600 for individuals and \$5,150 for families in 2004 	<ul style="list-style-type: none"> -Notional accounts (liability) -Contributions by employers only -No contribution limit—limits set by employers 	<ul style="list-style-type: none"> -Funded accounts (asset) -Contributions by employer, employee, or both (usually employee) -No contribution limit
Employee Eligibility and Health Plan Requirements	<ul style="list-style-type: none"> -Employees covered by qualified, high deductible plans -Deductibles of less than \$1,000 for individuals and \$2,000 for families -Maximum of out-of-pocket of \$5,000 for individuals and \$10,000 for families -Preventive care can be excluded from deductibles -Overlapping coverage for the same medical expense is not permitted; other plans must cover expenses not qualified under high deductible plans (e.g., dental and vision care) 	<ul style="list-style-type: none"> -All employees -No specific health plan requirements 	<ul style="list-style-type: none"> -All employees except self-employed -No specific health plan requirements
Qualified Medical Expenses	<ul style="list-style-type: none"> -Un-reimbursed Code 213(d) medical expenses -Cannot reimburse insurance premiums other than for COBRA, a qualified long-term care contract, or a health plan while the member is either receiving unemployment compensation or is over age 65 (other than a Medicare supplement policy) 	<ul style="list-style-type: none"> -Un-reimbursed Code 213(d) medical expenses -Premiums for eligible health insurance and long-term insurance -Further limitations subject to employers' discretion -Further limitations may apply for employees with a qualified HSA—no duplicate coverage of same benefits 	<ul style="list-style-type: none"> -Un-reimbursed Code 213(d) medical expenses -Cannot reimburse insurance premiums and long-term care services -Further limitations subject to employers' discretion -Further limitations may apply for employees with a qualified HSA—no duplicate coverage of same benefits
Roll Over of Balances to Next Year	<ul style="list-style-type: none"> -Yes, tax free roll over -No limit on amount 	<ul style="list-style-type: none"> -Yes, tax free roll over -Amount of roll over subject to employers' discretion 	<ul style="list-style-type: none"> -No, use it or leave it
Portability of Account to another Employer	<ul style="list-style-type: none"> -Yes 	<ul style="list-style-type: none"> -Generally not portable but theoretically could transfer to another employer's HRA—no single account portability and amount is subject to employers' discretion 	<ul style="list-style-type: none"> -No
Returns on Funds	<ul style="list-style-type: none"> -Choices of interest-bearing savings accounts and mutual funds 	<ul style="list-style-type: none"> -Notional interests benchmarked to government securities -Notional interests may not be granted subject to employers' discretion 	<ul style="list-style-type: none"> -Not applicable, no roll over balances
Tax Treatments	<ul style="list-style-type: none"> -Employer and employee contributions are pre-tax -Tax-free accumulation -Tax-free withdrawal for qualified medical expenses -Withdrawals for non-medical expenses are subject to income tax and a 10% penalty 	<ul style="list-style-type: none"> -Employer contributions are pre-tax -Tax-free withdrawal only allowed for qualified medical expenses 	<ul style="list-style-type: none"> -Employer and employee contributions are pre-tax -Tax free withdrawal, only allowed for qualified medical expenses

Source: Casewriter.

Exhibit 1 2003 Expenditures for Health Services and Supplies by Source of Funds and Type of Service, in billions

Year and Type of Expenditure	Private						Public		
	Total	All Private Funds	Consumer			Other	Total	Federal	State and Local
			Total	Out-of-Pocket Payments	Private Health Insurance				
National Health Expenditures	1,678.9	913.2	831.1	230.5	600.6	82.1	765.7	541.7	224.0
Health Services and Supplies	1,614.2	892.6	831.1	230.5	600.6	61.5	721.7	507.5	214.2
Personal Health Care	1,440.8	809.2	749.2	230.5	518.7	60.0	631.5	479.8	151.7
Hospital Care	515.9	215.1	193.7	16.3	177.4	21.3	300.8	242.1	58.7
Professional Services	542.0	356.0	322.7	83.8	238.9	33.3	186.1	139.3	46.7
Physician and Clinical Services	369.7	246.8	221.2	37.6	183.6	25.5	123.0	101.3	21.7
Other Professional Services	48.5	34.9	32.1	13.3	18.8	2.8	13.6	8.8	4.8
Dental Services	74.3	69.4	69.4	32.9	36.5	0.0	4.9	2.9	1.9
Other Personal Health Care	49.5	4.9	—	—	—	4.9	44.6	26.3	18.3
Nursing Home and Home Health	150.8	58.6	53.3	37.5	15.7	5.4	92.2	64.1	28.1
Home Health Care	40.0	15.1	13.9	6.6	7.3	1.2	24.9	18.6	6.3
Nursing Home Care	110.8	43.5	39.4	30.9	8.5	4.2	67.3	45.5	21.8
Retail Outlet Sales of Medical Products	232.1	179.6	179.6	92.9	86.7	—	52.5	34.3	18.2
Prescription Drugs	179.2	136.0	136.0	53.2	82.9	—	43.2	25.2	18.0
Other Medical Products	52.9	43.5	43.5	39.7	3.8	—	9.3	9.1	0.2
Durable Medical Equipment	20.4	12.8	12.8	9.0	3.8	—	7.6	7.4	0.2
Other Non-Durable Medical Products	32.5	30.7	30.7	30.7	—	—	1.7	1.7	—
Government Administration and Net Cost of Private Health Insurance	119.7	83.3	81.9	—	81.9	1.5	36.4	20.2	16.2
Government Public Health Activities	53.8	—	—	—	—	—	53.8	7.4	46.3
Investment	64.6	20.6	—	—	—	20.6	44.0	34.2	9.8
Research	40.2	2.5	—	—	—	2.5	37.6	33.3	4.3
Construction	24.5	18.1	—	—	—	18.1	6.4	0.9	5.5

Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, <http://www.cms.hhs.gov/statistics/nhe/historical/t3.asp>, Table 3: National Health Expenditures, by Source of Funds and Type of Expenditure, 2003, accessed July 29, 2005.

Note: Research and development expenditures of drug companies, other manufacturers and providers of medical equipment and supplies are excluded from research expenditures. These research expenditures are implicitly included in the expenditure class in which the product falls, in that they are covered by the payment received for that product. Numbers may not add to totals because of rounding. The figure 0.0 denotes amounts less than \$50 million.

Exhibit 2 2003 Percent of Private Establishments Offering Health Insurance

	Total Employees (in millions)	Employers Offering One or More Major Plans			Exclusive Provider Plan			Mixed Provider Plan			Employees Offered Health Insurance			Eligible Employees Enrolled in Any Plan			Employees Enrolled in Employer's Plan
		Conventional Indemnity	Any Managed Care Plan	Any Managed Care Plan	Retirees Plans (over age 65)	Employees Offered Health Insurance	Eligible Employees Enrolled in Any Plan	Employees Offered Health Insurance	Eligible Employees Enrolled in Any Plan	Employees Offered Health Insurance	Eligible Employees Enrolled in Any Plan	Employees Offered Health Insurance	Eligible Employees Enrolled in Any Plan	Employees Offered Health Insurance	Eligible Employees Enrolled in Any Plan	Employees Offered Health Insurance	
< 10 employees	14.4	35.6%	16.4%	81.1%	35.9%	52.3%	2.3%	45.8%	79.2%	45.8%	79.2%	70.6	70.6	77.4	77.4	65.1%	
10 to 24 employees	9.8	66.2	13.0	88.9	37.8	56.6	3.7	70.6	70.6	70.6	70.6	84.1	84.1	84.1	84.1	60.1	
25 to 99 employees	15.1	81.0	9.8	93.5	36.8	66.0	4.9	77.2	77.2	77.2	77.2	95.8	95.8	95.8	95.8	57.7	
100 to 999 employees	20.7	93.5	8.3	95.8	36.6	76.9	9.9	79.7	79.7	79.7	79.7	98.7	98.7	98.7	98.7	61.1	
1,000+ employees	50.9	98.6	14.8	97.3	44.0	92.3	40.9	98.7	98.7	98.7	98.7	81.7	81.7	81.7	81.7	65.1	
Total	110.9	56.2%	13.8%	91.0%	38.4%	67.4%	13.3%	86.8%	80.3%	86.8%	80.3%	80.3%	80.3%	80.3%	80.3%	63.0%	

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2003 Medical Expenditure Panel Survey-Insurance Component, <http://www.meps.ahrq.gov/MEPSDATA/ic/2003/Index103.htm>, accessed July 29, 2005.

Exhibit 3 Sample of the Largest Blues Plans, 2004*Combination*

- **Health Care Service Corporation (HCSC)** is the 1998 combination of BCBS of Illinois and BCBS Texas that added BCBS New Mexico in 2000 and The Regence Group (BCBS of Idaho, Oregon, Utah, and Washington State). The Regence Group covered over 10 million members in 2001 and remained a mutual legal reserve company. Interestingly, by 2002, HCSC owned 3.7% of all common stock of RightChoice Managed Care that it purchased in 1999.
- **CareFirst BCBS** was the March 2000 combination of BCBSs of Washington, D.C., Northern Virginia, Maryland; and BCBS Delaware in 2001, covering 3 million members. In 2001, WellPoint purchased CareFirst for \$450 million in cash and \$850 million in WellPoint common stock.

Independent

- **Empire Health Choice, Inc.**, the former Empire BCBS of New York City, covered 4.8 million members in 2005.
- **BCBS of Florida** that provided coverage to over 3.6 million members in 2005.
- **Highmark BCBS** in 2005 covered nearly 3.1 million members.
- **BCBS of Michigan** offered coverage to over 4.7 million members in 2005, approximately half of all Michigan residents.

Source: Annual Reports.

Exhibit 4**Medical Membership Enrollment in Top 10 Payers (in thousands)**

	1996	2000
Aetna	14,210 ^a	19,273
UnitedHealth	13,778	15,031
CIGNA	8,885	14,313
WellPoint	4,485	7,869
Health Net	1,542	5,401
Humana	4,851	5,299
PacifiCare	2,031	4,118
Health Care Service Corp ^b	5,000E	10,000
Kaiser	7,400	8,100
Anthem ^c	2,000E	7,100
Sub-Total	64,182	96,504
Total Insured	225,100	228,511
Top 10 payers as % Total Insured	28.5%	42.2%

E = Estimated.

^aDoes not include Prudential health business.

^bFormed in 1998.

^cExact figures not available.

Estimated Self-Funded Enrollment (in millions)

	Number of Enrolled Lives		Estimated Market Share
	1997	Q3 2000	
Aetna (including Prudential)	10.9	9.3	17.9%
CIGNA	7.0	9.7	18.6
UnitedHealth	6.0	8.3	16.0
First Health	2.5	2.8	5.4
WellPoint	2.8	2.5	4.8
Humana	0.7	0.7	1.3
Sub-Total	29.9	33.3	64.0
Blues & other regionals	20.2	18.7	35.9
Total self-insured lives	50.1	52.0	99.9

Sources: 2000 data from National Underwriter Life & Health, "Most Health Plans End 2000 in the Black" (April 16, 2001): 18; 1999 data from National Underwriter Life & Health, "Managed Care Firms' Profits Surged in '99" (April 3, 2000): 3; 1996 data from company annual reports.

Exhibit 4 (continued) Payer Metrics

Name	Total Members (in millions)	2000 Revenue (in millions)	2000 EBITDA (in millions)	5-Year Revenue CAGR	4-Year ROE
Aetna	19.2	\$26,819	\$ 209	22.3%	1.2%
UnitedHealth	16.5	21,122	1,447	20.3	10.0
CIGNA	14.3	19,994	1,497	1.3	13.0
Humana	6.5	10,514	290	11.6	0.4
Health Net	5.5	9,076	389	7.8	2.1
PacifiCare	3.7	11,468	342	8.5	7.3
WellPoint	9.7	9,229	634	23.5	23.2

Source: Annual Reports.

Aetna: EBITDA excludes goodwill write-off, unusual expense

4-year Revenue CAGR.

2-year Average ROE (Average Shareholder Equity).

Exhibit 5**Ten Largest U.S. Brokers, 2004**

	Revenue (in millions)
Marsh & McLennan Cos. Inc.	\$5,084.4
Aon Corp.	3,105.9
Arthur J. Gallagher & Co.	1,192.7
Willis Group Holdings Ltd.	1,036.4
Wells Fargo Insurance Brokerage Inc.	943.7
BB&T Insurance Services Inc.	679.7
Brown & Brown Inc.	638.3
Hilb, Rogal & Hobbs Co.	601.7
Wachovia Insurance Services, Inc.	410.8
USI Insurance Services Corp.	\$405.8

Source: *Business Insurance*, 34th Annual Broker/Agent Profile (July 18, 2005), p. 22.

Largest U.S. Benefit Specialists, 2004**Brokers that Derive Majority of Revenue from Benefits Business, 2004**

	Revenue from Benefits	% of Gross Revenues
CBIZ Benefits & Insurance Services Inc.	\$84,045,600	54%
Brokerage Concepts Inc.	53,310,900	83
Fleet Insurance Services	49,734,300	66
Trion	33,800,000	100
Fringe Benefits Management Co.	30,987,076	100
Associated Financial Group	21,598,781	50
Thesco Benefits L.L.C.	11,399,314	100
McGraw Wentworth	7,434,040	100
Mid America Group Inc.	5,899,757	100
Preferred Benefits Inc.	1,211,630	100%

Source: *Business Insurance*, 34th Annual Broker/Agent Profile (July 18, 2005), p. 12.

Note: Includes commissions and fees from brokering group benefits coverage, benefit consulting and health care administration.

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