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**Trends Affecting Hospitals
and Health Systems**

*TrendWatch
Chartbook*

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TrendWatch Chartbook 2000

Trends Affecting
Hospitals and Health Systems

June 2000

Prepared by
The Lewin Group, Inc.
for
The American Hospital Association

TrendWatch is a partnership between The American Hospital Association and The Lewin Group designed to provide research and analysis of important and emerging trends in the hospital and health care field. The TrendWatch team members track hospital and health care issues, prepare quarterly reports on emerging and important trends, and offer technical support to AHA and member organizations.

The American Hospital Association (AHA) is the national organization that represents and serves all types of hospitals, health care networks, and their patients and communities. Close to 5,000 institutional, 600 associate, and 40,000 personal members come together to form the AHA.



The Lewin Group is a strategic health and human services consulting firm with 30 years' experience in the US and around the world. The Lewin Group's mission is to help improve health policy and increase knowledge about the health and human services systems worldwide.



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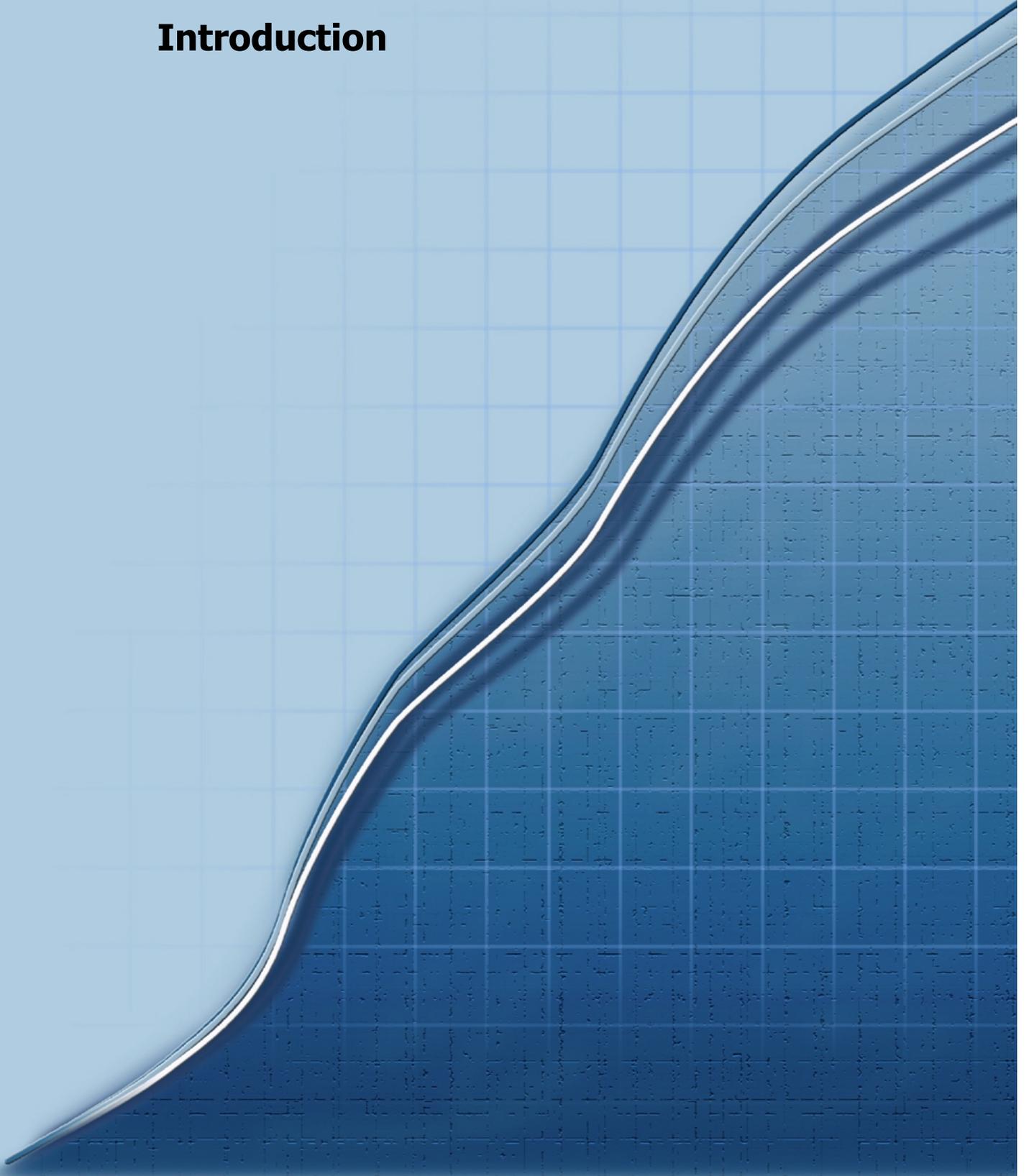
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ACKNOWLEDGEMENTS

There are several people who made significant contributions toward the completion of this report. Presented below is a list of the staff of The Lewin Group and The American Hospital Association who were actively involved in the production of the *TrendWatch Chartbook 2000*.

Ying-Jun Chen
Molly Collins
Carmela Coyle
Allen Dobson
Alison Horan
Emily Lam
Linda Magno
Donald May
Caroline Steinberg
Deborah Williams
Anne Yang

Introduction



Introduction

Hospitals face a challenging health care environment, fueled by changes in both the public and private sectors. Medicare continues to struggle with ways to ensure future solvency, and the full impact of the Balanced Budget Act of 1997 (BBA) remains to be seen. Meanwhile, against a backdrop of the strong economy, the end of a period of low health insurance premium growth, increasing concern about the cost of prescription drugs, and a tight labor market, private sector priorities are changing. The “managed care backlash” has raised concerns around choice and access and for the first time HMO enrollment as a percent of total private enrollment has declined.

The proportion of hospitals with negative total margins grew to over 26 percent in 1998, due to private market pressures, BBA payment reductions, and increasing expense per adjusted admission. After steady increases for a number of years, the Medicare payment-to-cost ratio fell in 1998, joining the continued downward trend in the payment-to-cost ratio for private payers. Early data indicate that margins continue to trend down in 1999. In 1999, bond rating agencies reported more downgrades than upgrades of non-profit hospital bond ratings, and the composite earnings projections of publicly traded hospital companies fell 16 percent.

After a period of declining increases in health insurance premium levels, the rate of growth in health insurance premiums is on the rise again. Premiums increased five percent in 1999 and are expected to increase more next year. But, higher premium levels do not translate into higher payments to hospitals. Much of the increase is going to fund prior health plan losses rather than to increase provider payments. The managed care backlash has led health plans to relax utilization control policies and back off from capitation as a form of payment. Any growth in utilization, however, may be offset by increased plan pressure on provider payment rates to control costs and maintain premium growth at levels palatable to employers.



Hospital strategies appear to be changing in response to these pressures. Over the past two years, there has been a striking reversal in a longstanding upward trend in hospital pursuit of varied horizontal and vertical integration strategies. These strategies were pursued both to prepare for managing covered lives and to increase market power. After peaking in 1997, however, fewer hospitals reported being in a system, having an ownership interest in an insurance product, or offering home health or long-term care services. Since 1996, the number of hospitals using various physician affiliation models has been declining. “Disintegration” seems to be a theme of recent news reports as hospital CEOs talk about returning to “core” lines of business.

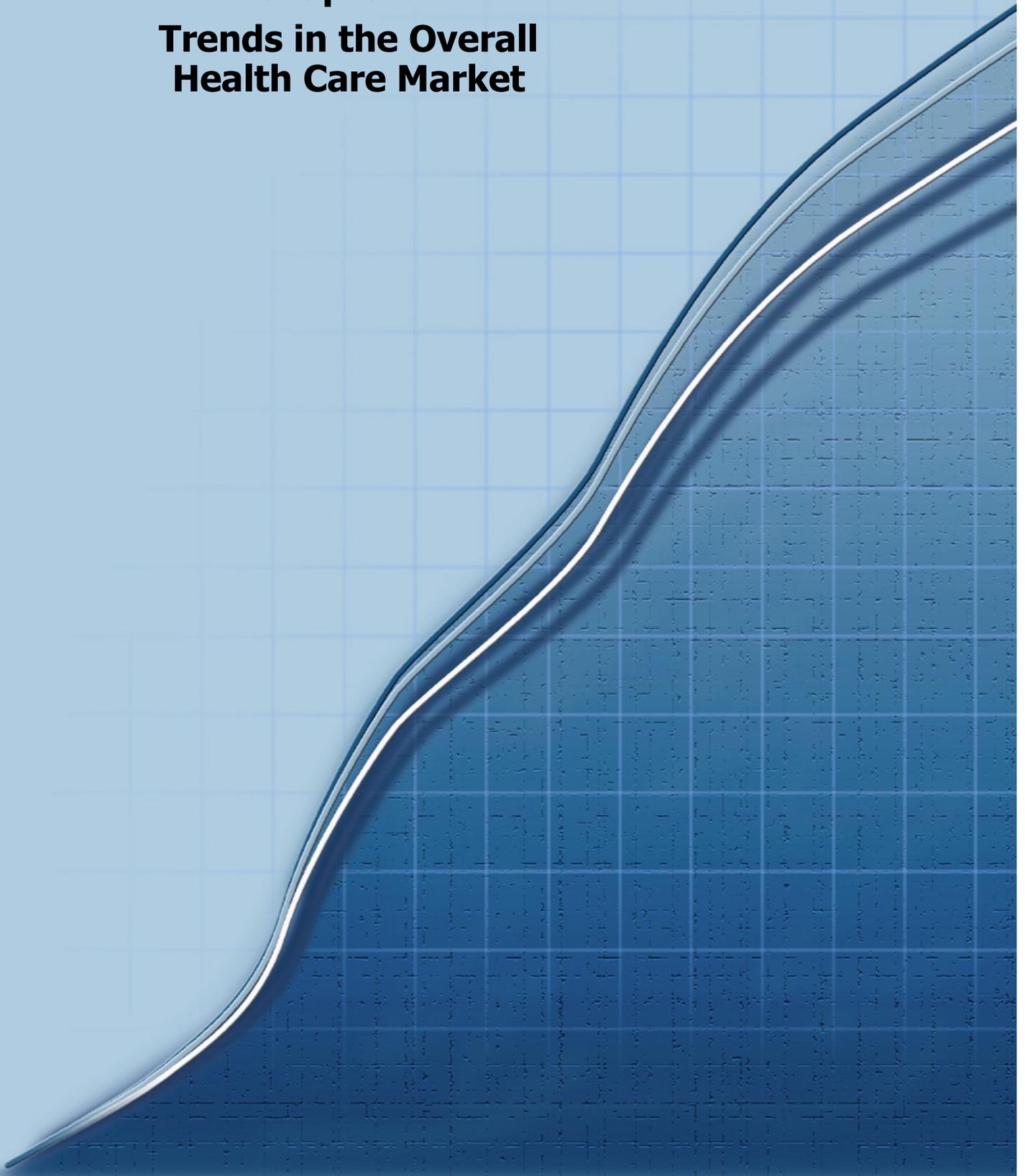
Meanwhile the shift in hospital volume and revenues from inpatient to outpatient continues. Outpatient services now account for 33 percent of total hospital revenues up from 13 percent in 1980.

Recently, attention has been focused on prescription drug spending, which has been increasing much more rapidly than physician and hospital spending in the United States. Even though prescription drugs make up only 8.1 percent of total health care spending nationally, they were responsible for 20 percent of the total increase in health care spending between 1997 and 1998.

The hospital field also is affected by larger societal factors. Technological advances and lifestyle changes have decreased mortality rates. As a result, people are living longer. By 2050, 20 percent of the population will be 65 or older and five percent of the population will be 85 or older. Utilization for the over 65 population is significantly higher than for those under 65. At the same time, the aging population means fewer workers per Medicare recipient. This trend will put greater pressure on the solvency of Medicare, leading policy-makers to continue to find ways to control the cost of care.

The following charts present an analysis of trends in the hospital field within the context of the broader environment for health care. Hospital data is drawn primarily from the American Hospital Association Annual Surveys. Other data comes from a variety of sources. The chartbook begins with a chapter on overall trends in health care spending, financing, and coverage. The next four chapters look at trends specific to the hospital field, including organizational trends, volume and utilization, financing, and workforce issues. The final chapter looks at selected community health indicators.

Chapter 1: Trends in the Overall Health Care Market



Chapter 1: Trends in the Overall Health Care Market

National Health Spending

Total national spending on health and spending per capita continued to rise through 1998, but the rate of increase has slowed considerably since the 1980s. This slower growth during a time of general economic expansion has meant that health spending as a percentage of Gross Domestic Product has been relatively flat since 1993 (Charts 1.1 - 1.4).

The distribution of national health spending by category has changed significantly. Between 1980 and 1998, spending for hospital care declined from 44 percent to 34 percent of total expenditures. By comparison, spending on physician services increased from 19 percent to 21 percent. The percent spent on home health tripled, while the percent spent on nursing home care declined, and prescription drug spending rose from five percent to eight percent of the total (Chart 1.5).

While the rate of increase in overall spending has declined, growth in spending on pharmaceuticals is accelerating. Growth in prescription drug spending now represents 20 percent of overall growth in national health spending. Private health insurance currently is paying for a larger share of prescription drug spending than are consumers (Charts 1.6 - 1.8).

Trends in Health Care Coverage and Premiums

Since 1980, Medicare and Medicaid together have gone from paying 26 percent to 34 percent of total national health expenditures. The share paid by private insurance has also risen. Meanwhile the share paid out of pocket has declined from 24 percent to 17 percent (Chart 1.9).

The percentage of individuals under private coverage has decreased slightly, while that under public coverage has remained fairly steady since 1990. The number of uninsured has grown by 28 percent since 1985 to 44.3 million, or from 14 percent to 16 percent of the total US population. The percent uninsured varies from a low of nine percent in Nebraska to a high of 25 percent in Texas (Charts 1.10 - 1.12).



Traditional indemnity type coverage has all but disappeared. In 1999 only 14 percent of those under private insurance could choose an indemnity option and only nine percent enrolled in one. HMO enrollment, however, peaked at 33 percent of private health coverage in 1996. Since that time, enrollment has shifted away from HMOs toward less restrictive products like PPOs and point-of-service options (Charts 1.13 - 1.14). At the same time, Medicare and Medicaid have used HMOs as a vehicle to expand access and reduce health care costs. The percent of beneficiaries enrolled in Medicare and Medicaid HMOs rose significantly in the 1990s, especially in Medicaid with 54 percent enrolled in HMOs in 1998 (Charts 1.15, 1.17 - 1.18).

While moderating significantly overall, the change in per-enrollee Medicare and private health spending has varied considerably over time. From 1984 to 1991, Medicare experienced lower growth in per-enrollee spending, likely due to the introduction of the hospital prospective payment system. Between 1992 and 1997, private sector costs increased more slowly than those of Medicare. This reversal was likely due to the massive shift of the privately insured population into managed care products. Now the rate of change for the private sector is trending up for a variety of reasons, while Medicare is trending down as the Balanced Budget Act of 1997 takes effect (Chart 1.16).

The annual change in private health insurance premiums hit a low of 0.5 percent in 1996, but is now rebounding as health plans, particularly HMOs, try to recoup recent losses in 1997 and 1998. (Charts 1.19 - 1.20).



Chart 1.1:
Total National Health Expenditures
1980 - 1998

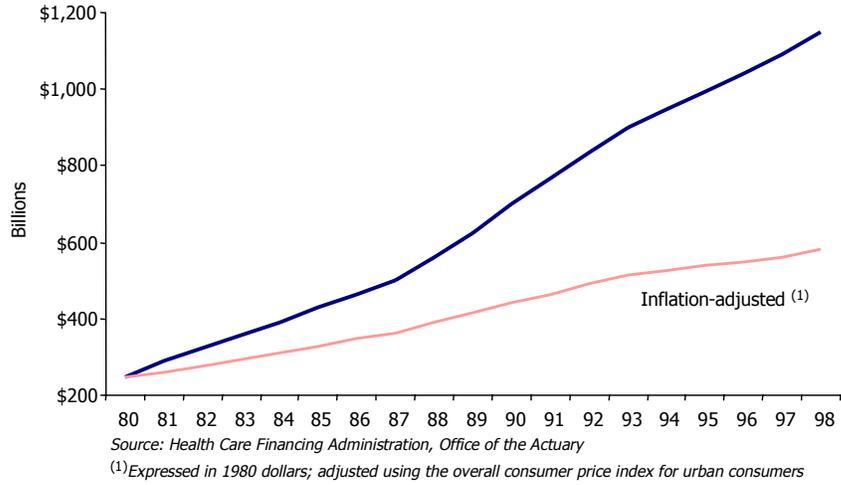
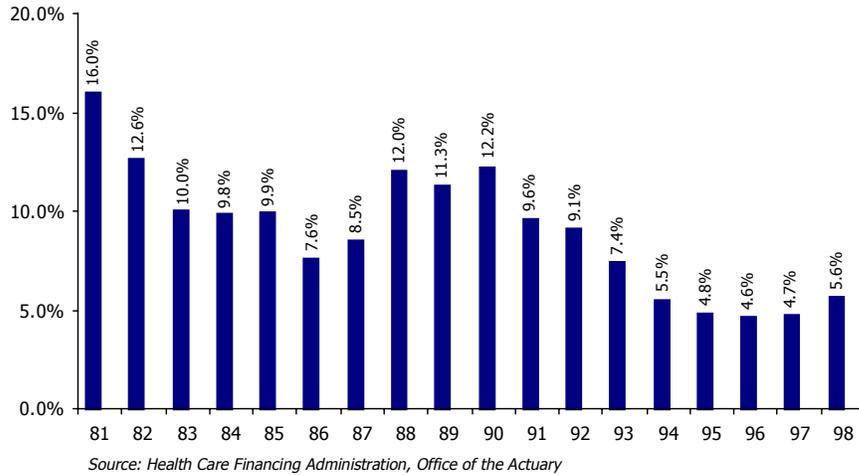
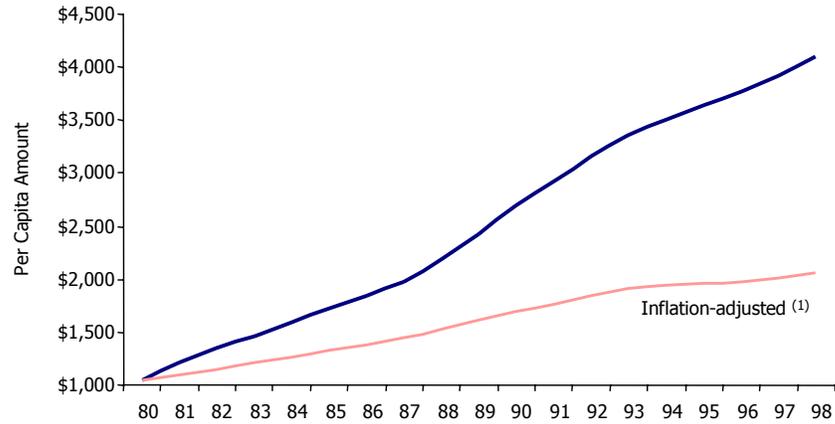


Chart 1.2:
Percent Change in Total National Health Expenditures
1981 - 1998





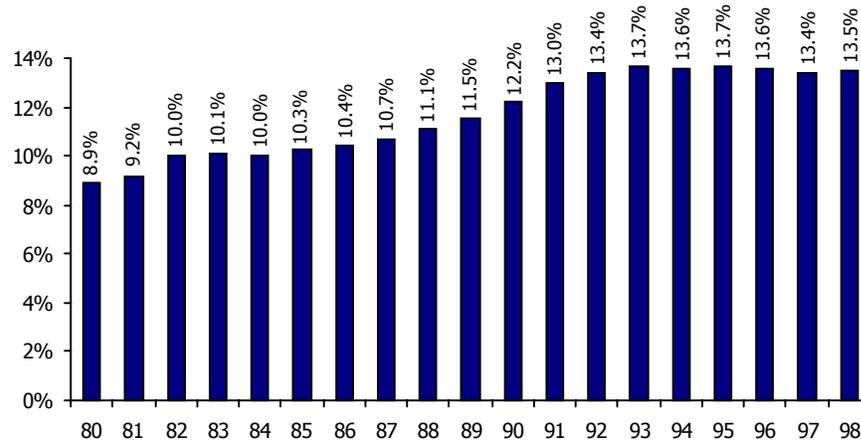
**Chart 1.3:
Per Capita National Health Expenditures
1980 - 1998**



Source: Health Care Financing Administration, Office of the Actuary

(1) Expressed in 1980 dollars; adjusted using the overall consumer price index for urban consumers

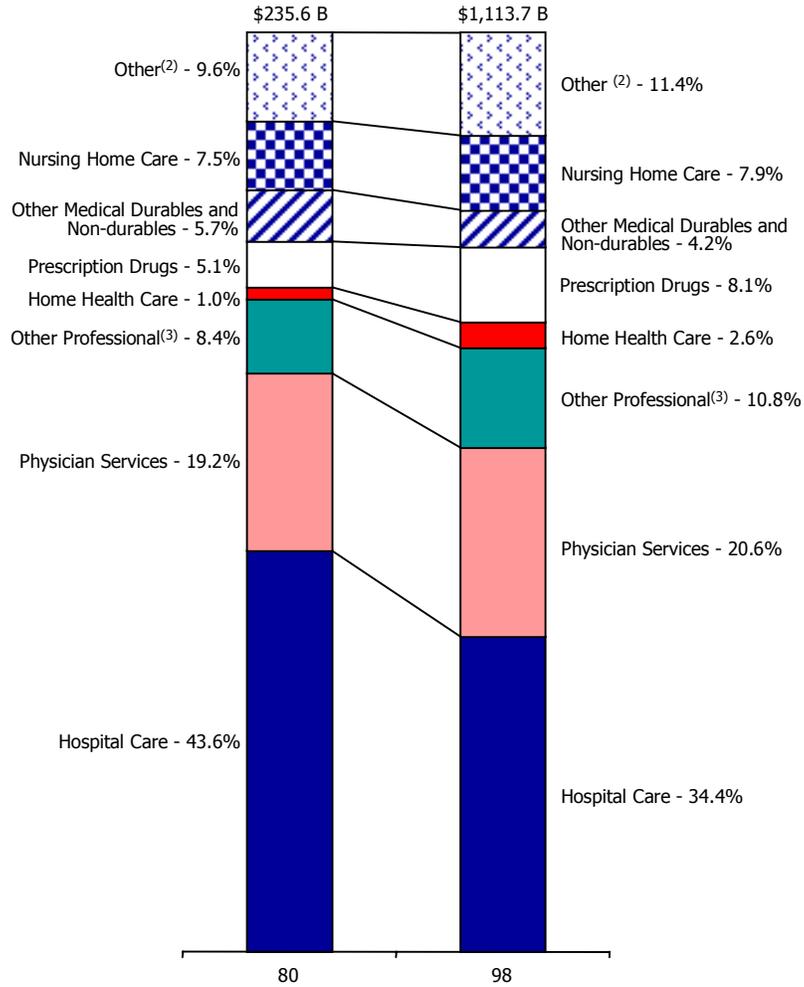
**Chart 1.4:
National Health Expenditures
as a Percent of Gross Domestic Product
1980 - 1998**



Source: Health Care Financing Administration, Office of the Actuary



**Chart 1.5:
National Health Expenditures for Health Services
and Supplies⁽¹⁾ by Category
1980 and 1998**

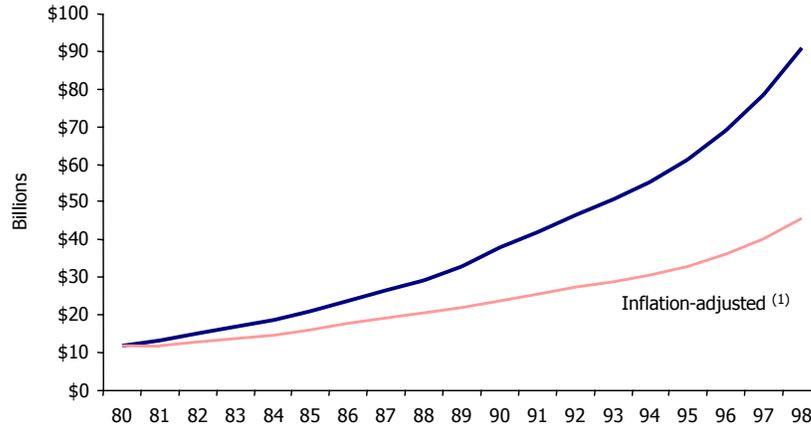


Source: Health Care Financing Administration, Office of the Actuary

- (1) Excludes medical research and medical facilities construction
- (2) "Other" includes net cost of insurance and administration, government public health activities, and other health services
- (3) "Other professional" includes dental and other non-physician professional services



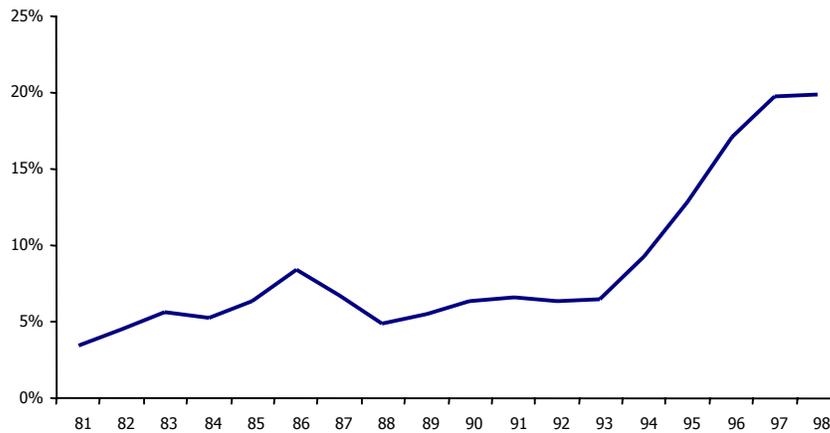
**Chart 1.6:
Total Prescription Drug Spending
1980 - 1998**



Source: Health Care Financing Administration, National Health Accounts

(1) Expressed in 1980 dollars; adjusted using the overall consumer price index for urban consumers

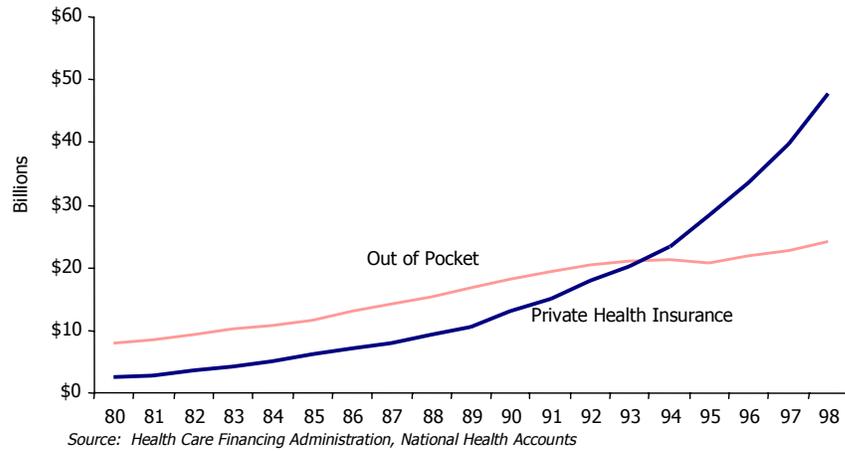
**Chart 1.7:
Growth in Total Prescription Drug Spending
as a Percent of Total Growth in National Health Expenditures
1981 - 1998**



Source: Health Care Financing Administration, National Health Accounts

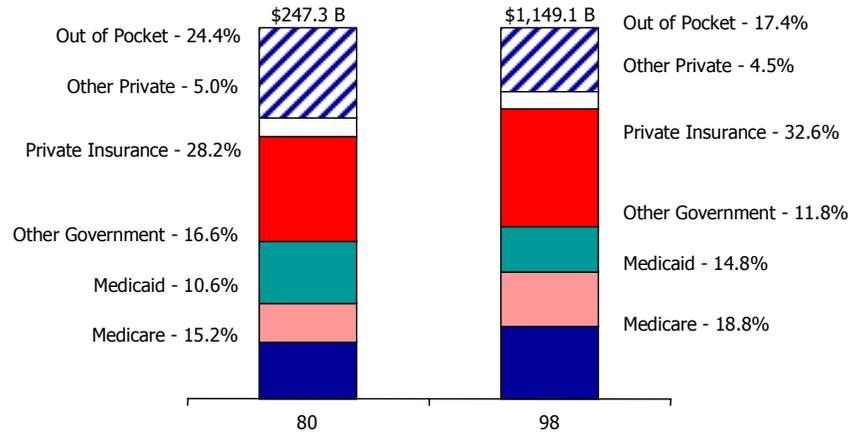


**Chart 1.8:
Consumer Out of Pocket Spending
vs. Private Health Insurance Spending
for Prescription Drugs
1980 - 1998**



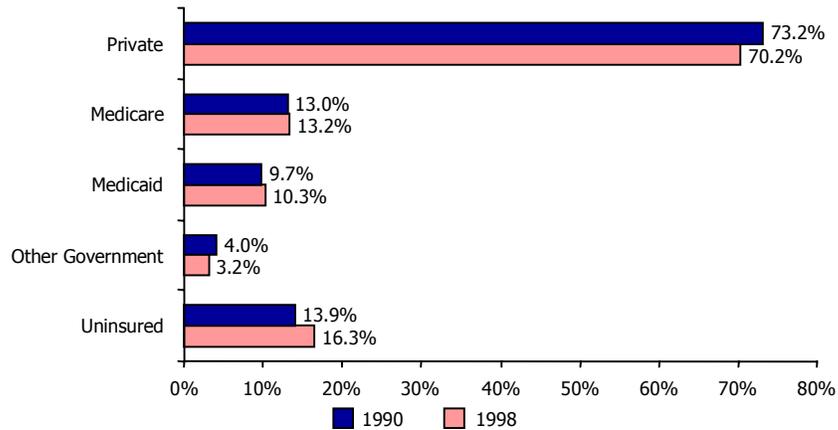


**Chart 1.9:
Distribution of National Health Expenditures
by Source of Payment
1980 and 1998**



Source: Health Care Financing Administration, Office of the Actuary

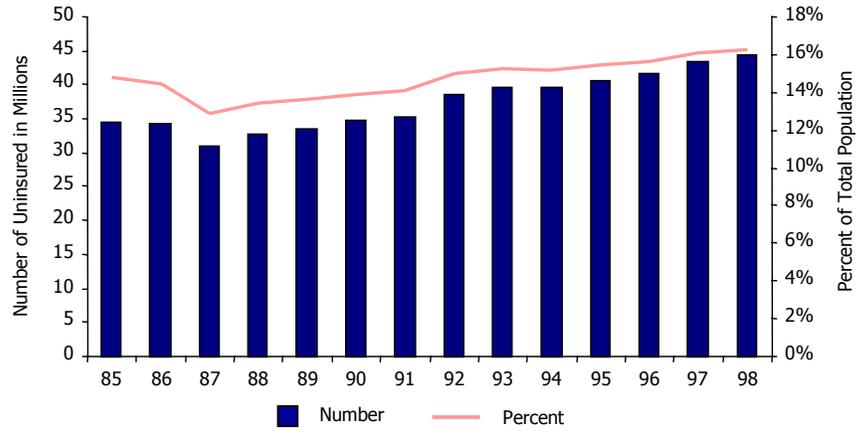
**Chart 1.10:
Distribution of Health Insurance
Percent of Population Covered by Payer
1990 and 1998**



Source: US Bureau of the Census

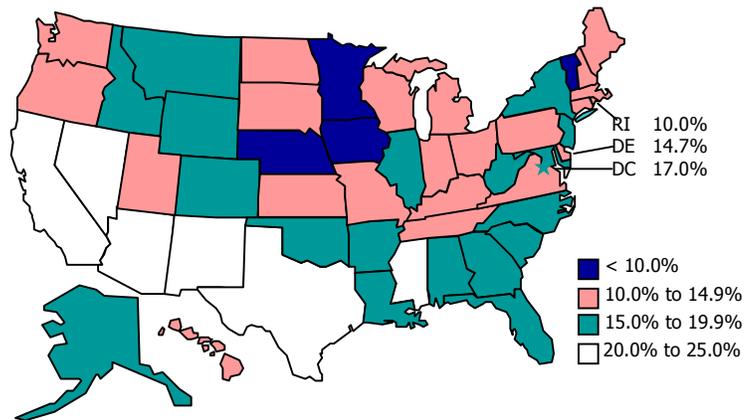


**Chart 1.11:
Number and Percent Uninsured
1985 - 1998**



Source: US Bureau of the Census

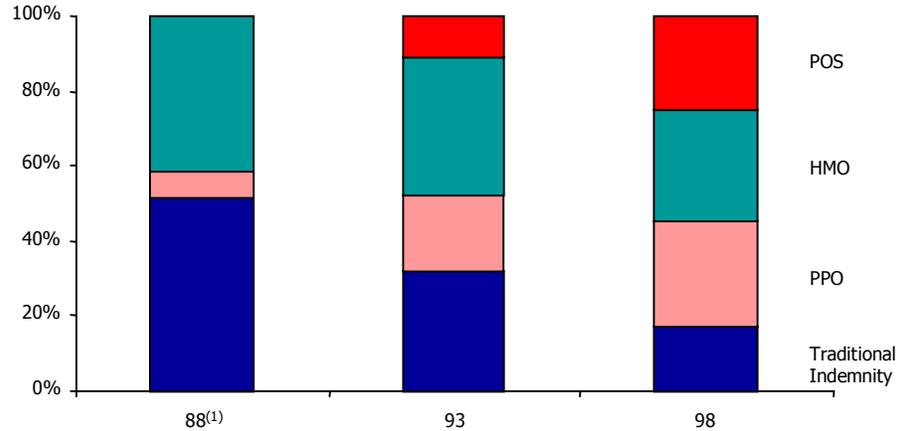
**Chart 1.12:
Percent Uninsured by State
1998**



Source: US Bureau of the Census

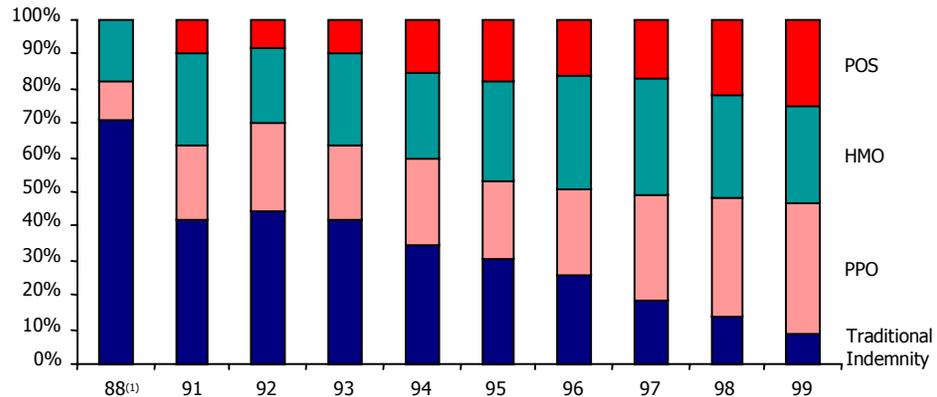


Chart 1.13:
Percentage of Employees with Employer-based Coverage
Who Can Choose Conventional, PPO, HMO and POS Plans
1988 - 1998



Source: KPMG Compensation & Benefits Health Care Group, Health Benefits 1998
 (1) Point-of-service plans not separately identified

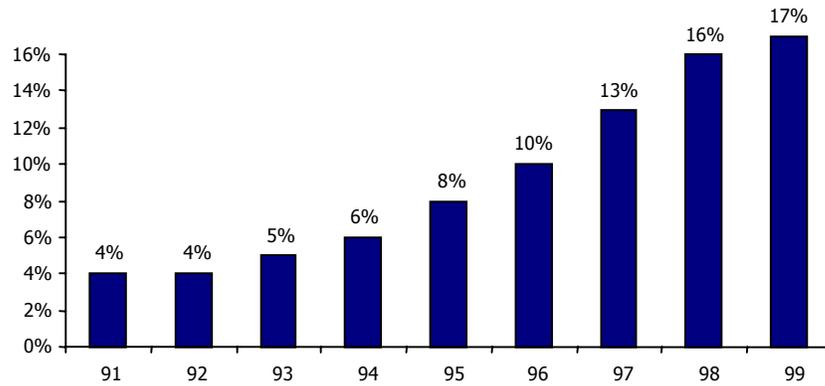
Chart 1.14:
Distribution of Medium and Large Firm Employer-sponsored
Health Insurance Enrollment by Type of Plan
1988 - 1999



Source: 1988-1998 The Kaiser Family Foundation, Trends and Indicators in the Changing Health Care Marketplace; and 1999 from the Health Research Education Trust Employer Health Benefits 1999 Annual Survey
 (1) Point-of-service plans not separately identified



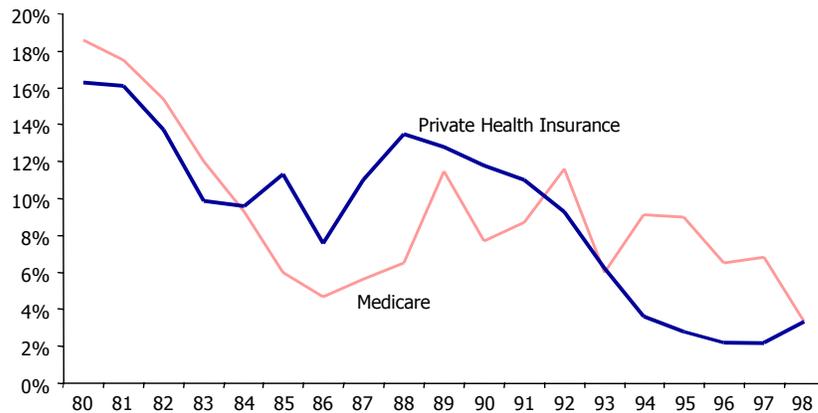
**Chart 1.15:
Percent of Medicare Beneficiaries Enrolled
in Medicare Managed Care
1988 - 1999**



Source: Health Care Financing Administration, Office of the Actuary

* Percentages are risk enrollees divided by enrollees who have both hospital insurance and supplementary medical insurance

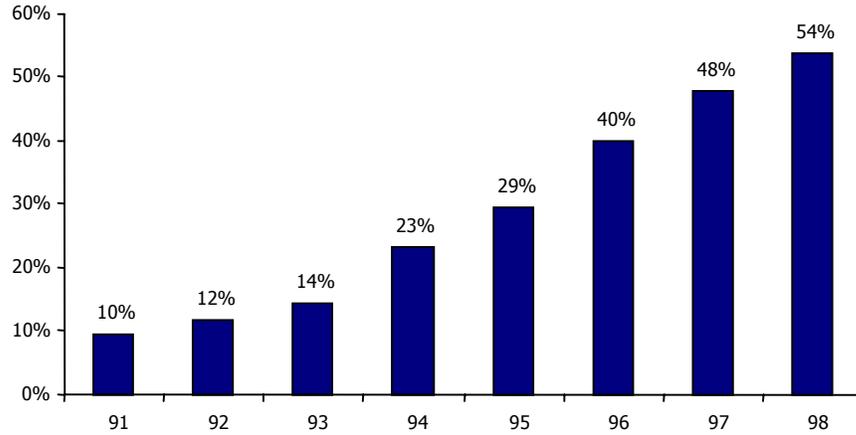
**Chart 1.16:
Growth in Medicare Spending per Beneficiary
vs. Private Health Insurance Spending per Enrollee
1980 - 1998**



Source: Health Care Financing Administration, Office of the Actuary

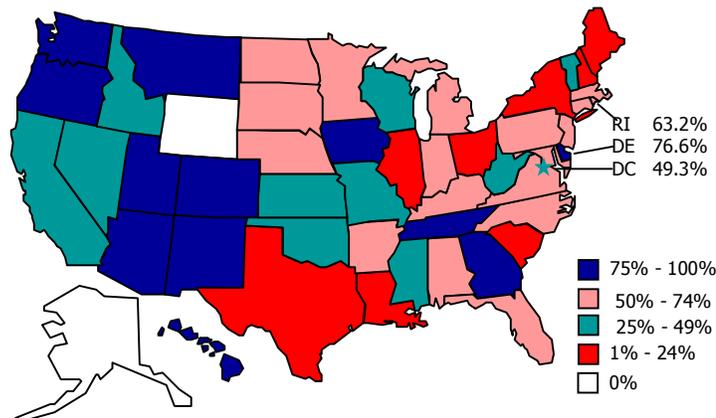


Chart 1.17:
Percent of Medicaid Beneficiaries Enrolled
in Medicaid Managed Care
1991 - 1998



Source: Health Care Financing Administration, Office of the Actuary

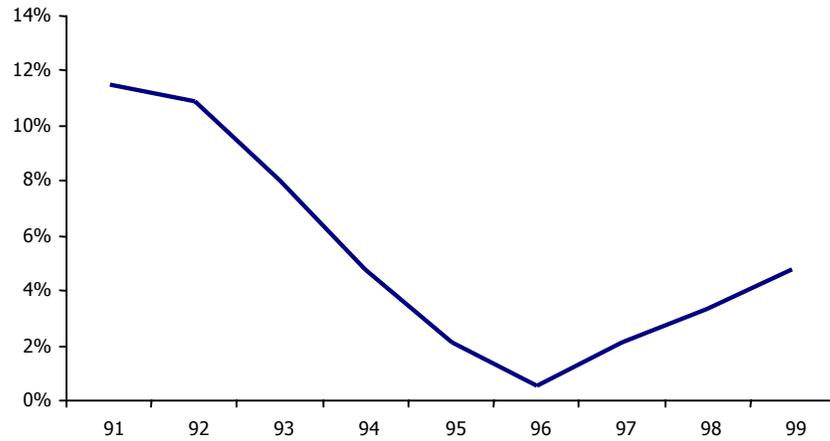
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1998



Source: Health Care Financing Administration, Office of the Actuary

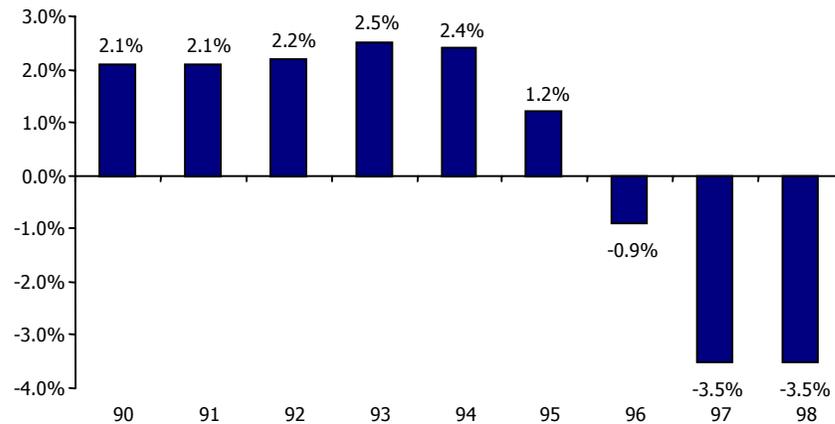


Chart 1.19:
Annual Change in Health Insurance Premiums
 1991 - 1999



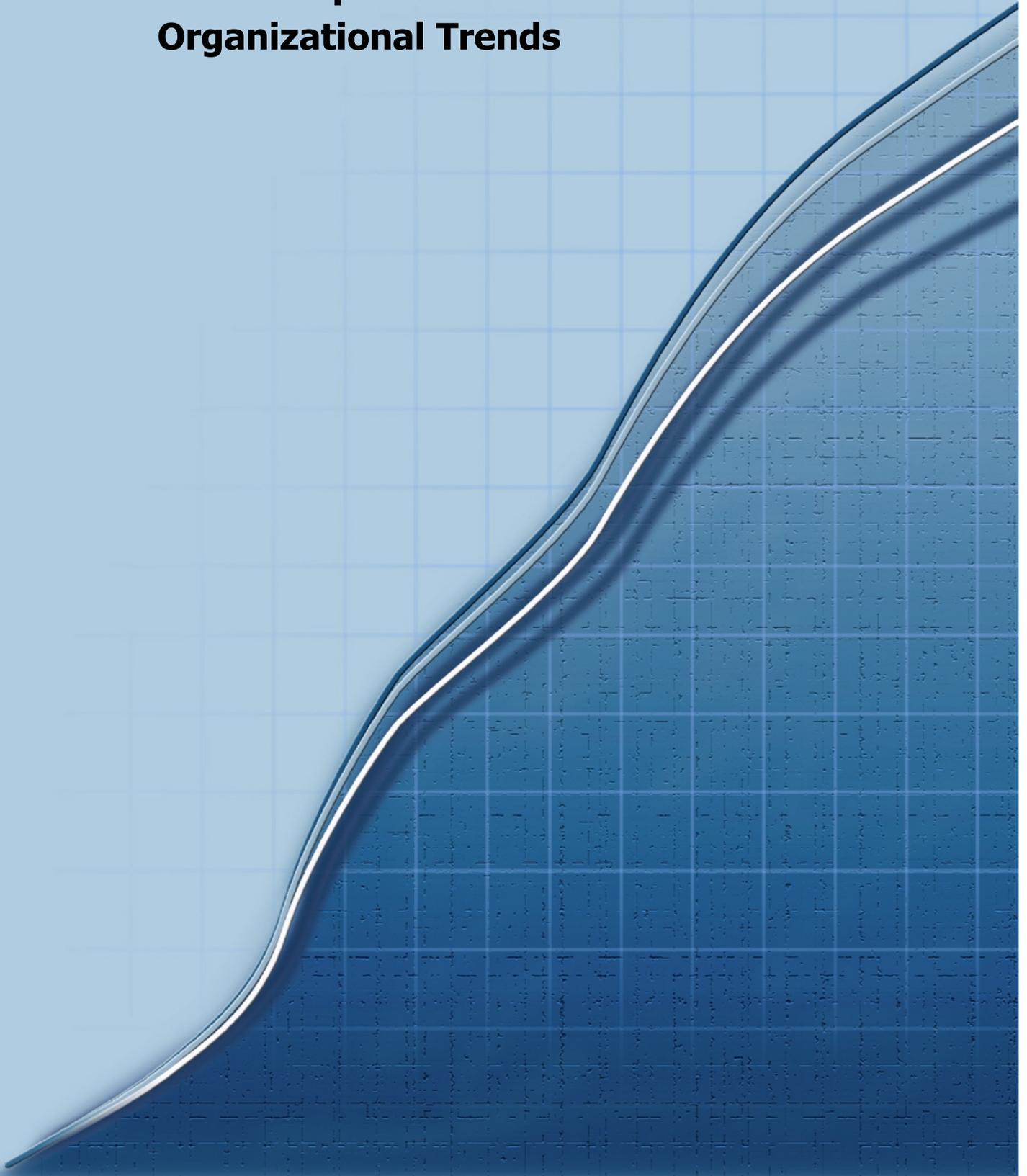
Source: The Kaiser Family Foundation and Health Research Education Trust Employer Health Benefits 1999 Annual Survey

Chart 1.20:
HMO Plan Operating Margins
 1990 - 1998



Source: Interstudy Competitive Edge: HMO Industry Report 9.2

Chapter 2: Organizational Trends





Chapter 2: Organizational Trends

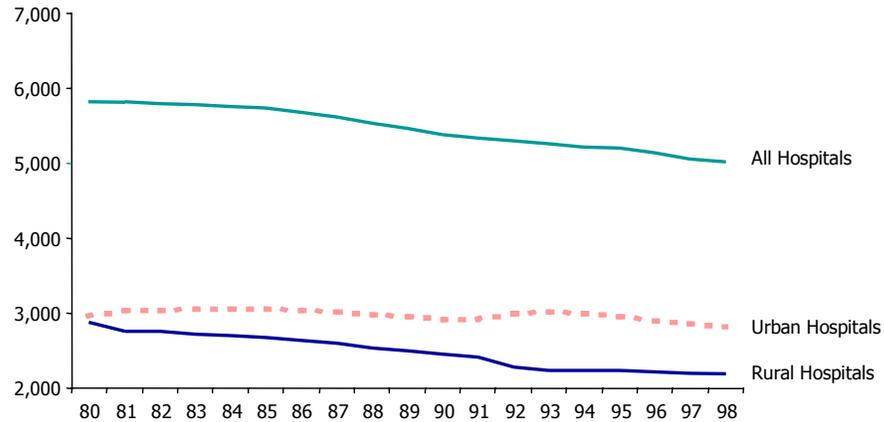
In response to the changing health care environment and consumer demand, hospitals have expanded their service portfolio and changed their organizational structure. The number of hospitals and hospital beds has shrunk considerably. There were 815 fewer hospitals in 1998 than in 1980 and nearly 150,000 fewer beds. Hospital beds per thousand population has dropped from 4.4 in 1980 to 3.1 in 1998, a decrease of 29 percent. Beds per thousand varies significantly by state. Meanwhile, hospital reliance on outpatient revenue has increased considerably; outpatient revenues now represent 33 percent of total hospital revenues, up from 13 percent in 1980 (Charts 2.1 - 2.4).

During the mid-1990s hospital mergers proceeded at a rapid clip. Forty-three percent of hospitals are now part of health systems. Many hospitals engaged in a variety of physician relationships, developed insurance products, and diversified into home health, long-term care, hospice and a variety of other services (Charts 2.5 - 2.8).

However, the number of hospitals using various physician affiliation models began to decline in 1997, and 1998 marked a sharp reversal of the steady upward trends in many of the other vertical and horizontal integration efforts described above. After peaking in 1997, fewer hospitals reported being in a system and fewer hospitals reported having an ownership interest in an insurance product or offering home health or long-term care services (Charts 2.5 - 2.8).

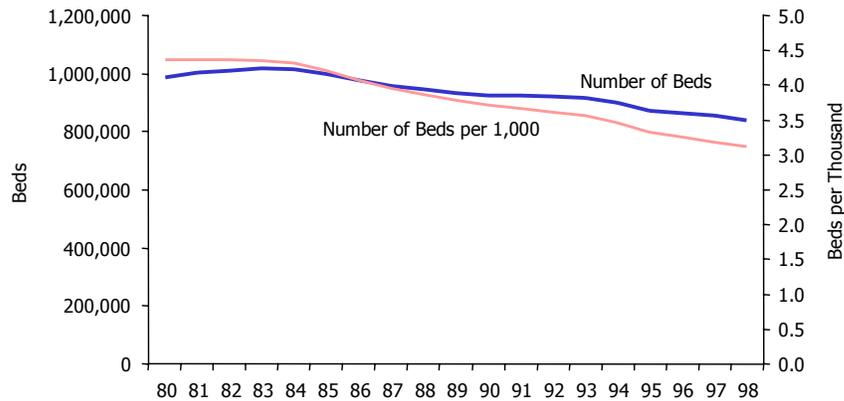


**Chart 2.1:
Number of Community Hospitals
1980 - 1998**



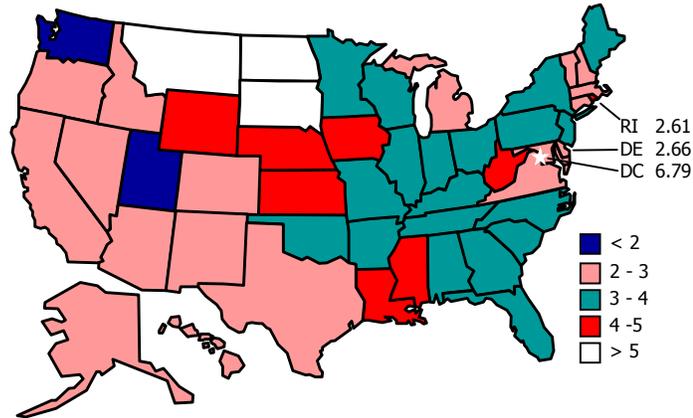
Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals.

**Chart 2.2:
Number of Beds
and Number of Beds per 1,000 Persons
1980 - 1998**



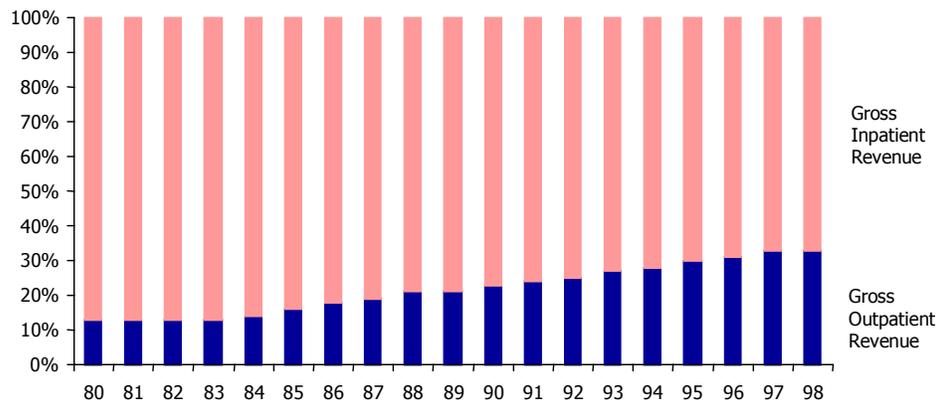
Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

Chart 2.3:
Beds per 1,000 by State
1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1998 for community hospitals

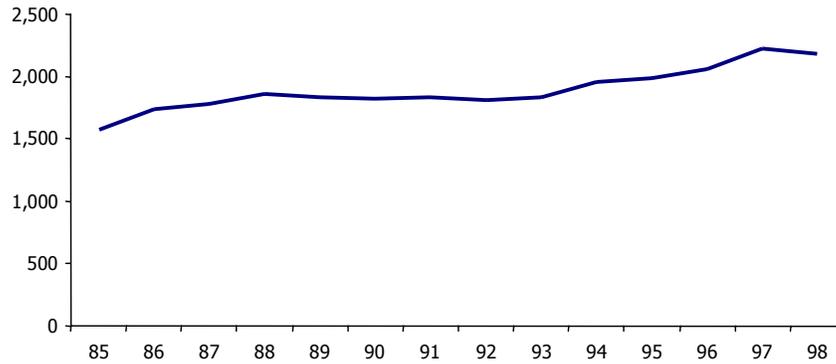
Chart 2.4:
Distribution of Outpatient vs. Inpatient Revenues
1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals



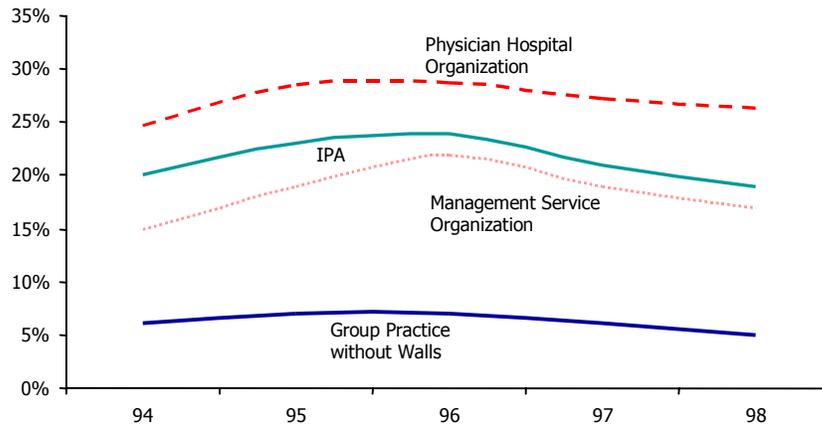
Chart 2.5:
Number of Hospitals in Health Systems⁽¹⁾
 1985 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1985 - 1998 for community hospitals

⁽¹⁾ Hospitals that are part of a corporate body that may own and/or manage health provider facilities or health-related subsidiaries as well as non-health-related facilities including freestanding and/or subsidiary corporations

Chart 2.6:
Percent of Hospitals with Physician Affiliates⁽¹⁾
 by Type of Relationship
 1994 - 1998

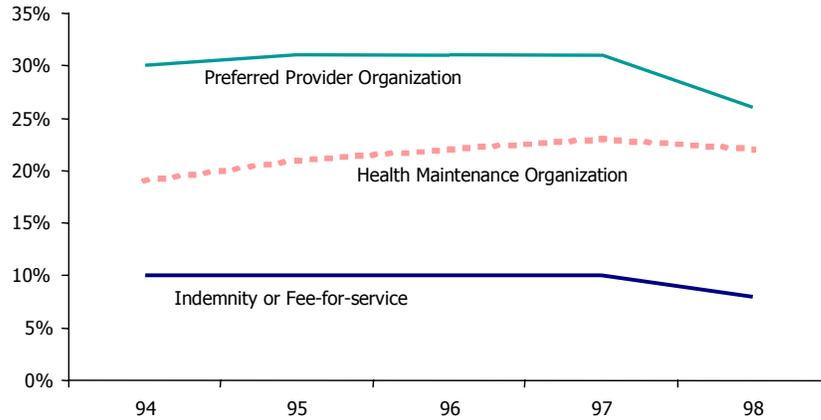


Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1994 - 1998 for community hospitals

⁽¹⁾ A hospital is considered to have a physician relationship if the relationship exists as part of the hospital or a system or network of which the hospital is a part

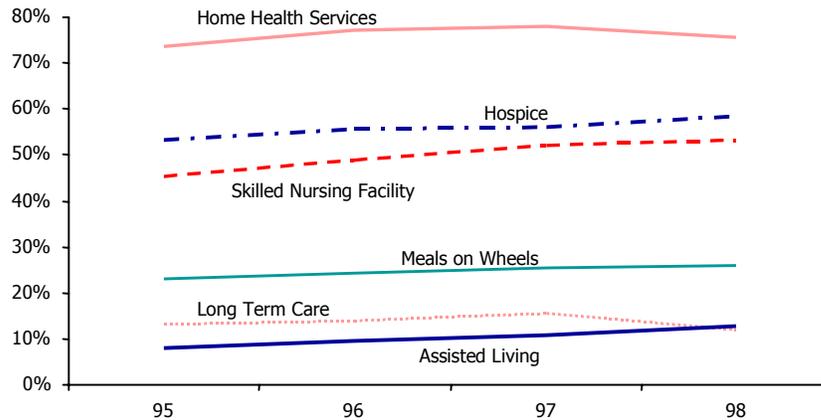


Chart 2.7:
Percent of Hospitals with Insurance Products
by Type of Insurance
1994 - 1998



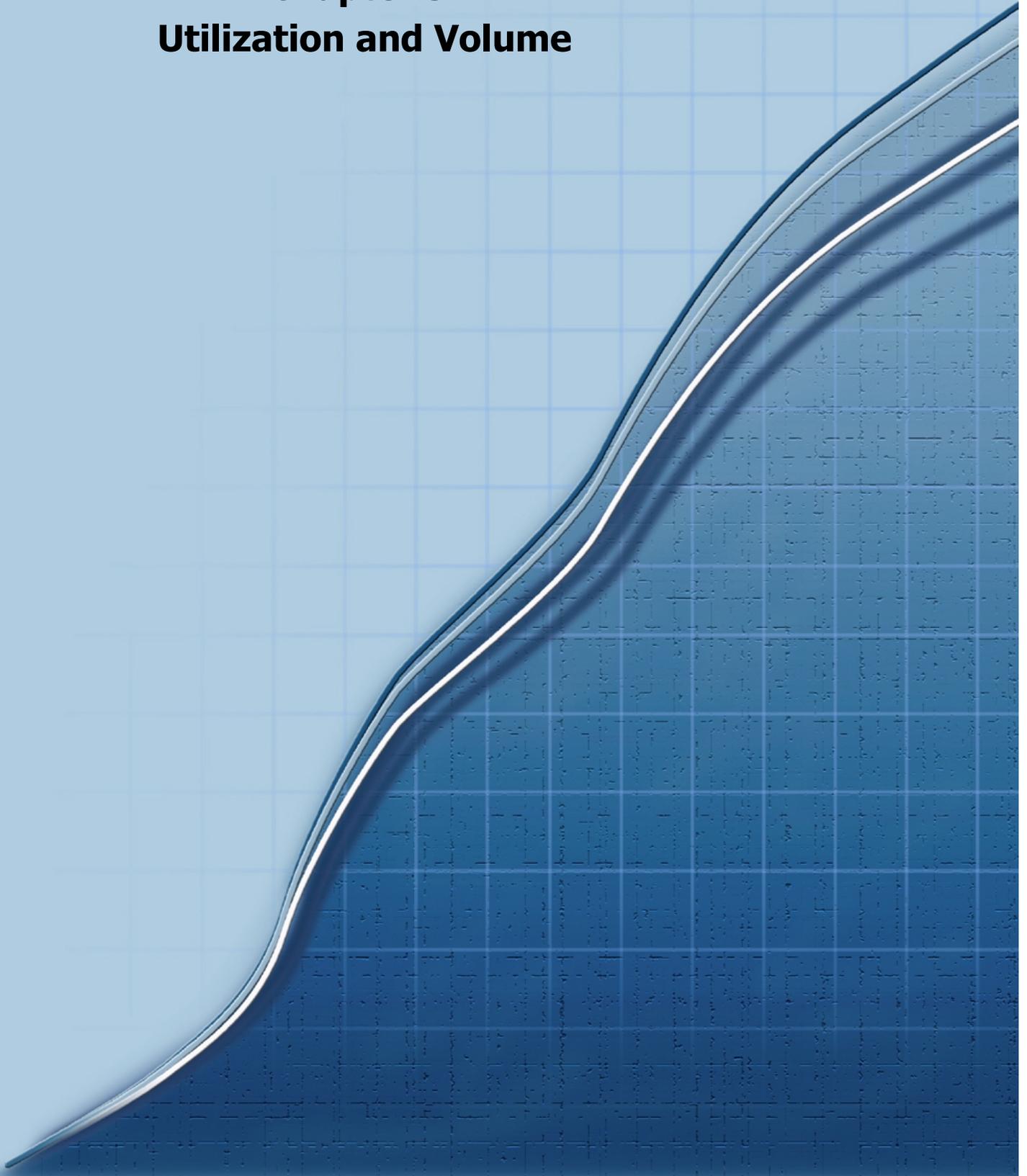
Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1994 - 1998 for community hospitals

Chart 2.8:
Percent of Hospitals Offering “Non-hospital” Services
1995 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1995 - 1998 for community hospitals

Chapter 3: Utilization and Volume



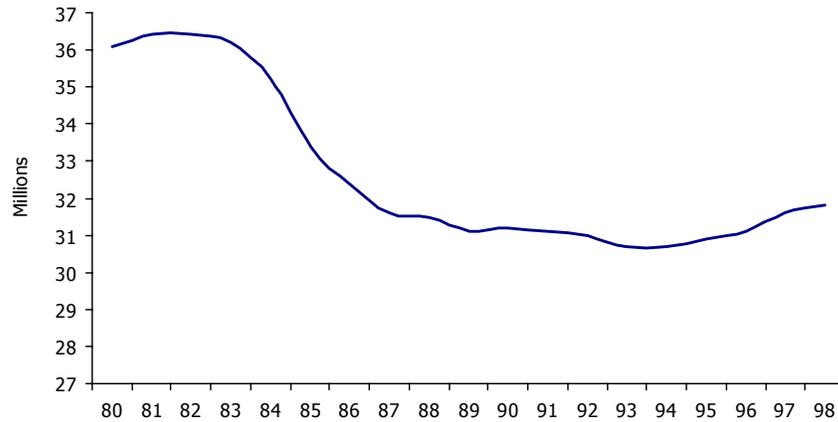
Chapter 3: Utilization and Volume

Community hospital acute care admissions declined 15 percent between 1980 and 1994 and then began slowly trending upward. After declining sharply in the 1980s and more modestly in the early 1990s, admissions per thousand have been flat. Average length of stay has dropped more than a day and a half (or 20 percent) between 1980 and 1998, but the pace of decline has slowed over the last three years. Length of stay by state varies from a high of 11.2 days in Montana to a low of 4.5 days in Oregon and New Mexico. Although inpatient days and days per thousand continue to decline, the rate of decrease has slowed as well (Charts 3.1 - 3.6).

Meanwhile outpatient visits have more than doubled since 1980, and outpatient utilization rates continue to increase at a rapid clip. Outpatient surgeries now represent nearly 60 percent of all surgeries (Charts 3.7 - 3.9).

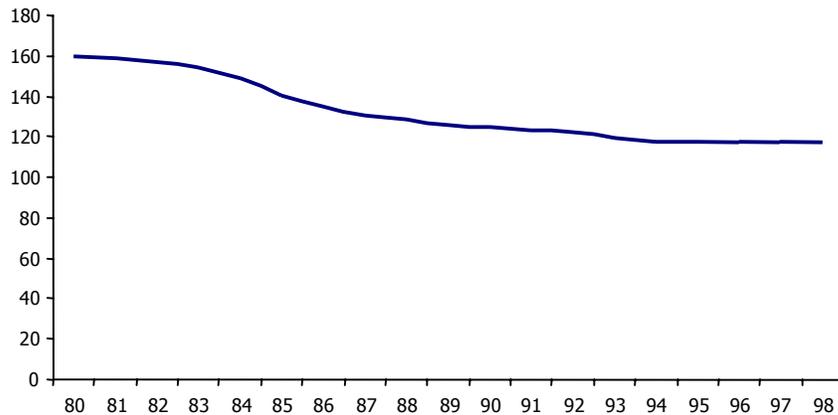


Chart 3.1:
Inpatient Admissions in Community Hospitals
 1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

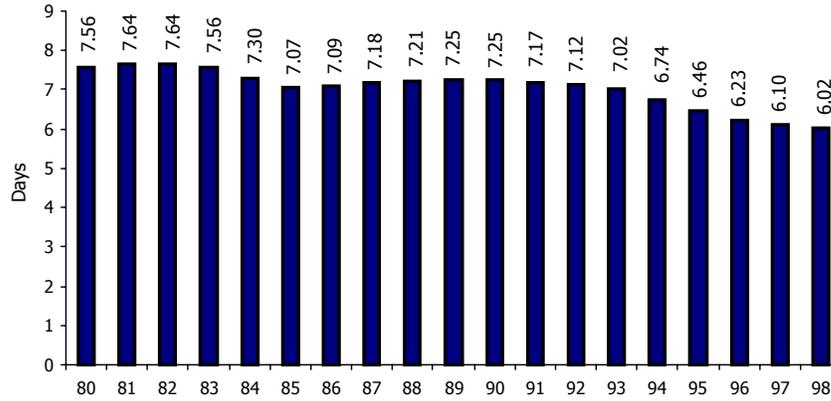
Chart 3.2:
Inpatient Admissions per 1,000 Persons
 1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals and US Census Bureau data

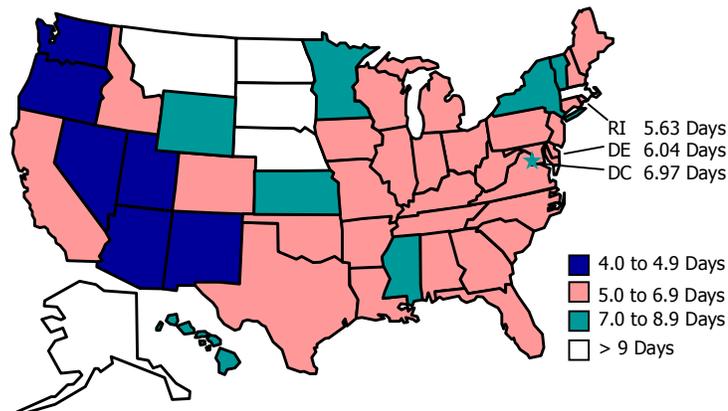


Chart 3.3:
Average Length of Stay in Community Hospitals
1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

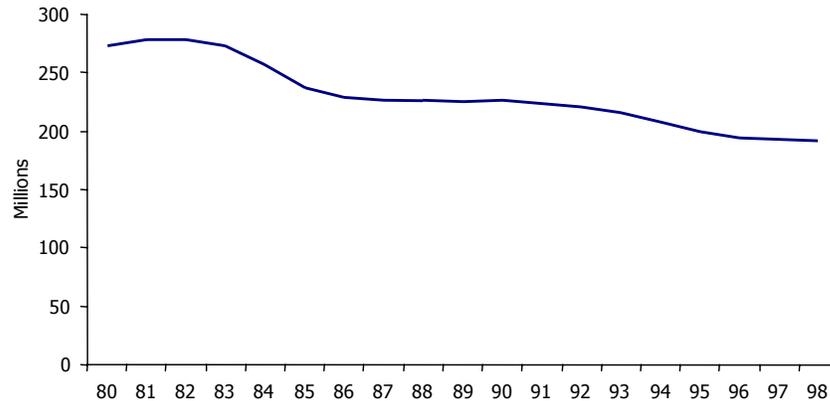
Chart 3.4:
Average Length of Stay in Community Hospitals
by State
1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1998 for community hospitals

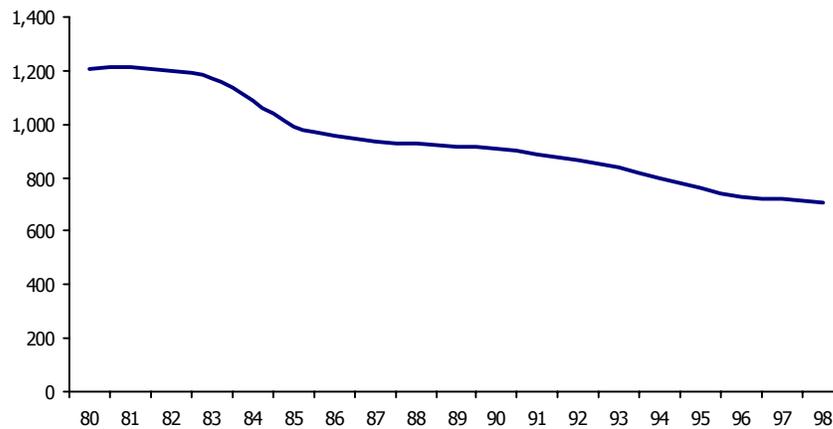


Chart 3.5:
Total Inpatient Days in Community Hospitals
 1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

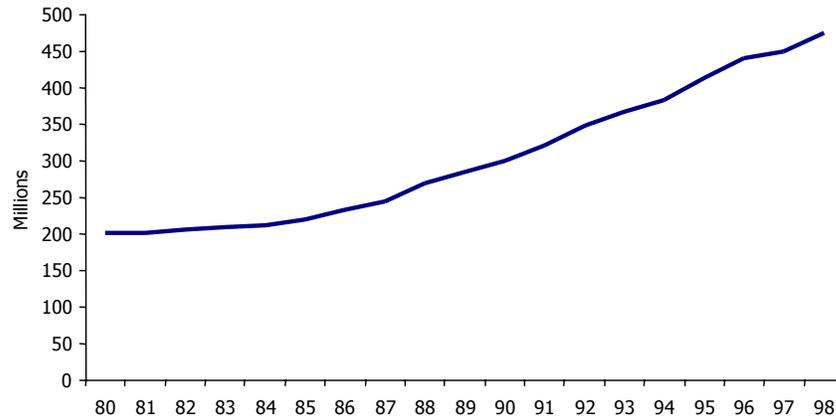
Chart 3.6:
Inpatient Days per 1,000 Persons
 1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals and US Census Bureau data

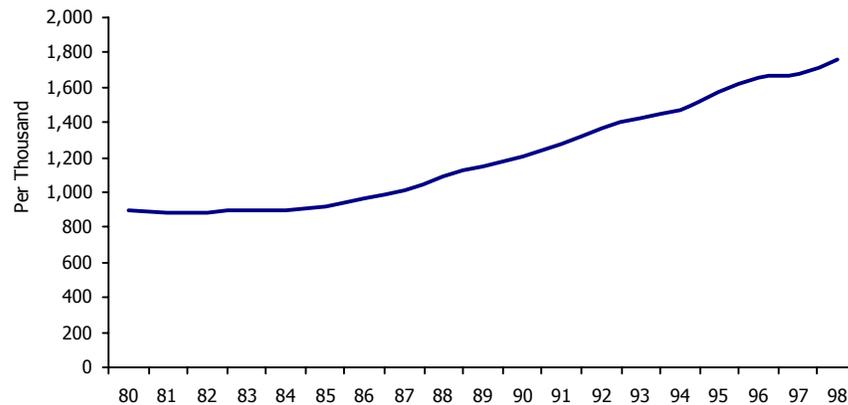


**Chart 3.7:
Total Hospital Outpatient Visits
in Community Hospitals
1980 - 1998**



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

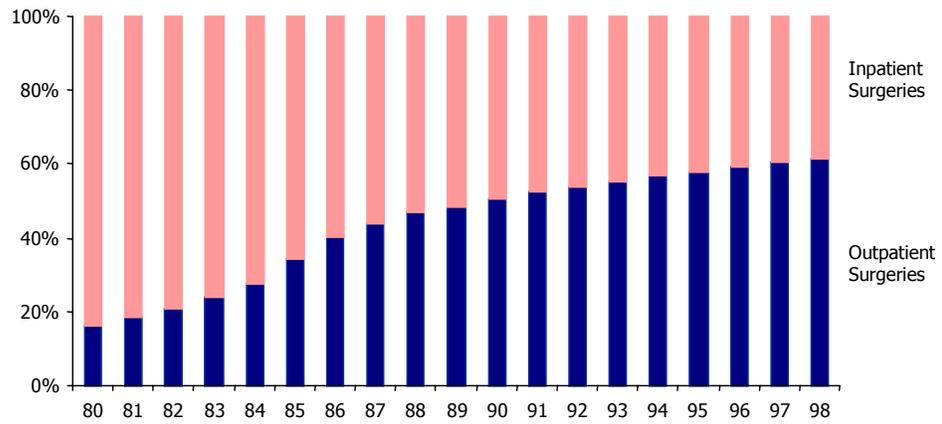
**Chart 3.8:
Hospital Outpatient Visits per 1,000 Persons
1980 - 1998**



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals and US Census Bureau data

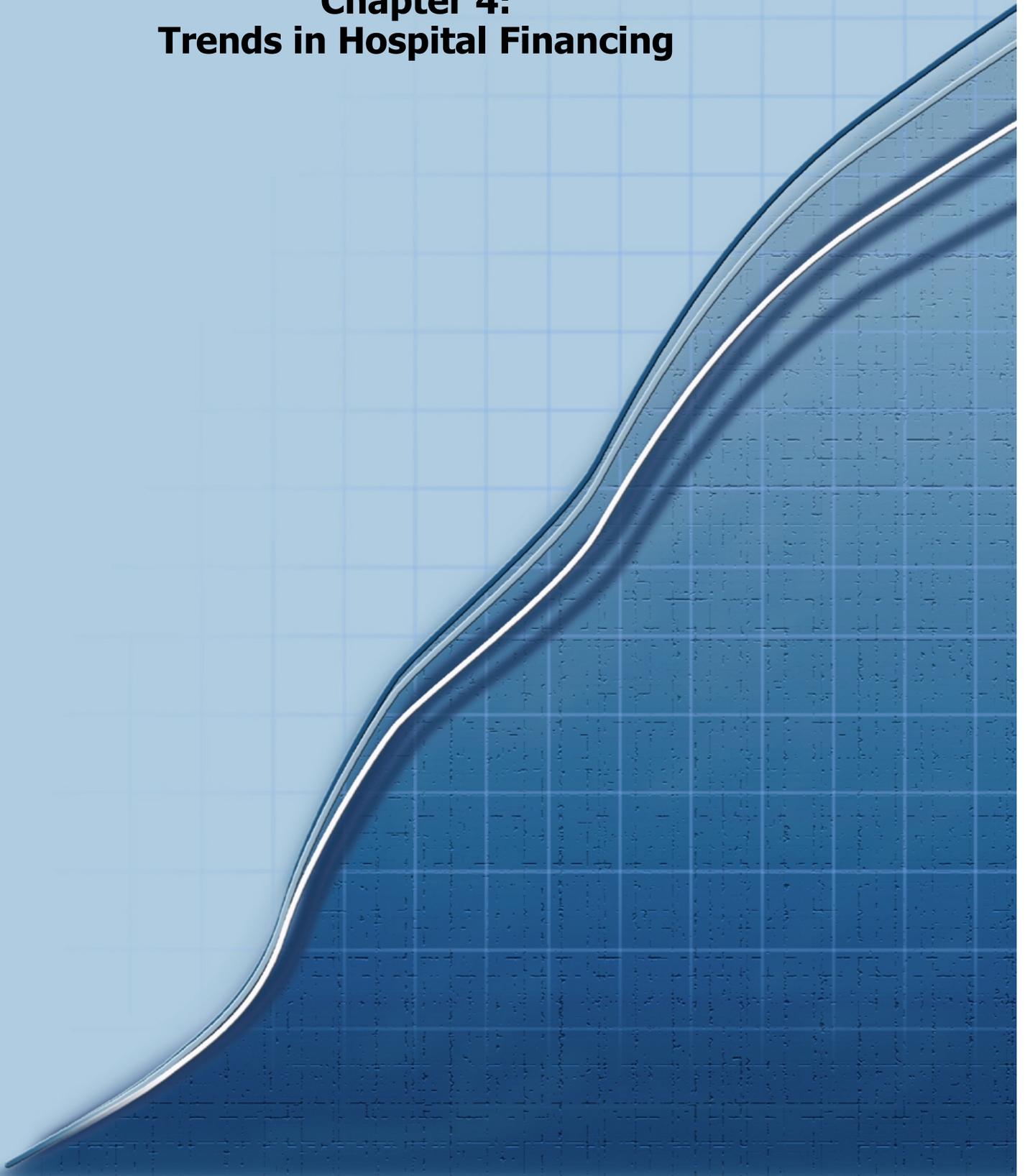


Chart 3.9:
Percentage Share of Inpatient vs. Outpatient Surgeries
1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

Chapter 4: Trends in Hospital Financing



Chapter 4: Trends in Hospital Financing

Overall Financial Performance

The aggregate hospital total margin fell to 5.8 percent in 1998, as growth in expenses slightly outpaced growth in revenues. This increased the proportion of hospitals with negative total margins to 26.6 percent, representing the highest percentage of hospitals with negative margins since 1990 (Charts 4.1 - 4.3).

After increasing rapidly from 1994 to 1997, aggregate non-operating gains (e.g., income from investments) as a percentage of total net revenue for hospitals have leveled off in 1998. At 2.8 percent of revenue, non-operating gains make up about half of aggregate total margin (Chart 4.4).

Although 1999 AHA survey data are not yet available, other data sources indicate that financial performance is continuing to decline for both not-for-profit and for-profit hospitals. Operating margins for the first and second quarters of 1999 for not-for-profit hospitals are down relative to the same quarters of 1998. Composite earnings per share projections for publicly traded hospital stocks fell by 23 percent from October 1998 to January 2000. Bond rating agencies reported a surge in bond downgrades for hospitals in 1999, with downgrades outnumbering upgrades by more than four to one in the first part of 1999. (Charts 4.5 - 4.7).

Payer Mix

Since 1980 hospital reliance on Medicare and Medicaid has increased. In 1980 Medicare represented 35 percent of total costs, growing to 39 percent by 1998. Over the same period, Medicaid increased from 10 percent to 13 percent. Meanwhile, private payers' share of costs has decreased from 42 percent to 38 percent and uncompensated care has increased from five percent to six percent of total costs (Chart 4.8).

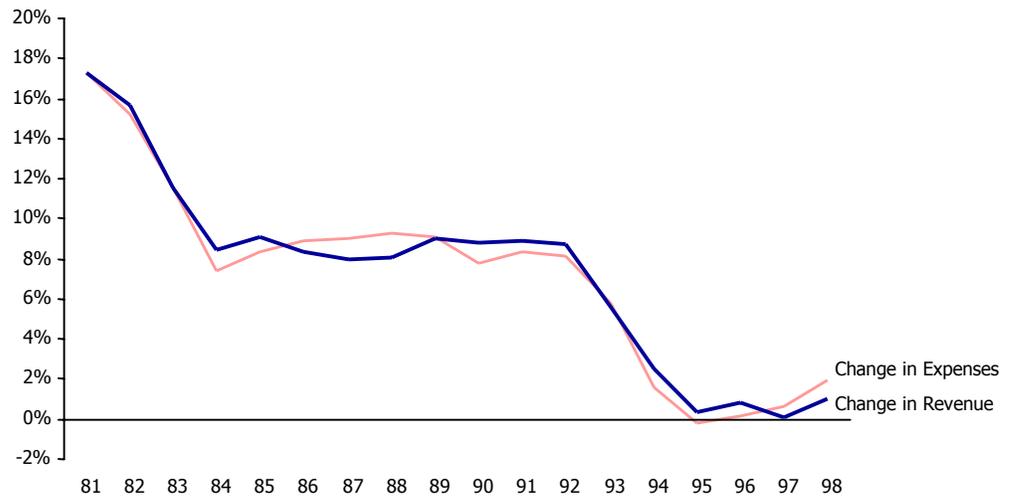
Payer Performance

1998 marked the end of a 10 year upward trend in the aggregate Medicare payment-to-cost ratio. The ratio exceeded breakeven for the first time in 1996 and hit its highest point in 1997, before declining under pressures including the impact of the Balanced Budget Act of 1997 (BBA). Payment-to-cost ratios for Medicare and the private sector have generally trended in the opposite direction -- when Medicare payment-to-cost ratios have trended down, private sector ratios have trended up and *vice versa*. This pattern has helped to stabilize hospital margins. In 1998, however, both Medicare and private sector payment-to-cost ratios fell, contributing to the decline in total margins for hospitals noted earlier (Charts 4.9 - 4.10).

In 1999, the Medicare Balanced Budget Refinement Act (BBRA) returned approximately \$8.4 billion in Medicare payments to hospitals over the five-year period from 2000 to 2004. However, the remaining impact of the BBA, after the BBRA, still reduces Medicare payments to hospitals by 10.9 percent from 1998 to 2004. Aggregate Medicare margins are projected to drop below breakeven by 1999. By 2004, six out of 10 hospitals are projected to lose money on Medicare (Charts 4.11 - 4.12).



**Chart 4.1:
Annual Change in Hospital Operating Revenue and Expenses
per Adjusted Admission⁽¹⁾
1981 - 1998**

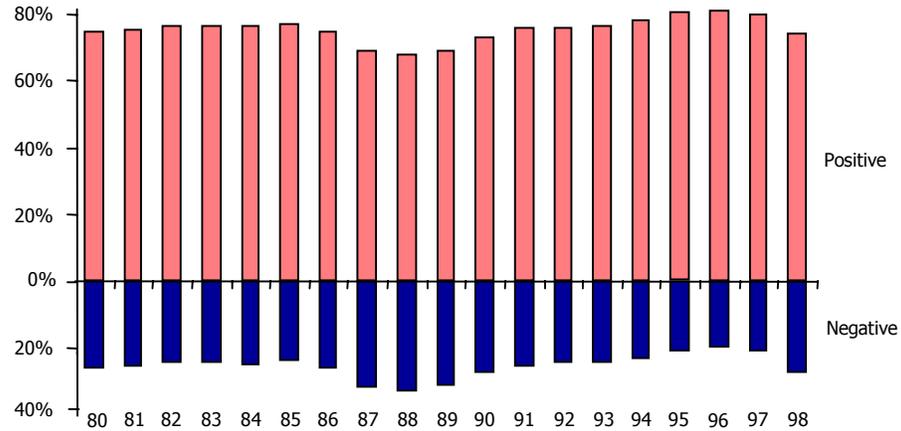


Source: The Lewin Group Analysis of the American Hospital Association Annual Survey data, 1980 - 1998, for community hospitals

(1) An aggregate measure of workload reflecting the number of inpatient admissions, plus an estimate of the volume of outpatient services, expressed in units equivalent to an inpatient admission in terms of level of effort



Chart 4.2:
Percent of Hospitals with Positive
or Negative Total Margins
1980 - 1998



Source: The Lewin Group Analysis of the American Hospital Association Annual Survey data, 1980 - 1998, for community hospitals

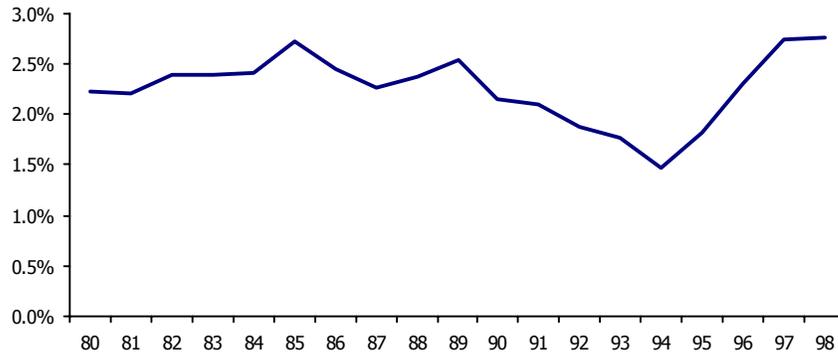
Chart 4.3:
Aggregate Total Hospital Margins
1980 - 1998



Source: The Lewin Group Analysis of the American Hospital Association Annual Survey data, 1980 - 1998, for community hospitals



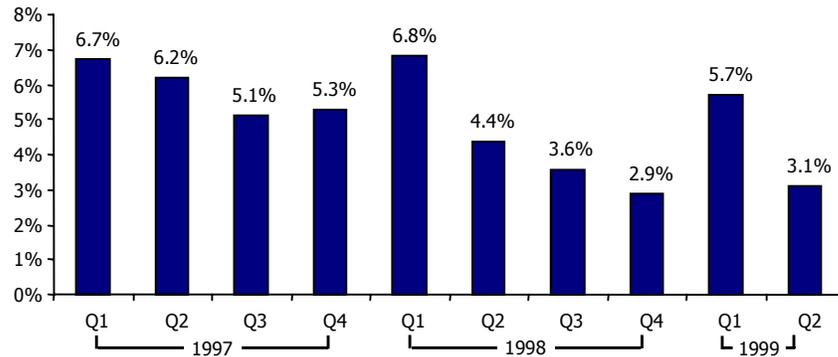
Chart 4.4:
Income from Investments and Other Non-operating Gains⁽¹⁾
as a Percentage of Total Net Revenue
1980 - 1998



Source: The Lewin Group analysis of the American Hospital Association Annual Survey data, 1980 - 1998, for community hospitals

(1) Non-operating gains include income from non-operating activities, including investments, endowments and extraordinary gains, as well as the value of non-realized gains from investments

Chart 4.5:
Non-profit Hospital Quarterly Operating Margins⁽¹⁾
1997 - Second Quarter 1999

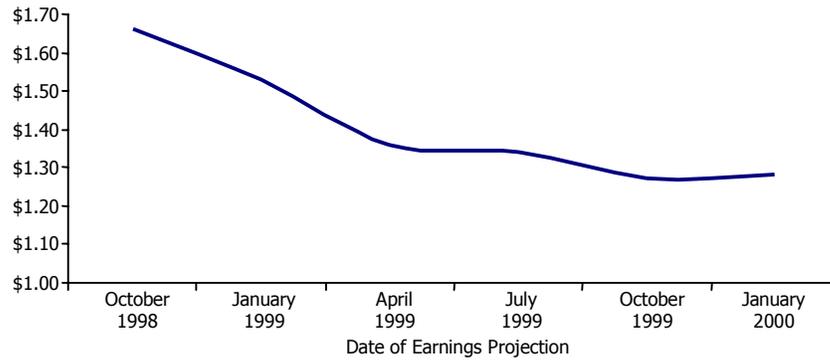


Source: HBS International, Inc., The Health of Our Nation's Hospitals 1997 through Second Quarter 1999; based on 382 geographically distributed hospitals that are primarily non-profit facilities

(1) Operating margin is calculated as the difference between total operating revenue and total operating expense divided by total operating revenue; operating margins exclude non-operating revenues

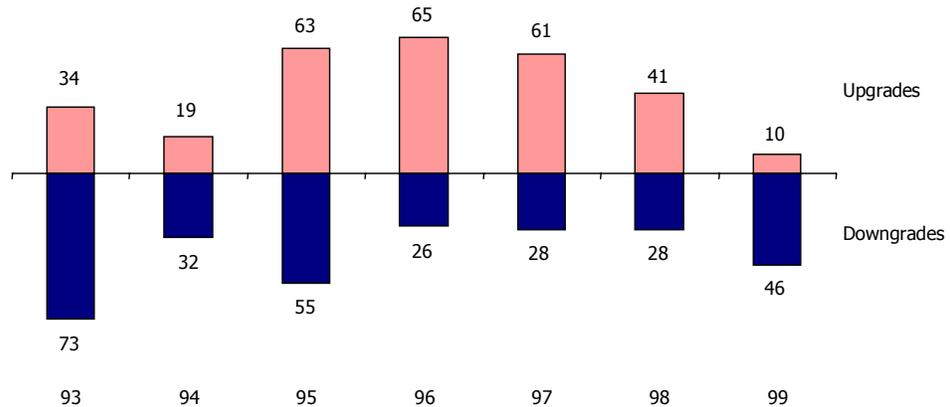


Chart 4.6:
Composite Fiscal Year 2000 Earnings
per Share Projections for Publicly Traded Hospitals
as Revised October 1998 - January 2000



Source: Composite calculated by The Lewin Group based on Wall Street consensus earnings per share projected for fiscal year 2000 for Columbia HCA Healthcare Corp.; Universal Health Services, Inc.; Quorum Health Group, Inc.; Health Management Associates, Inc.; and Tenet Health Care Corp.; data represents changes to fiscal year 2000 earnings expectations for publicly traded hospitals

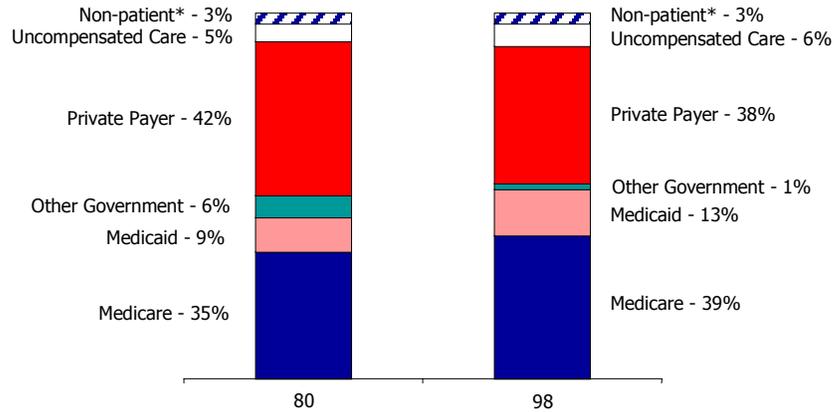
Chart 4.7:
Number of Bond Rating Upgrades and Downgrades
of Non-profit Hospitals
1993 - 1999



Source: Standard & Poor's Credit Week Municipal, October 25, 1999; 1999 data through August 20, 1999



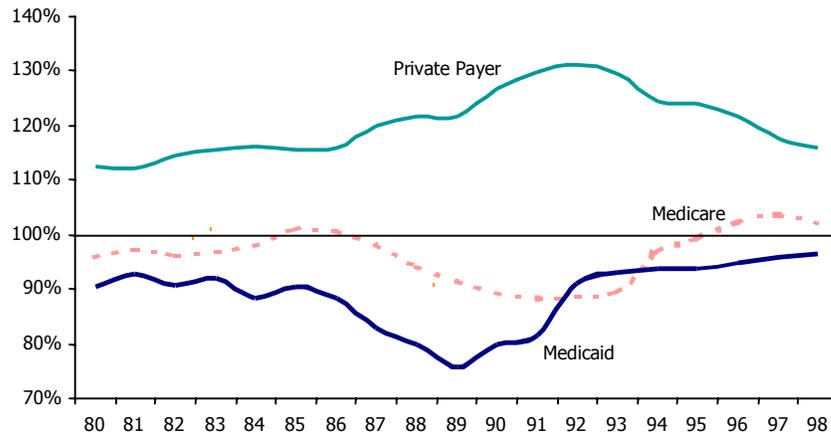
Chart 4.8:
Distribution of Hospital Cost by Payer Type
1980 and 1998



Source: The Lewin Group Analysis of the American Hospital Association Annual Survey data, 1980 - 1998, for community hospitals

* Non-patient represents costs for cafeterias, parking lots, gift shops and other non-patient care operating services and are not attributed to any one payer

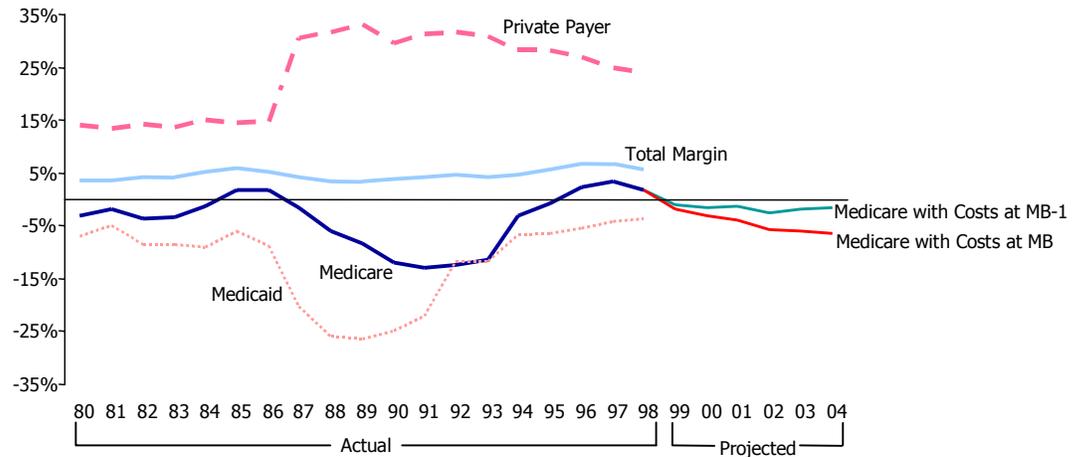
Chart 4.9:
Aggregate Hospital Payment-to-cost Ratios
for Private Payers, Medicare and Medicaid
1980-1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998, for community hospitals



**Chart 4.10:
Aggregate Margin by Payer
1980 - 1998 Actual
1999 - 2004 Projected**

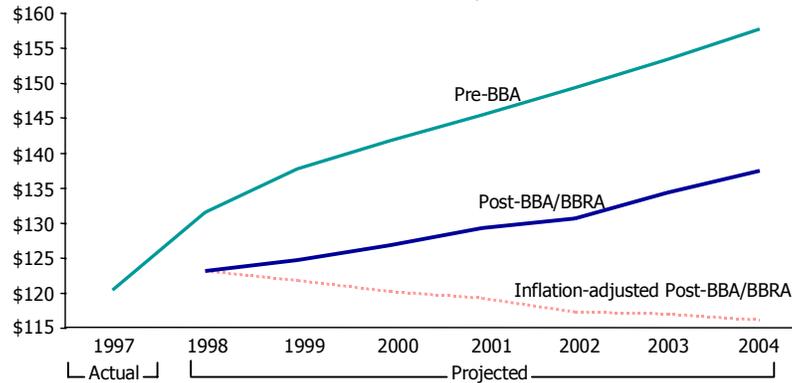


Source: The Lewin Group, "The Impact of the Medicare Balanced Budget Refinement Act on Medicare Payments to Hospitals," February 1, 2000

- Notes: (1) Uncompensated Care and Other Government Payers are not shown separately in this chart
 (2) Medicare projections based on The Lewin Group Analysis of Medicare payment policies under the Balanced Budget Act of 1997 and Medicare Balanced Budget Refinement Act of 1999
 (3) The market basket inflation rate is the rate of increase in the prices of goods and services purchased by hospitals:
 MB-1 = rate of increase in the prices of goods and services purchased by hospitals less one percentage point
 MB = rate of increase in the prices of goods and services purchased by hospitals



Chart 4.11:
Projected Total Medicare Payments to Hospitals
Pre-BBA⁽¹⁾, Post BBA/BBRA ⁽²⁾ and Inflation-adjusted
1997 Actual
1998 - 2004 Projected

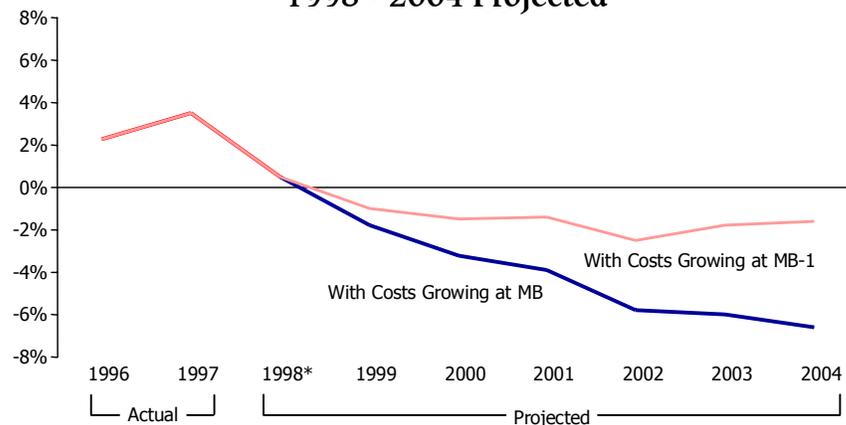


Source: The Lewin Group, "The Impact of the Medicare Balanced Budget Refinement Act on Medicare Payments to Hospitals," February 1, 2000

⁽¹⁾ Pre-BBA reflects projected payments under laws and regulations existing prior to passage of the BBA

⁽²⁾ Post-BBA/BBRA reflects projected payments under both the Balanced Budget Act of 1997 (BBA) and the Medicare Balanced Budget Refinement Act of 1999 (BBRA)

Chart 4.12:
Hospital Total Medicare Margins
Actual and Projected Post-BBA/BBRA
1996 - 1997 Actual
1998 - 2004 Projected



Source: The Lewin Group, "The Impact of the Medicare Balanced Budget Refinement Act on Medicare Payments to Hospitals," February 1, 2000

*The 1999 AHA annual survey provides actual 1998 data; however, 1998 AHA data reflect Medicare payments made under payment policies before and after implementation of the BBA. Post-BBA margins reflect the actual costs reported in the 1999 AHA annual survey and post-BBA payments are simulated based on hospitals that reported payments that were fully subject to BBA policies

MB-1 = rate of increase in the prices of goods and services purchased by hospitals less one percentage point (about two percent each year)

MB = rate of increase in the prices of goods and services purchased by hospitals (about three percent each year)



Chart 4.13:
Aggregate Payment-to-cost Ratios⁽¹⁾
by Payer by State
1998

	Medicare	Medicaid	Private Payers
Nation	1.02	0.97	1.16
Alabama*	1.07	0.91	1.12
Alaska*	0.83	0.76	1.40
Arizona*	1.06	0.95	1.12
Arkansas*	1.07	0.78	1.36
California*	1.06	0.94	1.26
Colorado	1.05	1.06	1.22
Connecticut	0.98	0.72	1.18
Delaware	0.95	0.82	1.26
Florida*	1.02	0.87	1.29
Georgia	1.04	0.99	1.29
Hawaii*	0.83	0.72	1.25
Idaho*	1.01	0.90	1.37
Illinois	0.94	0.71	1.22
Indiana	0.94	0.92	1.31
Iowa	0.89	0.92	1.32
Kansas	0.95	0.82	1.30
Kentucky*	1.02	0.93	1.19
Louisiana*	1.03	1.00	1.63
Maine	0.86	1.15	1.36
Maryland	1.11	1.09	1.12
Massachusetts	0.99	0.79	0.95
Michigan	0.99	0.96	1.11
Minnesota	0.90	0.92	1.20
Mississippi*	0.97	1.04	1.48
Missouri	0.97	0.90	1.15
Montana	0.92	0.81	1.36
Nebraska	0.91	0.98	1.32
Nevada*	0.97	0.97	1.30
New Hampshire	0.94	0.77	1.23
New Jersey*	0.96	0.97	1.11
New Mexico*	1.09	1.23	1.30
New York	1.03	0.98	1.01
North Carolina	1.01	0.93	1.30
North Dakota*	0.93	1.00	1.25
Ohio	0.96	0.92	1.18
Oklahoma	1.01	0.61	1.27
Oregon	0.99	0.83	1.13
Pennsylvania	1.01	0.77	1.03
Rhode Island	1.10	1.03	0.99
South Carolina	0.99	0.96	1.59
South Dakota	0.85	0.85	1.31
Tennessee*	1.12	0.74	1.30
Texas	1.01	1.09	1.27
Utah	0.99	1.05	1.19
Vermont	0.85	0.87	1.38
Virginia	1.02	1.01	1.30
Washington*	1.01	0.92	1.11
West Virginia	0.96	0.91	1.39
Wisconsin*	0.93	0.78	1.24
Wyoming	0.93	0.91	1.41

Source: The Lewin Group analysis of the American Hospital Association Annual Survey data, 1998, for community hospitals

⁽¹⁾ 1.00 reflects payment at 100% of cost

* Less than 60% of hospitals reporting

Chart 4.14:
Aggregate Payer Margins and Hospital Total Margins
by State
1998

	Medicare	Medicaid	Private Payers	Total ⁽¹⁾
Nation	1.8%	-3.5%	13.6%	5.8%
Alabama*	6.2%	-9.6%	10.6%	5.8%
Alaska*	-20.2%	-32.2%	28.4%	7.9%
Arizona*	5.8%	-5.4%	11.0%	5.9%
Arkansas*	6.6%	-28.4%	26.6%	6.4%
California*	5.3%	-6.0%	20.8%	3.7%
Colorado	5.1%	5.4%	18.2%	8.9%
Connecticut	-2.1%	-39.7%	15.4%	3.9%
Delaware	-5.5%	-22.6%	20.6%	6.8%
Florida*	1.8%	-14.9%	22.5%	6.2%
Georgia	3.9%	-1.3%	22.6%	9.8%
Hawaii*	-20.4%	-38.4%	19.8%	0.5%
Idaho*	0.7%	-11.5%	27.2%	14.0%
Illinois	-6.4%	-40.1%	17.9%	7.4%
Indiana	-6.3%	-9.0%	23.7%	9.3%
Iowa	-12.5%	-8.7%	24.2%	7.5%
Kansas	-4.9%	-21.7%	23.2%	9.1%
Kentucky*	1.5%	-7.6%	16.2%	6.4%
Louisiana*	2.7%	-0.2%	38.8%	5.8%
Maine	-16.2%	12.9%	26.7%	8.3%
Maryland	9.5%	8.5%	11.0%	4.9%
Massachusetts	-0.6%	-26.3%	-5.0%	-0.3%
Michigan	-0.7%	-4.5%	9.9%	7.2%
Minnesota	-10.6%	-8.9%	16.4%	7.3%
Mississippi*	-3.1%	4.1%	32.6%	7.2%
Missouri	-2.9%	-11.0%	13.3%	6.0%
Montana	-8.3%	-22.9%	26.3%	9.4%
Nebraska	-9.5%	-1.6%	24.2%	11.7%
Nevada*	-2.6%	-2.7%	22.9%	9.1%
New Hampshire	-6.5%	-29.5%	18.8%	6.6%
New Jersey*	-3.7%	-3.5%	10.0%	-0.1%
New Mexico*	7.9%	18.6%	23.1%	10.3%
New York	2.5%	-1.7%	0.7%	1.4%
North Carolina	1.3%	-8.0%	23.1%	9.8%
North Dakota*	-7.7%	-0.2%	20.1%	8.3%
Ohio	-4.2%	-8.2%	15.1%	5.2%
Oklahoma	0.6%	-64.5%	21.2%	2.9%
Oregon	-1.0%	-20.8%	11.8%	6.4%
Pennsylvania	0.8%	-30.3%	3.2%	3.3%
Rhode Island	8.9%	2.9%	-0.6%	5.0%
South Carolina	-0.9%	-4.5%	37.2%	7.8%
South Dakota	-17.3%	-17.5%	23.7%	6.1%
Tennessee*	10.9%	-34.6%	23.1%	10.4%
Texas	1.1%	8.0%	21.4%	8.4%
Utah	-0.8%	4.5%	15.6%	7.2%
Vermont	-17.9%	-15.4%	27.4%	3.8%
Virginia	1.7%	1.2%	23.3%	8.2%
Washington*	1.1%	-8.5%	10.2%	5.3%
West Virginia	-4.1%	-10.1%	28.1%	5.6%
Wisconsin*	-7.9%	-27.5%	19.2%	6.9%
Wyoming	-7.8%	-9.6%	29.2%	12.2%

Source: The Lewin Group analysis of the American Hospital Association Annual Survey data, 1998, for community hospitals

⁽¹⁾ Hospital total margins include non-operating revenue

* Less than 60% of hospitals reporting



Chart 4.15:
Aggregate Cost by Payer
as a Percent of Total Expenses by State
1998

	Medicare	Medicaid	Other Government	Uncompensated Care	Private Payers	Non-patient Care ⁽¹⁾
Nation	39%	13%	2%	6%	38%	3%
Alabama*	43%	10%	2%	7%	36%	2%
Alaska*	24%	17%	8%	6%	42%	3%
Arizona*	35%	14%	1%	4%	42%	3%
Arkansas*	45%	12%	0%	9%	33%	2%
California*	30%	24%	6%	7%	31%	2%
Colorado	29%	10%	3%	8%	48%	3%
Connecticut	44%	12%	0%	3%	37%	4%
Delaware	36%	10%	0%	5%	40%	8%
Florida*	42%	10%	3%	8%	34%	2%
Georgia	38%	14%	1%	8%	37%	2%
Hawaii*	41%	14%	1%	3%	39%	2%
Idaho*	39%	10%	2%	4%	44%	2%
Illinois	38%	12%	0%	5%	42%	3%
Indiana	42%	8%	0%	5%	41%	3%
Iowa	45%	8%	1%	5%	38%	3%
Kansas	45%	8%	1%	4%	40%	2%
Kentucky*	43%	13%	0%	5%	36%	2%
Louisiana*	38%	16%	3%	14%	27%	2%
Maine	45%	11%	1%	5%	36%	2%
Maryland	40%	10%	0%	7%	40%	3%
Massachusetts	35%	8%	1%	5%	41%	9%
Michigan	39%	9%	0%	3%	46%	3%
Minnesota	35%	12%	1%	2%	47%	3%
Mississippi*	46%	13%	0%	9%	30%	2%
Missouri	44%	11%	0%	5%	38%	2%
Montana	44%	10%	4%	5%	34%	3%
Nebraska	42%	8%	1%	2%	44%	3%
Nevada*	39%	7%	3%	6%	44%	1%
New Hampshire	41%	7%	0%	5%	44%	2%
New Jersey*	44%	7%	0%	9%	37%	2%
New Mexico*	31%	15%	6%	14%	33%	2%
New York	36%	23%	1%	6%	30%	5%
North Carolina	43%	13%	1%	6%	35%	2%
North Dakota*	46%	9%	1%	2%	38%	3%
Ohio	41%	9%	1%	6%	40%	3%
Oklahoma	45%	9%	1%	7%	35%	3%
Oregon	37%	10%	1%	3%	46%	3%
Pennsylvania	44%	8%	0%	3%	43%	2%
Rhode Island	39%	11%	1%	4%	42%	4%
South Carolina	40%	17%	4%	0%	26%	2%
South Dakota	45%	8%	2%	2%	38%	4%
Tennessee*	40%	17%	2%	5%	34%	2%
Texas	37%	13%	2%	11%	34%	3%
Utah	28%	11%	2%	5%	51%	3%
Vermont	44%	13%	0%	4%	36%	2%
Virginia	39%	10%	2%	7%	40%	2%
Washington*	33%	15%	2%	3%	43%	3%
West Virginia	47%	14%	7%	5%	26%	1%
Wisconsin*	42%	8%	1%	3%	43%	3%
Wyoming	41%	10%	3%	6%	39%	2%

Source: The Lewin Group analysis of the American Hospital Association Annual Survey data, 1998, for community hospitals

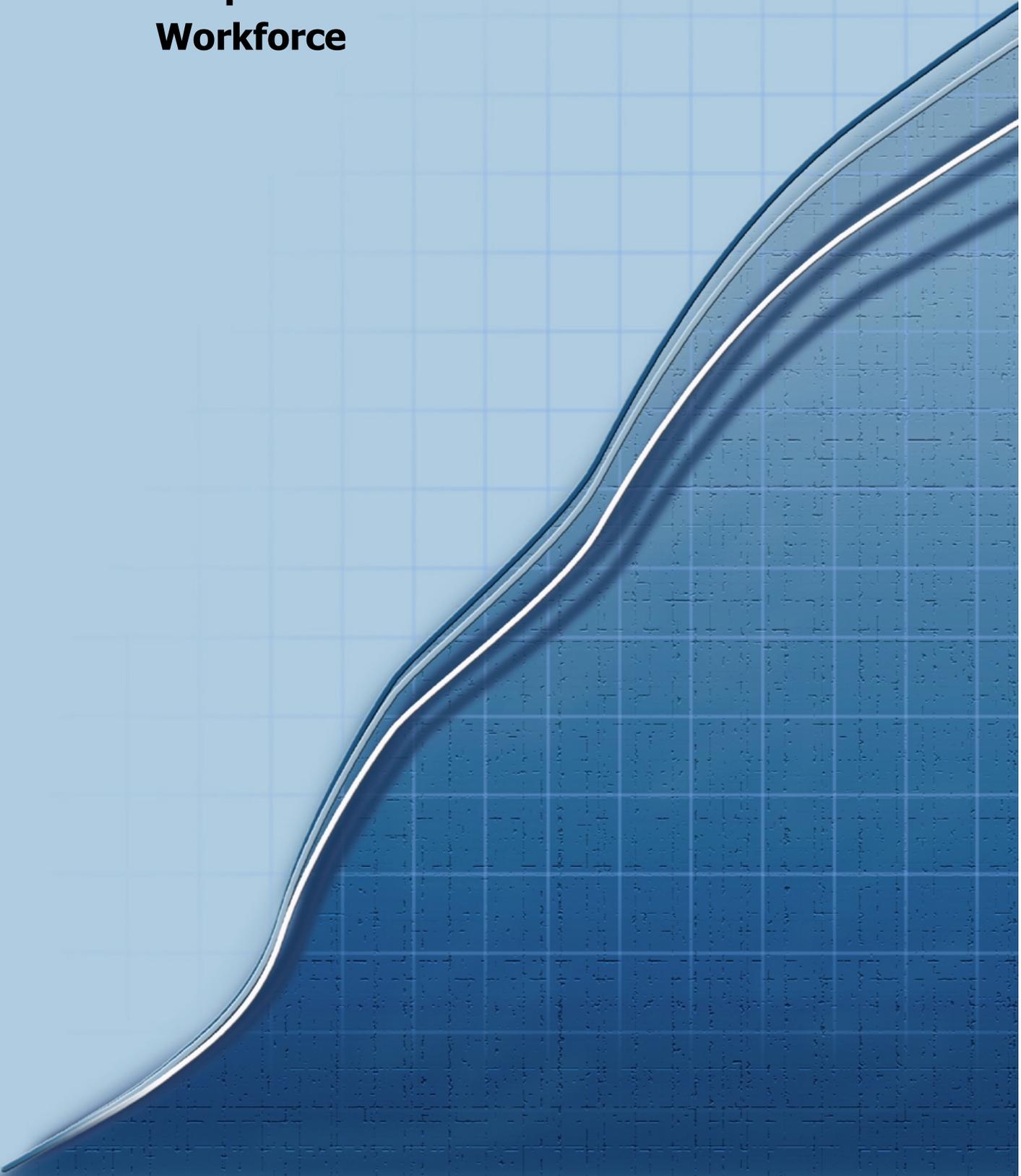
Note: Totals may not equal 100% due to rounding

Aggregate cost by payer as a percent of total expenses represents the portion of hospitals' costs that are attributed to each payer category

⁽¹⁾ Non-patient care costs represent hospitals' other operating expenses such as cafeterias, parking lots and gift shops

* Less than 60% of hospitals reporting

Chapter 5: Workforce



Chapter 5: Workforce

Physician Workforce

The number of physicians per thousand population has continued to increase despite a general consensus that there is an oversupply of many specialty types. The number of physicians per thousand is particularly high in the northeast and mid-Atlantic and relatively low in the south and west. These numbers should decline as the number of residents in training has leveled off while the population continues to grow (Charts 5.1 - 5.3).

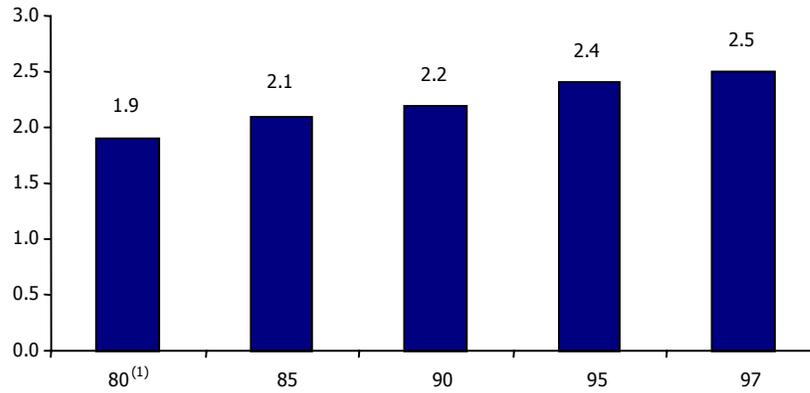
Hospital Workforce

After declining in the early to mid-1980s, the number of full time equivalent employees (FTEs) working in hospitals has increased since 1985, although more slowly since 1993. However, FTEs per adjusted admission⁽¹⁾ has been declining since 1992. The number of Registered Nurse (RN) FTEs has been increasing slowly, with the number of RN FTEs per adjusted admission staying relatively constant. RN FTEs as a percent of total hospital FTEs has remained steady at around 24 percent between 1986 and 1998 (Charts 5.4 - 5.7).

The market for nursing staff has become more competitive in recent years as more employment opportunities have opened up for RNs in non-hospital settings. The nursing workforce is aging as fewer people are enrolling in RN education programs. The National Advisory Council on Nurse Education and Practice projects that demand will exceed supply of RNs within the next 10 years (Charts 5.8 - 5.11).

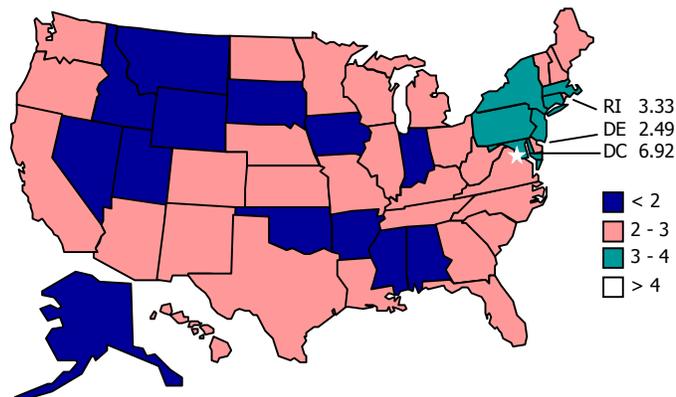
(1) An aggregate measure of workload reflecting the number of inpatient admissions, plus an estimate of the volume of outpatient services, expressed in units equivalent to an inpatient admission in terms of level of effort.

Chart 5.1:
Total Number of Active Physicians
per 1,000 Persons
1980 - 1997



Source: Health United States, 1982, 1996-97, 1999
 (1) 1980 does not include doctors of osteopathy

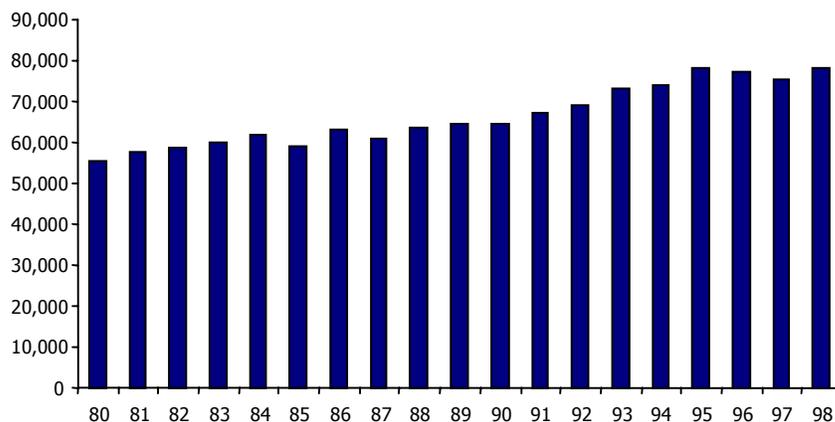
Chart 5.2:
Total Number of Active Physicians
per 1,000 Persons by State
1997



Source: Health United States, 1999
 Includes active non-federal doctors of medicine and active doctors of osteopathy

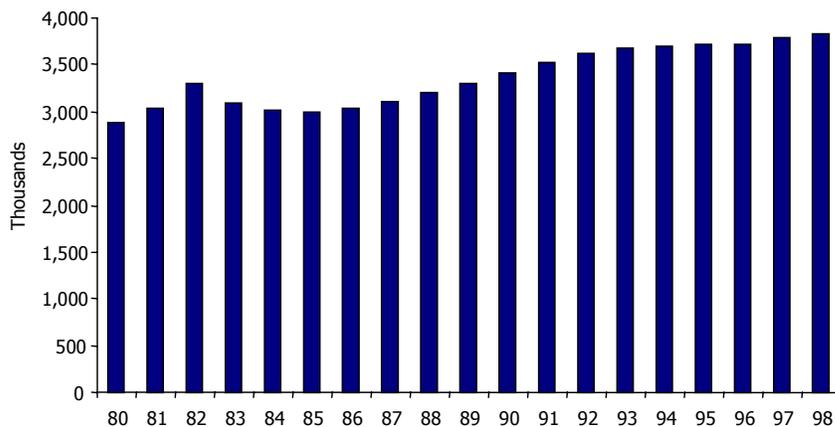


Chart 5.3:
Medical and Dental Residents in Training
in Community Hospitals
1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

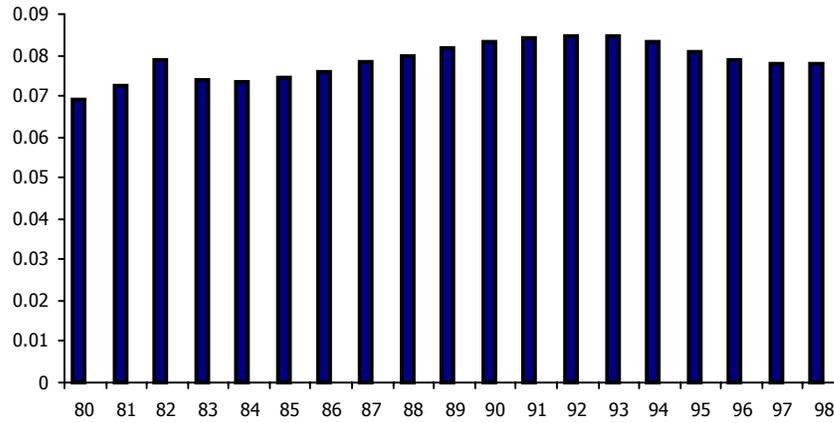
Chart 5.4:
Total Full Time Equivalent Employees
Working in Hospitals
1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

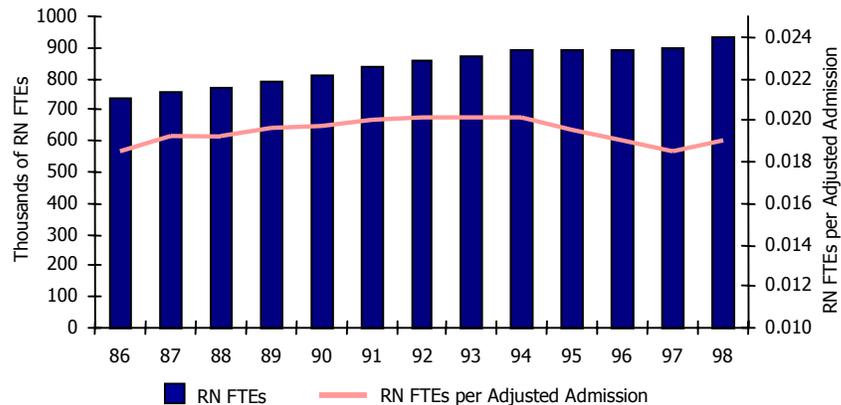


Chart 5.5:
Full Time Equivalent Employees
per Adjusted Admission
1980 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998 for community hospitals

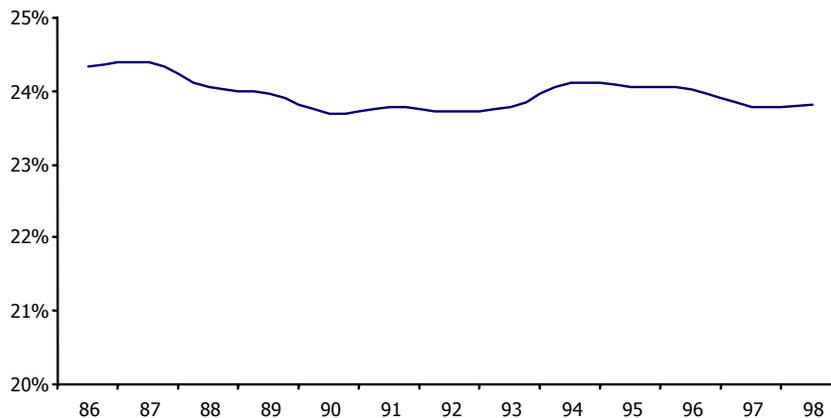
Chart 5.6:
Number of RN Full Time Equivalent Employees
and RN FTEs per Adjusted Admission
1986 - 1998



Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1986 - 1998 for community hospitals

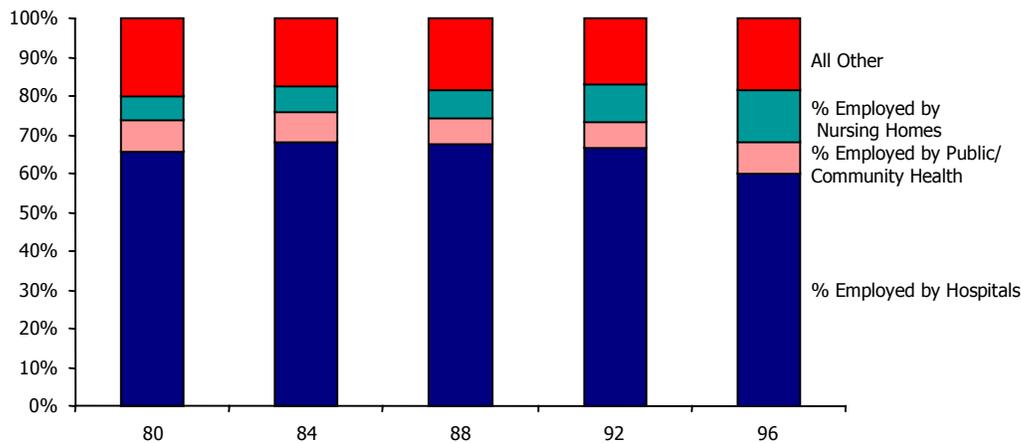


**Chart 5.7:
RN Full Time Equivalents
as a Percent of Total Hospital Full Time Equivalents
1986 - 1997**



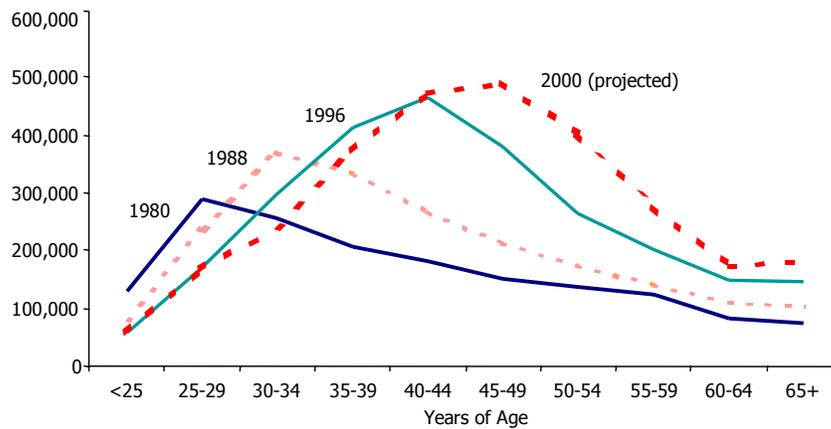
Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1986 - 1998 for community hospitals

**Chart 5.8:
RN Employment by Type of Provider
1980 - 1996**



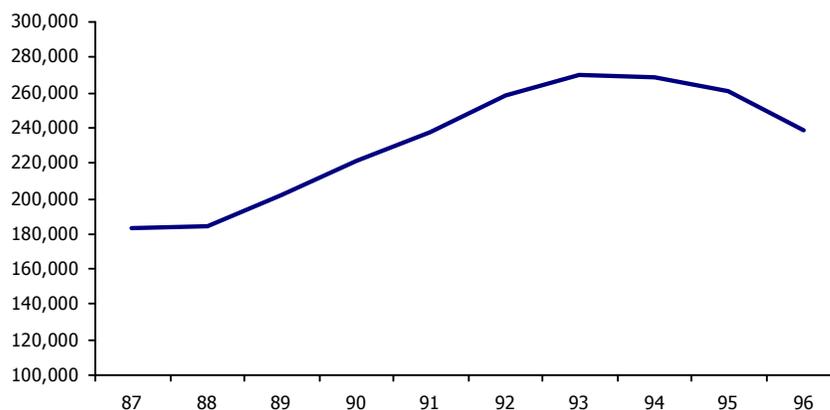
Source: Findings from the National Sample Survey of Registered Nurses, 1980-1996, Bureau of Health Professions, Division of Nursing, DHHS

**Chart 5.9:
 Distribution of RN Workforce by Age
 1980 - 2000 (projected)**



Source: Findings from the National Sample Survey of Registered Nurses, 1980-1996, Bureau of Health Professions, Division of Nursing, DHHS

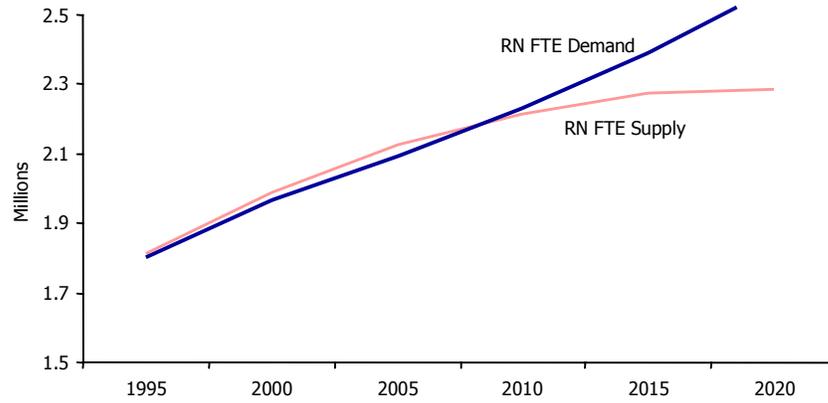
**Chart 5.10:
 Annual Enrollment in US RN Education Programs
 1987 - 1996**



Source: Center for Research in Nursing Education and Community Health, National League of Nursing

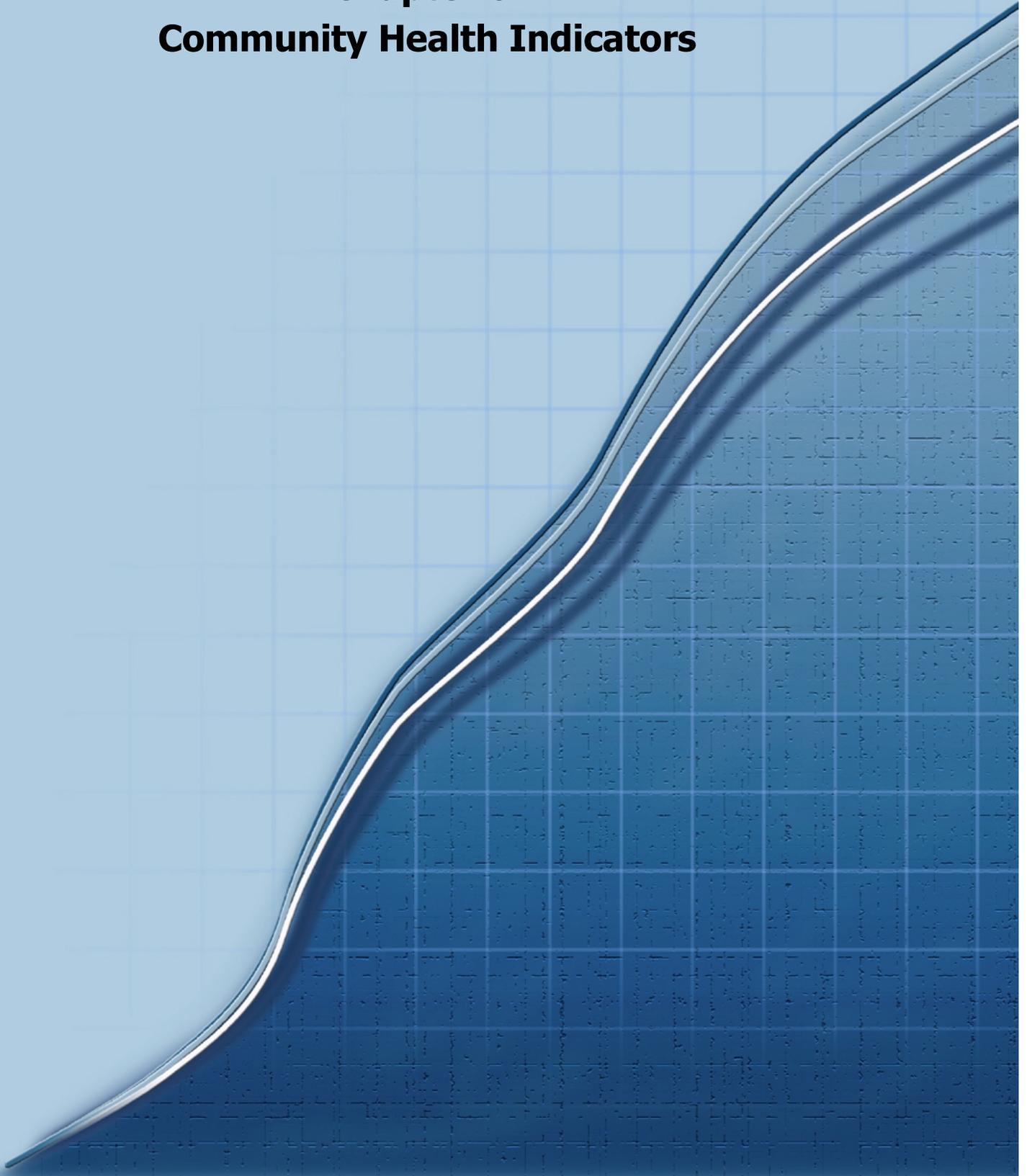


**Chart 5.11:
Projection of RN Workforce Supply and Demand
1995 - 2020**



Source: Report to the Secretary of the Department of Health and Human Services on Basic Registered Nurse Workforce, 1996, National Advisory Council on Nurse Education and Practice

Chapter 6: Community Health Indicators



Chapter 6: Community Health Indicators

Population

The population of the United States is expected to grow at a relatively constant rate into the early part of this century. The composition of the population by age, however, is expected to change substantially. By 2050, people 65 and older are projected to grow to 20 percent of the population from 11 percent in 1980. People 85 and older are projected to grow to five percent of the population from one percent in 1980. This demographic shift results as people live longer and have fewer children. The birth rate has declined by 13 percent since 1990, although it increased slightly between 1997 and 1998 (Charts 6.1 - 6.2).

Mortality

Since 1980, mortality rates have been declining for many diseases contributing to the longer life span and aging population noted above. Mortality rates for heart and cerebrovascular diseases have declined sharply as surgical and pharmaceutical technologies for treating these diseases have advanced. Meanwhile, mortality for malignant neoplasms has seen only moderate improvement with mortality for some cancers, like those of the respiratory system, actually rising. Mortality due to chronic obstructive pulmonary diseases and diabetes-related conditions has also increased (Chart 6.3).

The overall mortality rate for injuries and adverse events is down by 24 percent. Contributing to this decline, the death rate for motor vehicle accidents is down nearly 30 percent. The death rate for suicides, however, is up by over 50 percent (Chart 6.3).

Over the last 10 years, the infant mortality rate has decreased by 28 percent (Chart 6.4).

Disease

Although the overall mortality rate for cancer has declined, the incidence has gone up. The incidence of prostate cancer has risen by over 80 percent between 1980 and 1996 and the incidence of breast cancer went up by over 27 percent. The greater incidence may in part reflect increased awareness, better diagnostic techniques, and increased screening levels (Chart 6.5). After peaking in 1993, Acquired Immunodeficiency Syndrome (AIDS) cases have been trending down. The prevalence of hypertension and diabetes have shown recent declines, while the prevalence of asthma continues to rise (Charts 6.6 - 6.9).

Risk Factors

Lifestyles and behavior play an important role in mortality and disease.

From 1988 to 1994, more people were overweight than at a healthy weight, a substantial change from just a decade earlier. The percent of people considered obese has increased from 14.5 percent to 22.6 percent, an increase of 56 percent. Being overweight is a risk factor for cardiac disease and diabetes, and may be linked to various other diseases (Chart 6.10).

Smoking and substance abuse remain important public health issues, especially among the nation's youth. One out of five youth between the ages of 12 and 17 smoke. While gains have been made in reducing heavy alcohol use among this population, rates of marijuana and cocaine use are trending up (Charts 6.11 - 6.14).

Smoking rates among adults have changed little since 1990. Substance abuse rates and trends vary by age group (Charts 6.11 - 6.14).



Chart 6.1:
US Population Trends and Projections
1980 - 2050

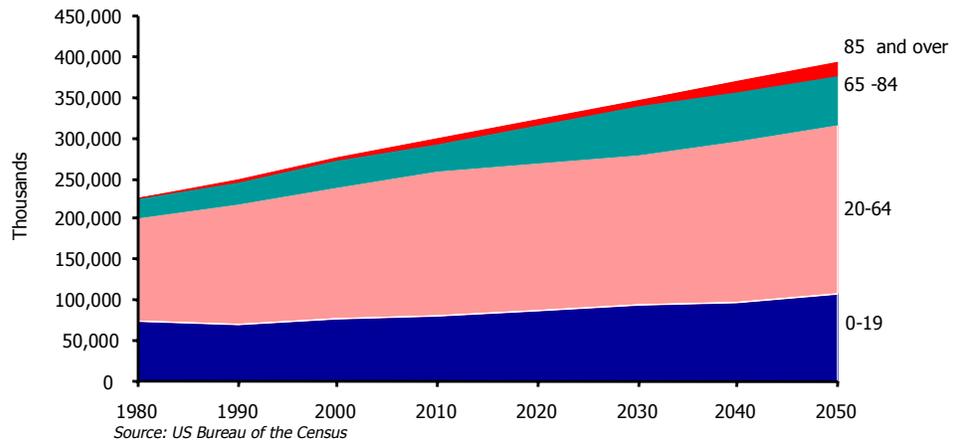


Chart 6.2:
Live Births per 1,000 Persons
1980 - 1998

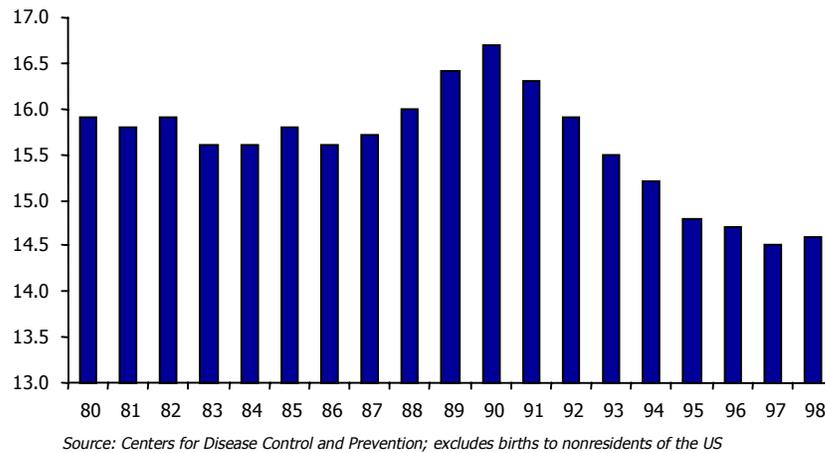
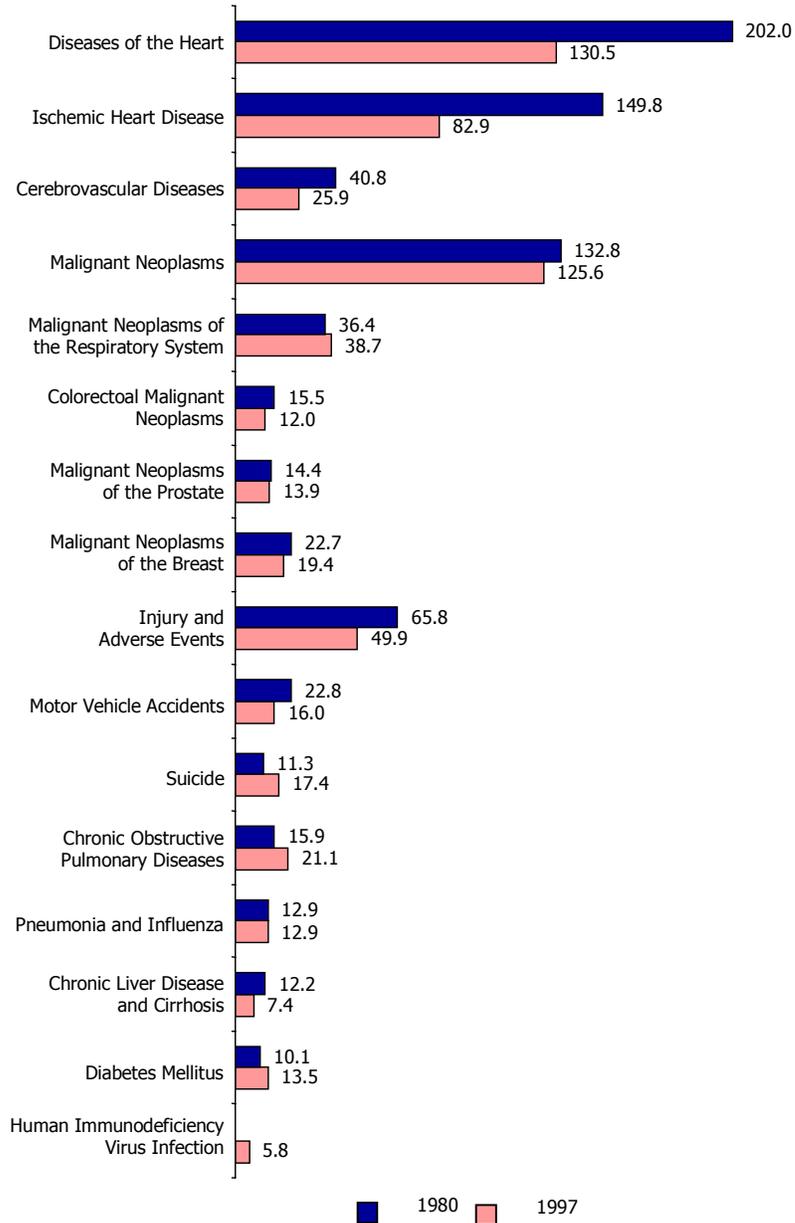




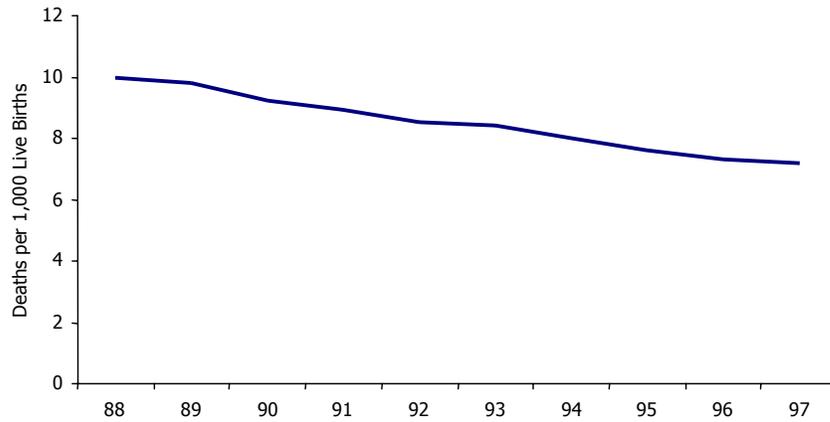
Chart 6.3:
Age-adjusted Death Rates per 100,000 Persons
for Selected Causes of Death
1980 and 1997



Source: National Center for Health Statistics, Health United States, 1999



**Chart 6.4:
Infant Mortality Rate
1988 - 1997**



Source: National Center for Health Statistics



Chart 6.5:
Age-adjusted Incidence Rates per 100,000 Persons
for Selected Types of Cancer
1980 and 1996

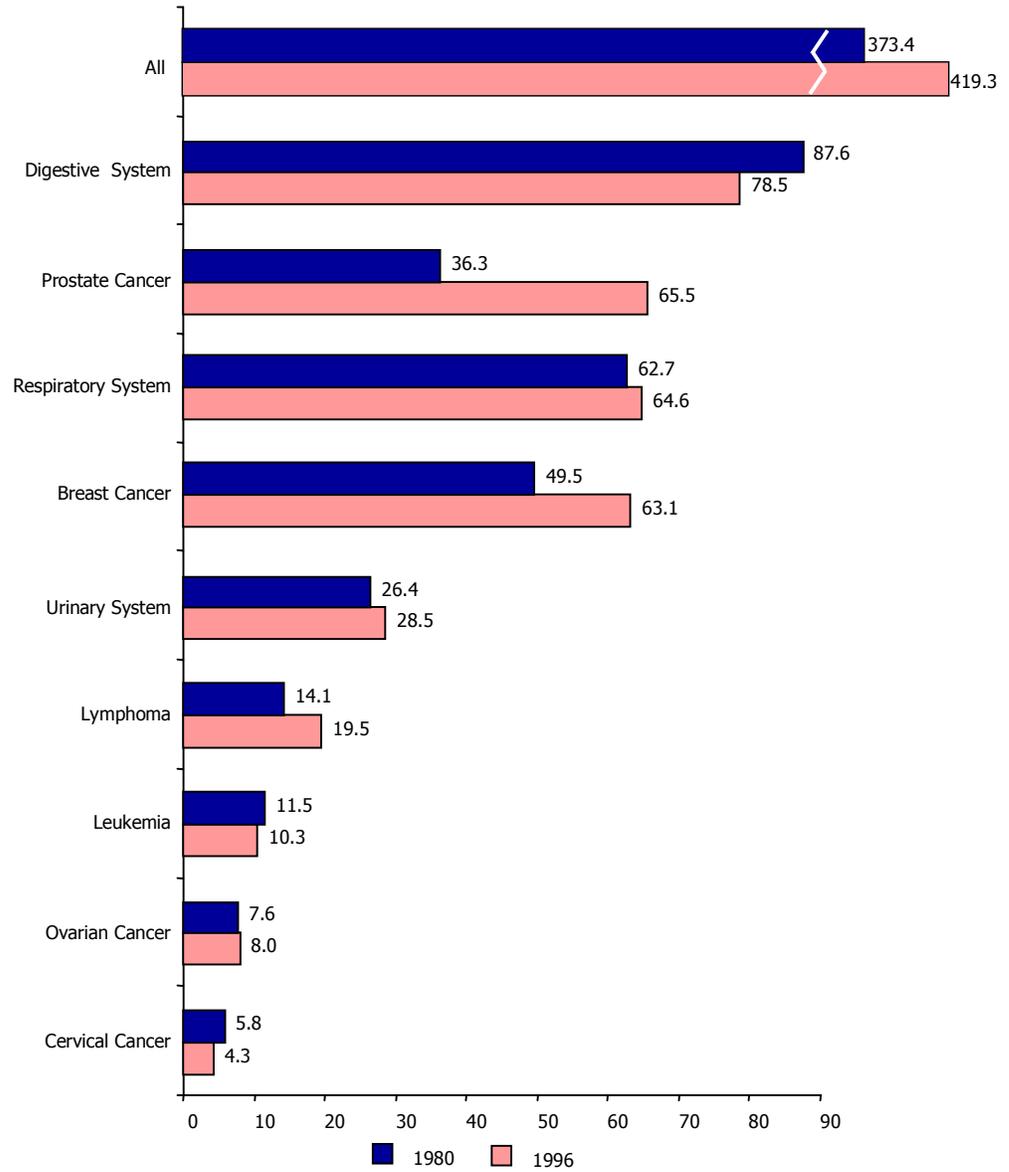
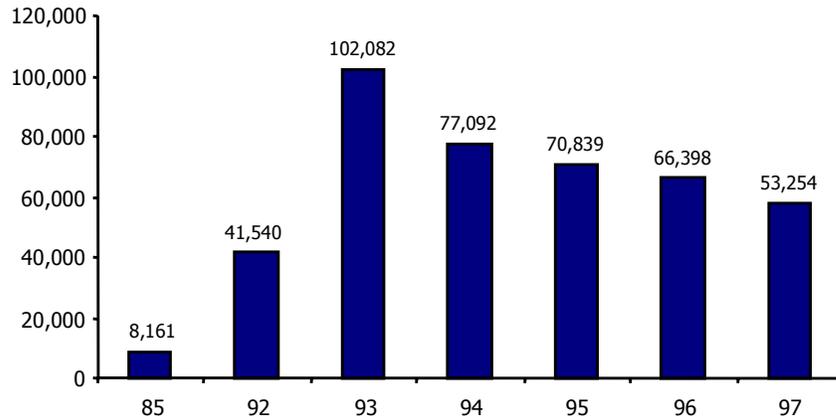


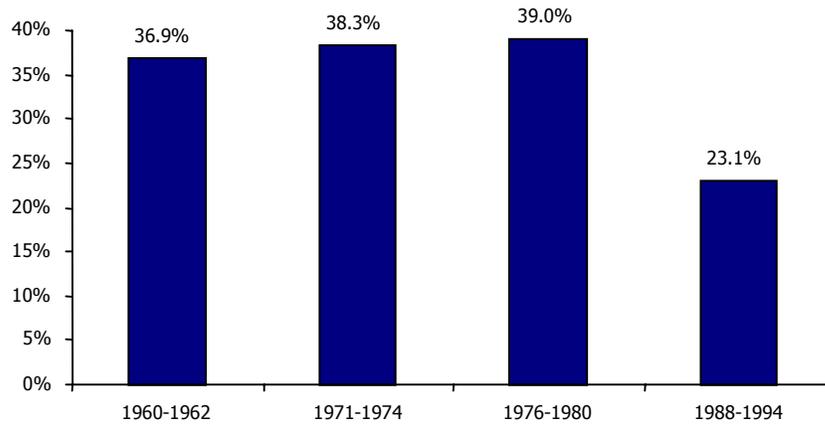


Chart 6.6:
Acquired Immunodeficiency Syndrome (AIDS) Cases
1985 - 1997



Source: National Center for Health Statistics, Health United States, 1999

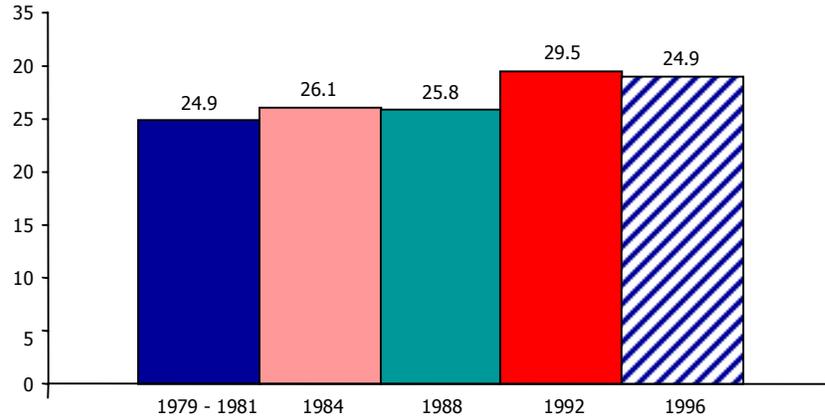
Chart 6.7:
Hypertension Among Persons 20 to 74 Years of Age
Percent of Population
1960 - 1994



Source: National Center for Health Statistics, Health United States, 1999, age-adjusted

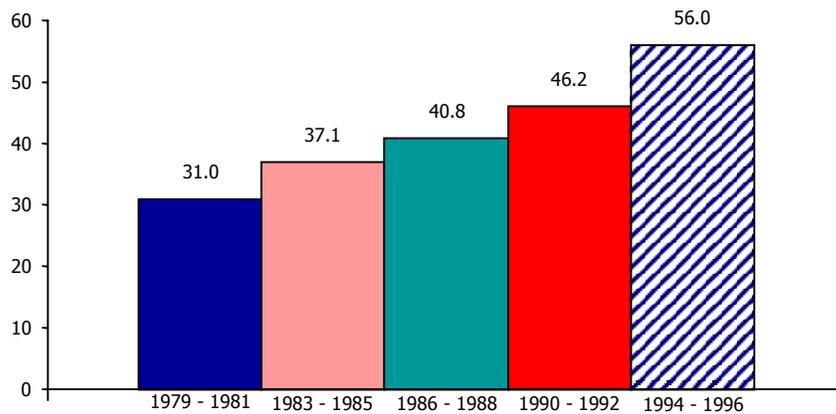


Chart 6.8:
Diabetes Prevalence Rates per 1,000 Persons
 1979 - 1996



Source: National Center for Health Statistics, The National Health Interview Survey

Chart 6.9:
Asthma Prevalence Rates per 1,000 Persons
 1979 - 1996



Source: National Health Interview Survey, Vital and Health Statistics Series 10, No. 194



Chart 6.10:
Healthy Weight, Overweight and Obesity Among Persons
20 Years of Age and Older
1976 - 1994

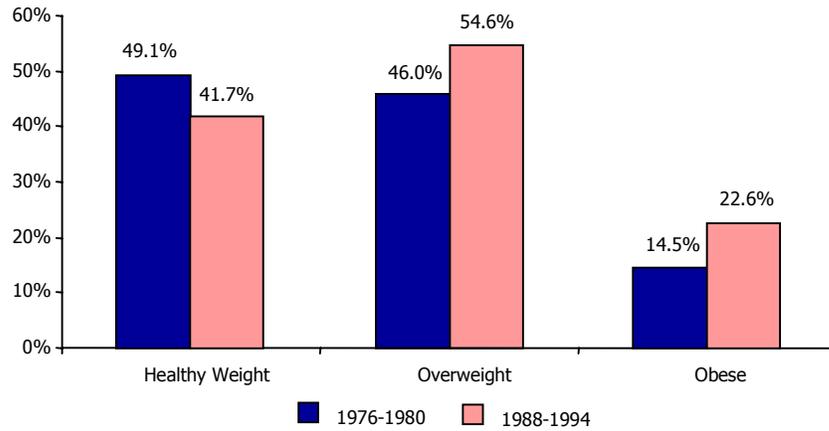


Chart 6.11:
Percent of Persons Who Currently Smoke
by Age Group
1990 - 1997

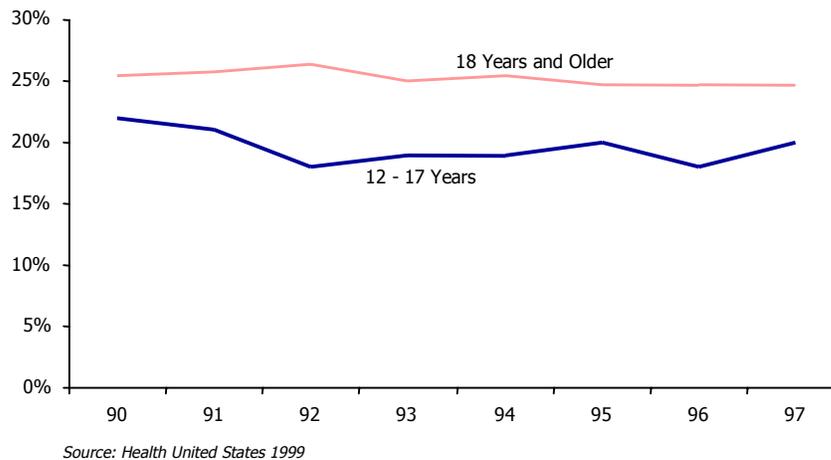
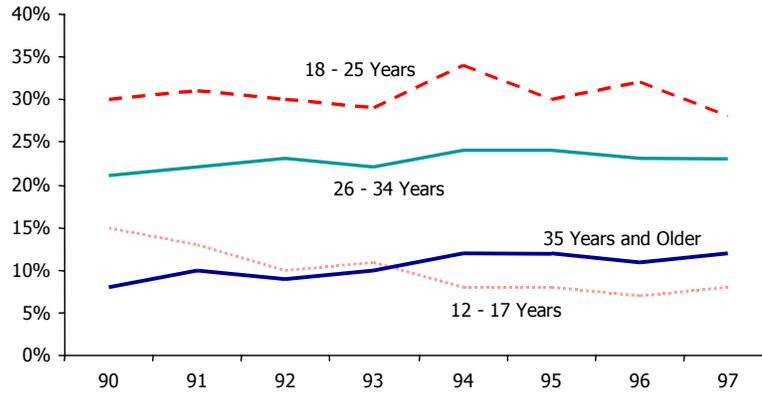




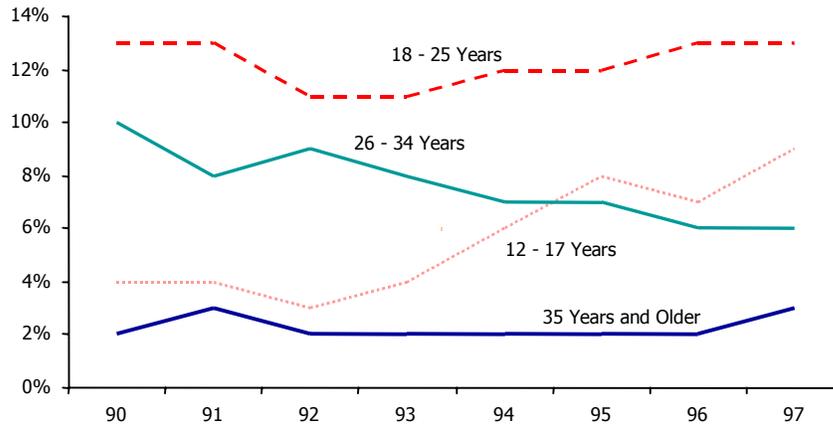
Chart 6.12:
Percent of Persons Reporting Heavy Alcohol Use⁽¹⁾
in the Past Month by Age Group
1990 - 1997



Source: Health United States, 1999

⁽¹⁾ Five or more drinks on the same occasion at least once in the past month

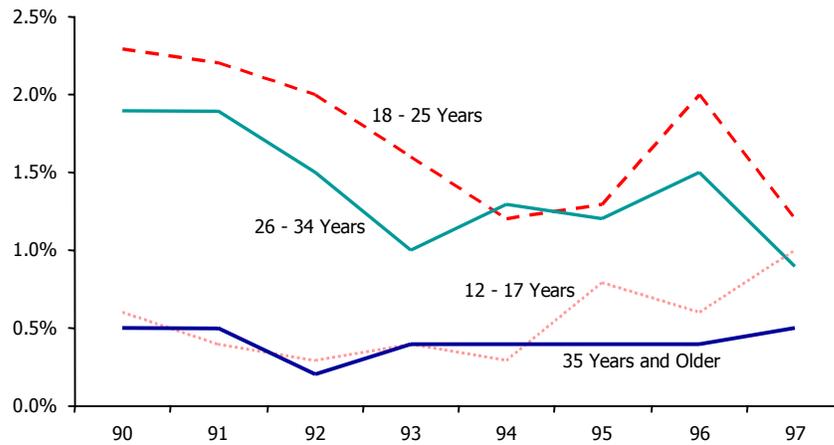
Chart 6.13:
Percent of Persons Reporting Use of Marijuana
in the Past Month by Age Group
1990 - 1997



Source: Health United States 1999

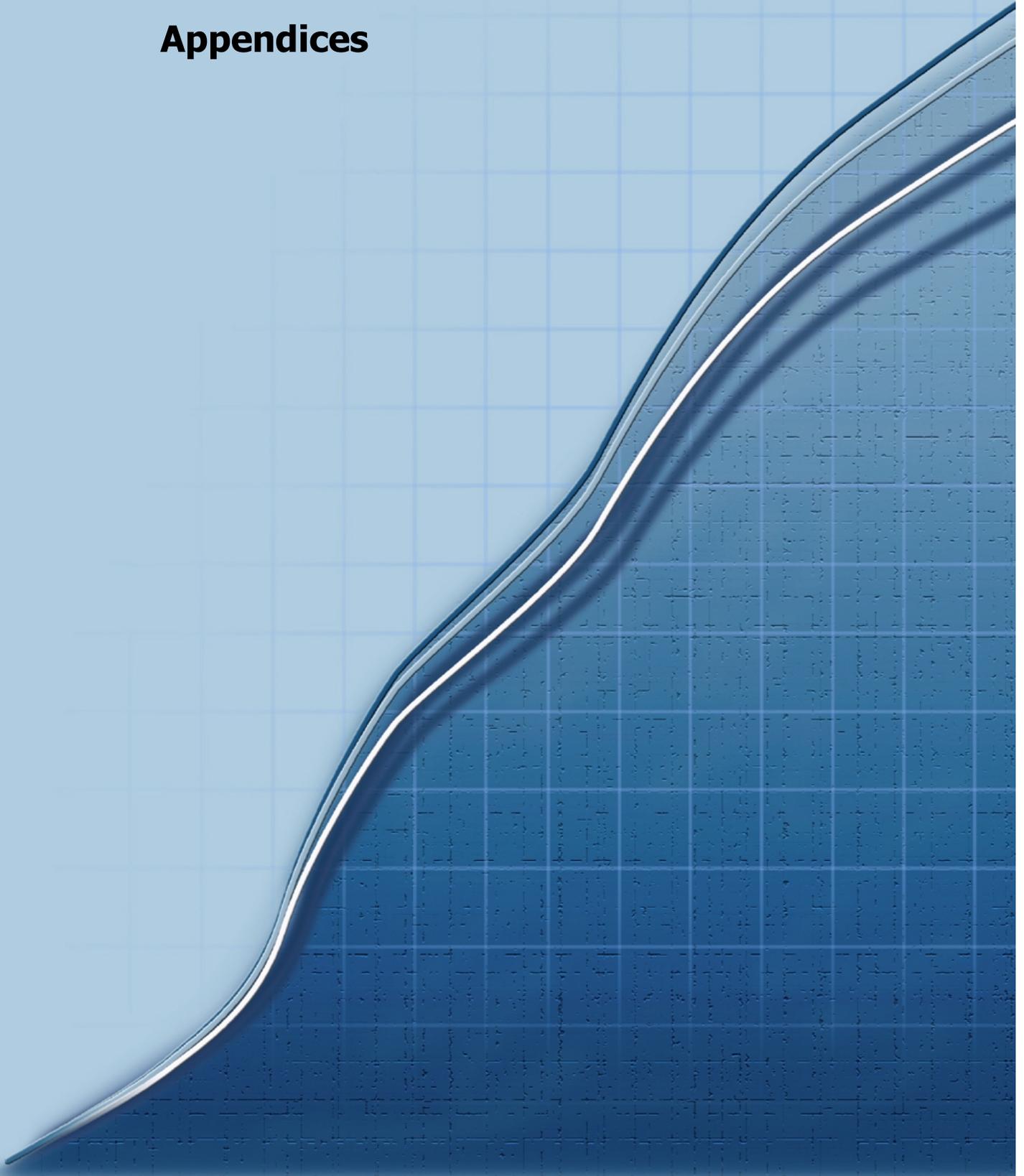


Chart 6.14:
Percent of Persons Reporting Use of Cocaine
in the Past Month by Age Group
1990 - 1997



Source: Health United States, 1999

Appendices



**Appendix 1:
Supplementary Data Tables
Trends in the Overall Health Care Market**





Table 1.1:
National Health Expenditures
1980 - 1998

Year	Total National Health Expenditures				Prescription Drugs Total	
	Total		Per Capita		Nominal Dollars (Billions)	Real Dollars ⁽¹⁾ (Billions)
	Nominal Dollars (Billions)	Real Dollars ⁽¹⁾ (Billions)	Nominal Dollars	Real Dollars		
1980	\$247.3	\$247.3	\$1,052	\$1,052	\$12.0	\$12.0
1981	\$286.9	\$260.1	\$1,208	\$1,095	\$13.4	\$12.1
1982	\$323.0	\$275.8	\$1,346	\$1,149	\$15.0	\$12.8
1983	\$355.3	\$293.9	\$1,466	\$1,213	\$16.8	\$13.9
1984	\$390.1	\$309.4	\$1,593	\$1,263	\$18.7	\$14.8
1985	\$428.7	\$328.3	\$1,734	\$1,328	\$21.2	\$16.2
1986	\$461.2	\$346.8	\$1,847	\$1,389	\$23.9	\$18.0
1987	\$500.5	\$363.0	\$1,985	\$1,440	\$26.5	\$19.2
1988	\$560.4	\$390.3	\$2,200	\$1,532	\$29.4	\$20.5
1989	\$623.5	\$414.3	\$2,422	\$1,609	\$32.9	\$21.8
1990	\$699.4	\$440.9	\$2,689	\$1,695	\$37.7	\$23.8
1991	\$766.8	\$463.9	\$2,918	\$1,765	\$42.1	\$25.5
1992	\$836.5	\$491.3	\$3,151	\$1,851	\$46.6	\$27.4
1993	\$898.5	\$512.4	\$3,351	\$1,911	\$50.6	\$28.9
1994	\$947.7	\$527.0	\$3,501	\$1,947	\$55.2	\$30.7
1995	\$993.3	\$537.0	\$3,637	\$1,966	\$61.0	\$33.0
1996	\$1,039.4	\$545.9	\$3,772	\$1,981	\$68.9	\$36.2
1997	\$1,088.2	\$558.7	\$3,912	\$2,008	\$78.5	\$40.3
1998	\$1,149.1	\$580.9	\$4,094	\$2,070	\$90.6	\$45.8

Source: Health Care Financing Administration, Office of the Actuary, Data from the Division of National Health Statistics
⁽¹⁾ Expressed in 1980 dollars; adjusted using the overall consumer price index for urban consumers



Table 1.2:
Percent Distribution of Medium and Large Firm
Employer-sponsored Health Insurance Enrollment
by Type of Plan
1988 - 1998

	1988	1991	1992	1993	1994	1995	1996	1997	1998	1999
POS	N/A ⁽¹⁾	10%	8%	10%	15%	18%	16%	17%	22%	25%
HMO	18%	26%	22%	26%	25%	29%	33%	33%	30%	28%
PPO	11%	22%	26%	22%	25%	22%	25%	31%	34%	38%
Traditional Indemnity	71%	42%	45%	42%	35%	31%	26%	18%	14%	9%

Source: 1988-1998 The Kaiser Family Foundation, *Trends and Indicators in the Changing Health Care Marketplace*; and 1999 from the Health Research Education Trust *Employer Health Benefits 1999 Annual Survey*

⁽¹⁾ Point-of-service plans not separately identified

Table 1.3:
Number and Percent Uninsured
1985 - 1998

Year	Number (in millions)	Percent
1985	34.6	14.8%
1986	34.2	14.4%
1987	31.0	12.9%
1988	32.7	13.4%
1989	33.4	13.6%
1990	34.7	13.9%
1991	35.4	14.1%
1992	38.6	15.0%
1993	39.7	15.3%
1994	39.7	15.2%
1995	40.6	15.4%
1996	41.7	15.6%
1997	43.4	16.1%
1998	44.3	16.3%

Source: US Bureau of the Census



Table 1.4:
Percent Uninsured
by State
1998

State	Percent Uninsured	State	Percent Uninsured
Alabama	17.0%	Montana	19.6%
Alaska	17.3%	Nebraska	9.0%
Arizona	24.2%	Nevada	21.2%
Arkansas	18.7%	New Hampshire	11.3%
California	22.1%	New Jersey	16.4%
Colorado	15.1%	New Mexico	21.1%
Connecticut	12.6%	New York	17.3%
Delaware	14.7%	North Carolina	15.0%
District of Columbia	17.0%	North Dakota	14.2%
Florida	17.5%	Ohio	10.4%
Georgia	17.5%	Oklahoma	18.3%
Hawaii	10.0%	Oregon	14.3%
Idaho	17.7%	Pennsylvania	10.5%
Illinois	15.0%	Rhode Island	10.0%
Indiana	14.4%	South Carolina	15.4%
Iowa	9.3%	South Dakota	14.3%
Kansas	10.3%	Tennessee	13.0%
Kentucky	14.1%	Texas	24.5%
Louisiana	19.0%	Utah	13.9%
Maine	12.7%	Vermont	9.9%
Maryland	16.6%	Virginia	14.1%
Massachusetts	10.3%	Washington	12.3%
Michigan	13.2%	West Virginia	17.2%
Minnesota	9.3%	Wisconsin	11.8%
Mississippi	20.0%	Wyoming	16.9%
Missouri	10.5%		

Source: US Bureau of the Census



**Table 1.5:
Growth in Medicare Spending per Beneficiary
vs. Private Health Insurance Spending
per Enrollee
1980 - 1998**

Year	Medicare Spending Growth per Beneficiary	Private Health Insurance Spending Growth per Beneficiary
1980	18.6%	16.3%
1981	17.5%	16.1%
1982	15.4%	13.7%
1983	12.0%	9.9%
1984	9.3%	9.6%
1985	6.0%	11.3%
1986	4.7%	7.6%
1987	5.6%	11.0%
1988	6.5%	13.5%
1989	11.5%	12.8%
1990	7.7%	11.8%
1991	8.7%	11.0%
1992	11.6%	9.3%
1993	6.0%	6.2%
1994	9.1%	3.6%
1995	9.0%	2.8%
1996	6.5%	2.2%
1997	6.8%	2.2%
1998	3.3%	3.3%

Source: Health Care Financing Administration, Office of the Actuary



Table 1.6:
Percent of Medicaid Beneficiaries Enrolled
in Medicaid Managed Care by State
1998

State	Percent Enrolled	State	Percent Enrolled
Alabama	70.9%	Montana	98.4%
Alaska	0.0%	Nebraska	72.8%
Arizona	85.1%	Nevada	38.7%
Arkansas	56.0%	New Hampshire	10.1%
California	45.8%	New Jersey	58.6%
Colorado	99.0%	New Mexico	79.7%
Connecticut	71.9%	New York	29.6%
Delaware	76.8%	North Carolina	68.6%
District of Columbia	45.3%	North Dakota	51.9%
Florida	64.6%	Ohio	28.4%
Georgia	76.3%	Oklahoma	49.7%
Hawaii	80.5%	Oregon	88.7%
Idaho	34.8%	Pennsylvania	68.3%
Illinois	13.4%	Rhode Island	63.2%
Indiana	57.7%	South Carolina	3.6%
Iowa	92.1%	South Dakota	70.6%
Kansas	49.4%	Tennessee	100.0%
Kentucky	62.7%	Texas	25.5%
Louisiana	5.4%	Utah	91.3%
Maine	10.7%	Vermont	48.3%
Maryland	67.1%	Virginia	60.0%
Massachusetts	62.7%	Washington	91.0%
Michigan	68.0%	West Virginia	42.5%
Minnesota	52.6%	Wisconsin	49.1%
Mississippi	40.0%	Wyoming	0.0%
Missouri	41.5%		

Source: Health Care Financing Administration, Office of the Actuary

**Appendix 2:
Supplementary Data Tables
Organizational Trends**





**Table 2.1:
Number of Community Hospitals
1980 - 1998**

Year	All Hospitals	Urban	Rural	In Health System ⁽¹⁾
1980	5,830	2,955	2,875	-
1981	5,813	3,048	2,765	-
1982	5,801	3,041	2,760	-
1983	5,783	3,070	2,713	-
1984	5,759	3,063	2,696	-
1985	5,732	3,058	2,674	1,579
1986	5,678	3,040	2,638	1,735
1987	5,611	3,012	2,599	1,781
1988	5,533	2,984	2,549	1,857
1989	5,455	2,958	2,497	1,835
1990	5,384	2,924	2,460	1,822
1991	5,342	2,921	2,421	1,827
1992	5,292	3,007	2,285	1,814
1993	5,261	3,012	2,249	1,829
1994	5,229	2,993	2,236	1,956
1995	5,194	2,958	2,236	1,990
1996	5,134	2,908	2,226	2,058
1997	5,057	2,852	2,205	2,222
1998	5,015	2,816	2,199	2,176

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals

⁽¹⁾ Hospitals that are part of a corporate body that may own and/or manage health provider facilities or health-related subsidiaries as well as non-health-related facilities including freestanding and/or subsidiary corporations.



Table 2.2:
Number of Beds and Number of Beds
per 1,000 Persons
1980 - 1998

Year	Number of Beds	Beds per 1,000
1980	988,287	4.36
1981	1,001,801	4.37
1982	1,011,989	4.37
1983	1,018,452	4.36
1984	1,016,987	4.31
1985	1,000,598	4.21
1986	978,283	4.07
1987	956,529	3.95
1988	944,276	3.86
1989	932,185	3.78
1990	926,436	3.72
1991	922,822	3.66
1992	919,505	3.61
1993	917,847	3.56
1994	901,056	3.46
1995	871,976	3.32
1996	862,352	3.25
1997	853,287	3.19
1998	839,988	3.11

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals



**Table 2.3:
Beds per 1,000 Persons
by State
1998**

State	Beds per 1,000	State	Beds per 1,000
Alabama	3.91	Montana	5.01
Alaska	2.02	Nebraska	4.89
Arizona	2.33	Nevada	2.02
Arkansas	3.89	New Hampshire	2.40
California	2.28	New Jersey	3.25
Colorado	2.31	New Mexico	2.01
Connecticut	2.12	New York	3.77
Delaware	2.66	North Carolina	3.09
District of Columbia	6.79	North Dakota	6.23
Florida	3.30	Ohio	3.14
Georgia	3.30	Oklahoma	3.29
Hawaii	2.34	Oregon	2.07
Idaho	2.78	Pennsylvania	3.73
Illinois	3.26	Rhode Island	2.61
Indiana	3.29	South Carolina	3.00
Iowa	4.27	South Dakota	5.96
Kansas	4.15	Tennessee	3.81
Kentucky	3.87	Texas	2.86
Louisiana	4.08	Utah	1.91
Maine	3.03	Vermont	2.83
Maryland	2.47	Virginia	2.63
Massachusetts	2.68	Washington	1.89
Michigan	2.77	West Virginia	4.48
Minnesota	3.49	Wisconsin	3.20
Mississippi	4.73	Wyoming	4.02
Missouri	3.80		

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1998, for community hospitals



Table 2.4:
Percent of Hospitals
Offering “Non-hospital”
Products or Services
1994 - 1998

	1994	1995	1996	1997	1998
Health Maintenance Organization	19%	21%	22%	23%	22%
Preferred Provider	30%	31%	31%	31%	26%
Indemnity Fee-for-service	10%	10%	10%	10%	8%
Home Health Service		74%	77%	78%	76%
Skilled Nursing Facility		45%	49%	52%	53%
Long-term Care		13%	14%	15%	12%
Assisted Living		8%	10%	11%	13%
Hospice		53%	56%	56%	59%
Meals on Wheels		23%	24%	25%	26%

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1994-1998, for Community Hospitals



Table 2.5:
Distribution of Inpatient vs. Outpatient Revenues
1980 - 1998

Year	Gross Outpatient Revenue	Gross Inpatient Revenue
1980	13%	87%
1981	13%	87%
1982	13%	87%
1983	13%	87%
1984	14%	86%
1985	16%	84%
1986	18%	82%
1987	19%	81%
1988	21%	79%
1989	21%	79%
1990	23%	77%
1991	24%	76%
1992	25%	75%
1993	27%	73%
1994	28%	72%
1995	30%	70%
1996	31%	69%
1997	33%	67%
1998	33%	67%

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for Community Hospitals

**Appendix 3:
Supplementary Data Tables
Utilization and Volume**

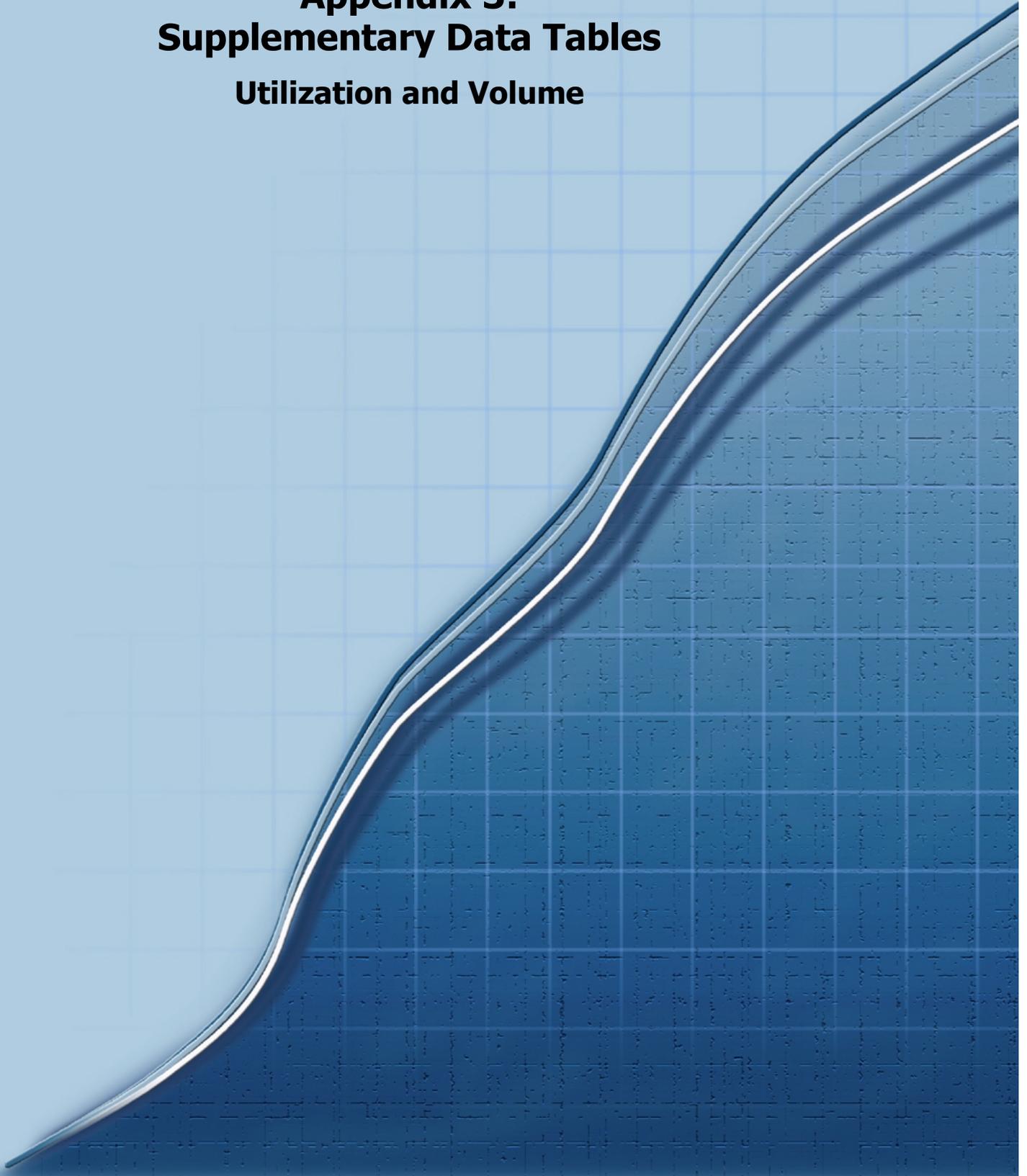




Table 3.1:
Trends in Inpatient Utilization
in Community Hospitals
1980 - 1998

Year	Inpatient Admissions in Community Hospitals	Inpatient Admissions per 1,000	Total Inpatient Days in Community Hospitals	Inpatient Days per 1,000	Average Length of Stay
1980	36,143,445	159.54	273,085,130	1,205.43	7.56
1981	36,438,232	158.80	278,405,882	1,213.28	7.64
1982	36,379,446	157.03	278,043,093	1,200.19	7.64
1983	36,151,780	154.63	273,196,906	1,168.54	7.56
1984	35,155,462	149.07	256,603,081	1,088.10	7.30
1985	33,448,631	140.59	236,619,446	994.52	7.07
1986	32,378,796	134.84	229,447,826	955.50	7.09
1987	31,600,817	130.43	227,014,903	936.96	7.18
1988	31,452,835	128.64	226,875,042	927.93	7.21
1989	31,116,048	126.07	225,436,505	913.36	7.25
1990	31,181,046	125.34	225,971,653	908.38	7.25
1991	31,064,283	123.21	222,858,470	883.93	7.17
1992	31,033,557	121.70	221,047,104	866.84	7.12
1993	30,748,051	119.29	215,888,741	837.58	7.02
1994	30,718,136	118.01	207,180,278	795.95	6.74
1995	30,945,357	117.77	199,876,367	760.68	6.46
1996	31,098,959	117.24	193,747,004	730.43	6.23
1997	31,576,960	117.98	192,504,015	719.25	6.10
1998	31,811,673	117.82	191,430,450	709.00	6.02

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals



Table 3.2:
Average Length of Stay in Community Hospitals
by State
1998

State	Average Length of Stay	State	Average Length of Stay
Alabama	5.65	Montana	11.21
Alaska	9.16	Nebraska	9.25
Arizona	4.86	Nevada	4.89
Arkansas	5.89	New Hampshire	6.05
California	5.25	New Jersey	6.27
Colorado	5.02	New Mexico	4.48
Connecticut	5.33	New York	8.11
Delaware	6.04	North Carolina	6.40
District of Columbia	6.97	North Dakota	10.26
Florida	5.57	Ohio	5.38
Georgia	6.66	Oklahoma	5.54
Hawaii	7.95	Oregon	4.47
Idaho	6.05	Pennsylvania	6.24
Illinois	5.89	Rhode Island	5.63
Indiana	5.79	South Carolina	6.04
Iowa	6.76	South Dakota	10.75
Kansas	7.17	Tennessee	5.76
Kentucky	5.76	Texas	5.27
Louisiana	5.59	Utah	4.60
Maine	5.85	Vermont	7.86
Maryland	5.57	Virginia	5.70
Massachusetts	5.67	Washington	4.84
Michigan	5.77	West Virginia	6.33
Minnesota	7.97	Wisconsin	6.22
Mississippi	7.13	Wyoming	8.68
Missouri	5.83		

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1998, for community hospitals



Table 3.3:
Outpatient Utilization in Community Hospitals
1980 - 1998

Year	Total Outpatient Visits	Outpatient Visits per 1,000	Outpatient Surgeries
1980	202,274,528	892.86	3,053,604
1981	202,554,317	882.72	3,561,573
1982	247,930,332	1,070.21	4,061,061
1983	210,038,878	898.40	4,714,504
1984	211,941,487	898.72	5,529,661
1985	218,694,236	919.18	6,951,359
1986	231,853,914	965.52	8,246,665
1987	244,495,134	1,009.11	9,126,205
1988	268,290,801	1,097.32	10,027,560
1989	284,815,681	1,153.94	10,350,871
1990	300,514,516	1,208.03	11,069,952
1991	321,044,324	1,273.36	11,711,808
1992	347,847,202	1,364.10	12,307,594
1993	366,533,432	1,422.03	12,624,292
1994	382,780,358	1,470.57	13,154,838
1995	413,748,403	1,574.62	13,462,304
1996	439,863,107	1,658.28	14,023,651
1997	450,140,010	1,681.85	14,678,290
1998	474,193,468	1,756.26	15,593,614

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals

**Appendix 4:
Supplementary Data Tables
Trends in Hospital Financing**





Table 4.1:
Annual Change in Hospital Operating Revenue and Expenses
per Adjusted Admission⁽¹⁾
1980 - 1998

Year	Expenses per Adjusted Admission	Revenue per Adjusted Admission	Percent Change Expenses	Percent Change Revenue
1980	\$1,851	\$1,878		
1981	\$2,171	\$2,203	17.3%	17.3%
1982	\$2,501	\$2,547	15.2%	15.6%
1983	\$2,789	\$2,841	11.5%	11.5%
1984	\$2,995	\$3,080	7.4%	8.4%
1985	\$3,245	\$3,359	8.3%	9.1%
1986	\$3,533	\$3,639	8.9%	8.3%
1987	\$3,850	\$3,929	9.0%	8.0%
1988	\$4,207	\$4,245	9.3%	8.1%
1989	\$4,588	\$4,628	9.1%	9.0%
1990	\$4,947	\$5,034	7.8%	8.8%
1991	\$5,360	\$5,481	8.3%	8.9%
1992	\$5,794	\$5,958	8.1%	8.7%
1993	\$6,132	\$6,290	5.8%	5.6%
1994	\$6,230	\$6,446	1.6%	2.5%
1995	\$6,216	\$6,466	(0.2%)	0.3%
1996	\$6,225	\$6,522	0.2%	0.9%
1997	\$6,262	\$6,526	0.6%	0.1%
1998	\$6,386	\$6,589	2.0%	1.0%

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals

(1) An aggregate measure of workload reflecting the number of inpatient admissions, plus an estimate of the volume of outpatient services, expressed in units equivalent to an inpatient admission in terms of level of effort



Table 4.2:
Aggregate Total Hospital Margins, Percent of Hospitals with Negative Total Hospital Margins and Aggregate Non-operating Gains as a Percentage of Total Net Revenue 1980-1998

Year	Aggregate Total Hospital Margins	Percent of Hospitals with Negative Total Margins	Aggregate Non-Operating Gains as a Percentage of Total Net Revenue
1980	3.6%	25.7%	2.2%
1981	3.6%	25.4%	2.2%
1982	4.2%	24.0%	2.4%
1983	4.2%	24.1%	2.4%
1984	5.1%	24.6%	2.4%
1985	6.0%	23.3%	2.7%
1986	5.3%	25.7%	2.4%
1987	4.2%	31.4%	2.3%
1988	3.3%	32.5%	2.4%
1989	3.4%	30.8%	2.5%
1990	3.9%	27.1%	2.1%
1991	4.3%	24.7%	2.1%
1992	4.6%	23.8%	1.9%
1993	4.2%	24.2%	1.8%
1994	4.8%	22.4%	1.5%
1995	5.6%	20.4%	1.8%
1996	6.7%	19.4%	2.3%
1997	6.7%	20.4%	2.7%
1998	5.8%	26.6%	2.8%

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals



Table 4.3:
Aggregate Hospital Payment-to-cost Ratio
for Private Payers, Medicare and Medicaid
1980 - 1998

Year	Medicare	Medicaid	Private Payer
1980	95.8%	90.5%	112.4%
1981	97.2%	92.9%	112.1%
1982	96.0%	90.8%	114.5%
1983	96.8%	92.0%	115.5%
1984	98.0%	88.2%	116.2%
1985	101.1%	90.4%	115.6%
1986	100.7%	88.2%	115.9%
1987	98.2%	83.0%	119.9%
1988	94.2%	79.7%	121.7%
1989	91.4%	75.8%	121.6%
1990	89.2%	79.7%	126.8%
1991	88.4%	81.6%	129.7%
1992	88.8%	90.9%	131.3%
1993	89.4%	93.1%	129.3%
1994	96.9%	93.7%	124.4%
1995	99.3%	93.8%	123.9%
1996	102.4%	94.8%	121.5%
1997	103.6%	95.9%	117.6%
1998	101.8%	96.6%	115.8%

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals



**Table 4.4:
Aggregate Margin by Payer
1980 - 1998 Actual
1998 - 2004 (projected)**

Year	Private Payers	Medicaid	Medicare	Medicare with Costs at MB-1	Medicare with Costs at MB	Total Margins
1980	14.0%	-7.1%	-3.0%			3.6%
1981	13.5%	-4.8%	-1.7%			3.6%
1982	14.3%	-8.5%	-3.7%			4.2%
1983	13.8%	-8.6%	-3.3%			4.2%
1984	15.1%	-9.0%	-1.3%			5.1%
1985	14.4%	-6.0%	1.9%			6.0%
1986	14.8%	-8.9%	1.7%			5.3%
1987	30.6%	-20.2%	-1.6%			4.2%
1988	31.5%	-26.0%	-6.0%			3.3%
1989	33.2%	-26.5%	-8.4%			3.4%
1990	29.5%	-25.0%	-11.9%			3.9%
1991	31.3%	-22.0%	-13.0%			4.3%
1992	31.7%	-11.8%	-12.4%			4.6%
1993	30.8%	-11.6%	-11.3%			4.2%
1994	28.3%	-6.7%	-3.2%			4.8%
1995	28.1%	-6.6%	-0.7%			5.6%
1996	26.9%	-5.4%	2.4%			6.8%
1997	24.8%	-4.2%	3.5%			6.7%
1998	24.2%	-3.5%	1.8%	0.5%*	0.5%*	5.8%
1999				-1.0%	-1.8%	
2000				-1.5%	-3.2%	
2001				-1.4%	-3.9%	
2002				-2.5%	-5.8%	
2003				-1.8%	-6.0%	
2004				-1.6%	-6.6%	

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980 - 1998, for community hospital and analysis in, "The Impact of the Medicare Balanced Budget Refinement Act on Medicare Payments to Hospitals"

- Notes: (1) Uncompensated Care and Other Government Payers are not shown separately in this chart
 (2) Medicare projections based on The Lewin Group Analysis of Medicare payment policies under the Balanced Budget Act of 1997 and Medicare Balanced Budget Refinement Act of 1999
 (3) The market basket inflation rate is the rate of increase in the prices of goods and services purchased by hospitals:
 MB-1 = rate of increase in the prices of goods and services purchased by hospitals less one percentage point
 MB = rate of increase in the prices of goods and services purchased by hospitals
 * The 1999 AHA annual survey provides actual 1998 data; however, 1998 AHA data reflect Medicare payments made under payment policies before and after implementation of the BBA. Post-BBA margins reflect the actual costs reported in the 1999 AHA annual survey and post-BBA payments are simulated based on hospitals that reported payments that were fully subject to BBA policies



**Table 4.5:
Total Medicare Payments to Hospitals
Under the BBA and BBRA
1997 - 2004 (projected)**

Year	Pre-BBA (billions)	Inflation-adjusted Post BBA/BBRA (billions)	Post-BBA/ BBRA (billions)
1997	\$120.4	-	-
1998	\$131.5	\$123.3	\$123.3
1999	\$137.8	\$121.9	\$124.9
2000	\$141.8	\$120.3	\$126.7
2001	\$145.6	\$119.4	\$129.4
2002	\$149.4	\$117.2	\$130.6
2003	\$153.4	\$117.0	\$134.3
2004	\$157.6	\$116.2	\$137.6

Source: The Lewin Group analysis of Medicare cost report and American Hospital Association Annual Survey data in, "The Impact of the Medicare Balanced Budget Refinement Act on Medicare Payments to Hospitals," February 1, 2000
 (1) Pre-BBA reflects projected payments under laws and regulations existing prior to passage of the BBA
 (2) Post-BBA/BBRA reflects projected payments under both the Balanced Budget Act of 1997 (BBA) and the Medicare Balanced Budget Refinement Act of 1999 (BBRA)

**Appendix 5:
Supplementary Data Tables
Workforce**

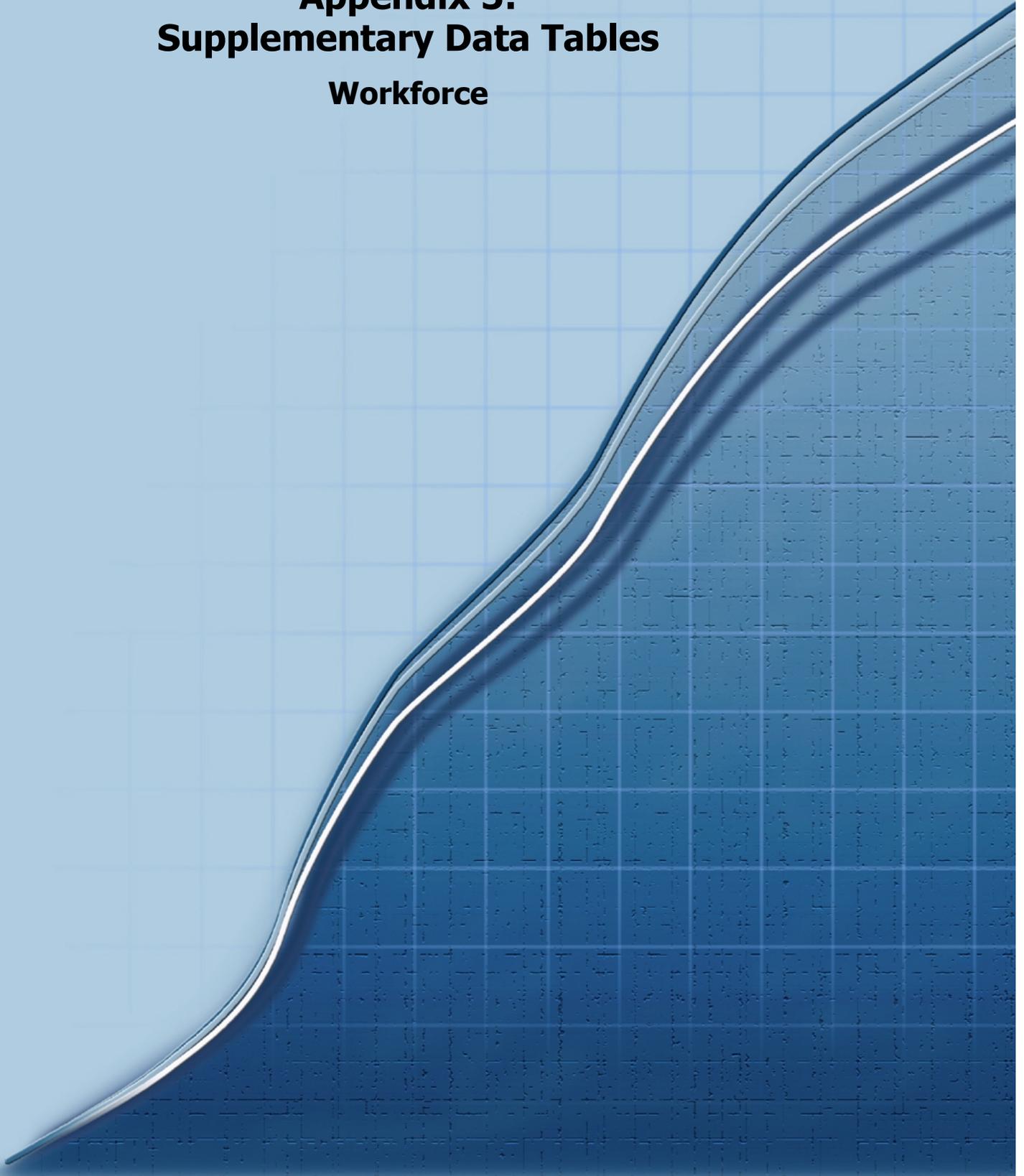




Table 5.1:
Total Number of Active Physicians per 1,000 Persons
by State
1997

State	Physicians per 1,000	State	Physicians per 1,000
Alabama	1.97	Montana	1.92
Alaska	1.72	Nebraska	2.13
Arizona	2.17	Nevada	1.81
Arkansas	1.88	New Hampshire	2.13
California	2.41	New Jersey	2.34
Colorado	2.47	New Mexico	3.06
Connecticut	3.4	New York	3.71
Delaware	2.49	North Carolina	2.26
District of Columbia	6.92	North Dakota	2.24
Florida	2.44	Ohio	2.51
Georgia	2.08	Oklahoma	1.96
Hawaii	2.64	Oregon	2.26
Idaho	1.55	Pennsylvania	3.13
Illinois	2.62	Rhode Island	3.33
Indiana	1.97	South Carolina	2.05
Iowa	1.98	South Dakota	1.82
Kansas	2.19	Tennessee	2.43
Kentucky	2.07	Texas	2.03
Louisiana	2.35	Utah	1.97
Maine	2.39	Vermont	2.88
Maryland	3.59	Virginia	2.37
Massachusetts	3.91	Washington	2.38
Michigan	2.59	West Virginia	2.28
Minnesota	2.45	Wisconsin	2.28
Mississippi	1.60	Wyoming	1.71
Missouri	2.48		

Source: Health United States, 1999; includes active non-federal doctors of medicine and active doctors of osteopathy



**Table 5.2:
Medical and Dental Residents in Training
in Community Hospitals
1980 - 1998**

Year	Residents
1980	55,572
1981	57,776
1982	58,439
1983	59,990
1984	61,888
1985	59,171
1986	63,200
1987	60,909
1988	63,608
1989	64,478
1990	64,530
1991	67,189
1992	69,111
1993	73,377
1994	74,027
1995	78,137
1996	77,160
1997	75,398
1998	78,345

*Source: The Lewin Group
analysis of American Hospital
Association Annual Survey data,
1980-1998, for community
hospitals*



**Table 5.3:
Total Full Time Equivalent Employees Working in Hospitals
and Full Time Equivalents per Adjusted Admission
1980 - 1998**

Year	FTE Personnel	FTE per Adjusted Admission
1980	2,872,772	0.069
1981	3,028,154	0.073
1982	3,305,136	0.079
1983	3,095,579	0.074
1984	3,016,665	0.073
1985	2,996,846	0.075
1986	3,024,320	0.076
1987	3,106,082	0.078
1988	3,195,168	0.080
1989	3,297,947	0.082
1990	3,415,622	0.083
1991	3,530,623	0.084
1992	3,615,145	0.084
1993	3,674,250	0.085
1994	3,690,905	0.083
1995	3,707,958	0.081
1996	3,724,843	0.079
1997	3,789,752	0.078
1998	3,831,068	0.078

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1980-1998, for community hospitals

(1) An aggregate measure of workload reflecting the number of inpatient admissions, plus an estimate of the volume of outpatient services, expressed in units equivalent to an inpatient admission in terms of level of effort



Table 5.4:
Number of RN Full Time Equivalent Employees,
RN Full Time Equivalent Employees per Adjusted Admission
and RN Full Time Equivalents as a Percent of Total FTEs
1986 - 1998

Year	RN FTEs (thousands)	RN FTEs per Adjusted Admission	RN FTEs as a Percent of Total FTEs
1986	736.3	0.0185	24.3%
1987	759.0	0.0192	24.4%
1988	770.6	0.0192	24.0%
1989	791.5	0.0196	24.0%
1990	809.9	0.0197	23.7%
1991	840.5	0.0200	23.8%
1992	858.9	0.0201	23.7%
1993	874.1	0.0201	23.8%
1994	890.9	0.0201	24.1%
1995	893.7	0.0195	24.1%
1996	895.1	0.0190	24.0%
1997	901.2	0.0185	23.8%
1998	930.0	0.0190	23.8%

Source: The Lewin Group analysis of American Hospital Association Annual Survey data, 1986-1998, for community hospitals



**Table 5.5:
RN Employment
by Type of Provider
1980 - 1996**

	1980	1984	1988	1992	1996
Percent Employed by Hospitals	65.7%	68.1%	67.9%	66.5%	60.1%
Percent Employed Nursing Homes	8.0%	7.7%	6.6%	7.0%	8.1%
Percent Employed by Public/Community Health	6.6%	6.8%	6.8%	9.7%	13.1%
All Other	19.8%	17.3%	18.6%	16.8%	18.7%

Source: Findings from the National Sample Survey of Registered Nurses, 1980 - 1996; Bureau of Health Professionals, Division of Nursing, DHHS

**Table 5.6:
Distribution of RN Workforce
by Age
1980 - 2000 (projected)**

Age	1980	1984	1988	1992	1996	2000 (projected)
<25	128,554	90,074	78,556	47,625	58,012	57,025
25-29	289,777	287,080	237,578	198,405	170,277	166,520
30-34	255,400	338,032	368,982	328,190	297,119	238,359
35-39	205,979	261,868	332,159	421,553	413,931	370,789
40-44	180,327	222,619	267,578	355,799	465,188	473,720
45-49	150,087	179,520	212,846	259,093	378,569	489,394
50-54	137,154	151,080	173,828	202,111	263,635	402,342
55-59	124,613	131,543	140,190	164,273	201,114	274,365
60-64	81,485	105,034	109,019	120,687	147,951	172,277
65+	74,270	83,269	101,064	126,476	145,849	185,455

Source: Findings from the National Sample Survey of Registered Nurses, 1980-1996, Bureau of Health Professions, Division of Nursing, DHHS



**Table 5.7:
Annual Enrollment in US RN Education Programs
1987 - 1996**

Year	Total Enrollment
1987	182,947
1988	184,924
1989	201,458
1990	221,170
1991	237,598
1992	257,983
1993	270,228
1994	268,350
1995	261,219
1996	238,244

Source: Center for Research in Nursing Education and Community Health, National League of Nursing



**Table 5.8:
Projection of RN Workforce Supply and Demand
1995 - 2020**

Year	RN FTE Supply	RN FTE Demand
1995	1,813,000	1,800,000
2000	1,987,000	1,969,000
2005	2,128,000	2,095,000
2010	2,214,000	2,232,000
2015	2,277,000	2,391,000
2020	2,284,000	2,575,000

Source: Report to the Secretary of the Department of Health and Human Services on Basic Registered Nurse Workforce, 1996, National Advisory Council on Nurse Education and Practice