Health services industry: still a job machine?

The accelerating employment growth in health services during the 1980s and early 1990s has slowed in recent years, but the industry continues to be a major source of new jobs in the United States

Cynthia Engel

In recent years, the Nation's health care system has undergone a major transition in the way health care is financed, in the settings where care is provided, and in the process by which care is delivered. Privately managed health care institutions emerged as the regulator of services and costs. As growth in health care costs slowed, health care workers experienced smaller gains in employment and earnings in the late 1990s, compared with those in the 1980s. Health services had been a growing portion of the private economy until the latter half of the 1990s, when employment growth fell below the rate of other industries. This article examines changes in the industry's employment and earnings from 1987 to 1997 and in 1998.

Not the job machine it used to be

The primary health services industries are offices of medical doctors, offices of other health practitioners, nursing and personal care, hospitals, and home health care. While health services remains among the small group of industries that add tens of thousands of workers nearly every month, growth in the industry has slowed in recent years.[1] Although cost-reduction strategies had already taken hold in 1992, the impact on employment was negligible. Growth in the health services industry was still viewed as robust in that year. Since then, however, employment growth in health services has slowed. This is in contrast to several other services industries, in which employment growth accelerated after 1992, compared with the earlier period. (See table 1).

Health services continued a pattern of slowing growth in 1998. Federal reimbursement policies for home health care and nursing homes were revised during the late 1990s, and many individuals shifted from fee-for-service to managed care insurance plans. Most of the increase in health care jobs over the 1987–97 period came from hospitals and from offices and clinics of medical doctors. When measuring growth *rates* instead of job levels, however, home health care surpassed all other components in every year of the past decade *except* 1998. (See chart 1.)

Since its first measurement in 1988, employment in home health care had phenomenal growth.[2] Medicare expenditures for home health services grew at an average annual rate of 28.6 percent between 1990 and 1996, but this was projected to have slowed to 0.2 percent annually for the 1996–98 period.[3]

Cost controls. Increased reports of medicare fraud, in part, prompted changes to the reimbursement system for home care. False claims in the medicare program were aggressively targeted with an expansion of Operation Restore Trust in

Cynthia Engel is an economist in the Division of Monthly Industry Employment Statistics, Bureau of Labor Statistics.

Table 1. Annual average growth in employment, total services and selected services industries, selected years, 1987–98

Industry	1998 annual average	1987–92		1992–97		1998 percent change
		Job growth	Annual average percent change	Job growth	Annual average percent change	
Services	37,525	4,942	3.8	6,988	4.4	4.1
Health services	9,904	1,385	4.6	1,230	2.7	1.9
Offices of medical doctors	1,817	324	5.1	280	3.6	4.3
Offices of other health practitioners	464	129	10.5	112	6.1	5.6
Nursing and personal care	1,757	250	3.6	222	2.7	.1
Hospitals	3,953	608	3.6	119	.6	2.2
Home health services	680	182	16.5	315	12.4	–4.5
Business services	8,546	1,037	4.4	2,667	8.5	7.1
Personnel supply	3,161	453	6.7	1,339	12.7	6.5
Computer and data processing	1,603	207	5.9	575	11	13.6
Engineering and management services[1]	3,236	240	2.6	534	4	7.7
Amusement and recreation[1]	1,688	211	5	385	5.8	7.3

[1] Data series available beginning in 1988, therefore, the average shown is a 4-year average in the 1987–92 period.

1997 by the Health Care Financing Administration.[4] This effort, which targeted fraudulent billings to medicare by health services institutions, found the greatest rate of fraud in nursing homes and in home health care services. As part of this program, cost-report audits of home health agencies doubled,[5] major hospital chains were investigated for doubtful billings, and claims were closely scrutinized. The program also increased efforts to prevent illegitimate providers and suppliers from doing business with the Health Care Financing Administration.[6] Provisions in the Balanced Budget Act of 1997,[7] development of the Medicare Integrity Program,[8] and other actions also addressed fraud in health services. (See the box.) Employment growth in home health care agencies and nursing homes slowed during this period.[9] (See chart 2.)

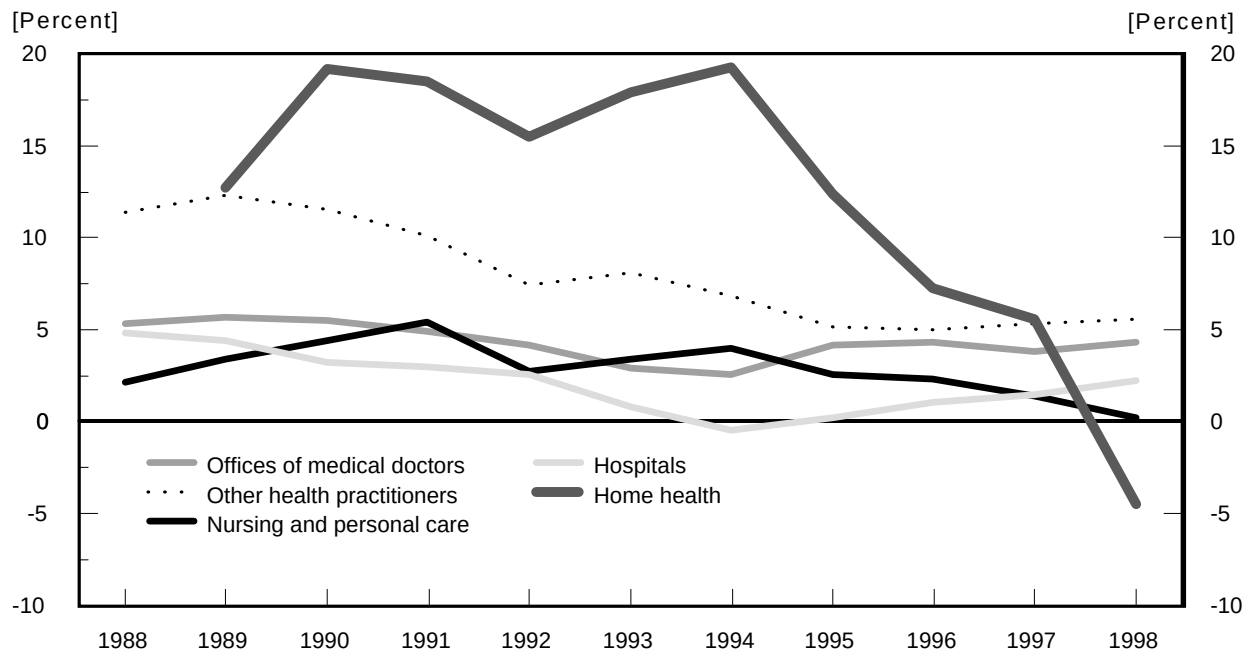
Another recent development in Federal reimbursement is the establishment of the prospective payment system in the nursing home industry. Prior to July 1998, reimbursements varied widely for medicare patients with the same diagnosis and were not adjusted for the clinical conditions of the patient. After July of that year, with the prospective payment system in effect, medicare reimbursements had to reflect the average cost to treat patients by diagnosis. This new payment system initially provides for a blending of a facility-specific rate and a Federal rate. By 2002, all nursing facilities will receive a single Federal rate to charge by diagnosis of the patient. While most nursing homes receive a greater portion of their funding from medicaid (a joint Federal-State program) than from medicare, many States base their reimbursements on the medicare policy. The Health Care Financing Administration estimates that payments to nursing homes from all sources will grow less rapidly than did those prior to 1998.[10]

Changes that are being made in the home health and nursing home industries are similar to the changes initiated for hospitals in 1983. Under the prospective payment system for hospitals, reimbursements also were based on diagnostic groupings of illnesses.[11] As a result, hospitals reduced operating costs, partly through greater control of labor costs.[12] Federal Government initiatives to control rising costs in medicare continued with the implementation of a physician fee schedule in 1992.[13] At the same time that payments for inpatient hospital and physician services slowed, payments for services that typically follow hospitalization (skilled nursing facility, hospice, and home health services) increased dramatically, prompting subsequent changes to their reimbursement systems as well.

Slower earnings growth. Cost-containment forces not only affected employment, but also they dampened wage growth in health care as well. Other services industries also experienced a slowing of wage growth, but the decline in health services was more dramatic. (See table 2.) In 1998, the rate of growth in average hourly earnings for nonsupervisory workers in health services was only half of its 1987–92 pace. Wage growth in health services had been higher than that for all services in the 1987–92 period, but dropped to the same rate in 1992–97, and fell considerably below the rate of increase for all services in 1998. While wage growth subsided, average hourly earnings for health services workers' still was 83 cents greater than the average for all workers in the services industry in 1998.

Weaker hourly earnings growth appears to be partly compensated by an increase in the number of paid hours throughout the health care industry. (See table 3.) Over the decade, "home health services" increased the average workweek the most. This was followed by "offices of medical doctors;" and may relate to increased delivery of outpatient services in lieu

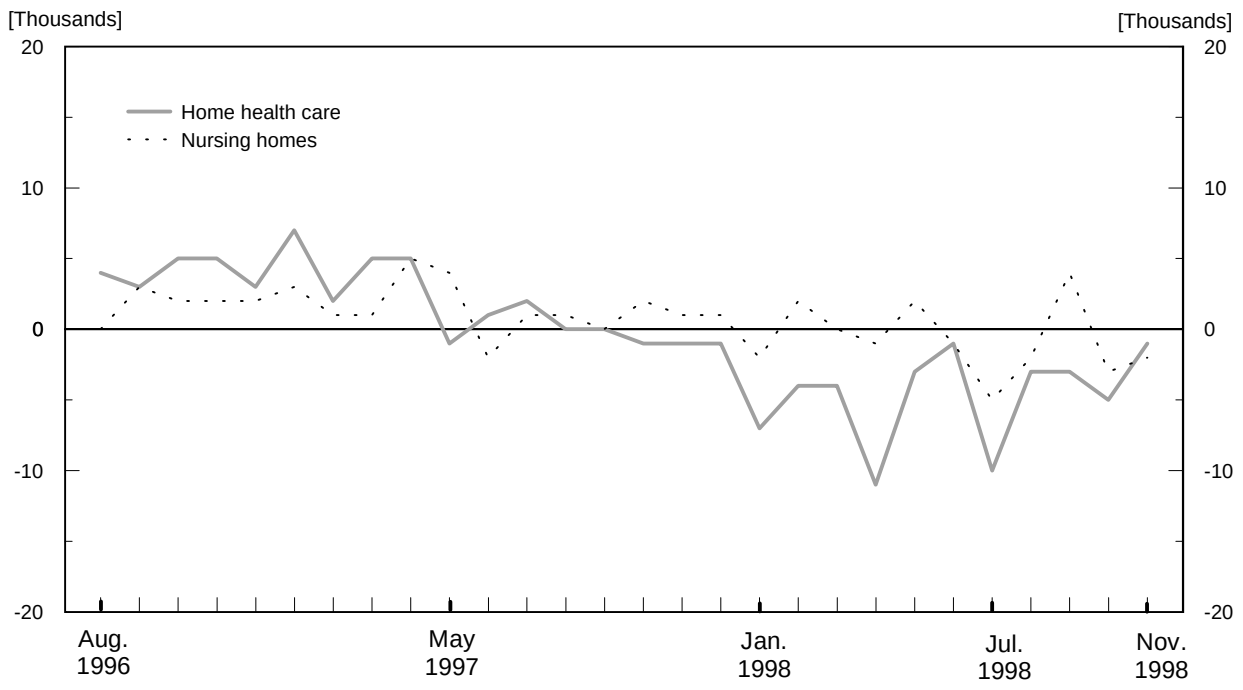
Chart 1. **Employment growth in selected components of the health services industry, 1988–98**



Chronology of policy in health care, 1996–98

August 1996	*Medicare Integrity Program*. The Health Insurance and Portability Act of 1996 provided funding for safeguarding activities of the medicare program. In recent years, problems arose when contract administrators gained control over the payment of medicare funding as they engaged in other lines of business, which may have introduced a conflict of interest. The Medicare Integrity Program expands the Health Care Financing Administration's contracting authority to perform medicare integrity functions.
May 1997	*Operation Restore Trust expansion*. This added new geographic areas of concentration, as well as several new, specific anti-fraud and abuse targets. Operation Restore Trust identified $188 million owed to the Federal Government in its first 2 years of operation.
September 1997	*Moratorium on new home health care agencies*. This action blocked the formation of new home health care agencies. Reimbursements were closely reviewed in the interim. In January 1998, the moratorium was lifted, as other requirements were announced.
January 1998	*Interim payment system.* The Health Care Financing Administration announced new interim payments for home health care services. Actual reimbursement rates were announced in April 1998. The payment system reflects a transition from a cost-based system to one based on diagnoses. Funding levels for agencies were projected to reduce from current levels.
July 1998	*Prospective payment system in nursing homes.* Payments are based on the average cost to treat a specific diagnosis. The prospective payment system makes it more difficult to increase charges by manipulating medicare's billing rules for ancillary services.

Chart 2. Employment changes in home health and nursing care services, 1996–98



NOTE: Data are seasonally adjusted.

of inpatient services, as well as extended office hours for patients. "Nursing homes" also added significantly to average hours over the decade. Even hospitals, which showed relatively anemic employment growth, increased the average hours for which staff were paid. The growth in worker hours in the health services industry is particularly significant when compared with almost no growth in the average workweek for all services industries.

When adjusted for inflation, weekly earnings in health services continued to increase, albeit less rapidly than all services since 1994. (See chart 3.) This is partially attributed to health services' relative immunity to the economic cycle, resulting in more stable increases in earnings over time. Still, much of the growth in weekly earnings over the last several years arose from an increase in the number of hours for which workers in heath services were paid.

The quest for efficiency

Higher increases in average hourly earnings between 1987 and 1992 coincide with an era of primarily fee-for-service health care financing. By comparison, slower wage growth in the latter 1992–98 period corresponds with the shift toward managed care and networks of provider organizations. (See table 4.) The most recent published data from the Employee Benefits Survey illustrates this decline when compared to a time within the 1987–92 window. Health maintenance organizations (HMOs), which take on the dual role of health provider and insurer, bear the most financial risk associated with pro-

Table 2. Annual percentage rate of increase in average hourly earnings, total services and selected services industries, selected years, 1987–98

Industry	Percent growth			1998 annual average (dollars per hour)
	1987–92	1992–97	1998	
Services	4.4	3.1	4.6	$12.84
Health services	5.5	3.1	3.5	13.72
Offices of medical doctors	5.8	3.8	3.6	14.28
Offices of other health practitioners	6.7	4.6	5.1	13.13
Nursing and personal care	5.6	3.5	4.5	9.76
Hospitals	5.8	2.9	2.9	15.46
Home health services	8.2	2.6	1.3	11.5
Business services	2.7	3.5	6.1	12.55
Personnel supply	2.7	2.8	5.3	10.33
Computer and data processing	5.2	4.9	5.3	21.16
Engineering and management services[1]	4.3	3.3	4.2	17.86
Amusement and recreation[1]	2.3	2.7	5.6	9.67

[1]Data series began in 1988, therefore the average shown is a 4-year average in the 1987–92 period.

NOTE: Data are for nonsupervisory workers.

viding care. Other insurance arrangements provide medical care services and then bill for the reimbursement.

Types of health plans. A fee-for-service arrangement allows the greatest freedom of choice. The insured may choose the health care provider and service, and fees are billed to the insurer when care is delivered. While per-patient deductibles and copayments serve as restraints on services, once the deductible is met, a relatively high portion of medical expense is covered, up to specific plan maximums. Any licensed provider may be sought by the insured, including very specialized physicians. Under fee-for-service plans, therefore, health care providers are subject to fewer cost controls than are other types of health insurance plans.

In contrast, managed care arrangements provide an incentive to lower costs, but the extent to which care is managed varies a great deal. One form of managed care—preferred provider organizations (PPOs)—merely represent groups of providers that have negotiated discounts with insurers. Preferred provider plans offer participants a higher rate of reimbursement for choosing physicians that are among a designated list of participating physicians. In other respects, preferred provider plans are similar to fee-for-service plans. Services are reimbursed following treatment, treatment is subject to a deductible, and there usually is an out-of-pocket expense limit.

Table 3. Annual average growth in hours, 1988–98

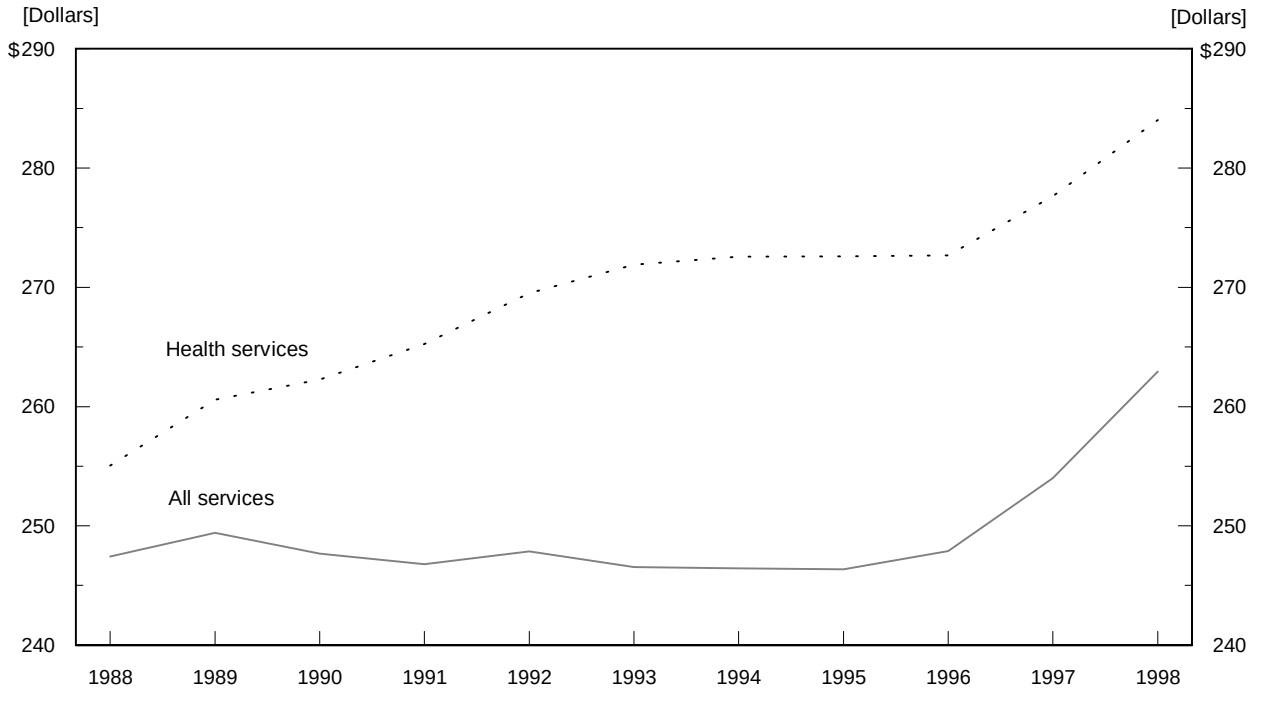
Industry	Hours	
	1988 annual average	1988–98 change
Services	32.4	0.3
Health services	31.6	1.5
Offices of medical doctors	31.6	1.3
Offices of other health practitioners	29.6	.6
Nursing and personal care	31.6	1.0
Hospitals	34.0	1.0
Home health services	26.5	3.5

NOTE: Data are for all nonsupervisory workers, both full- and part-time employees, and include all hours for which workers are paid (hours of work and paid leave hours).

The plans do not require the selection of a primary care physician or referrals for appointments with specialists. PPOs offer the greatest selection of providers among managed-care plans.[14]

Of the health plans available, HMOs more closely control the provision of care compared with other insurance arrangements. HMOs begin the year with a fixed amount of revenue based on the prepaid fee income of its participants, and this represents the majority of their income for the year. Although the prepaid fee covers most medical procedures, additional revenue is earned only from copayments, which tend to be

Chart 3. Real average weekly earnings, health services, compared with all services, 1988–98



very small. HMOs require the insured to be screened by a primary physician for most treatments. In practice, the HMO manages services to a greater extent than other plans, and frequently provides more complete coverage for preventive care and routine physicals.[15] HMOs, which compete directly with PPOs and fee-for-service plans, often provide less expensive health insurance to the insured.

The popularity of lower cost managed care services has prompted many physicians to join managed care companies, leaving fewer physicians who operate independently. The share of self-employed physicians declined from 38 percent in 1994 to 34 percent in 1997 as the share of managed care physicians grew.[16] According to the American Medical Association's Socioeconomic Monitoring System Survey, the percent of physicians having contracts with one or more managed care companies grew from 88.1 percent in 1996 to 92.3 percent in 1997.[17]

Inflation of medical care costs. The shift toward managed care insurance arrangements coincides not only with slower employment and wage growth, but also with declining price inflation. Besides government and private initiatives to control rising costs, the slowing of price growth reflects changes to work processes in health care institutions and shifts from inpatient to outpatient settings for medical care.

Inflation of medical care, as measured by the Consumer Price Index (CPI), far exceeds the rate of inflation of other goods and services over the 1989–95 period, with price growth decelerating and nearly converging with that of "all items except medical care" in recent years. (See chart 4.) In the Consumer Expenditure Survey, which is used to determine the market basket for the CPI, consumers' health care costs are split between insurance premiums and out-of-pocket costs (including drugs, medical supplies, and services). Insurance costs for consumers averaged a growth rate of 6.1 percent between 1990 and 1996 for all consumer units.[18] Consumer expenditures for health insurance increased, in part, because premium costs shifted from employers to employees.[19] Despite substantial increases in insurance premiums, the average annual increase in the total health care bill paid by these same consumer units measured only 3.0 percent in the same period.

The CPI is not an all-inclusive measure of health care costs, however. Although it measures consumer health care prices, it does not include increases in costs paid by employers' health insurance premiums or government sources. Just as the over-the-year growth for medical care in the CPI has slowed from 9 percent in 1990 to 3 percent in 1997, increases in health costs paid by employers and the government have moderated as well. (See chart 5.) Employers' health insurance costs have declined in the 1990s, first reflecting declines in the rate of growth and then reflecting absolute reductions in health insurance paid per civilian hour worked beginning in 1995.[20] Although the moderation in the growth rate of public funding was much less impressive than the declines for employers, public funding achieved its slowdown despite increasing tolls of an aging population. Otherwise, the rate of growth in public health spending would likely have slowed even more.

Table 4. Percent distribution of health financing arrangements, full-time employees in private establishments, selected years

Type of arrangement	All employees			
	Medium and large firms		Small firms	
	1989	1995	1990	1996
Total	100	100	100	100
Fee-for-service	74	37	74	36
Health maintenance organization	17	27	14	27
Preferred provider organization	10	34	13	35
Exclusive provider organization[1]	–	1	–	2

[1] Similar to preferred provider organizations, these plans have arrangements with specific providers who offer medical services at lower prices. Medical care received from other providers is not paid for by the plan.

NOTE: Dash indicates data were not available in that year. Because of rounding, sums of arrangements may not equal totals.

SOURCE: Data are from the Bureau of Labor Statistics Employee Benefits Survey.

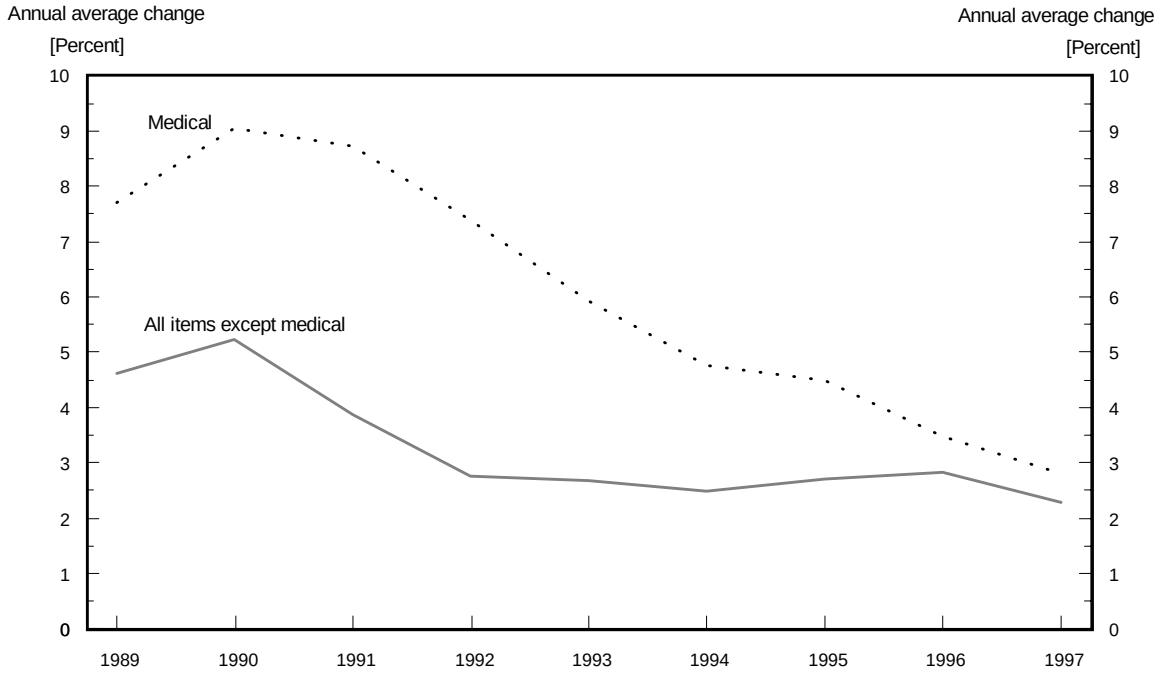
Declining price growth resulted from health care organizations using a variety of efforts to lower costs. These cost-cutting strategies included: shifting care from inpatient facilities to outpatient settings, consolidating acute care facilities within the industry, and conducting more studies on processes in hospitals.

Hospital restructuring. Greater attention to the process of providing patient care has allowed hospitals to change the role of employees, while reducing overhead.[21] Reorganizing the jobs of staff members, to reduce idle time and the number of staff member contacts per patient, is a common theme among providers. While the actual impact is uncertain, hospitals have embraced varying team approaches to care, with most resulting in increased reliance on nurses as resource coordinators.

Quality improvement techniques have helped to lower the overall cost of care by eliminating redundancies and idle time. The process of health care delivered to the patient has been scrutinized as hospital revenues increase less rapidly, and labor costs are an obvious target for cuts. Many varied team approaches to patient care are now common, as staff are trained in several skills for greater flexibility.[22]

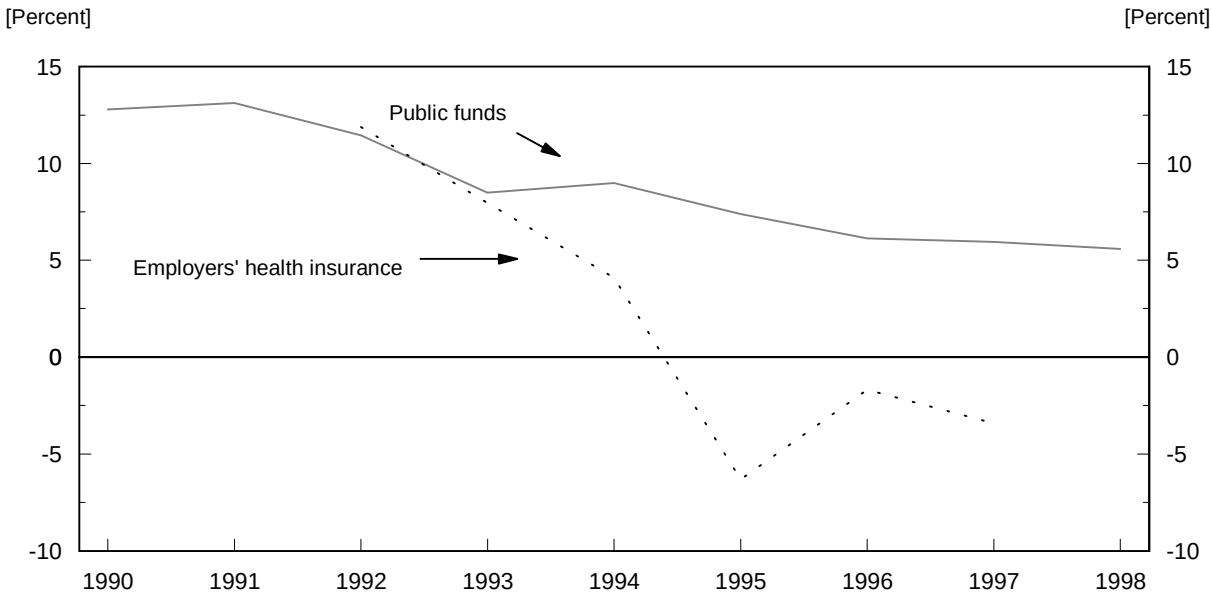
However, many health care workers report that understaffing has made their jobs more difficult. Based on a survey

Chart 4. **Changes in Consumer Price Indexes, medical care, versus all items except medical, 1989–97**



SOURCE: Consumer Price Index, Bureau of Labor Statistics.

Chart 5. **Average annual percent increase in health expenditures paid by employers and public funds, 1990–98**



NOTE: Computations are based on current dollar expenditures. Public expenditures for 1997 and 1998 are projections. Employer costs are for civilian workers only. Health insurance was not reported prior to 1991.

SOURCE: *Employer Costs for Employee Compensation*, Bureau of Labor Statistics, and Health Care Financing Administration, *National Health Expenditures*.

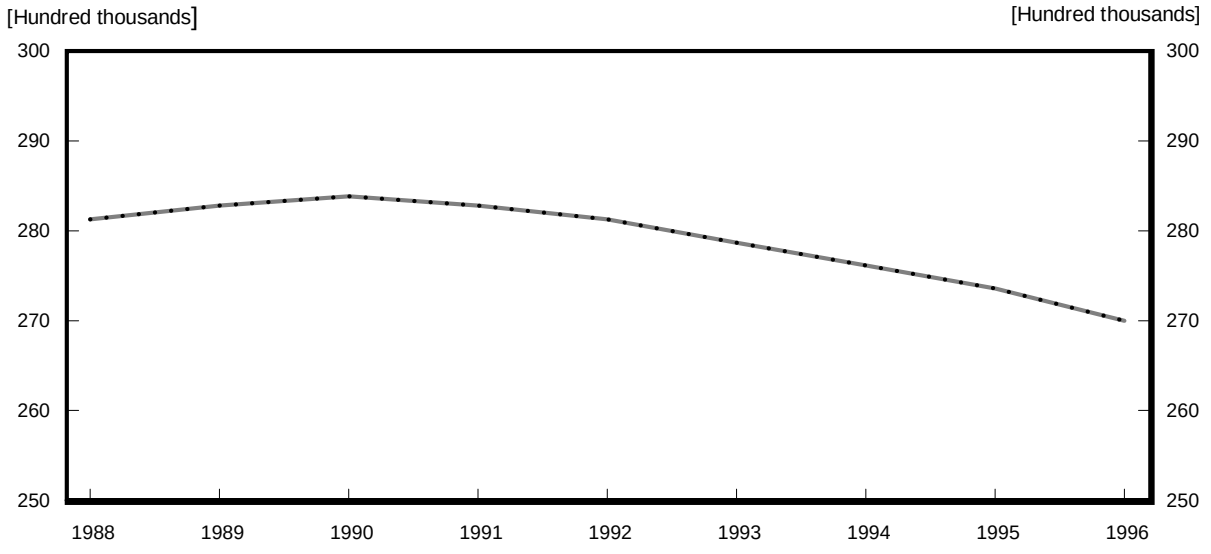
of health care workers, more than half of a sample of registered nurses, practical nurses, physical therapists, and occupational therapists reported that they did not have enough time to spend with patients, and 38 percent said their facility is understaffed as patient care has deteriorated. One-third, however, reported staffing levels as either excellent or good. Among national trends that have contributed to a lower quality of care, the trend most frequently mentioned in the survey was the closing of urban hospitals and clinics, and the second most common concern was the expansion of managed care.[23]

Also, as an indication of staffing concerns, the American Nursing Association drafted the Patient Safety Act in 1997. This act would have required medicare providers to disclose staffing and performance measures in order to promote better care. The act also would have protected employees of medicare providers who report concerns about the safety and quality of services. Providers would have to disclose how proposed mergers and acquisitions affect public health and safety.[24] The Nursing Association subsequently endorsed the Patients' Bill of Rights, proposed by the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry.

Shifts to less expensive settings. Government and private insurance policies have lowered reimbursements to hospitals for inpatient services and increased reimbursements for home health and outpatient services, causing a reduction in costly hospital stays. Inpatient care is much more expensive than outpatient treatment because of its greater reliance on skilled personnel and technology, as well as the need to provide 24-hour personal care. Because hospital outpatient services are associated with less staff support, overall days of care in hospitals are declining. (See chart 6, which combines outpatient and inpatient services into comparable units.) While output measures in health care are not always comparable (an inpatient day 10 years ago may have required different expertise from nursing staff than an inpatient day today) fewer patient days correlate with a decreasing rate of growth in expenditures for hospital care. The latter grew at an average annual percent rate of 8.8 percent between 1985 and 1990, compared with 6.4 percent between 1990 and 1995.[25] Changes in the medicare program, which allowed the insured to pay for part-time or daily home-health services in 1989, also has resulted in less hospital care and more home health services.[26]

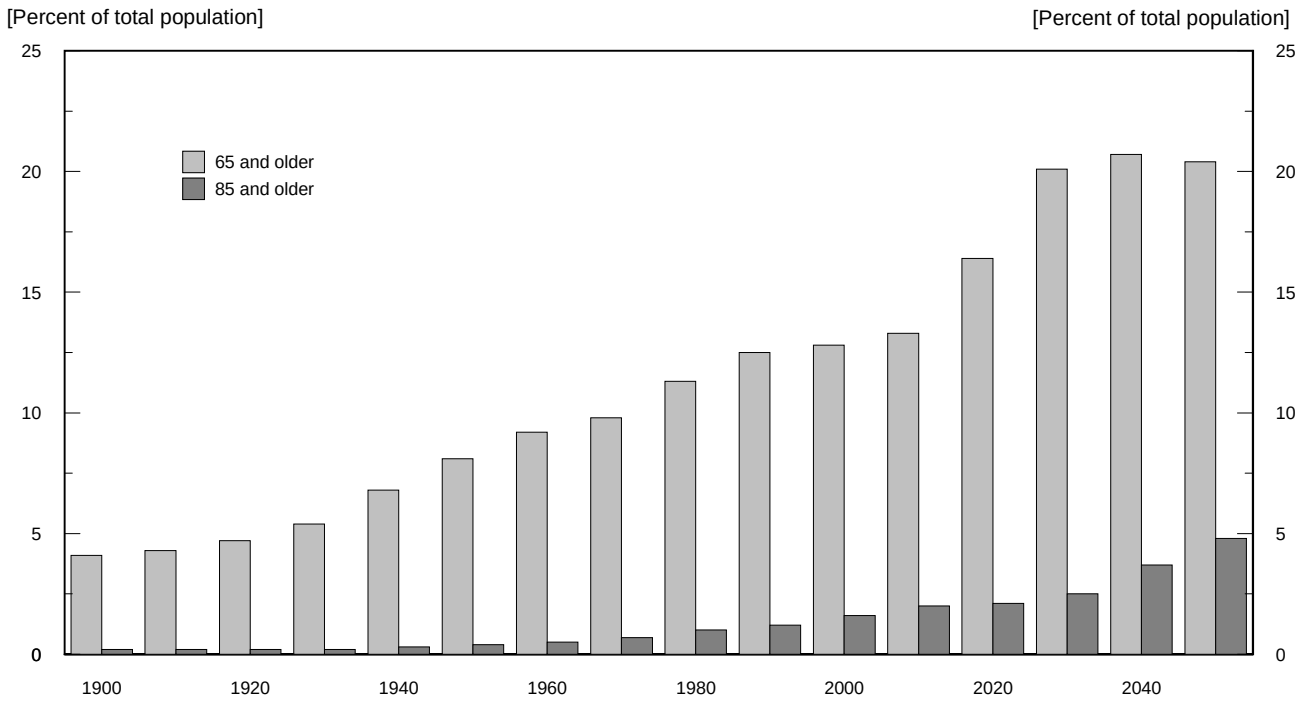
While reductions in the average length of stay in hospitals have occurred for all age groups except those under 15 years of age, the reduction in days of care are greatest for those 85 years and older. Between 1985 and 1996, the average length of stay for this group has declined by 2.6 days, compared with 2.2 days for those aged 65 and older, and 1.7 days for those

Chart 6. Total adjusted hospital patient days—combined inpatient and outpatient care, 1988–96



SOURCE: American Hospital Association.

Chart 7. Elderly population rates, 1900–80 and projections from 2000 to 2050



SOURCE: Bureau of the Census.

aged 45–64.[27] Overall, declining lengths of stay among the elderly have reduced hospital services for this rapidly growing group. As lengths of stay declined, cost growth was greater than average in the post-acute care settings of skilled nursing facilities, home health services, and hospice care.[28]

Impact of demographic changes

Continued increases in the elderly population will result in higher demand for medical and personal services into the twenty-first century. Policies of the medicare program provide a base health care package for all elderly Americans, providing only about half of the personal health care expenditures of the elderly.[29] For those elderly who cannot afford additional coverage, the changing policies in the medicare program are critical in determining what health care they receive. The rate of growth in the elderly population aged 65 and older eased slightly in the 1990s. However, the eldest subgroup, aged 85 and older, is growing more rapidly than any other group. (See chart 7.) Because the aged use health care services more intensively than others, they will account for much of the care provided by health care workers in the next decade.

Public funds absorb a larger share of personal health care costs as the population ages. The portion of health care costs that the Federal Government paid increased from 24 percent in 1970 to 34 percent in 1996. (See table 5.) While the average medicare expense tends to decline with age,[30] more persons are living longer while they are under the medicare umbrella, partially contributing to larger Federal expenditures. Furthermore, new and improved treatments have increased demand from this group. Hospital statistics show that in 1970, 20 percent of the discharges and 33 percent of the days of care in hospitals were for persons aged 65 and older. This grew to 37 percent of the discharges and 47 percent of the days of care in 1994.[31]

As the public health bill has grown, so have efforts to contain cost growth. Like much of the private sector, medicare is turning to managed care arrangements, especially since provisions of the Tax Equity and Fiscal Responsibility Act made it easier for HMOs to contract with medicare. Because managed care was limited only to the HMO option prior to 1998, participation among the elderly lags that of the general population, with only about 12 percent of medicare enrollees in managed care.[32] The Balanced Budget Act of 1997 contains provisions that expand medicare's managed care options.[33] The act also includes extensive changes to medicare payment systems to improve accuracy and to restrain the growth of spending, especially in the areas of post-acute care services. Managed care is more prevalent for the elderly in medicaid

Table 5. Percent distribution of personal health care payment sources, selected years

Source of payment	1970	1980	1990	1996
Total (billions of dollars)	73.2	247.3	699.5	1035.1
Total (in percent)	100	100	100	100
Private funds	62.2	57.6	59.3	53.3
Private health insurance	3.7	4.8	5.8	5.9
Public funds	37.8	42.4	40.7	46.7
Federal	24.3	29.1	28	33.9
State and local	13.5	13.3	12.7	12.8

NOTE: Data excludes administrative, research, construction, and other spending that is not directed towards patient care.

SOURCE: Department of Health and Human Service, Health Care Financing Administration, Office of the Actuary and Office of National Health Statistics.

than it is in medicare, covering 40 percent of those enrolled in 1996 and 48 percent in 1997.[34]

Impact on occupational distribution

More generalists. Changing trends have had an impact on the occupational distribution of employment among different health care settings as well as on the demand for specific types of care. Managed care has placed more control in the hands of generalists who typically are general practitioners, physician assistants, and nurse practitioners. Most often, generalists treat patients themselves or, in some cases, refer patients to specialists. As a result, growth in managed care has altered the demand for physicians of differing professional specialties. According to a study of medical journal recruitment ads, the market for specialist physicians rose between 1984 and 1990—a period when fee-for-service plans offered easier access to specialist services—followed by a steep decline as managed care plans shifted to delivery systems that use fewer specialists. The ratio of advertisements for specialist positions to generalist positions dropped from a peak of 4 to 1 in 1990 to 1.8 to 1 in 1995, the last year studied. Between 1984 and 1995, only family medicine practitioners exhibited continuous growth, as managed care plans required stronger utilization of generalists.[35] This need is understood by new medical residents; more than half of whom began residencies in 1998 in generalist programs.[36]

Despite increasing overall numbers of physicians, some rural and urban environments continue to be underserved. Helping to fill in the gap is the increasing number of physician assistants, who provide health services otherwise provided by physicians. They conduct complete physicals, provide treatment, and counsel patients. Over the last 10 years, the number of graduates who became physician assistants has more than doubled to approximately 4,000 per year.[37] With median annual incomes of physician assistants only about half that of doctors, the infusion of this new profession into the health care environment has helped to reduce costs.[38] Physician assistants practice under the supervision of physicians and are authorized to practice in 49 of the 50 States; 44 States allow them to write prescriptions.[39] According to a study by the Congressional Office of Technology Assessment, the quality of care provided by a physician assistant for authorized procedures is equal to that provided by physicians for the same care.[40]

Demand for multiskilled professionals is increasing in various patient care environments and is reflecting a move towards a more generalist approach to health care. Initially, small and rural hospitals and clinics hired multiskilled staff to overcome the difficulty of employing specialists. However, this employment strategy has entered mainstream health care as a way to meet the needs of patients, at lower overall costs. Distinctions between the practice of nursing and the various allied health professions are blurring, as individuals often are cross-trained into several disciplines, and are thereby able to perform a wider range of services for patients. For example, nurses now may have the added skills of a respiratory therapist or a cardiac rehabilitation specialist. Radiology technologists may also work as sonographers and EKG technicians, and the latter may act as respiratory therapists, and the like.

Employment shifts of nursing staff. The nursing work force became more highly skilled as patient populations changed. In hospitals, the ratio of registered nursing personnel per hospital bed increased by more than 50 percent between 1983 and 1994. During this period, the workload of nurses increased because they cared for patients whose illnesses were more acute and whose average length of stay became shorter. Lesser skilled nursing professions, including licensed practical nurses and nurses aides, accounted for a smaller portion of hospital employment, although job opportunities for these occupations opened in home health care and in nursing homes.

According to an analysis of Current Population Survey (CPS) data, sectoral shifts in the employment of nurses contributed to a wage decline for registered nurses, licensed practical nurses, and nursing aides.[41] A declining rate of growth in hospital employment led some nurses to seek jobs in other sectors, which paid registered nurses and nursing aides 10 percent to 20 percent less than those working in hospitals in 1994.[42] The rate of employment growth between 1988 and 1994 for registered nurses was 26 percent in nursing homes, compared with 16 percent in hospitals.[43] In the early 1990s, as hospital employment growth moderated, earnings of registered nurses stagnated, especially in States with high rates of HMO enrollment.[44] According to CPS estimates of weekly earnings, registered nurses' earnings continued to decline through 1997 when adjusted for inflation.

Conclusion

Unlike many services industries, the health services industry experienced a slowdown in employment and wage growth in recent years, even as it continues to be a major source of new jobs in the United States. As health care expenditures increased at a slowing pace, the increases in health services payrolls and earnings also have moderated.

Strategic bargaining on the part of large insurers helped to bring increases in health prices in line with overall inflation. Managed care also played a part in keeping health care costs down. Strong competition engendered a restructuring of health care occupations and job duties across and within health care components. A reduction in inpatient hospital stays, despite increased growth in the elderly population, underscores the dramatic changes that have taken place. A reduced growth rate in hospital employment contributed significantly to lower growth in wages for nurses.

Managed care has altered the occupational mix of employees in health care establishments. The demand for generalists has resulted in new jobs for physician assistants and nurse practitioners, who provide some care previously rendered by physicians. Multiskilled personnel are increasingly replacing other health professionals certified in one area. This changing occupational mix, coupled with a slowing of growth in hospitals and increased bargaining power of insurance companies, has led to a slowdown in wage growth for the health services industry. □

Footnotes

[1] The employment data in this article are from the Current Employment Statistics survey and appear in various issues of *Employment and Earnings*, a monthly publication of the Bureau of Labor Statistics. Data on all employees, female workers, average hourly earnings, and average weekly hours are products of this monthly survey. Data also are available on the Internet at **http://stats.bls.gov/ceshome.htm.** For a historical view of trends in health care financing and employment, see David Hiles, "Health services: the real job machine," *Monthly Labor Review,* November 1992, pp. 3–16.

[2] Laura Freeman, "Home-sweet-home health care," *Monthly Labor Review,* March 1995, pp. 3–11.

[3] Health Care Financing Administration, National Health Expenditure Projections, on the Internet at **www.hcfa.gov/stats/NHE-Proj/tables/t07A.htm** (visited September 1998).

[4] In its first 2 years as a demonstration project, Operation Restore Trust focused on five States. In 1997, the Health Care Financing Administration expanded the initiative. See "Secretary Shalala launches new Operation Restore Trust" press release (Health Care Financing Administration, May 20, 1997).

[5] "Medicare Home Health Moratorium is Lifted," press release (Health Care Financing Administration, Jan. 13, 1998).

[6] "Home Health Care: Improving Quality, Tightening Standards," on the Internet at **www.hcfa.gov/facts/f970808.htm** (visited July 17, 1998)**.**

[7] This act also outlined provisions of the interim payment system for the home health industry and the prospective payment system for the nursing home industry, to be discussed in the following paragraphs of this article.

[8] The Medicare Integrity Program expanded the authority of the Health Care Financing Administration to review provider activities for medicare. On the Internet at **www.hcfa.gov/medicare/mip/background.htm** (visited July 16, 1998).

[9] "Medicare: Recent Legislation to Minimize Fraud and Abuse Requires Effective Implementation," GAO/T-HEHS-98-9 (General Accounting Office, October 9, 1997). See also, "Clinton Calls for Moratorium on Entry of Home Health Agencies into Medicare," *BNA Health Care Policy Report* (Washington, Bureau of National Affairs, Sept. 22, 1997), p. 1442; and "Moratorium Lifted on Medicare Home Health; President Cites New, Tougher Agency Rules," *BNA Health Care Policy Report* (Washington, Bureau of National Affairs, Jan. 19, 1998), p. 127.

[10] National Health Expenditure Amounts, and Average Annual Percent Change, Years 1970–2007, on the Internet at **www.hcfa.gov/stats/NHE-Proj/tables/t02.htm** (visited September 16, 1998).

[11] The prospective payment system was initiated in October 1983 and implementation was completed by October 1986. Louise B. Russell, *Medicare's new hospital payment system: Is it working?* (Washington, The Brookings Institution, 1989).

[12] "Hospital medicare profits reach 10-year high, ProPAC says," *BNA Health Care Policy Report* (Washington, Bureau of National Affairs, Jan. 20, 1997), p. 117. The Prospective Payment Assessment Commission (ProPAC), reported that medicare margins are rising not because the program is paying more than in past years, but because hospitals have become more efficient and have taken on a campaign to control their expenses.

[13] A Profile of Medicare, 1998, on the Internet at **www.hcfa.gov/pubforms/chartbk.pdf**, p. 25 (visited August 28, 1998). Also, other measures, which evaluate the reimbursements to physicians for health services, are ongoing. See Gail R. Wilensky, "Statement before the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives," Washington, Mar. 20, 1997.

[14] Robert McCarthy, "Not just another dinosaur" *Business and Health*, May 1, 1998.

[15] *Employee Benefits in Medium and Large Establishments, 1995*, Bulletin 2496 (Bureau of Labor Statistics, April 1998), table 42, "Medical care benefits: Coverage for selected services, by type of plan," p. 46.

[16] Data are annual averages from the Current Population Survey.

[17] "Incomes Climbing for Employed Physicians, Leads to Increase for All, AMA Survey Finds," *BNA Health Care Policy Report* (Bureau of National Affairs, Apr. 13, 1998), p. 639.

[18] Bureau of Labor Statistics, Consumer Expenditure Survey, time series data for all consumer units, annual averages. The most recent data are for 1996.

[19] Geoffrey D. Paulin, and Wolf D. Weber, "The effects of health insurance on consumer spending," *Monthly Labor Review,* March 1995, p. 35.

[20] *Employer Costs for Employee Compensation, 1986–1997*, Bulletin 2505 (Bureau of Labor Statistics, August 1998).

[21] Data from a study of large hospitals in 1991 indicate that, 20 percent of the wages of personnel were attributed to structured idle time (time specialized staff members spent waiting for the opportunity or need to carry out specific duties), compared with only 16 percent of wages spent providing direct care to patients. Twenty-nine percent of wages was spent documenting care, and 14 percent, for scheduling and coordinating care. Other services, such as providing hotel and patient services, transporting patients or supplies, and managing and supervising employees, accounted for between 6 percent and 8 percent each. See J. P. Lathrop, "The Patient-focused Hospital," *Healthcare Forum Journal*, vol. 34, 1991, pp. 17–21.

[22] Sharon B. Schweikhart, "Reengineering the work of caregivers: role redefinition, team structures, and organizational redesign" (Foundation of the American College of Healthcare Executives, Hospital and Health services Administration, Mar. 1, 1996).

[23] "While quality of care still good, many workers say it is declining," *BNA Health Care Policy Report* (Washington, Bureau of National Affairs, Jan. 5, 1998), p. 31.

[24] On the Internet at **www.nursingworld.org/gova/hr1165.htm** (visited June 25, 1998).

[25] National health expenditures, percent distribution, and average annual percent change, according to type of expenditure: United States, selected years 1960–95, table 121, on the Internet at **ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/Health_US/hus96_97/table121.wk1** (visited March 31, 1999).

[26] Inpatient hospital care expenses in the medicare program declined from 92.8 percent of hospital insurance fees in 1985, to 75.8 percent in 1995. See table 138, Medicare enrollees and expenditures and percent distribution, according to type of service: United States and other areas, selected years 1967–95, on the Internet at **ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/Health_US/hus96_97/table138.wk1** (visited March 31, 1999).

[27] *Annual Hospital Discharge Summary, 1995*, series 13, no. 133 (National Center for Health Statistics, May 1998), table A, and preliminary 1996 data (mimeo).

[28] *A Profile of Medicare, 1998*, on the Internet.

[29] "*A Profile of Medicare*," on the Internet, figure 31.

[30] Medicare payments in the last 2 years of life for decedents aged 60–69 averaged $22,590, compared with $8,296 for those aged 101 and older. Those in the younger cohort tend to be admitted for more utilization-intensive diagnoses. James Lubitz, James Beebe, and Colin Baker, "Longevity and Medicare Expenses," *New England Journal of Medicine*, Apr. 13, 1995, pp. 999–1003.

[31] Annual Hospital Discharge Summary, 1994, *National Center for Health Statistics*, May 1997, table A.

[32] "*A Profile of Medicare*," p. 59.

[33] "The new Medicare+Choice program," Health Care Financing Administration, on the Internet at **www.hcfa.gov/medicare/mplusc.htm** (visited July 24, 1998).

[34] "National Summary of Medicaid Managed Care," Health Care Financing Administration, on the Internet at **www.hcfa.gov/medicaid/trends97.htm** (visited May 19,1998).

[35] "Report Says Managed Care Changing Marketplace Demand for Physicians," *BNA Health Care Policy Report*, vol. 4, no. 36, pp. 1442–1443.

[36] "Majority of U.S. Medical School Graduates Continue to Enter First-Year Primary Care Residencies" (Washington, DC, Association of American Medical Colleges newsroom), on the Internet at **www.aamc.org/newsroom/pressrel/980318.html** (visited June 1998).

[37] *Fourteenth annual report on Physician Assistant Educational Programs in the United States, 1997–1998* (Alexandria, VA**,** American Association of Physician Assistant Programs, May 1998).

[38] Usual Weekly Earnings of full-time employees by detailed occupation, Current Population Survey, annual averages, table A-26.

[39] Per phone conversation with Kevin Marvel, Director of Research, American Academy of Physician Assistants. Earlier data, James McCawley "Physician Assistants," *Journal of the American Medical Association*, Apr. 2, 1997. Mississippi does not have laws recognizing physician assistance practice.

[40] "Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives," A Policy Analysis, Case Study 37, OTA_HCS-37 (Washington, U.S. Congress, Office of Technology Assessment, December 1986).

[41] Peter I. Buerhaus, and Douglas O. Staiger, "Managed care and the nurse workforce," *Journal of the American Medical Association*, Nov. 13, 1996.

[42] "Managed care and the nurse workforce."

[43] Employment growth data are based on full-time and part-time registered nurses, and are derived from the Industry-Occupation matrix, Bureau of Labor Statistics.

[44] "Managed care and the nurse workforce."