



TRENDWATCH

CHARTBOOK 2018

Trends Affecting Hospitals and Health Systems

Additional copies of this report are available on the American Hospital Association's web site at www.aha.org



American Hospital
Association®

TRENDWATCH CHARTBOOK 2018

Trends Affecting Hospitals and Health Systems

TrendWatch, produced by the American Hospital Association, highlights important trends in the hospital and health care field. TrendWatch products include a series of reports, released each year, that provide up-to-date information on health and hospital trends, and this Chartbook.

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.



**American Hospital
Association®**

American Hospital Association
Two CityCenter, Suite 400
800 10th Street, NW
Washington, DC 20001-4956
202.638.1100
www.aha.org



TABLE OF CONTENTS

CHAPTER 1:	Trends in the Overall Health Care Market	1
	Chart 1.1: Total National Health Expenditures	3
	Chart 1.2: Percent Change in Total National Health Expenditures	3
	Chart 1.3: Per Capita National Health Expenditures	4
	Chart 1.4: National Health Expenditures as a Percentage of Gross Domestic Product	4
	Chart 1.5: National Expenditures for Health Services and Supplies by Category	5
	Chart 1.6: Percent Change in National Expenditures for Selected Health Services and Supplies	6
	Chart 1.7: National Health Expenditures	6
	Chart 1.8: Consumer Out-of-pocket Payments for National Health Expenditures	7
	Chart 1.9: Total Prescription Drug Spending	7
	Chart 1.10: Consumer Out-of-pocket Spending vs. Private Health Insurance Spending for Prescription Drugs	8
	Chart 1.11: Distribution of National Health Expenditures by Source of Payment	8
	Chart 1.12: Distribution of Health Insurance Coverage, Percentage of Population Covered by Payer	9
	Chart 1.13: Number and Percent Uninsured	9
	Chart 1.14: Average Percent Uninsured by State	10
	Chart 1.15: Medicare Enrollees	10
	Chart 1.16: Medicaid Enrollees	11
	Chart 1.17: National CHIP Enrollment	11
	Chart 1.18: Percent Change in CHIP Enrollment By State	12



Chart 1.19:	Percentage of Employees with Employer-based Coverage Who Can Choose Conventional, PPO, HMO, POS, and HDHP/SO Plans	12
Chart 1.20:	Distribution of Employer-sponsored Health Insurance Enrollment by Type of Plan	13
Chart 1.21:	Percentage of Medicare Beneficiaries Enrolled in Medicare Managed Care	13
Chart 1.22:	Percent Growth in Medicare Spending per Beneficiary vs. Private Health Insurance Spending per Enrollee	14
Chart 1.23:	Percentage of Medicaid Beneficiaries Enrolled in Medicaid Managed Care	14
Chart 1.24:	Percentage of Medicaid Beneficiaries Enrolled in Medicaid Managed Care by State	15
Chart 1.25:	Status of State Medicaid Expansion Decisions	15
Chart 1.26:	Total Effectuated Marketplace Enrollment by Metal Level	16
Chart 1.27:	Annual Change in Health Insurance Premiums	16
Chart 1.28:	Managed Care Plan Median Operating Margins	17
Chart 1.30:	Operating Margins of the Top Insurers	17
CHAPTER 2:	Organizational Trends	20
Chart 2.1:	Number of Community Hospitals	21
Chart 2.2:	Number of Beds and Number of Beds per 1,000 Persons	21
Chart 2.3:	Beds per 1,000 by State	22
Chart 2.4:	Number of Hospitals in Health Systems	22
Chart 2.5:	Number of Medicare-certified Ambulatory Surgical Centers	23
Chart 2.6:	Percentage of Hospitals with Physician Affiliates by Type of Relationship	23
Chart 2.7:	Percentage of Hospitals with Insurance Products by Type of Insurance	24
Chart 2.8:	Percentage of Hospitals Offering “Non-hospital” Services	24
Chart 2.9:	Announced Hospital Mergers and Acquisitions	25

CHAPTER 3:	Utilization and Volume	27
Chart 3.1:	Inpatient Admissions in Community Hospitals	29
Chart 3.2:	Total Inpatient Days in Community Hospitals	29
Chart 3.3:	Inpatient Admissions per 1,000 Persons	30
Chart 3.4:	Inpatient Days per 1,000 Persons	30
Chart 3.5:	Average Length of Stay in Community Hospitals	31
Chart 3.6:	Average Length of Stay in Community Hospitals by State	31
Chart 3.7:	Emergency Department Visits and Emergency Departments Reporting Visits in Community Hospitals	32
Chart 3.8:	Hospital Emergency Department Visits per 1,000 Persons	32
Chart 3.9:	Total Hospital Outpatient Visits in Community Hospitals	33
Chart 3.10:	Hospital Outpatient Visits per 1,000 Persons	33
Chart 3.11:	Percentage Share of Inpatient vs. Outpatient Surgeries	34
CHAPTER 4:	Trends in Hospital Financing	35
Chart 4.1:	Percentage of Hospitals with Negative Total and Operating Margins	37
Chart 4.2:	Aggregate Total Hospital Margins and Operating Margins	37
Chart 4.3:	Distribution of Outpatient vs. Inpatient Revenues	38
Chart 4.4:	Annual Change in Hospital Operating Revenue and Expenses per Adjusted Admission	38
Chart 4.5:	Distribution of Hospital Cost by Payer Type	39
Chart 4.6:	Aggregate Hospital Payment-to-cost Ratios for Private Payers, Medicare, and Medicaid	40
Chart 4.7:	Hospital Payment Shortfall Relative to Costs for Medicare, Medicaid and Other Government	40



	Chart 4.8: Income from Investments and Other Non-operating Gains as a Percentage of Total Net Revenue	41
	Chart 4.9: Number of Bond Rating Upgrades and Downgrades, Not-for-profit Health Care	41
	Chart 4.10: Median Average Age of Plant	42
	Chart 4.11: Percent Change in Employment Cost Index, All Private Service Industries, All Health Services, and Hospitals	42
CHAPTER 5:	Workforce	43
	Chart 5.1: Total Number of Active Physicians per 1,000 Persons	45
	Chart 5.2: Total Number of Active Physicians per 1,000 Persons by State	45
	Chart 5.3: Number of Physicians and Dentists Employed by Community Hospitals	46
	Chart 5.4: Medical and Dental Residents in Training in Community Hospitals	46
	Chart 5.5: Total Full-time Equivalent Employees Working in Hospitals	47
	Chart 5.6: Full-time Equivalent Employees per Adjusted Admission	47
	Chart 5.7: Number of RN Full-time Equivalent Employees and RN FTEs per Adjusted Admission	48
	Chart 5.8: RN Full-time Equivalent as a Percentage of Total Hospital Full-time Equivalents	48
	Chart 5.9: Percent Distribution of RN Workforce by Age Group	49
	Chart 5.10: RN Employment by Type of Provider	49
	Chart 5.11: Number of Physicians by Age	50
	Chart 5.12: Annual Percentage Change in Entry Level Baccalaureate Nursing Enrollment	50
	Chart 5.13: National Supply and Demand Projections for FTE RNs	51



CHAPTER 6:	The Economic Contribution of Hospitals	53
Chart 6.1:	National Health Expenditures as a Percentage of Gross Domestic Product and Breakdown of National Health Expenditures	55
Chart 6.2:	Number of Full-time and Part-time Hospital Employees	55
Chart 6.3:	Impact of Community Hospitals on U.S. Economy (in \$ billions)	56
Chart 6.4:	Hospital Employment vs. Employment in Other Industries	56
Chart 6.5:	Average Weekly Earnings of Workers, Hospitals vs. All Service-providing Industries	57
Chart 6.6:	Hospital Employment by Occupation Type	57
Chart 6.7:	Percent Change in Employment, Seasonally-adjusted: Hospital vs. All Industries (Total Non-farm)	58
Chart 6.8:	Percent of Total Regional Employment by Hospitals	58
Chart 6.9:	Impact of Community Hospitals on U.S. Jobs (in millions)	59
Chart 6.10:	Percent of Costs by Category in the Inpatient Prospective Payment System Hospital Market Basket	59
Chart 6.11:	Hospital Impact on Sectors of the U.S. Economy (in \$ billions)	60
Chart 6.12:	Impact of Community Hospitals on U.S. Economy; All States, DC, and Total U.S.	61
CHAPTER 7:	Community Health Indicators	63
Chart 7.1:	U.S. Population Trends and Projections by Age	65
Chart 7.2:	U.S. Population Trends and Projections by Race	65
Chart 7.3:	Age-adjusted Death Rates, Selected Causes, by Race	66
Chart 7.4:	Percent of People with Chronic Conditions by Number and Sex	66
Chart 7.5:	Percent of Fee-for-Service Medicare Beneficiaries with Chronic Conditions	67
Chart 7.6:	Number of Persons with Asthma	67
Chart 7.7:	Percent of Adults with Hypertension by Sex	68



Chart 7.8:	Percent of Adults Who Are Overweight and Obese	68
Chart 7.9:	Percent of Expenses Used by People with Chronic Conditions by Service Type	69
Chart 7.10:	Percent of Spending for Individuals with Chronic Conditions by Insurance Status	69
Chart 7.11:	Percent of Medicare Fee-for-Service Beneficiaries vs. Percent of Medicare Spending, by Number of Chronic Conditions	70
Chart 7.12:	Percent of Medicare Fee-for-Service Spending on Chronic Conditions, by Type of Service	70
Chart 7.13:	Percent Uninsured by Race	71
Chart 7.14:	Percent of Adults with No Usual Source of Care by Race	71
Chart 7.15:	Percent of Adults with No Usual Source of Care by Insurance Status	72
Chart 7.16:	Percent of Children with No Usual Source of Care by Race	72
Chart 7.17:	Percent of Children with No Usual Source of Care by Insurance Status	73
Chart 7.18:	Percent of Individuals with No Health Care Visits by Race, Insurance Status	73
Chart 7.19:	Percent of Children with No Health Care Visits by Race, Insurance Status	74
Chart 7.20:	Percent of Children with No Dental Visits by Race, Poverty Status	74
Chart 7.21:	Percent of Children Vaccinated by Race, Poverty Status	75
Chart 7.22:	Percent of Women Receiving Mammography by Race, Poverty Status	75
Chart 7.23:	Percent of Adults with Chronic Conditions by Insurance Type	76
Chart 7.24:	Total Expenditures on Top 10 Most Costly Conditions Among Adults by Sex	76
Chart 7.25:	30-Day Readmission Rate for Medicare Fee-for-Service Beneficiaries by Number of Chronic Conditions	77



LIST OF APPENDICES

APPENDIX 1:	Supplementary Data Tables, Trends in the Overall Health Care Market	A-3
Table 1.1:	Total National Health Expenditures	A-4
Table 1.2:	National Health Expenditures	A-5
Table 1.3:	Consumer Out-of-pocket Payments for National Health Expenditures	A-6
Table 1.4:	Consumer Out-of-pocket Spending vs. Private Health Insurance Spending for Prescription Drugs	A-7
Table 1.5:	Number and Percent Uninsured	A-8
Table 1.6:	Average Percent Uninsured by State	A-9
Table 1.7:	Medicaid Enrollees	A-10
Table 1.8:	Percent Change in CHIP Enrollment by State,	A-11
Table 1.9:	Percentage of Employees with Employer-based Coverage Who Can Choose Conventional, PPO, HMO, POS, and HDHP/SO Plans	A-12
Table 1.10:	Percent Distribution of Employer-sponsored Health Insurance Enrollment by Type of Plan	A-12
Table 1.11:	Growth in Medicare Spending per Beneficiary vs. Private Health Insurance Spending per Enrollee	A-13
Table 1.12:	Percentage of Medicaid Beneficiaries Enrolled in Medicaid Managed Care by State	A-14
Table 1.13:	Operating Margins of the Top Insurers	A-15
APPENDIX 2:	Supplementary Data Tables, Organizational Trends	A-17
Table 2.1:	Number of Community Hospitals	A-18
Table 2.2:	Number of Beds and Number of Beds per 1,000 Persons	A-19



Table 2.3:	Beds per 1,000 Persons by State	A-20
Table 2.4:	Percentage of Hospitals with Physician Affiliates by Type of Relationship	A-21
Table 2.5:	Percentage of Hospitals with Insurance Products by Type of Insurance	A-21
Table 2.6:	Percentage of Hospitals Offering “Non-hospital” Services	A-22

APPENDIX 3: Supplementary Data Tables, Utilization and Volume **A-23**

Table 3.1:	Trends in Inpatient Utilization in Community Hospitals	A-24
Table 3.2:	Average Length of Stay in Community Hospitals by State	A-25
Table 3.3:	Emergency Department Visits, Emergency Department Visits per 1,000 Persons and Number of Emergency Departments Reporting Visits	A-26
Table 3.4:	Outpatient Utilization in Community Hospitals	A-27

APPENDIX 4: Supplementary Data Tables, Trends in Hospital Financing **A-29**

Table 4.1:	Aggregate Total Hospital Margins and Operating Margins; Percentage of Hospitals with Negative Total Margins; and Aggregate Non-operating Gains as a Percentage of Total Net Revenue	A-30
Table 4.2:	Distribution of Inpatient vs. Outpatient Revenues	A-31
Table 4.3:	Annual Change in Hospital Operating Revenue and Expenses per Adjusted Admission	A-32
Table 4.4:	Aggregate Hospital Payment-to-cost Ratios for Private Payers, Medicare, and Medicaid	A-33
Table 4.5:	Hospital Payment Shortfall Relative to Costs for Medicare, Medicaid, and Other Government	A-34



APPENDIX 5:	Supplementary Data Tables, Workforce	A-35
Table 5.1:	Total Number of Active Physicians per 1,000 Persons by State	A-36
Table 5.2:	Number of Physicians and Dentists Employed by Community Hospitals	A-37
Table 5.3:	Medical and Dental Residents in Training in Community Hospitals	A-38
Table 5.4:	Total Full-time Equivalent Employees Working in Hospitals and Full-time Equivalents per Adjusted Admission	A-39
Table 5.5:	Number of RN Full-time Equivalent Employees, RN Full-time Equivalent Employees per Adjusted Admission and RN Full-time Equivalents as a Percentage of Total FTEs	A-40
Table 5.6:	Percent Distribution of RN Workforce by Age Group	A-41
Table 5.7:	RN Employment by Type of Provider	A-41
Table 5.8:	Number of Physicians by Age	A-42
APPENDIX 6:	Supplementary Data Tables, The Economic Contribution of Hospitals	A-43
Table 6.1:	Number of Full-time and Part-time Hospital Employees	A-44
Table 6.2:	Hospital Employment vs. Employment in Other Industries	A-45
Table 6.3:	Average Weekly Earnings of Workers, Hospitals vs. All Service-providing Industries	A-46
APPENDIX 7:	Supplementary Data Tables, Community Health Indicators	A-47
Table 7.1:	U.S. Population Trends and Projections by Age	A-48
Table 7.2:	U.S. Population Trends and Projections by Race	A-49



Table 7.3:	Age-adjusted Death Rates, Selected Causes, by Race	A-50
Table 7.4:	Number of Persons with Asthma	A-50
Table 7.5:	Percent of Adults Who Are Overweight and Obese	A-51
Table 7.6:	Percent Uninsured by Race	A-51
Table 7.7:	Percent of Persons with No Usual Source of Care by Race	A-52

GLOSSARY

A-53



ACKNOWLEDGEMENTS

There are many people who made significant contributions toward the completion of this report. Presented below is a list of individuals who were actively involved in the production of the *TrendWatch Chartbook 2018*.

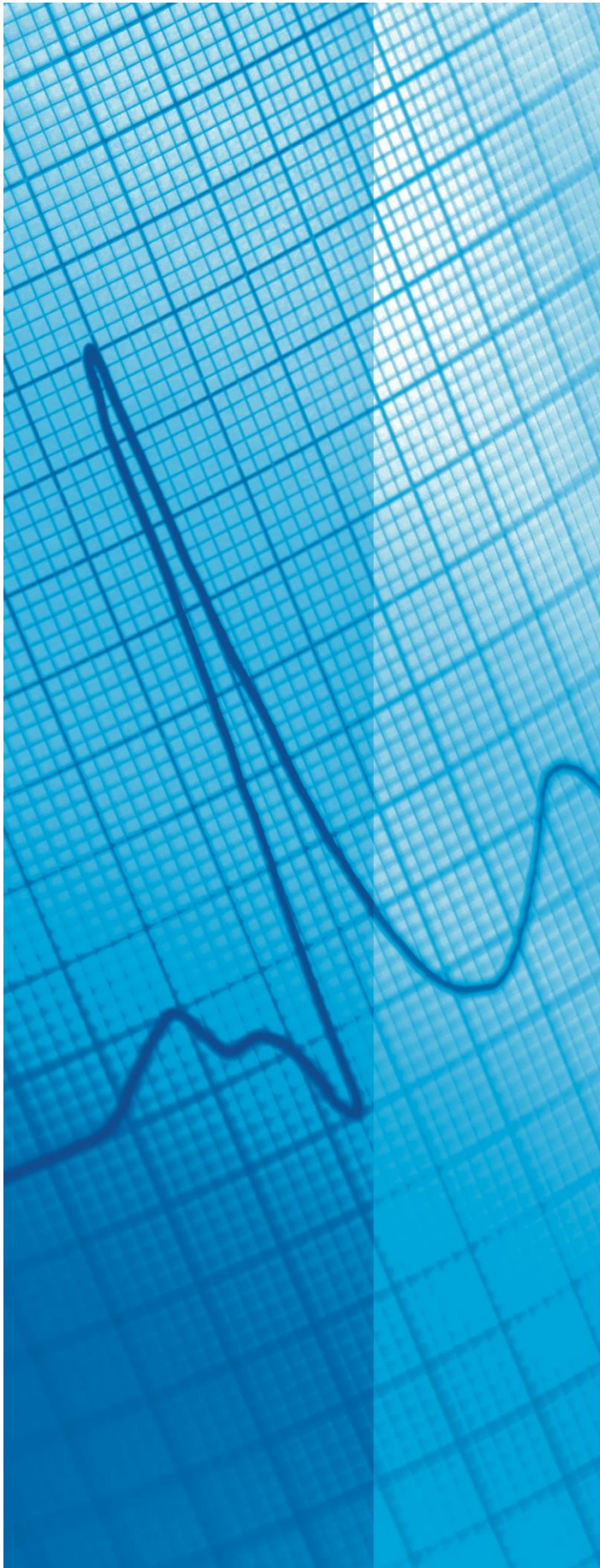
Scott Bates

Christopher Vaz

Michael Ward

Aaron Wesolowski

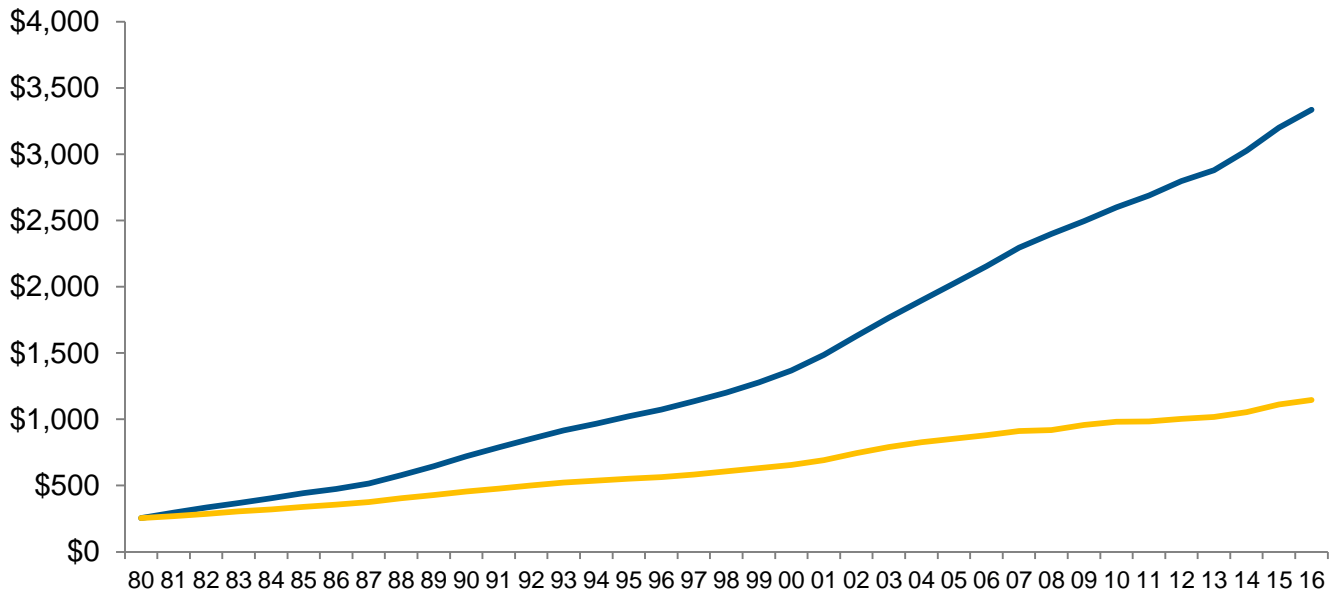
Chantal Worzala



CHAPTER 1

Trends in the Overall
Health Care Market

Chart 1.1: Total National Health Expenditures, 1980 – 2016⁽¹⁾

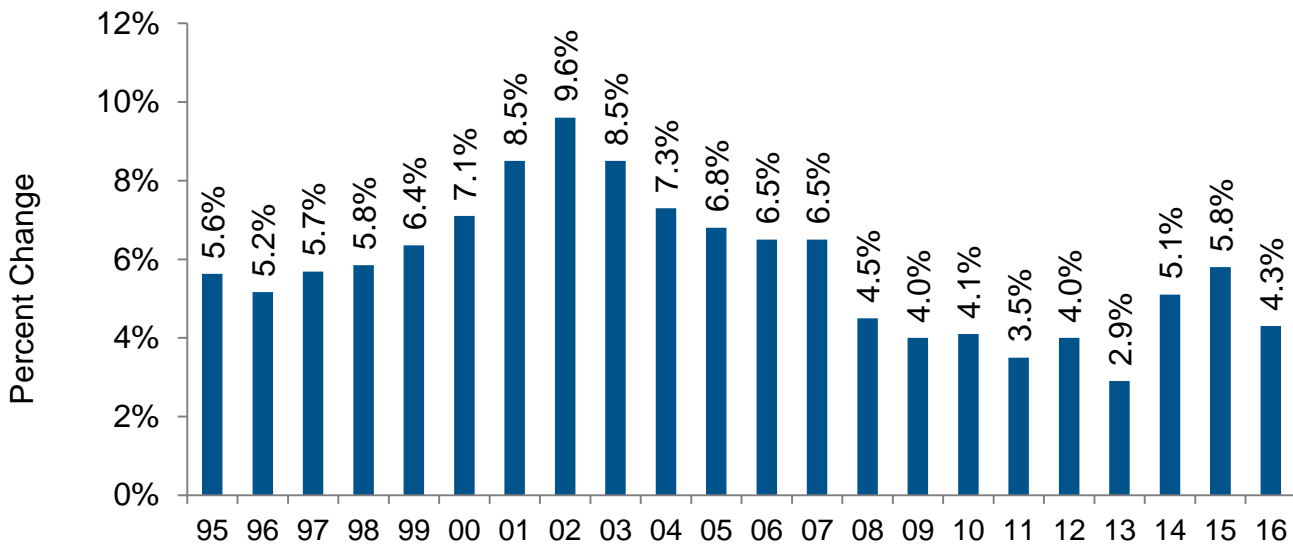


Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

⁽²⁾ Expressed in 1980 dollars; adjusted using the overall Consumer Price Index for Urban Consumers.

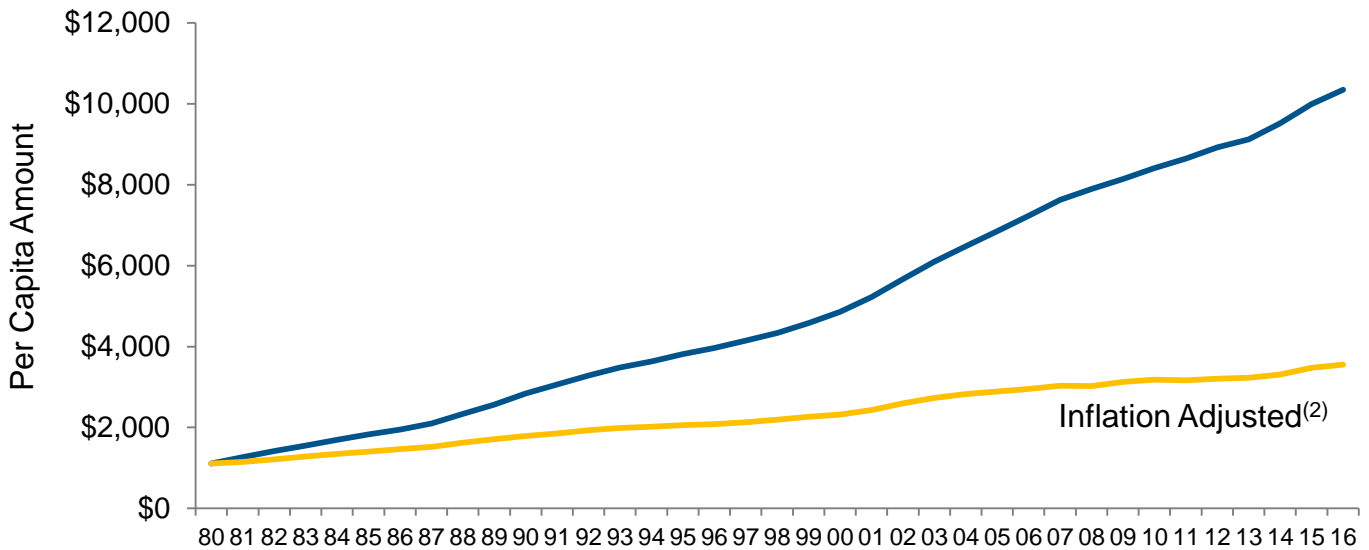
Chart 1.2: Percent Change in Total National Health Expenditures, 1995 – 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Chart 1.3: Per Capita National Health Expenditures, 1980 – 2016⁽¹⁾

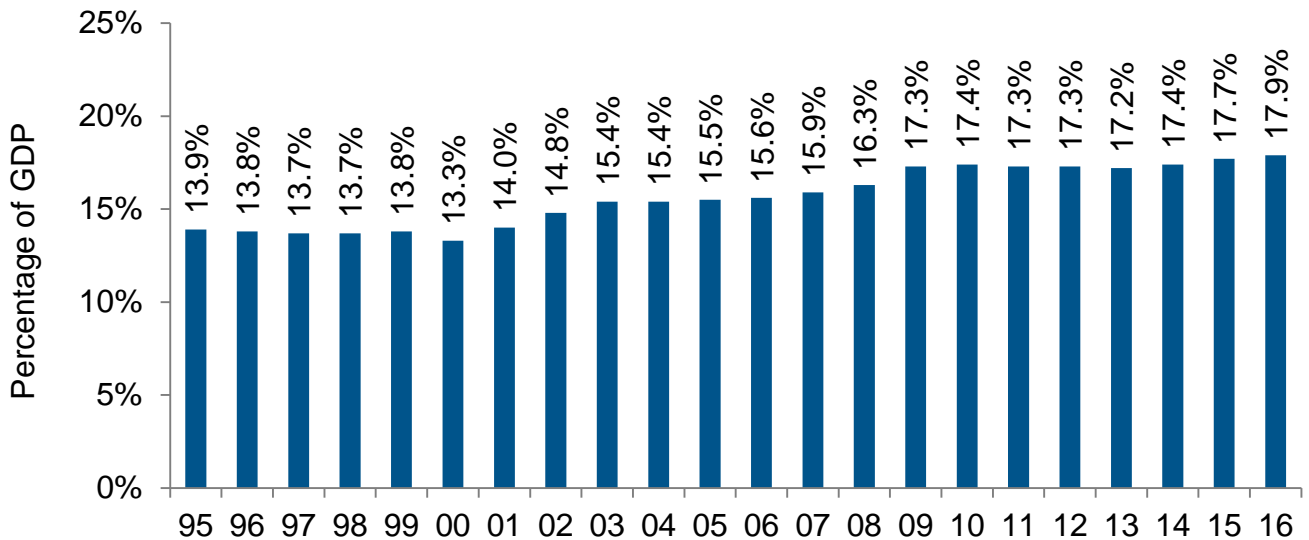


Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

⁽²⁾ Expressed in 1980 dollars; adjusted using the overall Consumer Price Index for Urban Consumers.

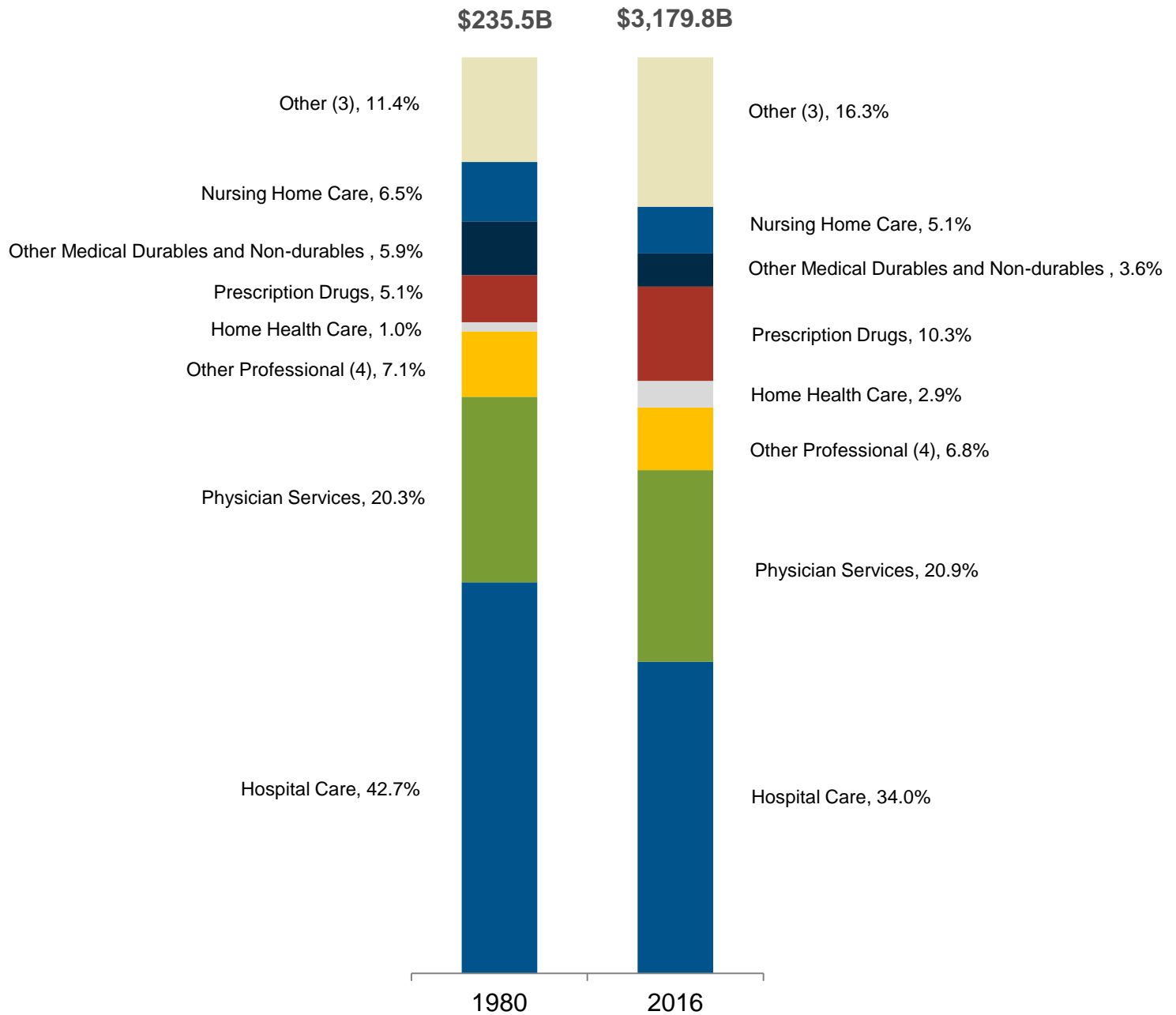
Chart 1.4: National Health Expenditures as a Percentage of Gross Domestic Product, 1995 – 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Chart 1.5: National Expenditures for Health Services and Supplies⁽¹⁾ by Category, 1980 and 2016⁽²⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

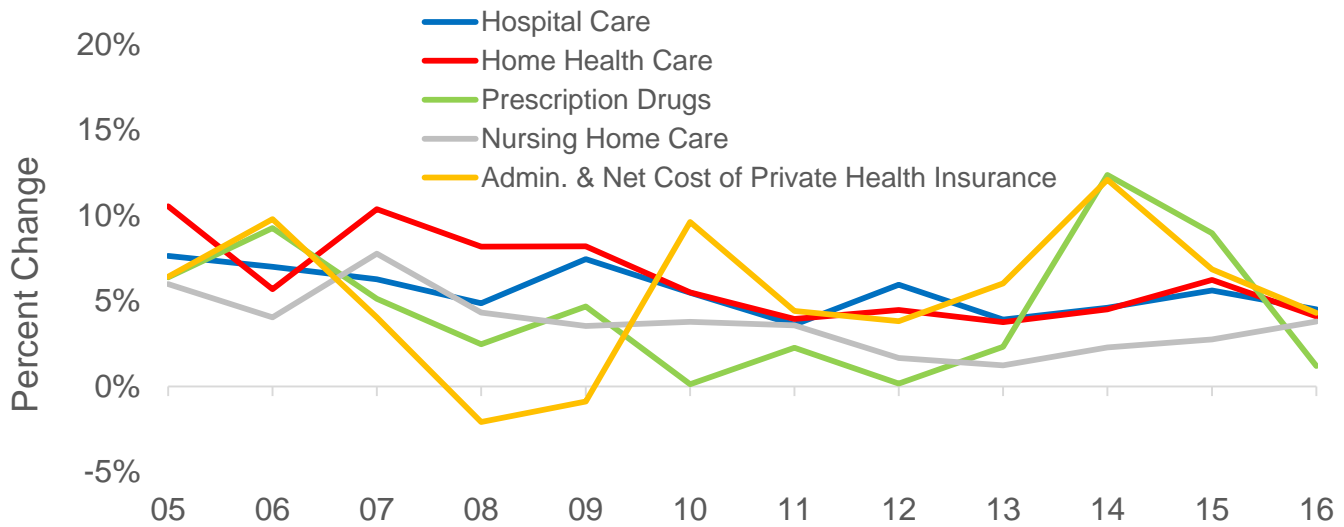
(1) Excludes medical research and medical facilities construction.

(2) CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

(3) "Other" includes net cost of insurance and administration, government public health activities, and other personal health care.

(4) "Other professional" includes dental and other non-physician professional services.

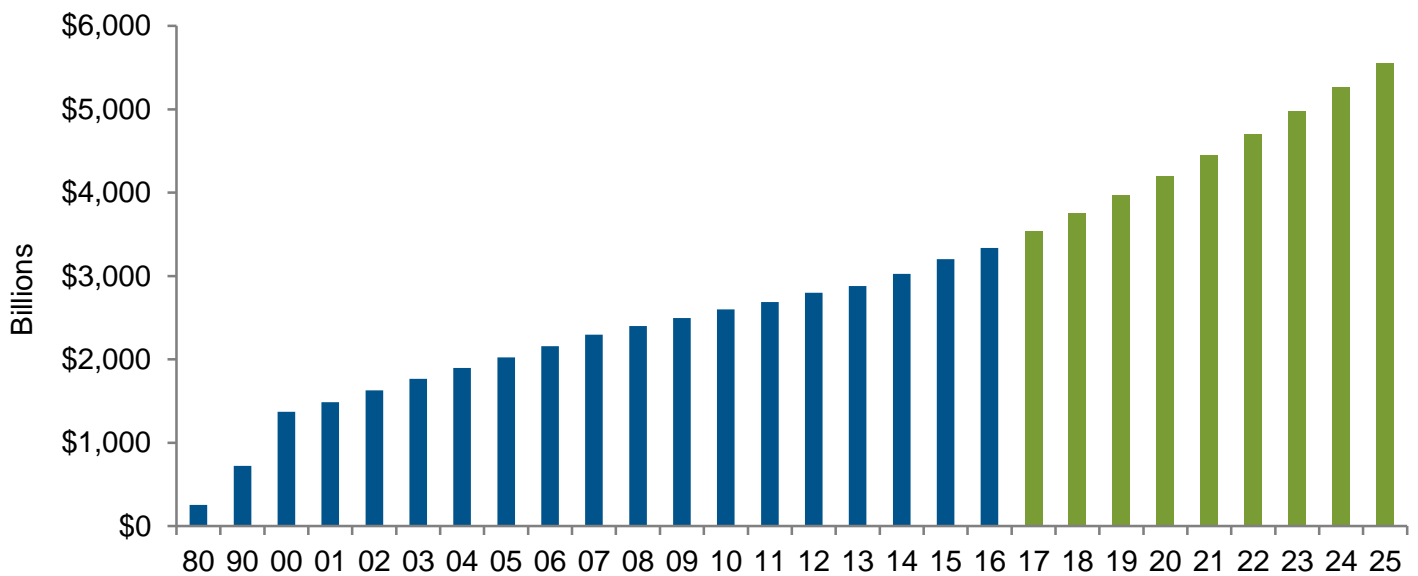
Chart 1.6: Percent Change in National Expenditures for Selected Health Services and Supplies, 2005 – 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Chart 1.7: National Health Expenditures,⁽¹⁾ 1980 – 2025⁽²⁾

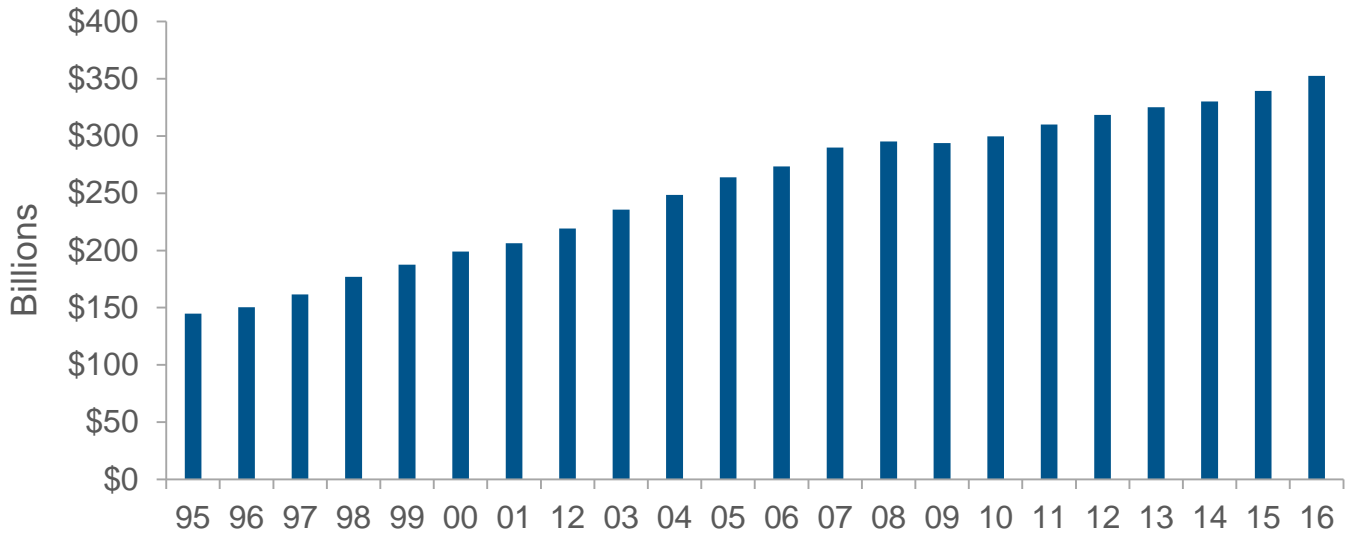


Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ Years 2017 – 2025 are projections.

⁽²⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

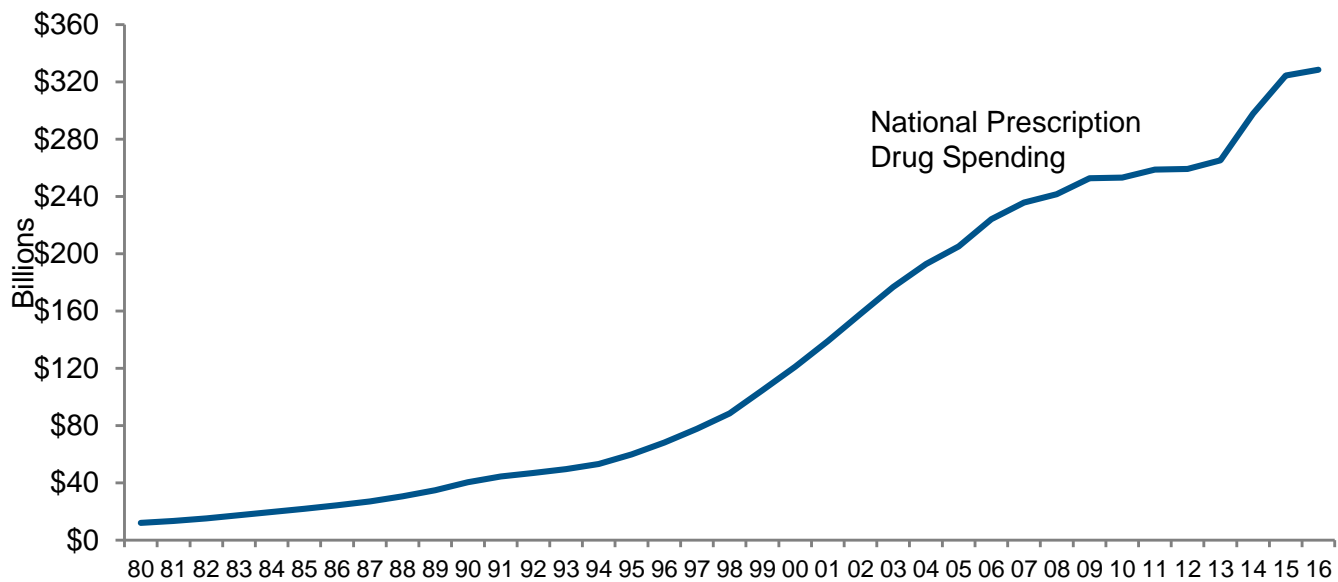
Chart 1.8: Consumer Out-of-pocket Payments for National Health Expenditures, 1995 – 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

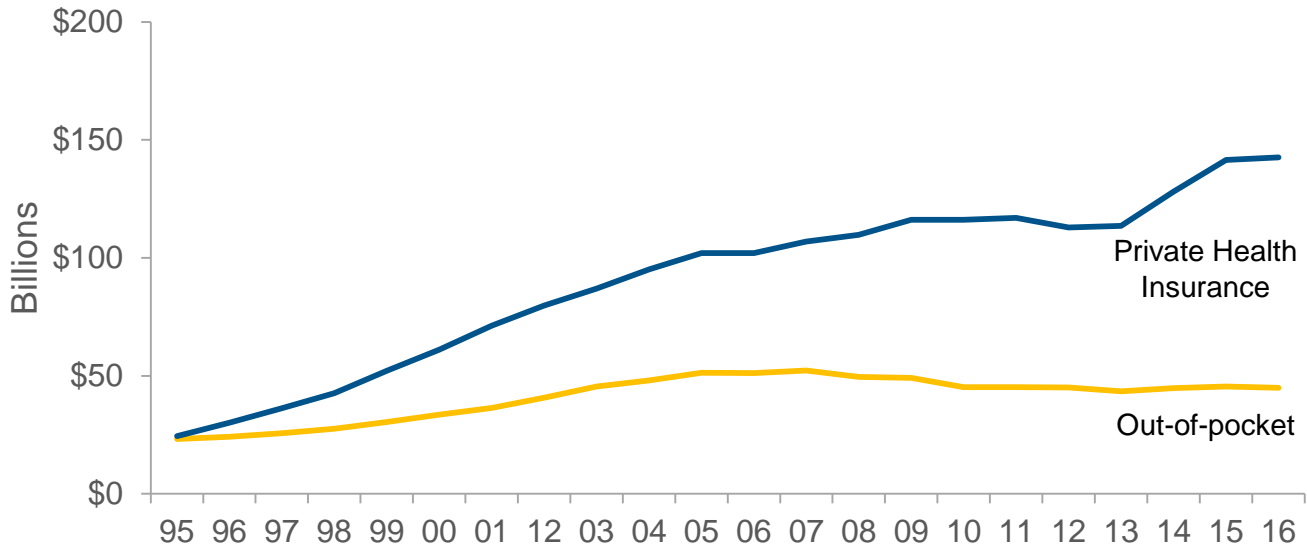
Chart 1.9: Total Prescription Drug Spending, 1980 – 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

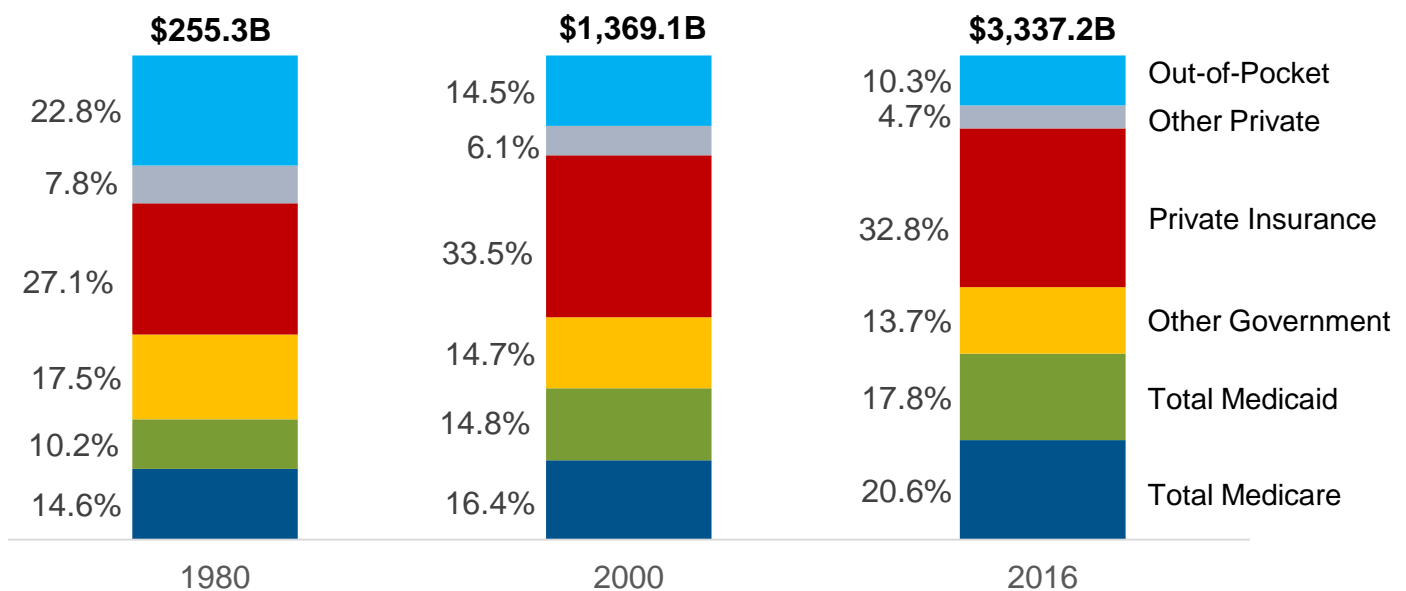
Chart 1.10: Consumer Out-of-pocket Spending vs. Private Health Insurance Spending for Prescription Drugs, 1995 – 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

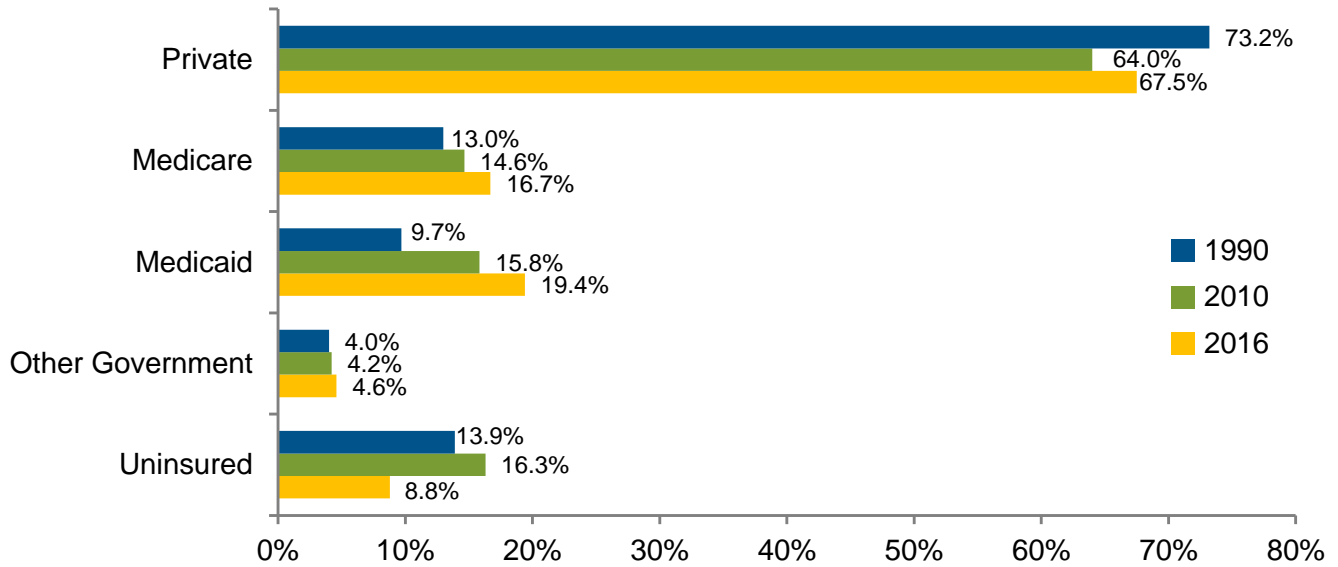
Chart 1.11: Distribution of National Health Expenditures by Source of Payment, 1980, 2000, and 2016⁽¹⁾



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Chart 1.12: Distribution of Health Insurance Coverage, Percentage of Population Covered by Payer*, 1990, 2010, and 2016⁽¹⁾



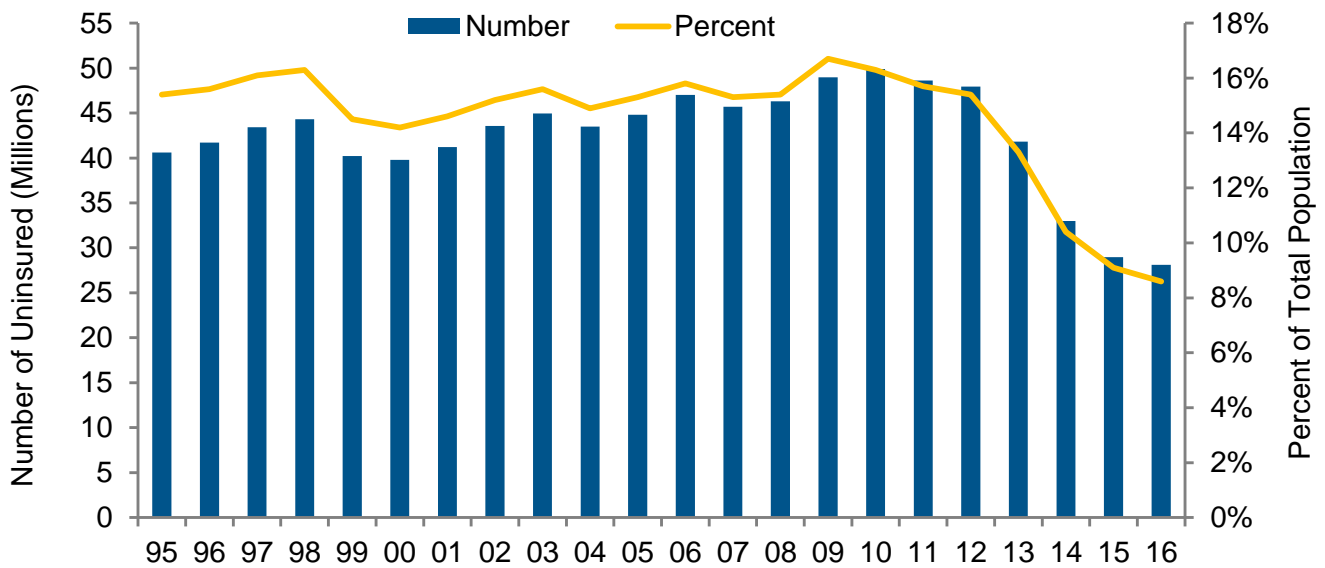
Source: US Census Bureau, Current Population Survey, 2016 Annual and Social Economic Supplement. Data released September 2017.

Table HI01. Health Insurance Coverage Status and Type of Coverage by Selected Characteristics: 2016.

<https://www.census.gov/content/dam/Census/library/publications/2017/demo/p60-260.pdf>

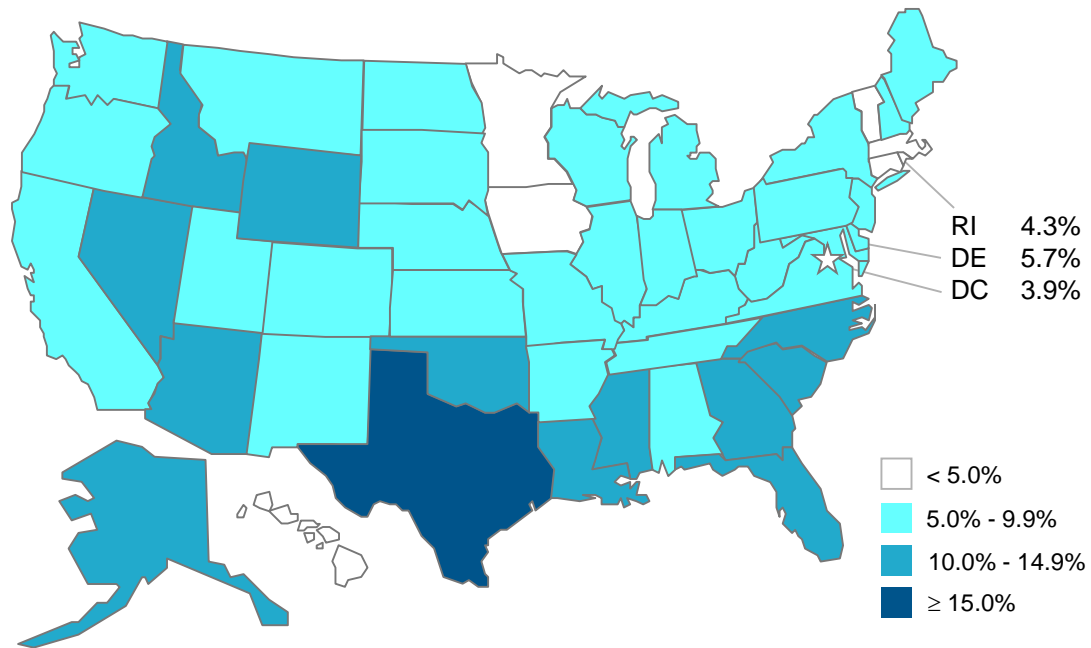
⁽¹⁾ Percentages across categories do not sum to 100 percent, as individuals may maintain coverage from multiple payers (e.g. Medicare and Medicaid, Medicare and private, etc.)

Chart 1.13: Number and Percent Uninsured, 1995 – 2016



Source: US Census Bureau, Health Insurance Coverage in the United States: 2016. Data released September 2017. Figure HIC-4. HIC-4. Health Insurance Coverage Status and Type of Coverage by State--All Persons: 2008 to 2016. Link: https://www2.census.gov/programs-surveys/demo/tables/health-insurance/time-series/acs/hic04_acs.xls

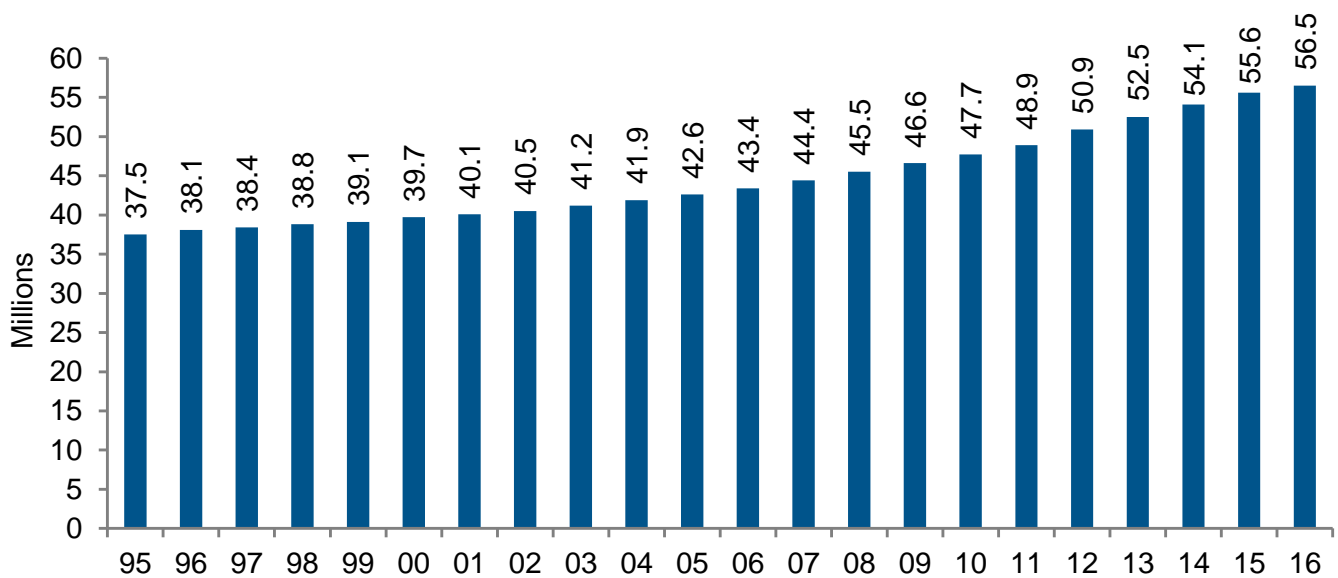
Chart 1.14: Average Percent Uninsured by State, 2015 and 2016⁽¹⁾



Source: US Census Bureau, Health Insurance Coverage in the United States: 2016. Data released September 2017. Figure HIC-4. HIC-4. Health Insurance Coverage Status and Type of Coverage by State--All Persons: 2008 to 2016. Link: https://www2.census.gov/programs-surveys/demo/tables/health-insurance/time-series/acs/hic04_acs.xls

⁽¹⁾ Chart represents a weighted average uninsured rate for the years indicated.

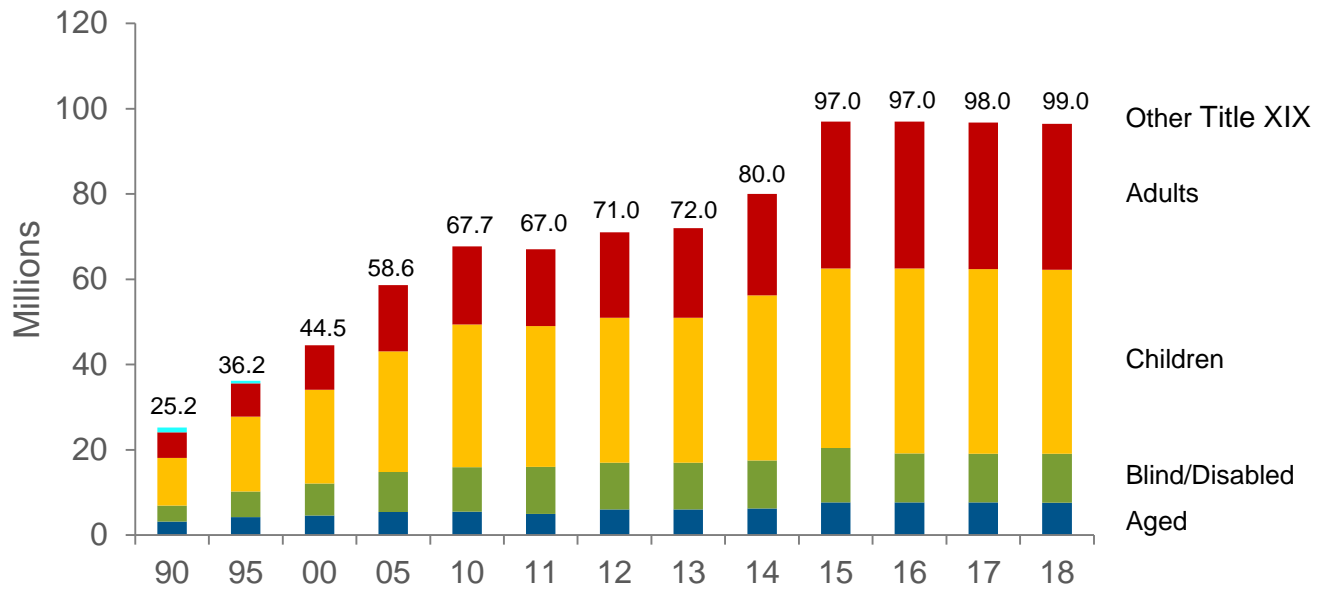
Chart 1.15: Medicare Enrollees,⁽¹⁾ 1995 – 2016



Source: Centers for Medicare & Medicaid Services. Medicare Enrollment: National Trends, 1966 – 2005; Medicare Aged and Disabled Enrollees by Type of Coverage. CMS, Office of the Actuary. Email correspondence with CMS staff (for years 2001 – 2016).

⁽¹⁾ Hospital insurance (Part A) enrollees and/or Supplementary Medical Insurance (Part B) enrollees, including enrollees with Medicare Advantage; includes all persons (aged and disabled).

Chart 1.16: Medicaid Enrollees,⁽¹⁾ 1990, 1995, 2000, 2005, 2010 – 2018



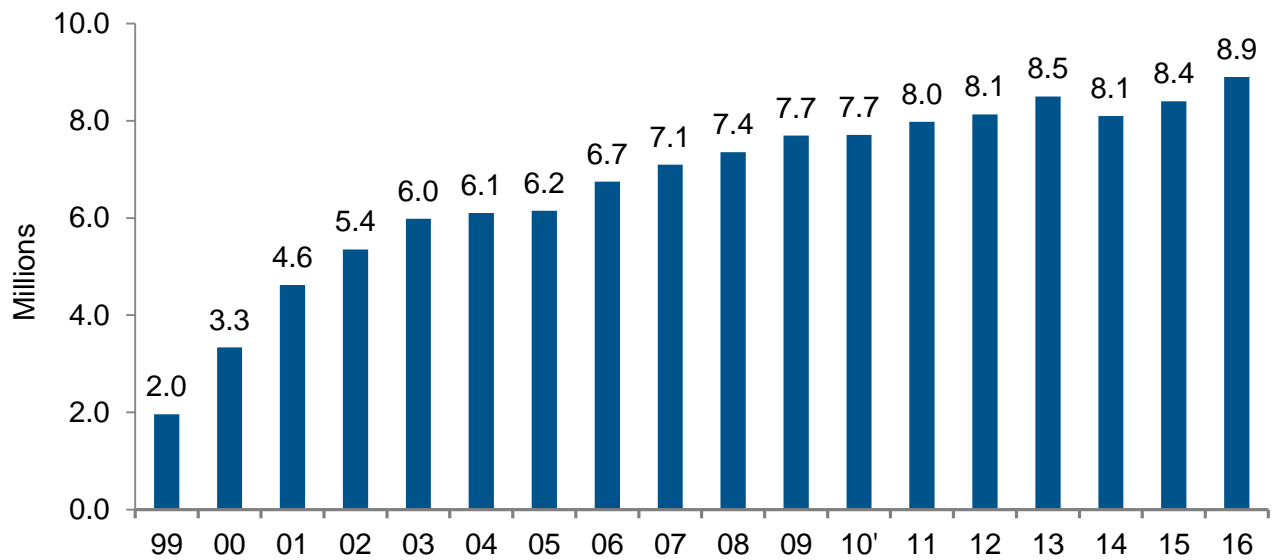
Source: Congressional Budget Office. Data released January 2017. Detail of Spending and Enrollment for CBO's January 2017 Baseline: Medicaid. Link: <https://www.cbo.gov/sites/default/files/recurringdata/51301-2017-01-medicaid.pdf>

(1) Does not include CHIP enrollees.

(2) In 1997, the Other Title XIX category was dropped and the enrollees therein were subsumed in the remaining categories. Other Title XIX enrollees referred to others who received Medicaid benefits.

(3) For 2014 onward, CBO changed from reporting annual enrollment to average monthly enrollment. Therefore, category values are derived from the total ever enrolled for each year.

Chart 1.17: National CHIP Enrollment,^(1,2) FY 1999 – FY 2016

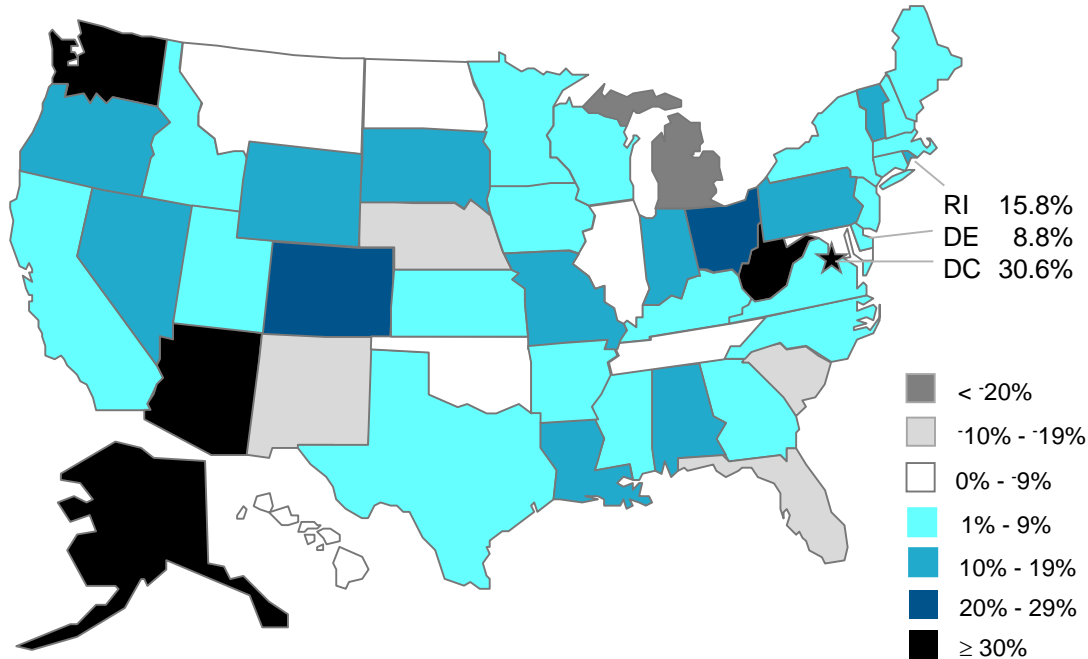


Source: Centers for Medicare & Medicaid Services. Data released July 2016. Number of Children Ever Enrolled Report. Link: <https://www.medicaid.gov/chip/downloads/fy-2016-childrens-enrollment-report.pdf>

(1) Number of children enrolled at any point in the year.

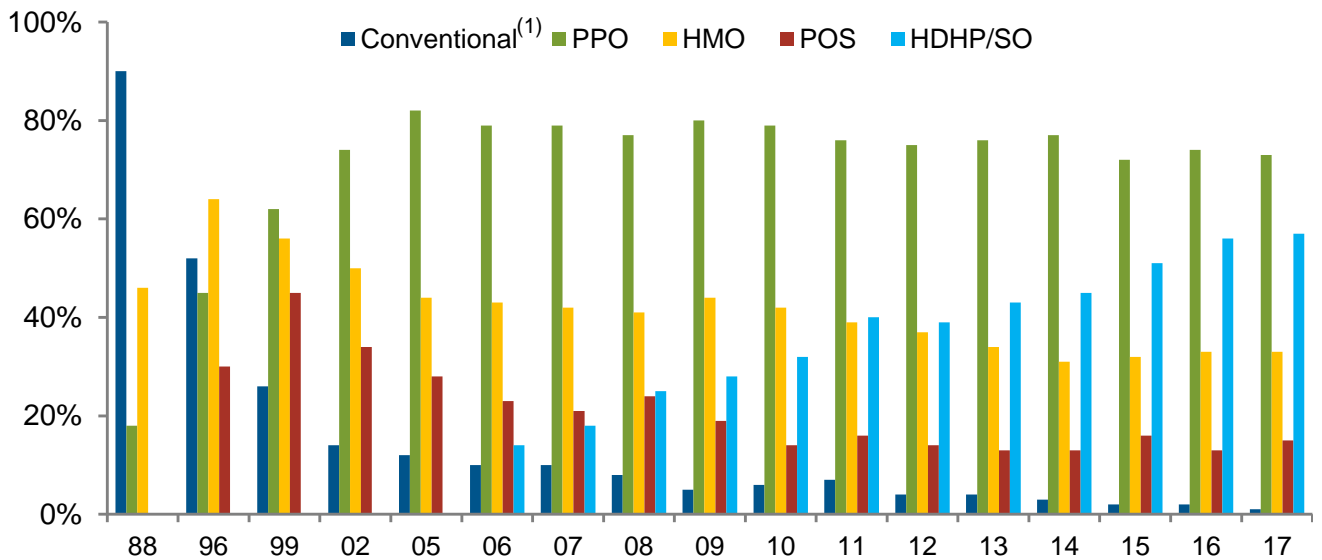
(2) 2009 figure reflects revised data released by Centers for Medicare & Medicaid Services on February 1, 2011.

Chart 1.18: Percent Change in CHIP Enrollment by State, FY 2015 – FY 2016



Source: Centers for Medicare & Medicaid Services. Data released July 2017. Number of Children Ever Enrolled Report.
Link: <https://www.medicaid.gov/chip/downloads/fy-2016-childrens-enrollment-report.pdf>

Chart 1.19: Percentage of Employees with Employer-based Coverage Who Can Choose Conventional, PPO, HMO, POS and, HDHP/SO Plans, 1988 – 2017



Source: The Kaiser Family Foundation and Health Research and Educational Trust. Data Released 2017. Employer Health Benefits: 1999, 2002, 2006 – 2017.

Link: <http://files.kff.org/attachment/Report-Employer-Health-Benefits-Annual-Survey-2017>

KPMG Survey of Employer-Sponsored Health Benefits: 1988, 1996.

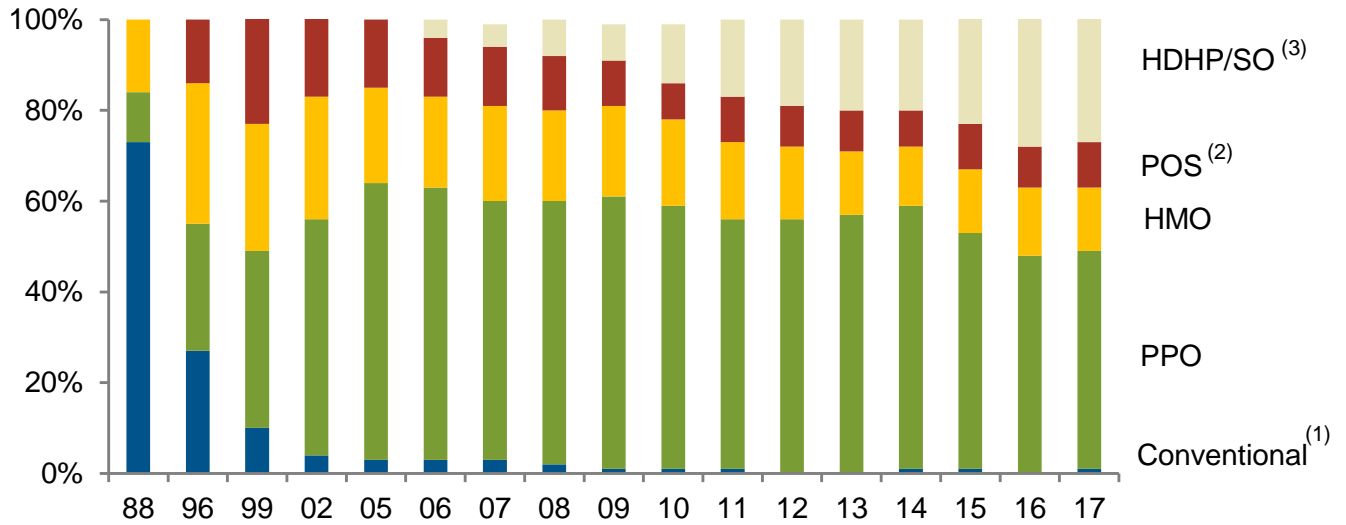
PPO: Preferred Provider Organization; HMO: Health Maintenance Organization.

(1) Conventional plans refer to traditional indemnity plans.

(2) Point-of-service (POS) plans not separately identified in 1988.

(3) In 2006, the survey began asking about HDHP/SO, high deductible health plans with a savings option.

Chart 1.20: Distribution of Employer-sponsored Health Insurance Enrollment by Type of Plan, 1988 – 2017



Source: The Kaiser Family Foundation and Health Research and Educational Trust. Data Released 2017. Employer Health Benefits: 1999, 2002, 2006 – 2017.

Link: <http://files.kff.org/attachment/Report-Employer-Health-Benefits-Annual-Survey-2017>

KPMG Survey of Employer-Sponsored Health Benefits: 1988, 1996.

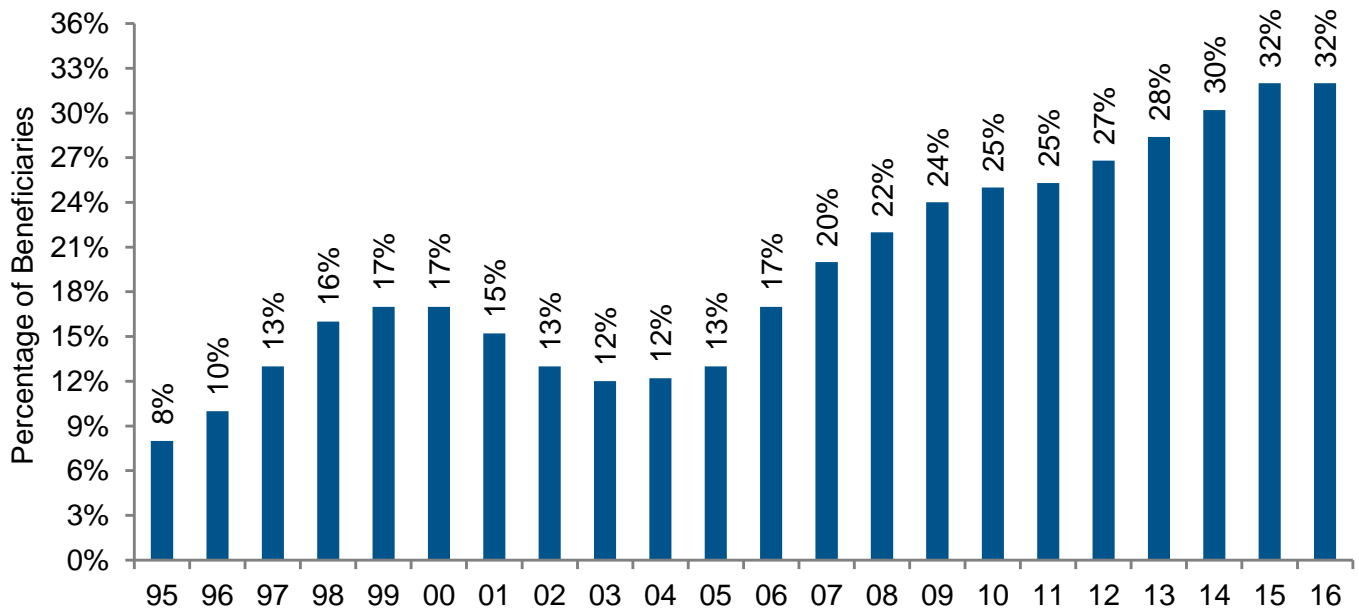
PPO: Preferred Provider Organization; HMO: Health Maintenance Organization.

(1) Conventional plans refer to traditional indemnity plans.

(2) Point-of-service (POS) plans not separately identified in 1988.

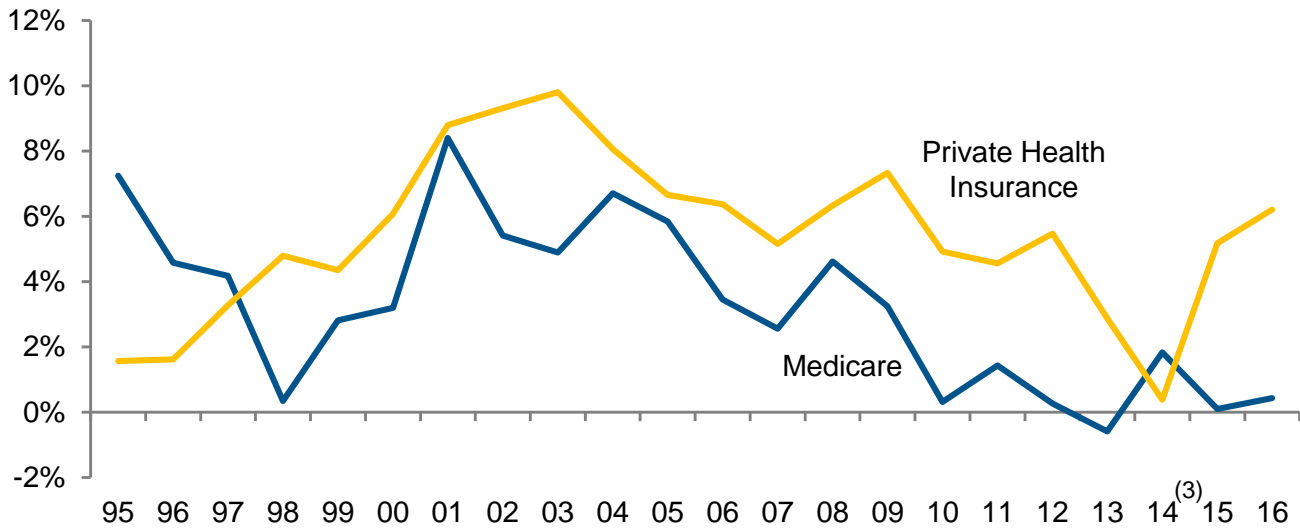
(3) In 2006, the survey began asking about HDHP/SO, high deductible health plans with a savings option.

Chart 1.21: Percentage of Medicare Beneficiaries Enrolled in Medicare Managed Care, 1995 – 2016



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Email correspondence with CMS staff in June 2017.

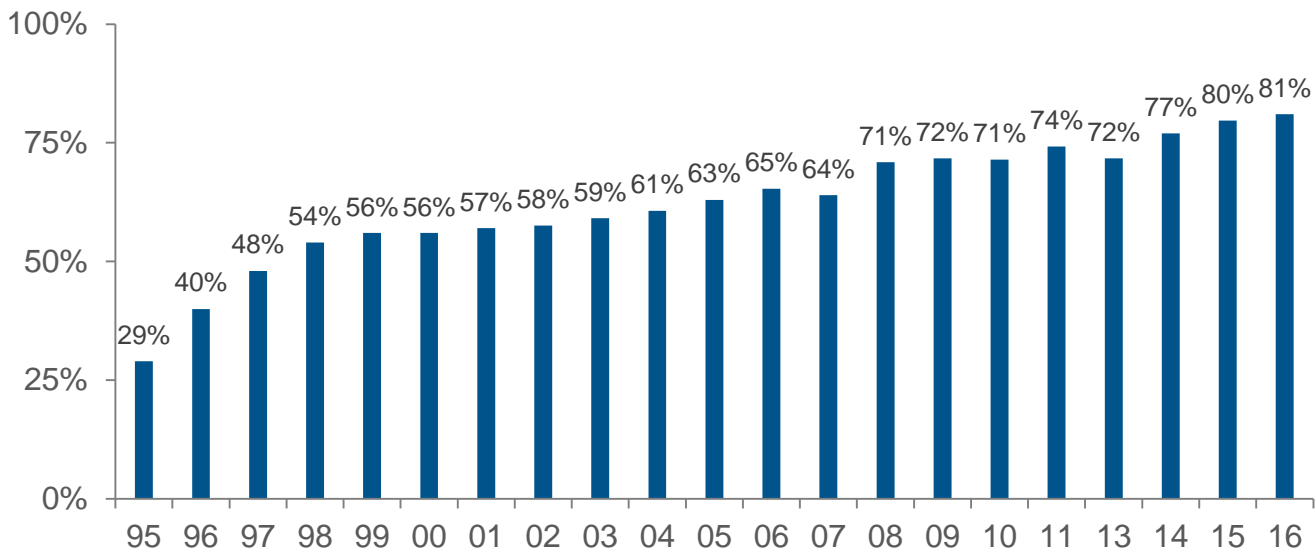
Chart 1.22: Percent Growth in Medicare Spending per Beneficiary vs. Private Health Insurance Spending per Enrollee, 1995 – 2016^(1,2)



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

- (1) CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf>.
- (2) Data reflects spending on benefits commonly covered by Medicare and Private Health Insurance.
- (3) CMS no longer includes the National Health Expenditure (NHE) table used to calculate growth in Medicare spending from 1994-2013. Data for 2014 and subsequent years reflects calculations using current NHE tables as recommended by CMS in email correspondence.

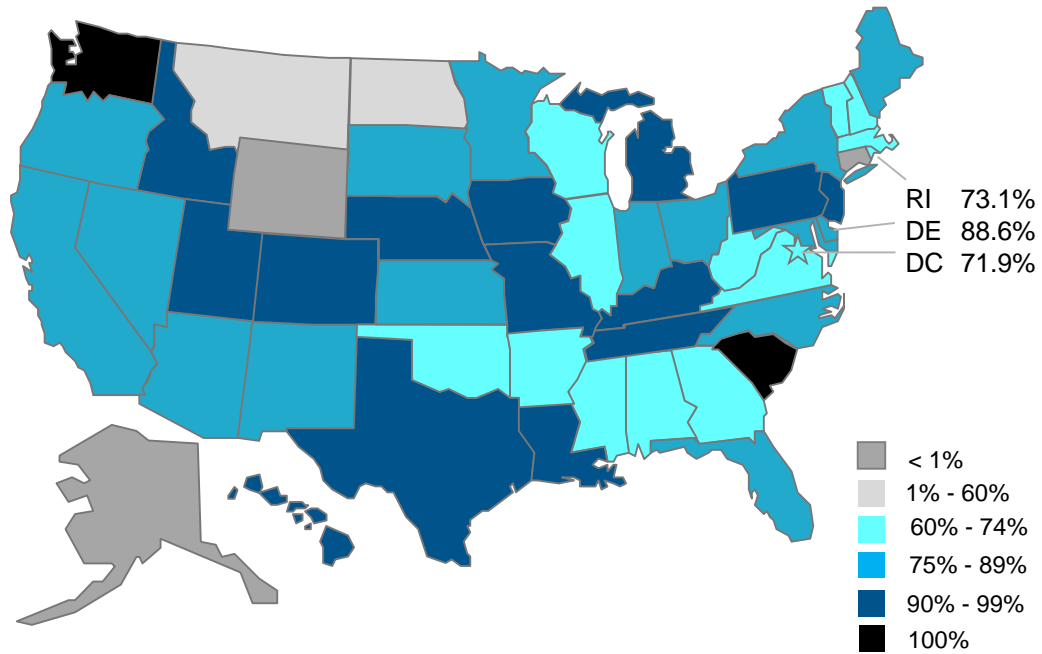
Chart 1.23: Percentage of Medicaid Beneficiaries Enrolled in Medicaid Managed Care, 1995 – 2011, 2013 – 2016⁽¹⁾



⁽¹⁾ CMS has not released data for 2012 total Medicaid managed care enrollment.

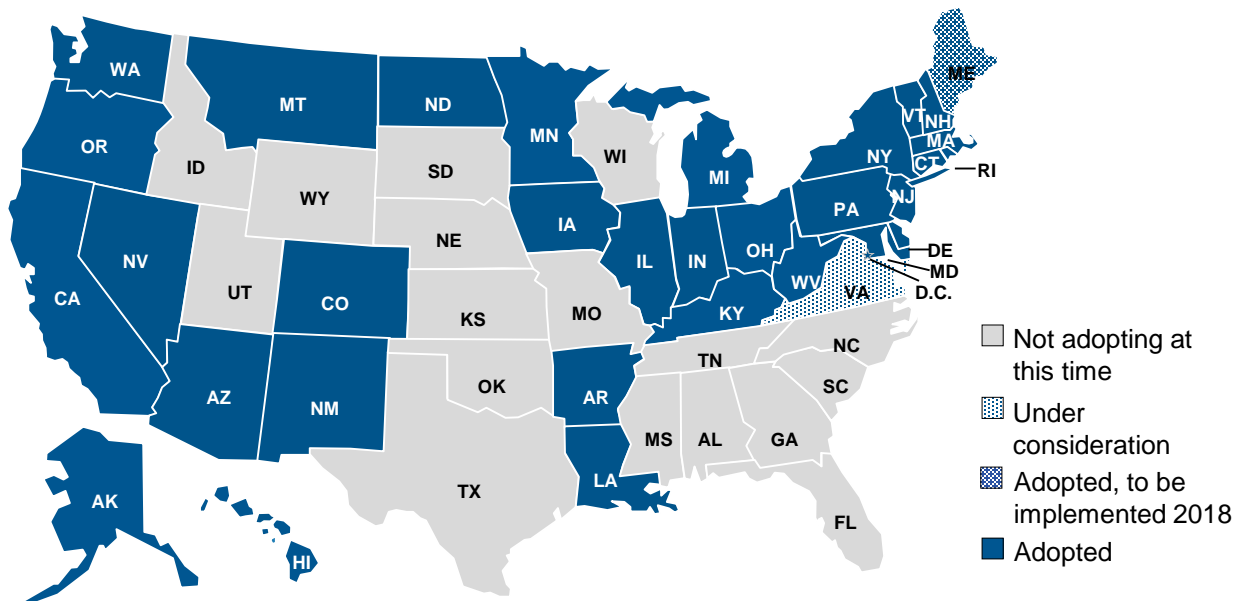
Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Medicaid Managed Care Enrollment and Program Characteristics, 2016, released Spring 2018.
Link: <https://www.medicare.gov/medicaid/managed-care/downloads/enrollment/2015-medicare-managed-care-enrollment-report.pdf>.

Chart 1.24: Percentage of Medicaid Beneficiaries Enrolled in Medicaid Managed Care by State, 2016



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Medicaid Managed Care Enrollment and Program Characteristics, 2016; released Spring 2018. <https://www.medicaid.gov/medicaid/managed-care/downloads/enrollment/2016-medicaid-managed-care-enrollment-report.pdf>. and the Kaiser Family Foundation. State Health Facts. Total Medicaid Managed Care Enrollment. Link: <http://kff.org/medicaid/state-indicator/total-medicaid-mc-enrollment/>.

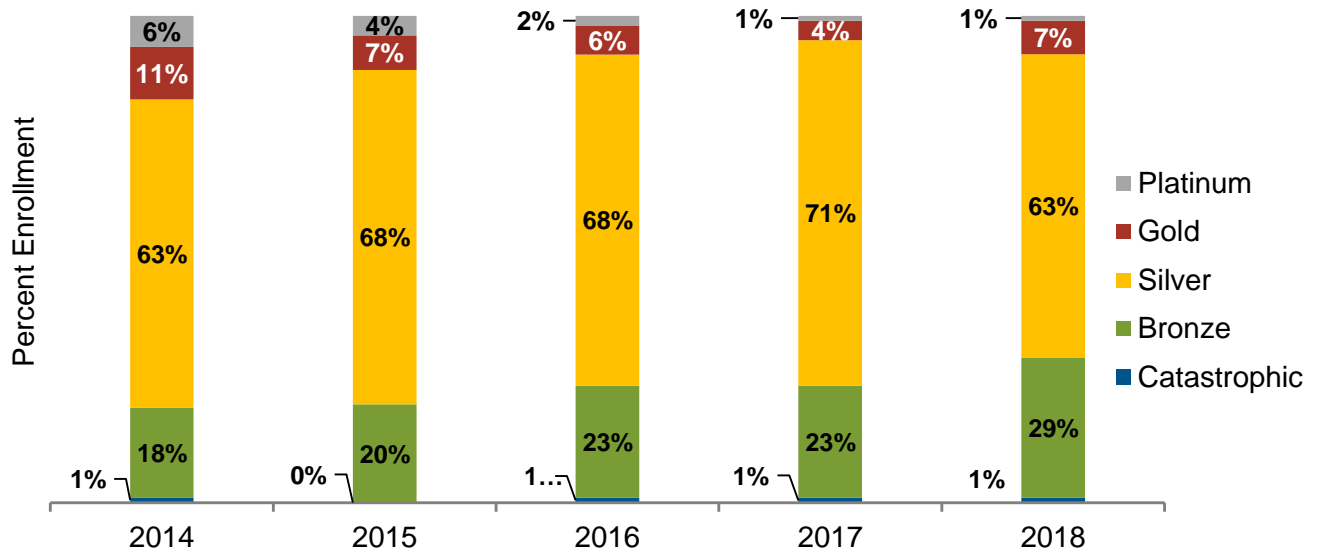
Chart 1.25: Status of State Medicaid Expansion Decisions, 2018



Source: Kaiser Family Foundation. Data as of January 2018. Current Status of State Medicaid Expansion Decisions. Link: <http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/>. Chart added in Chartbook 2016.

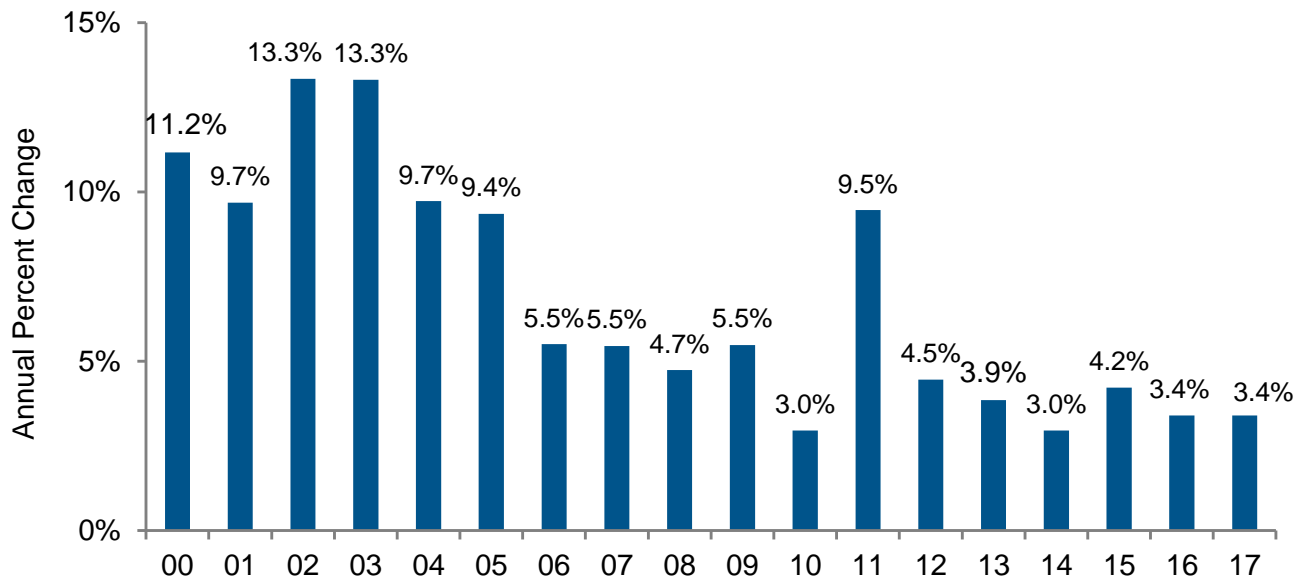
Note: AR, IA, IN, MI, MT, and NH are pursuing alternative expansion models.

Chart 1.26: Total Effectuated Marketplace Enrollment by Metal Level, 2014 – 2018



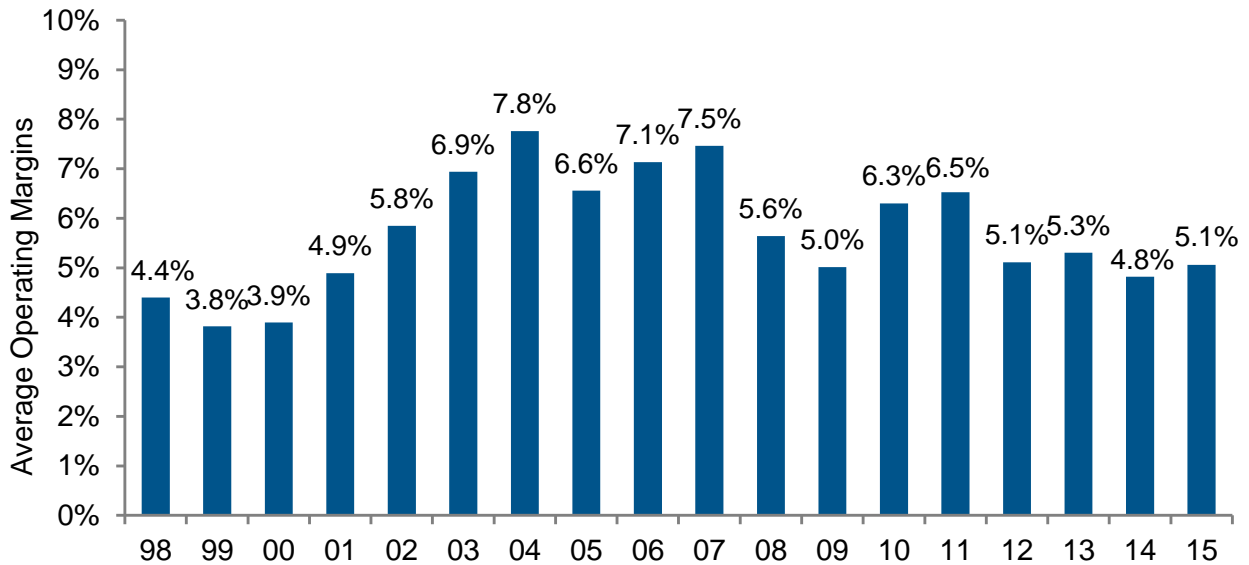
Sources: Centers for Medicare & Medicaid Services. Data released April 2018. Health Insurance Marketplaces Open Enrollment Period Final Enrollment Report. Link: <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2018-Fact-sheets-items/2018-04-03.html> and ASPE Issue Brief. Health Insurance Marketplace 2016 Open Enrollment Period: Final Enrollment Report. Data Released March 2016. Link: <https://aspe.hhs.gov/system/files/pdf/187866/Finalenrollment2016.pdf> and Health Insurance Marketplaces 2017 Open Enrollment Final Enrollment Report: November 1, 2016 – January 31, 2017. <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2017-Fact-Sheet-items/2017-03-15.html>
Chart added in Chartbook 2016.

Chart 1.27: Annual Change in Health Insurance Premiums, 2000 – 2017



Source: The Kaiser Family Foundation and Health Research and Educational Trust. Data released September 2017. Link: <http://files.kff.org/attachment/Report-Employer-Health-Benefits-Annual-Survey-2017>
Chart 1.27 in 2015 and earlier years' Chartbooks.

Chart 1.28: Managed Care Plan Average Operating Margins,⁽¹⁾
1998 – 2015

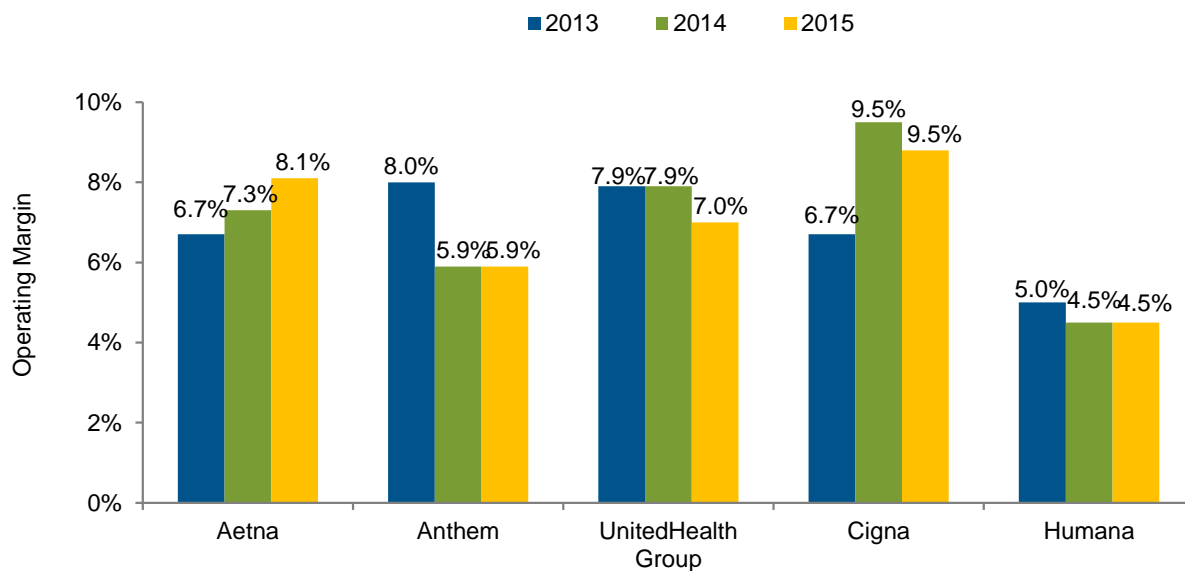


Source: YCharts data used for 2014 and 2015. Company documents of publicly traded managed care plans used for 1998–2013.

(1) Represents earnings before interest and taxes over net revenues for the total service lines of the 11 largest publicly traded managed care plans.

Chart 1.28 in 2015 and earlier years' Chartbooks.

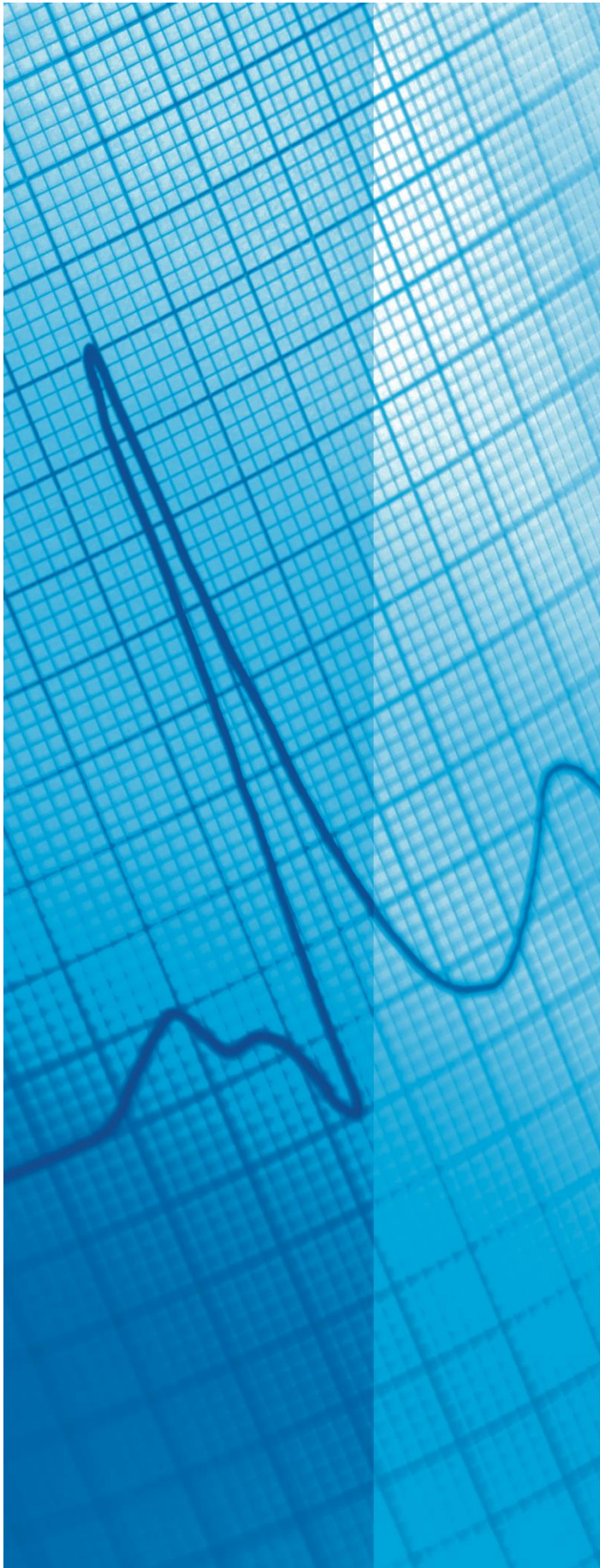
Chart 1.29: Operating Margins of the Top Insurers, 2013 – 2015



Source: YCharts data used for 2014 and 2015. Data from FactSet Research Systems Inc. used in 2012, 2013, and earlier years' Chartbooks.

(1) Wellpoint in 2014 and earlier years' Chartbooks. In December 2014, Wellpoint changed its name to Anthem.

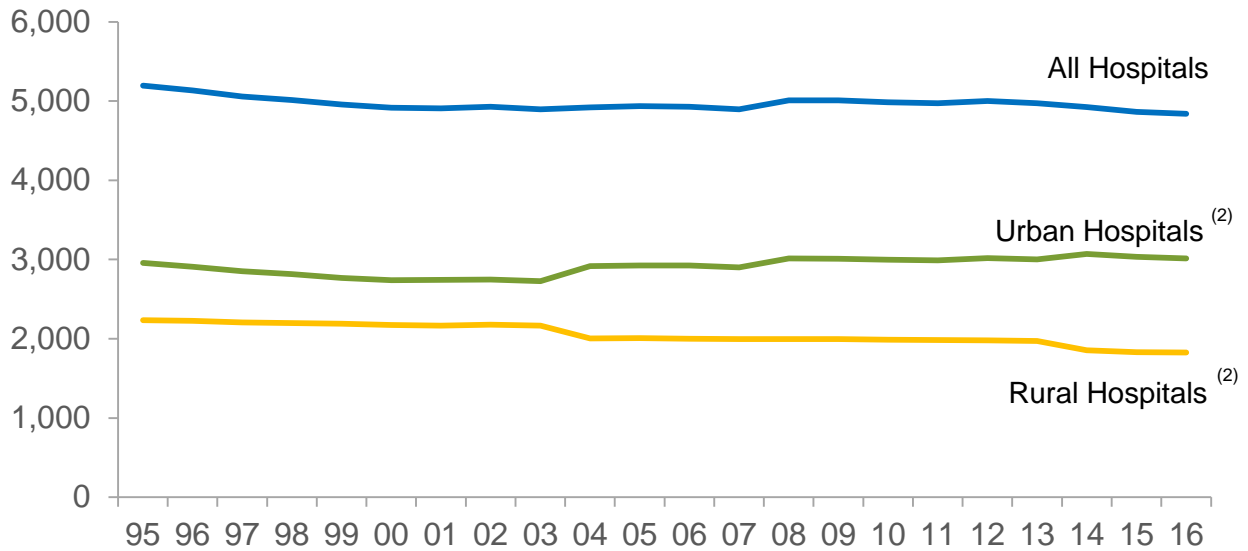
Chart 1.29 in 2015 and earlier years' Chartbooks.



CHAPTER 2

Organizational Trends

Chart 2.1: Number of Community Hospitals,⁽¹⁾ 1995 – 2016

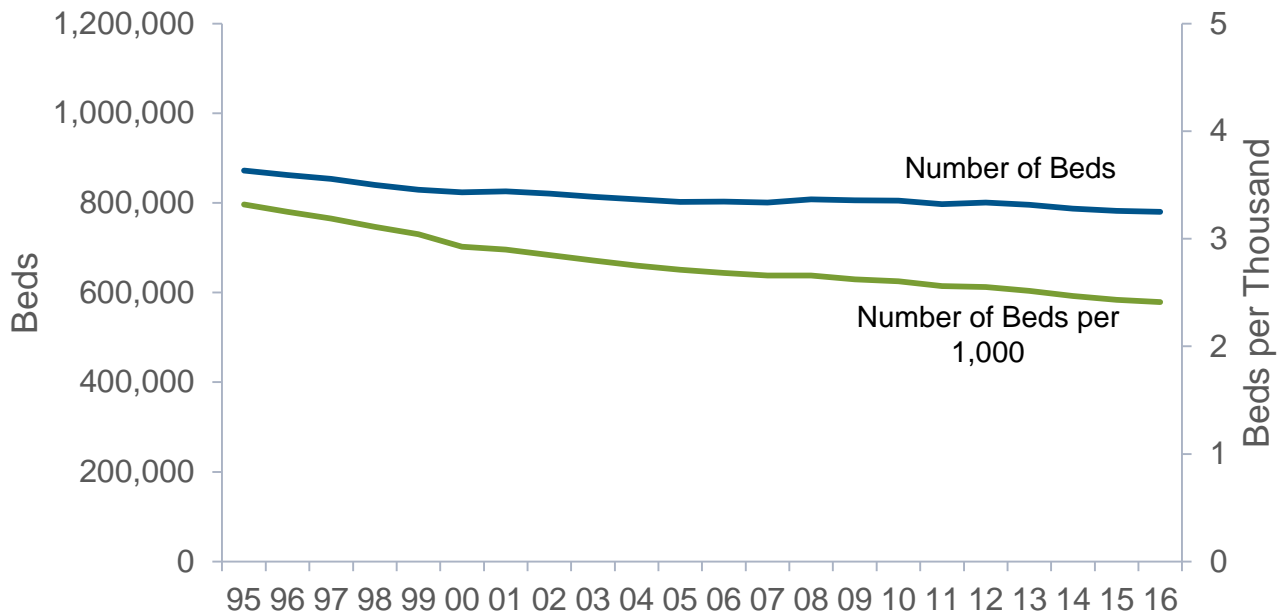


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ All non-federal, short-term general and specialty hospitals whose facilities and services are available to the public.

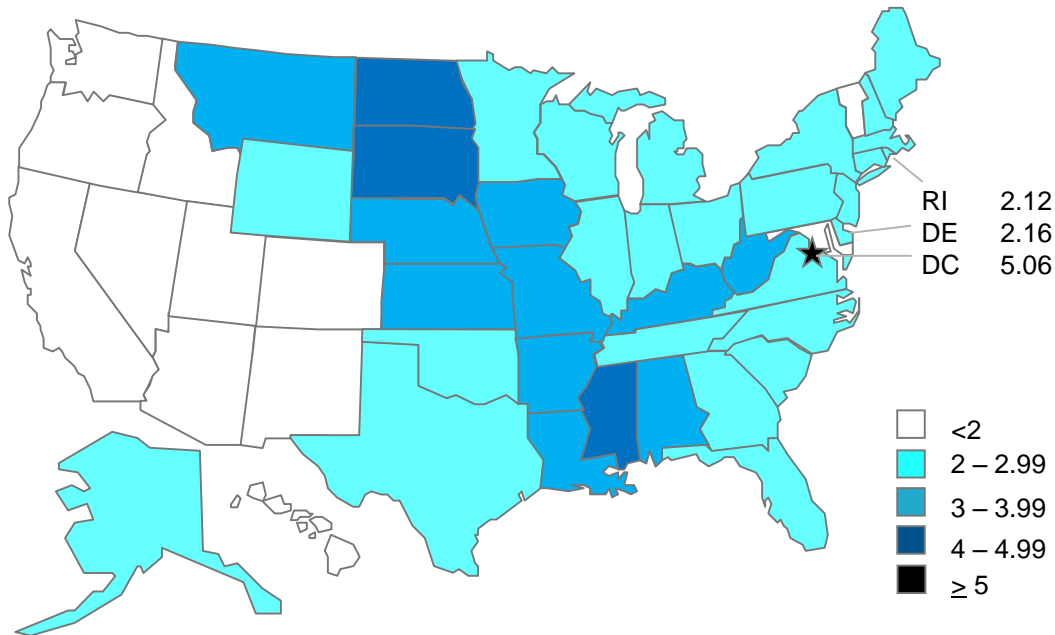
⁽²⁾ Data on the number of urban and rural hospitals in 2004 and beyond were collected using coding different from previous years to reflect new Centers for Medicare & Medicaid Services wage area designations.

Chart 2.2: Number of Beds and Number of Beds per 1,000 Persons, 1995 – 2016



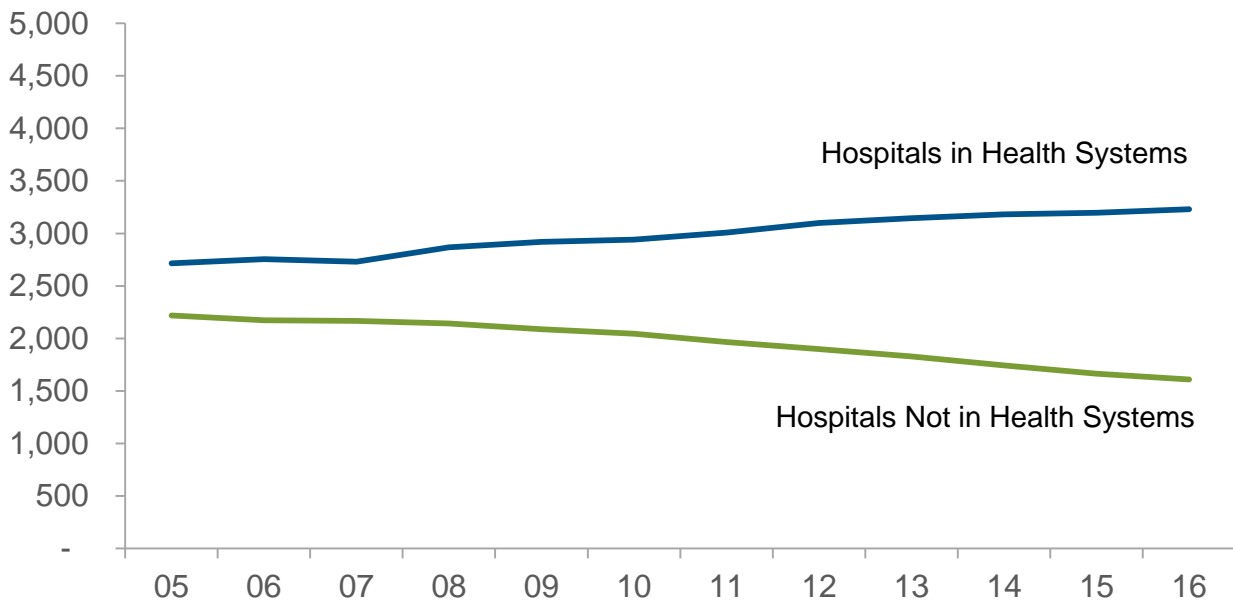
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Chart 2.3: Beds per 1,000 Persons by State, 2016



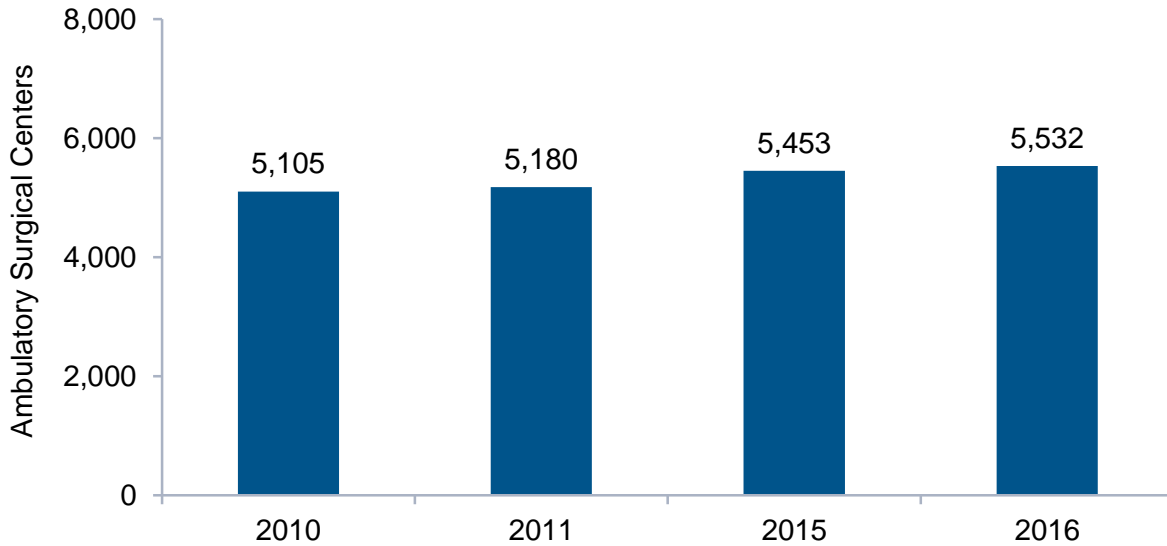
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.
Link: <https://www.census.gov/data/datasets/2017/demo/popest/nation-detail.html>

Chart 2.4: Number of Hospitals in Health Systems,⁽¹⁾ 2005 – 2016



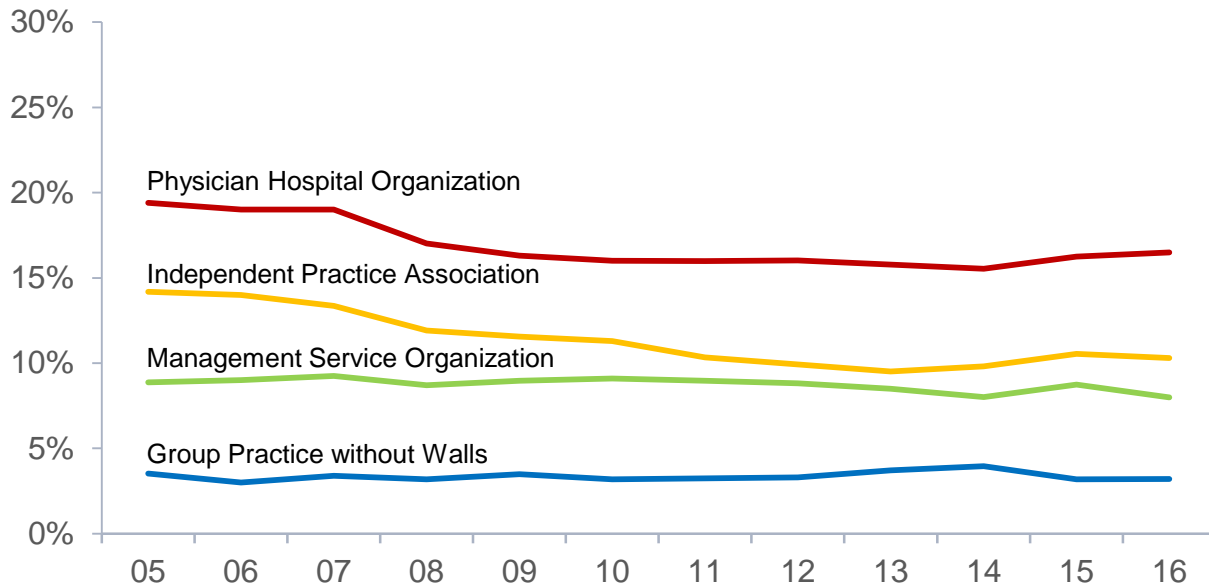
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
⁽¹⁾ Hospitals that are part of a corporate body that may own and/or manage health provider facilities or health-related subsidiaries as well as non-health-related facilities including freestanding and/or subsidiary corporations.

Chart 2.5: Number of Medicare-certified Ambulatory Surgical Centers, 2010, 2011, 2015, 2016



Source: Medicare Payment Advisory Commission. (March 2018). Report to the Congress: Medicare Payment Policy. Link: http://www.medpac.gov/docs/default-source/reports/mar18_medpac_ch5_sec.pdf

Chart 2.6: Percentage of Hospitals with Physician Affiliates⁽¹⁾ by Type of Relationship, 2005 – 2016

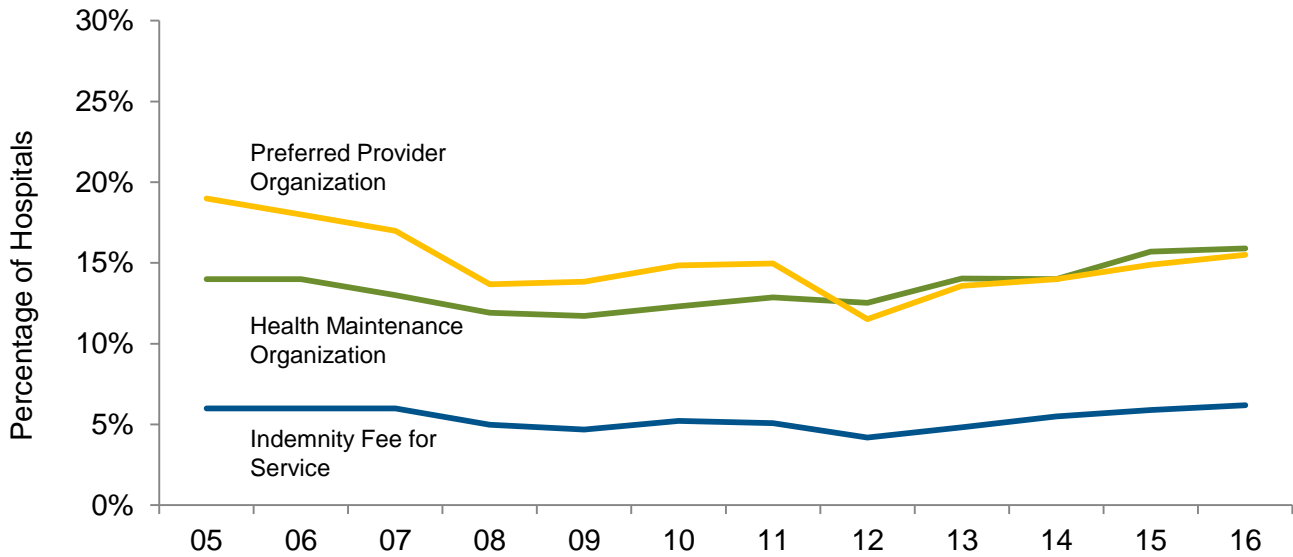


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽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.

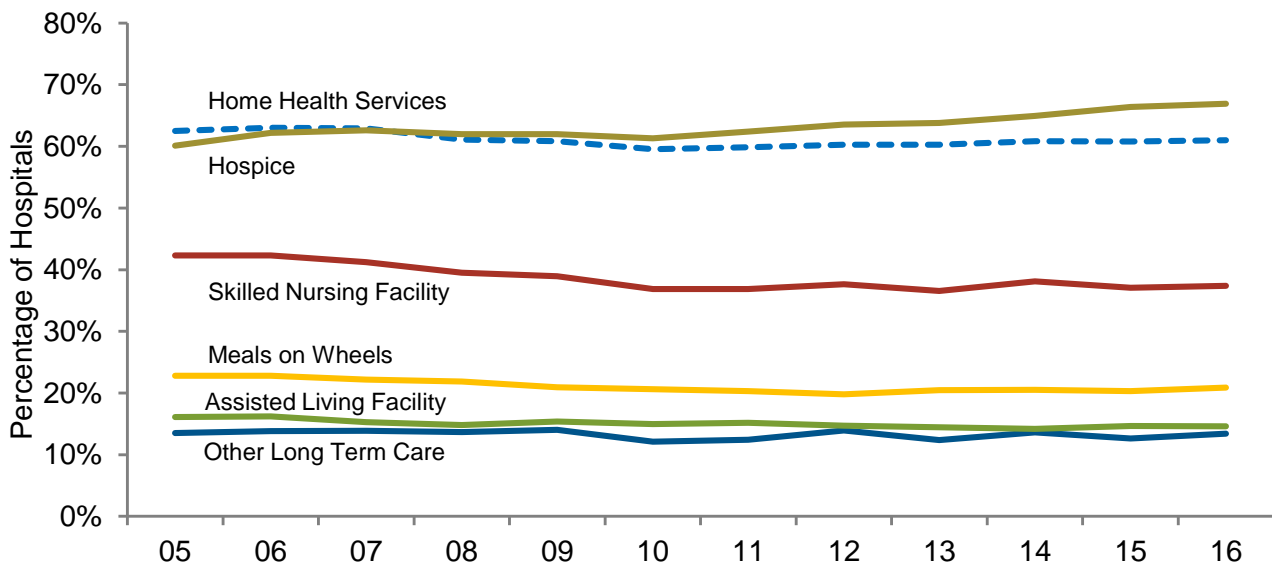
Chart 2.7 in 2009 and earlier years' Chartbooks.

Chart 2.7: Percentage of Hospitals with Insurance Products by Type of Insurance, 2005 – 2016



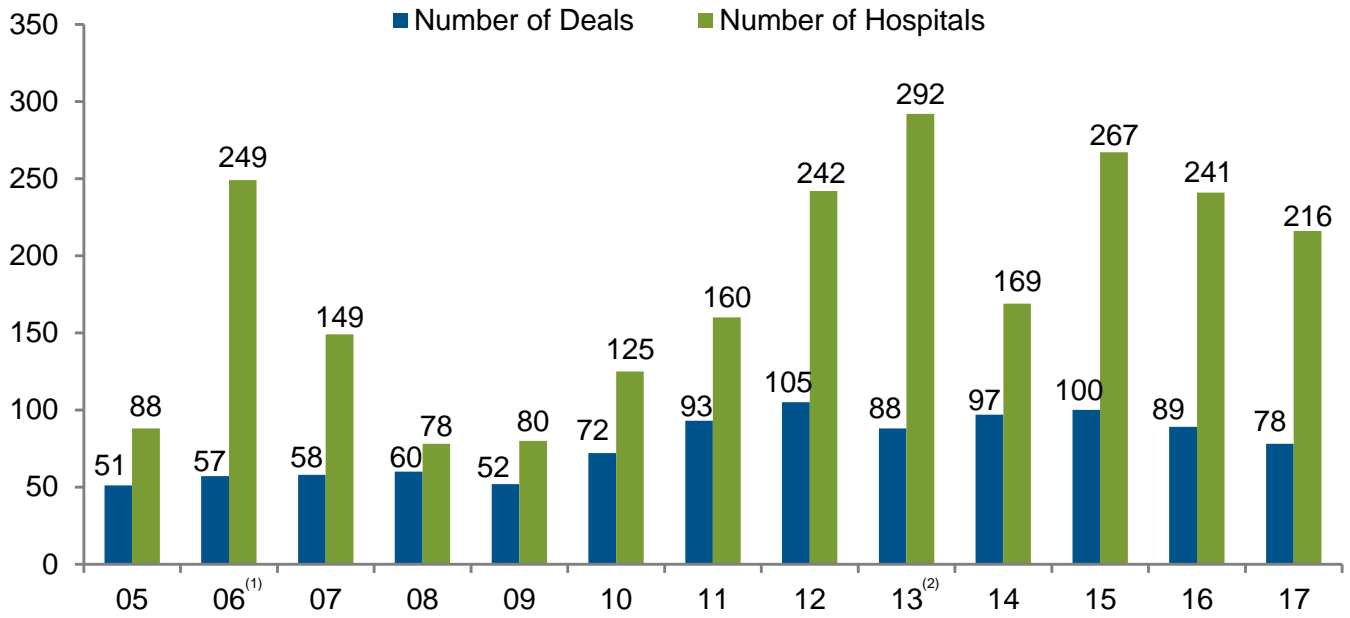
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
Chart 2.8 in 2009 and earlier years' Chartbooks.

Chart 2.8: Percentage of Hospitals Offering “Non-hospital” Services,⁽¹⁾ 2005 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
⁽¹⁾ Includes services offered in hospital, health system, network or joint venture.
Chart 2.9 in 2009 and earlier years' Chartbooks.

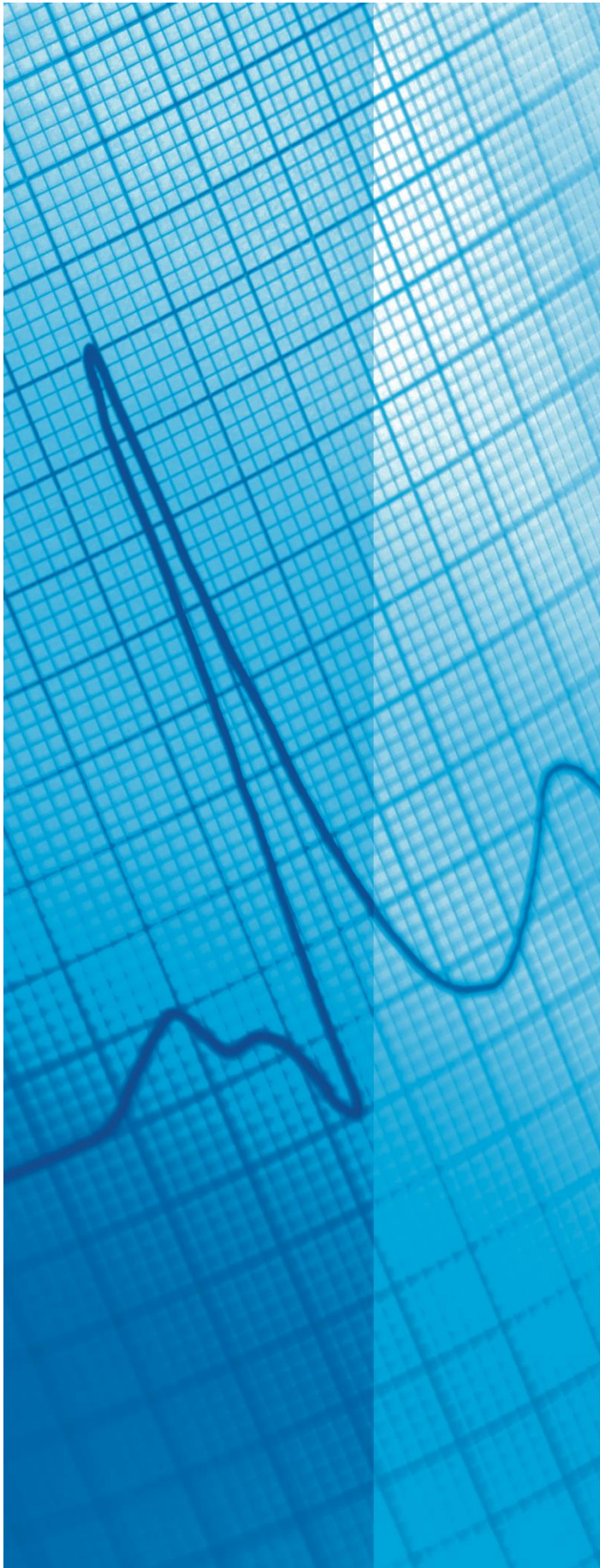
Chart 2.9: Announced Hospital Mergers and Acquisitions, 2005–2017



Source: Irving Levin Associates, Inc. (2018). *The Health Care Services Acquisition Report*, Twenty-Fourth Edition.

(1) In 2006, the privatization of Hospital Corporation of America, Inc. affected 176 hospitals. The acquisition was the largest health care transaction ever announced.

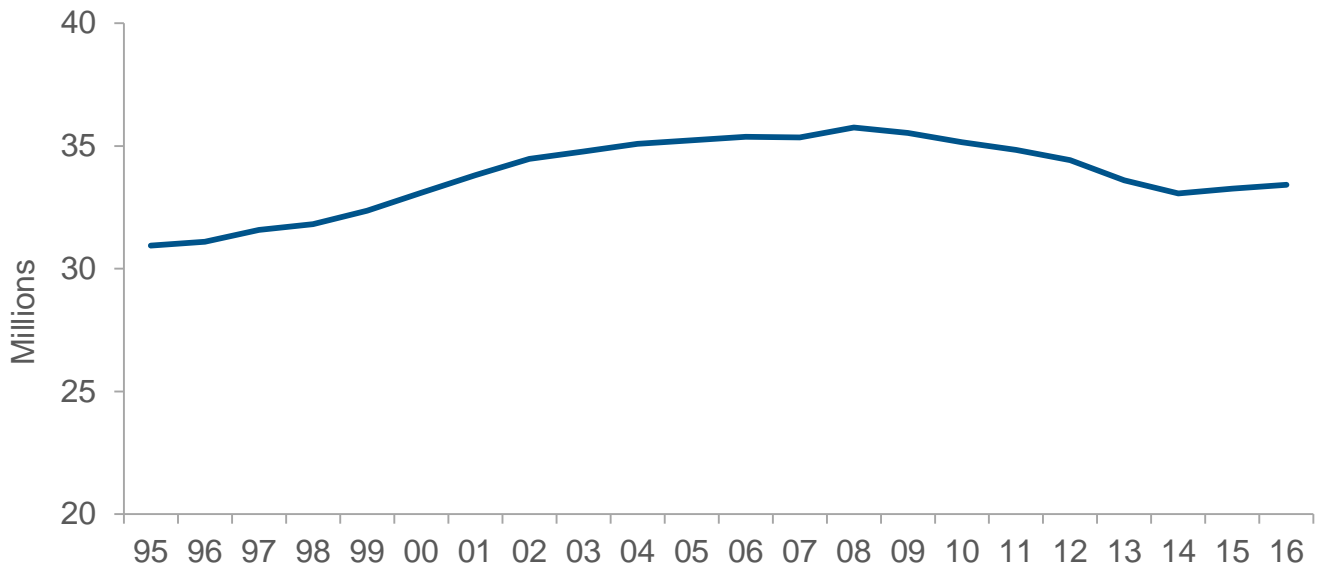
(2) In 2013, consolidation of several investor-owned systems resulted in a large number of hospitals involved in acquisition activity *Chart 2.10 in 2009 and earlier year's Chartbooks..*



CHAPTER 3

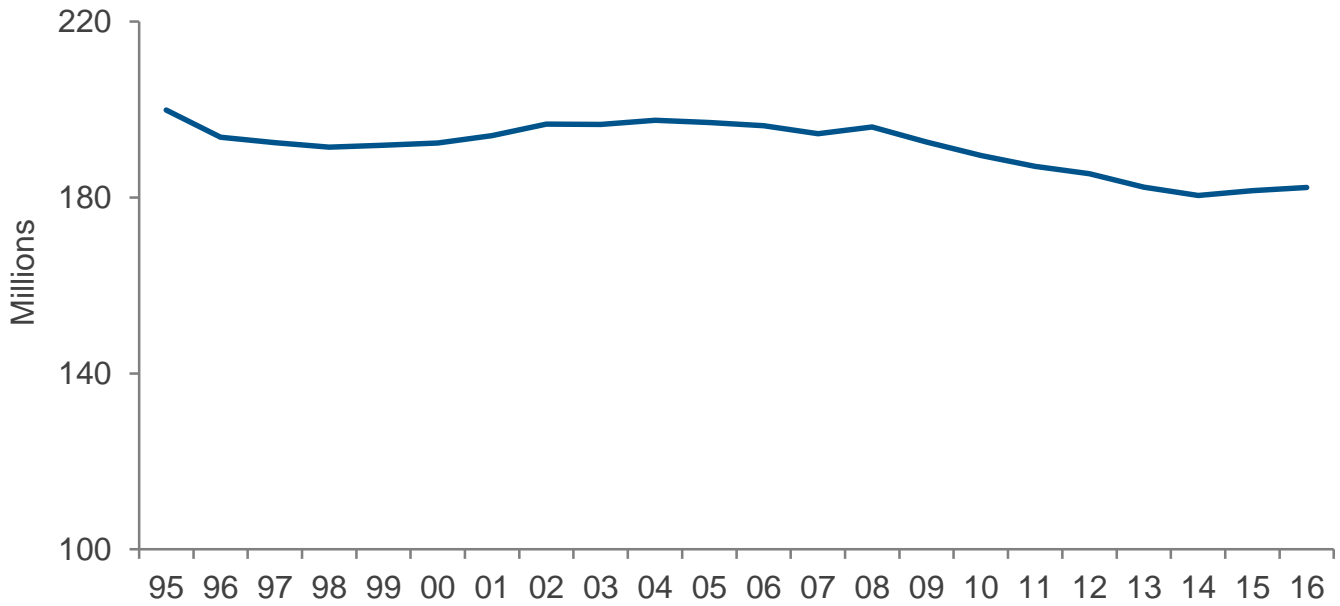
Utilization and Volume

Chart 3.1: Inpatient Admissions in Community Hospitals, 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

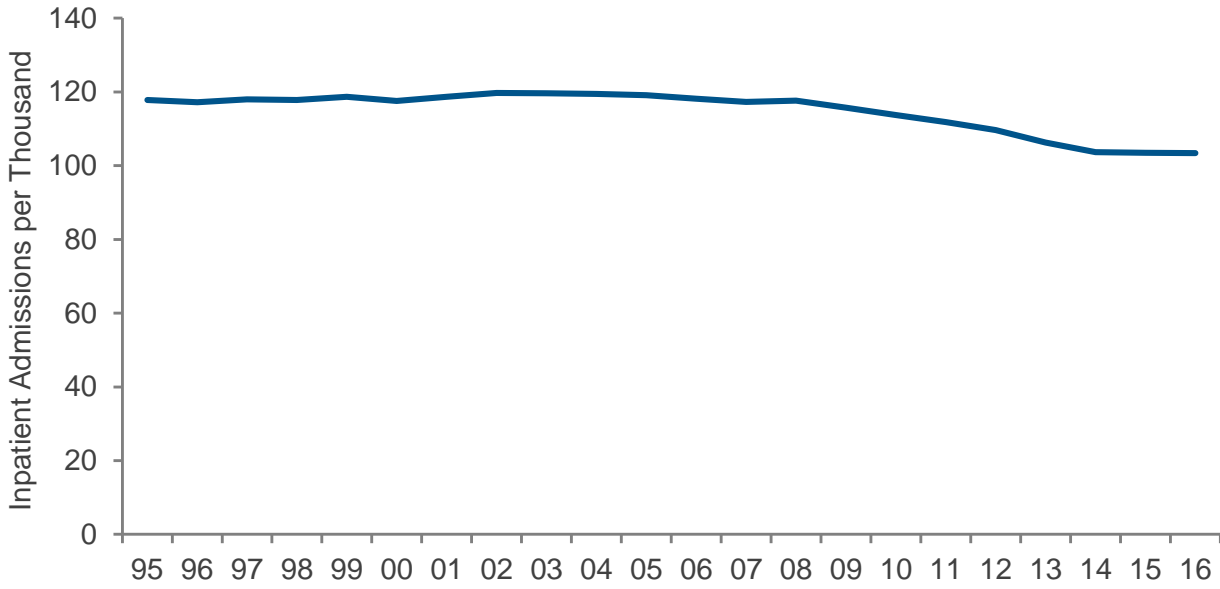
Chart 3.2: Total Inpatient Days in Community Hospitals, 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

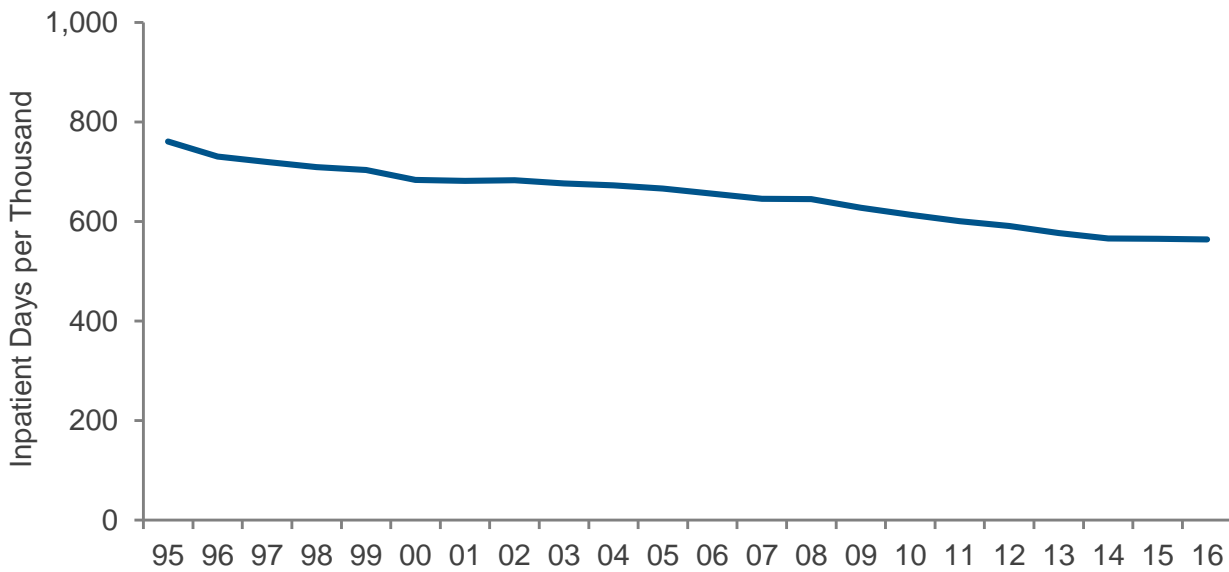


Chart 3.3: Inpatient Admissions per 1,000 Persons, 1995 – 2016



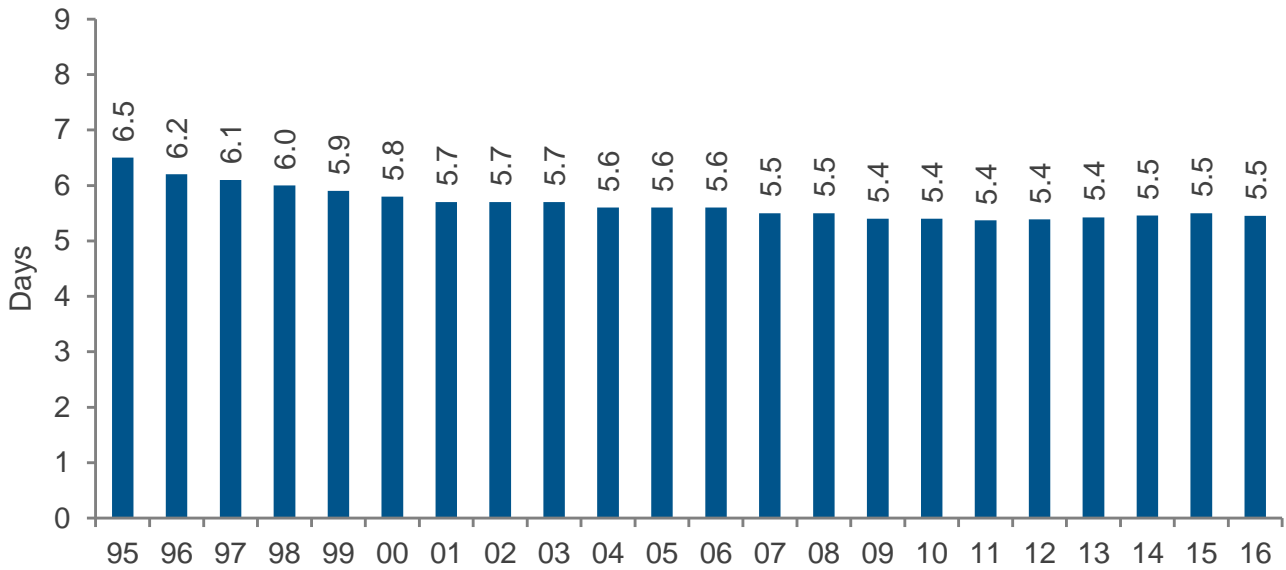
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.
Link: <https://www.census.gov/data/datasets/2017/demo/popest/nation-detail.html>

Chart 3.4: Inpatient Days per 1,000 Persons, 1995 – 2016



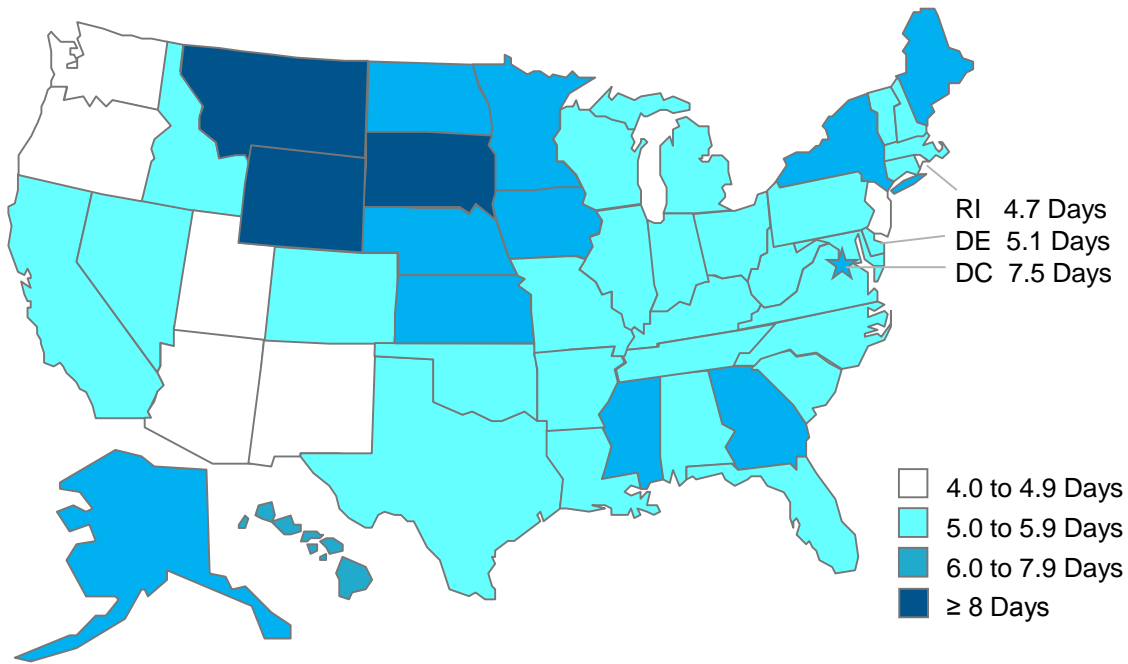
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.
Link: <https://www.census.gov/data/datasets/2017/demo/popest/nation-detail.html>

Chart 3.5: Average Length of Stay in Community Hospitals, 1995 – 2016



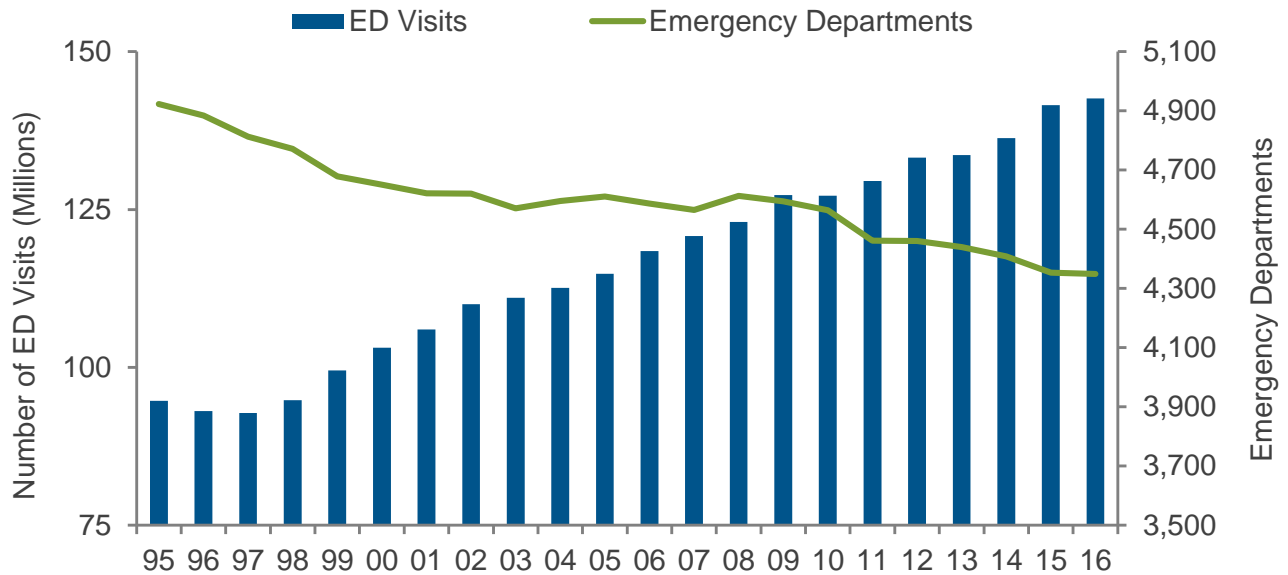
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Chart 3.6: Average Length of Stay in Community Hospitals by State, 2016



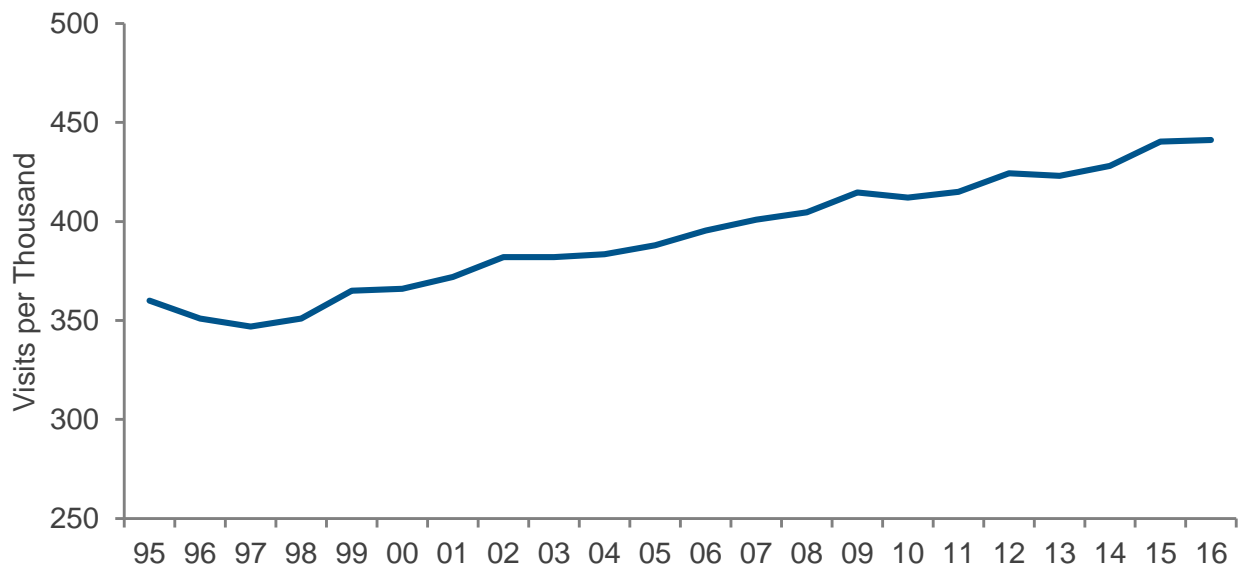
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Chart 3.7: Emergency Department Visits and Emergency Departments Reporting Visits⁽¹⁾ in Community Hospitals, 1995 – 2016



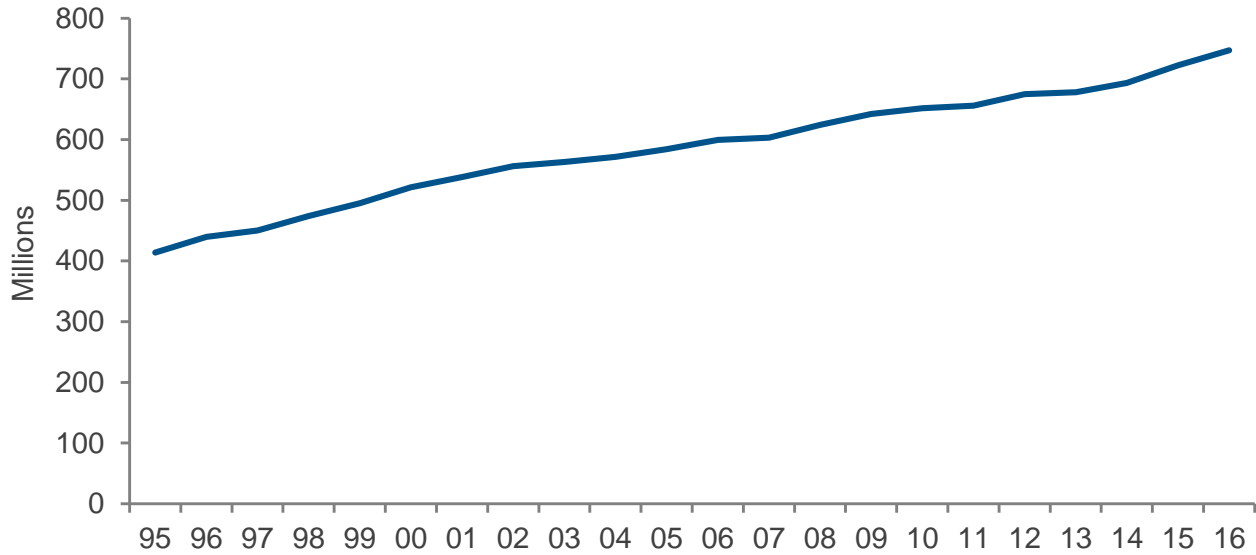
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
(1) Defined as hospitals reporting ED visits in the AHA Annual Survey.

Chart 3.8: Hospital Emergency Department Visits per 1,000 Persons, 1995 – 2016



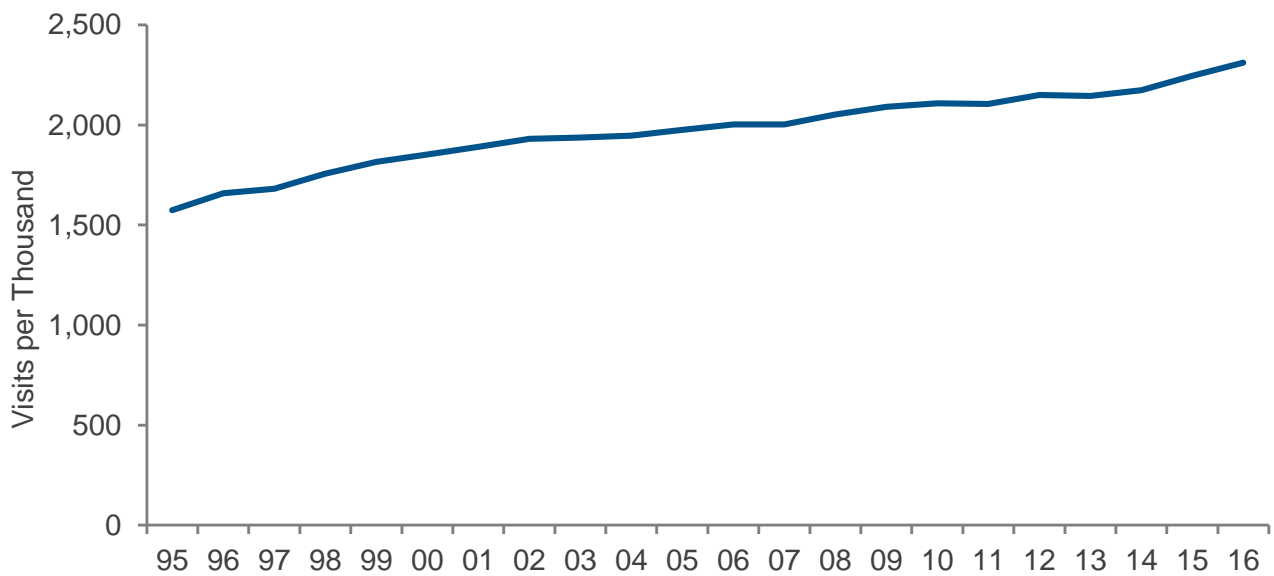
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.
Link: <https://www.census.gov/data/datasets/2017/demo/popest/nation-detail.html>

Chart 3.9: Total Hospital Outpatient Visits in Community Hospitals, 1995 – 2016



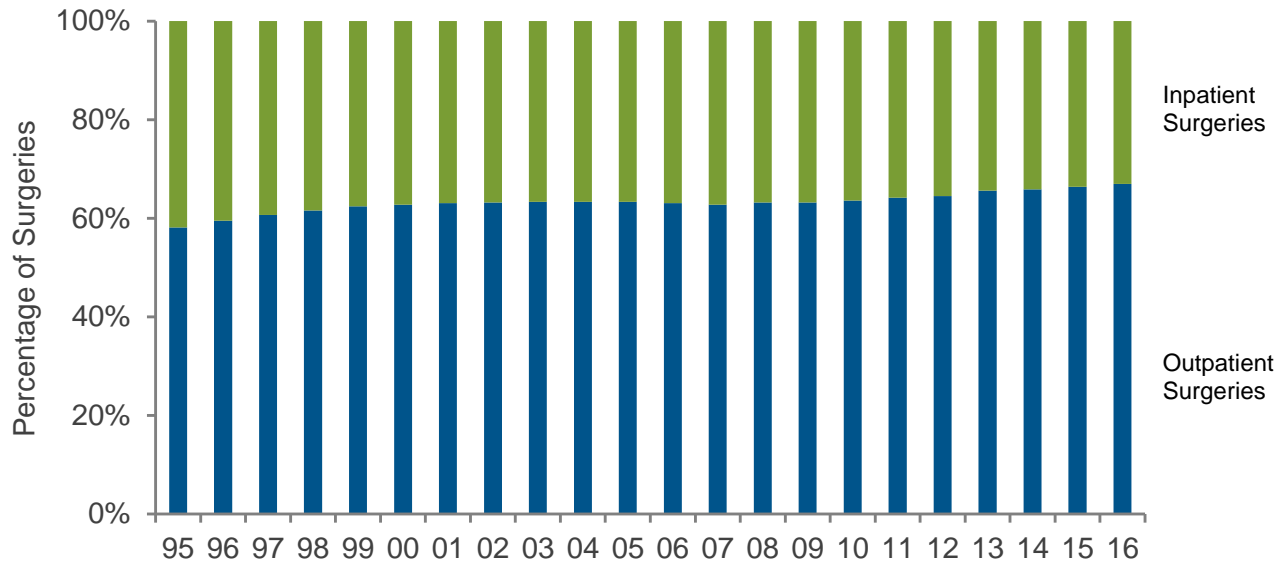
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. *Chart 3.12 in 2013 and earlier years' Chartbooks.*

Chart 3.10: Hospital Outpatient Visits per 1,000 Persons, 1995 – 2016

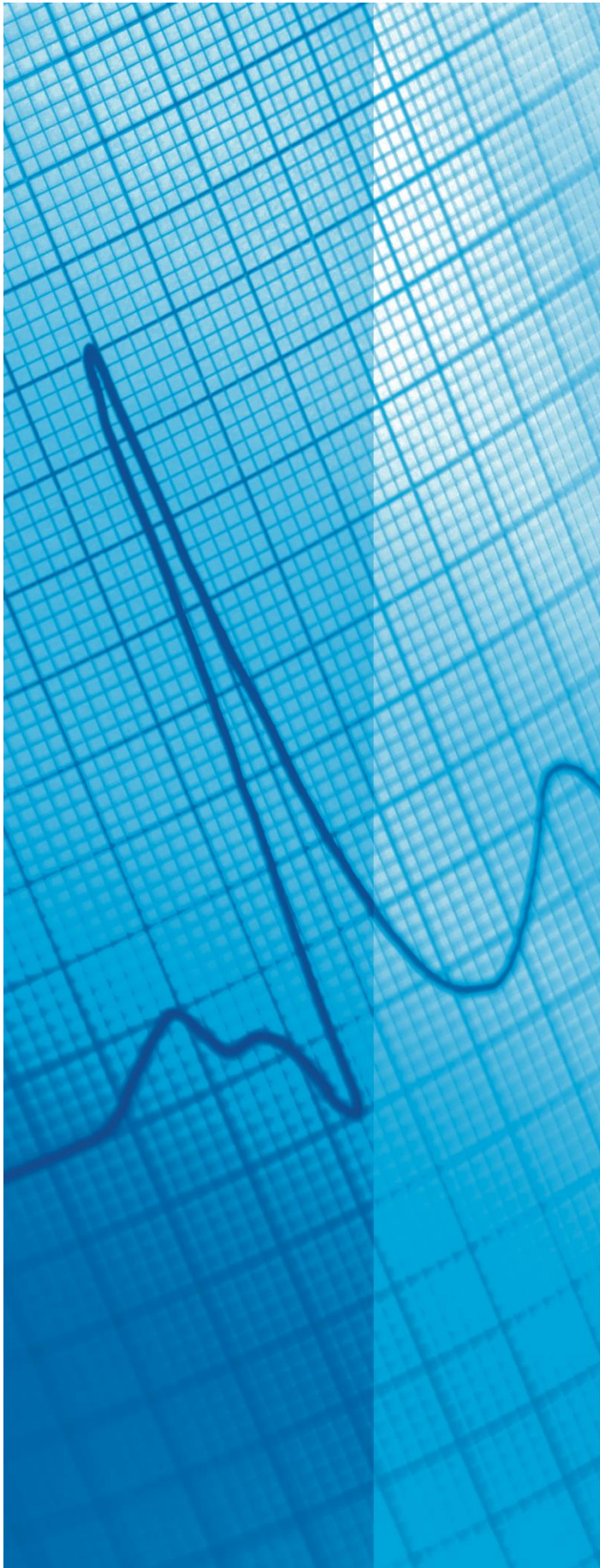


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.
Link: <https://www.census.gov/data/datasets/2017/demo/popest/nation-detail.html>
Chart 3.13 in 2013 and earlier years' Chartbooks.

Chart 3.11: Percentage Share of Inpatient vs. Outpatient Surgeries, 1995 – 2016



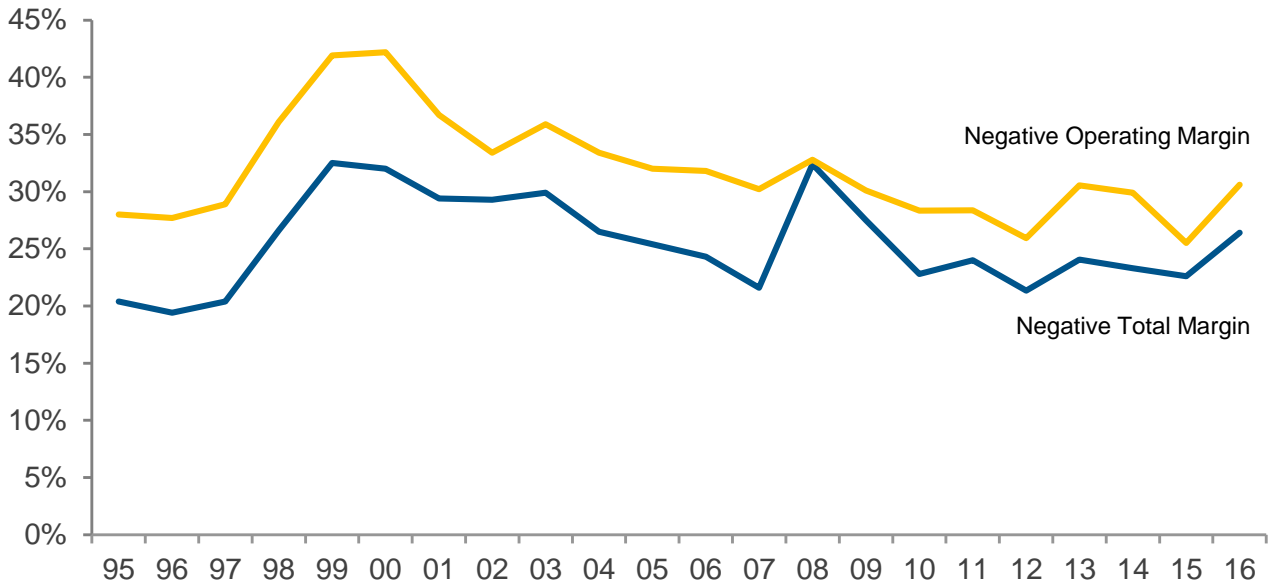
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
Chart 3.14 in 2013 and earlier years' Chartbooks.



CHAPTER 4

Trends in Hospital Financing

Chart 4.1: Percentage of Hospitals with Negative Total and Operating Margins, 1995 – 2016

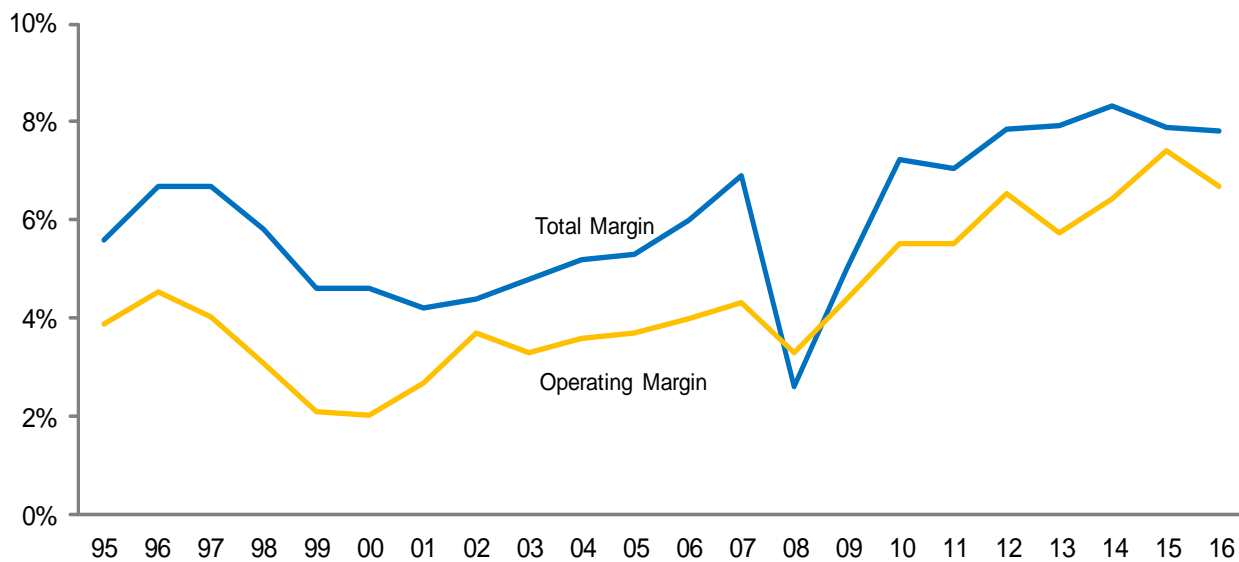


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

(1) Total Hospital Margin is calculated as the difference between total net revenue and total expenses divided by total net revenue.

(2) Operating Margin is calculated as the difference between operating revenue and total expenses divided by operating revenue.

Chart 4.2: Aggregate Total Hospital Margins⁽¹⁾ and Operating Margins,⁽²⁾ 1995 – 2016

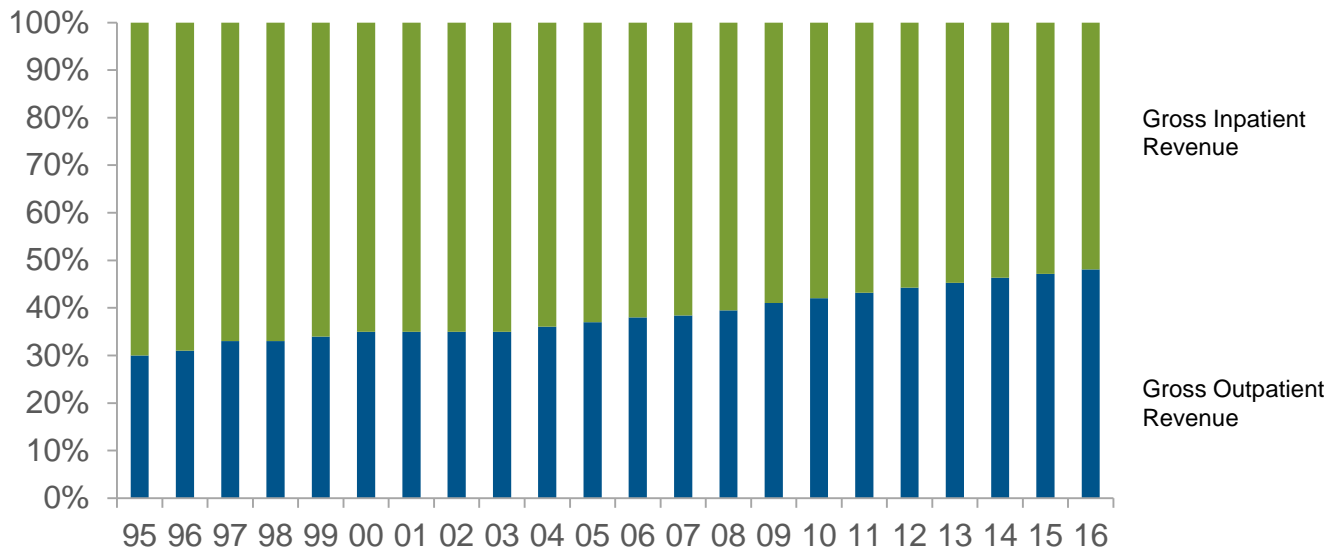


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

(1) Total Hospital Margin is calculated as the difference between total net revenue and total expenses divided by total net revenue.

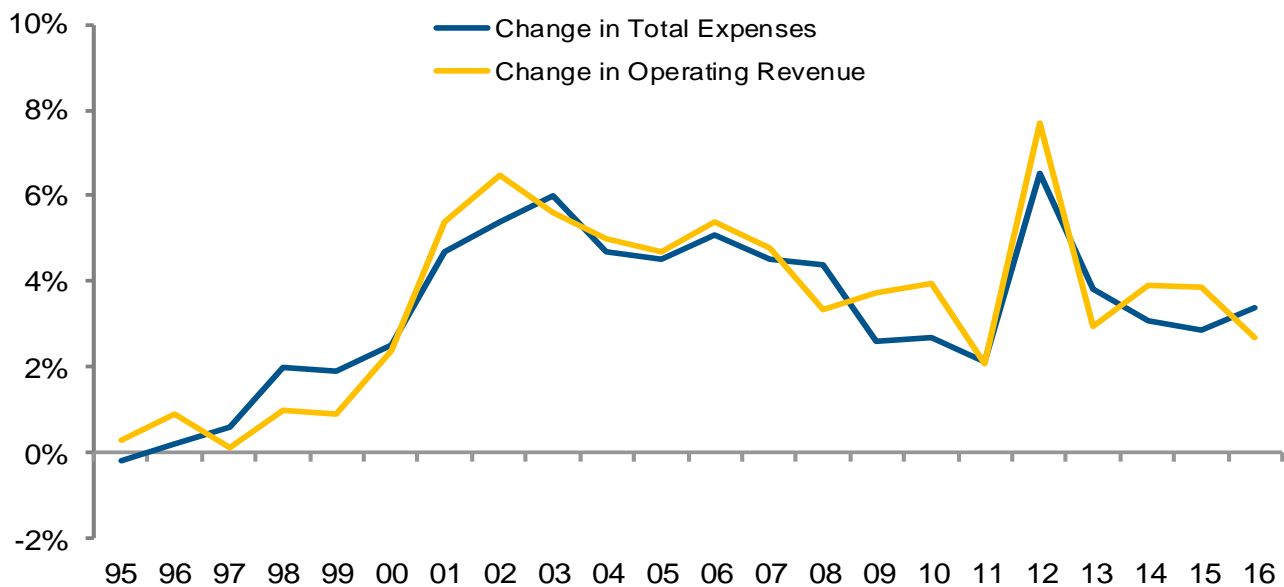
(2) Operating Margin is calculated as the difference between operating revenue and total expenses divided by operating revenue.

Chart 4.3: Distribution of Outpatient vs. Inpatient Revenues, 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

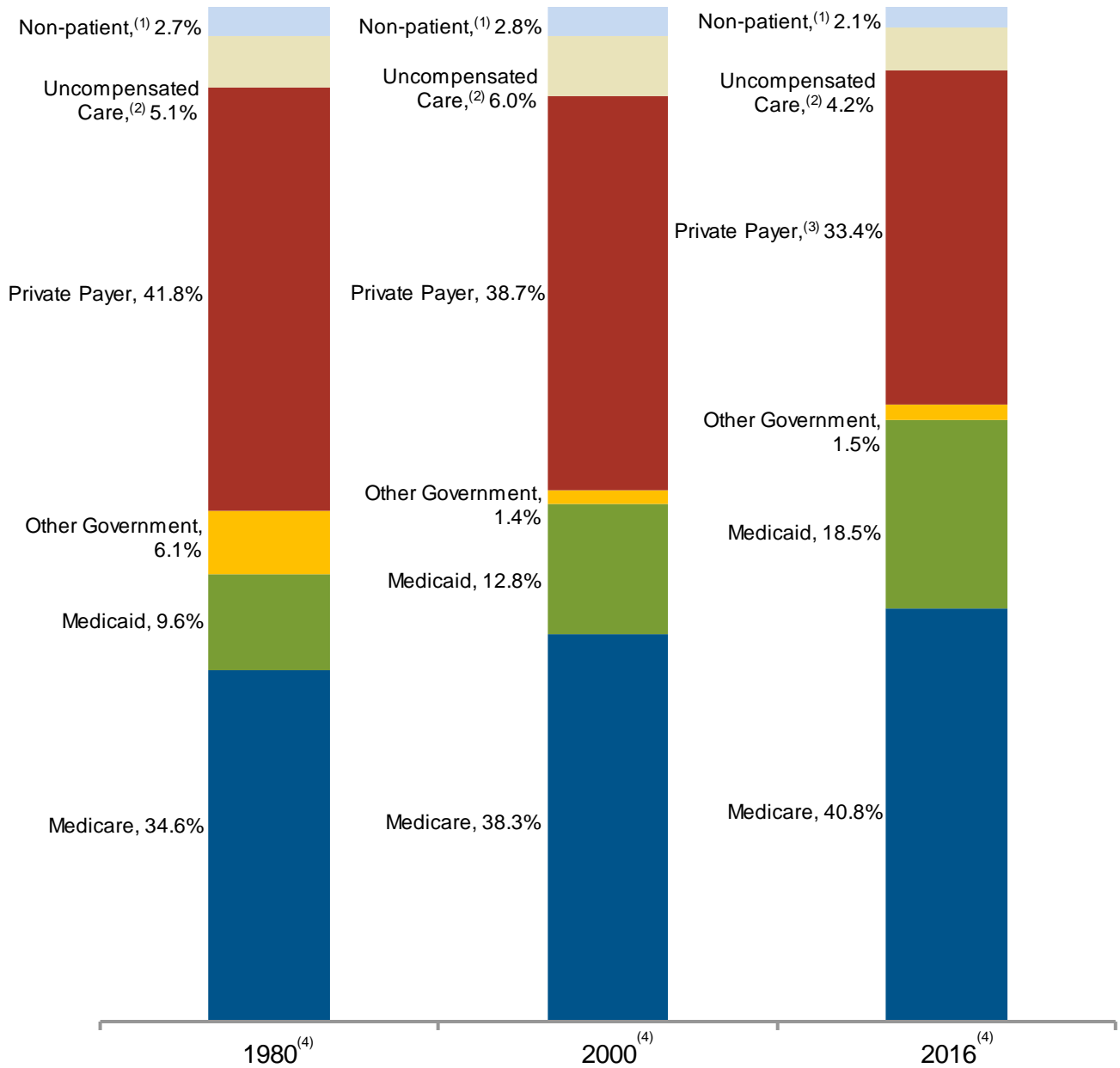
Chart 4.4: Annual Change in Hospital Operating Revenue and Expenses per Adjusted Admission,⁽¹⁾ 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, 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.

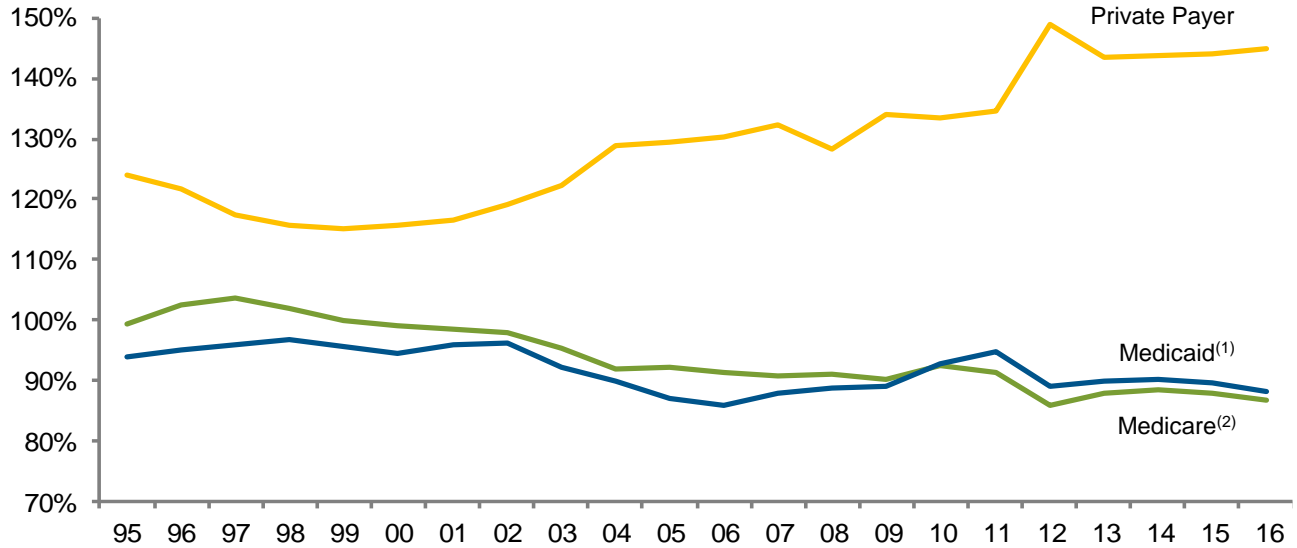
Chart 4.5: Distribution of Hospital Cost by Payer Type, 1980, 2000, and 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

- (1) 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.
- (2) Uncompensated care represents bad debt expense and charity care, at cost.
- (3) Private payer formulas were updated in 2014 to account for the change in bad debt calculations, which is now reported as a deduction from revenue rather than a expense.
- (4) Percentages were rounded, so they do not add to 100 percent in all years.

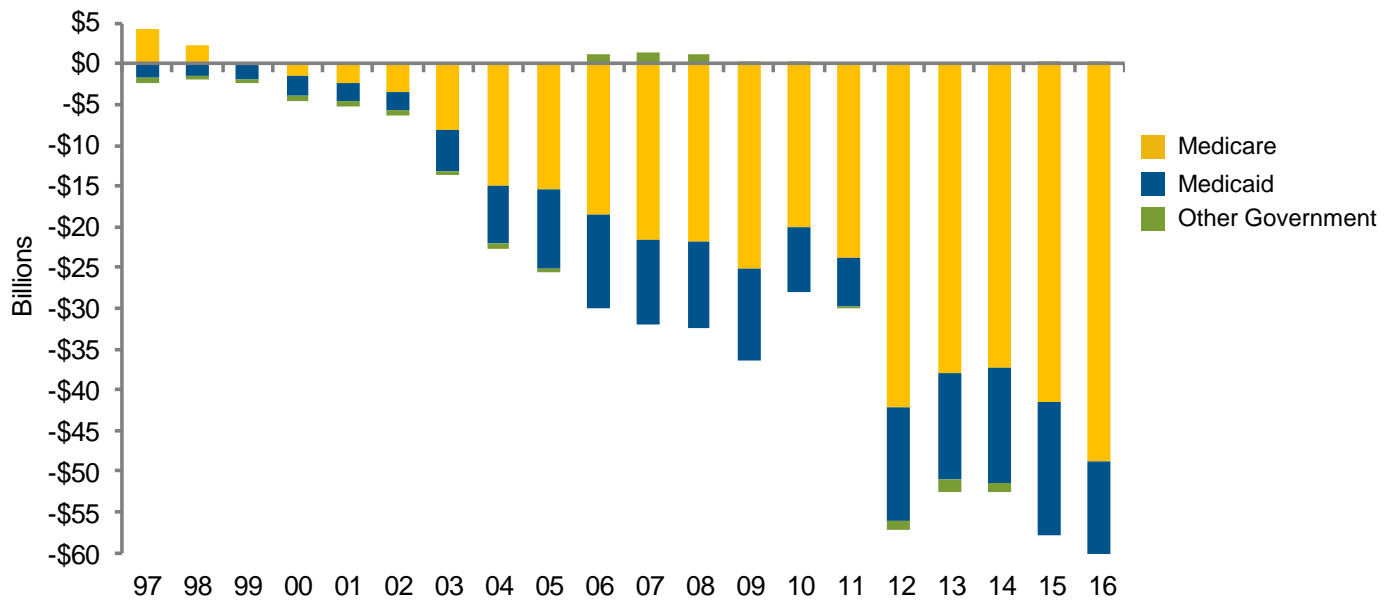
Chart 4.6: Aggregate Hospital Payment-to-cost Ratios for Private Payers, Medicare, and Medicaid, 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

- (1) Includes Medicaid Disproportionate Share Hospital payments.
- (2) Includes Medicare Disproportionate Share Hospital payments.

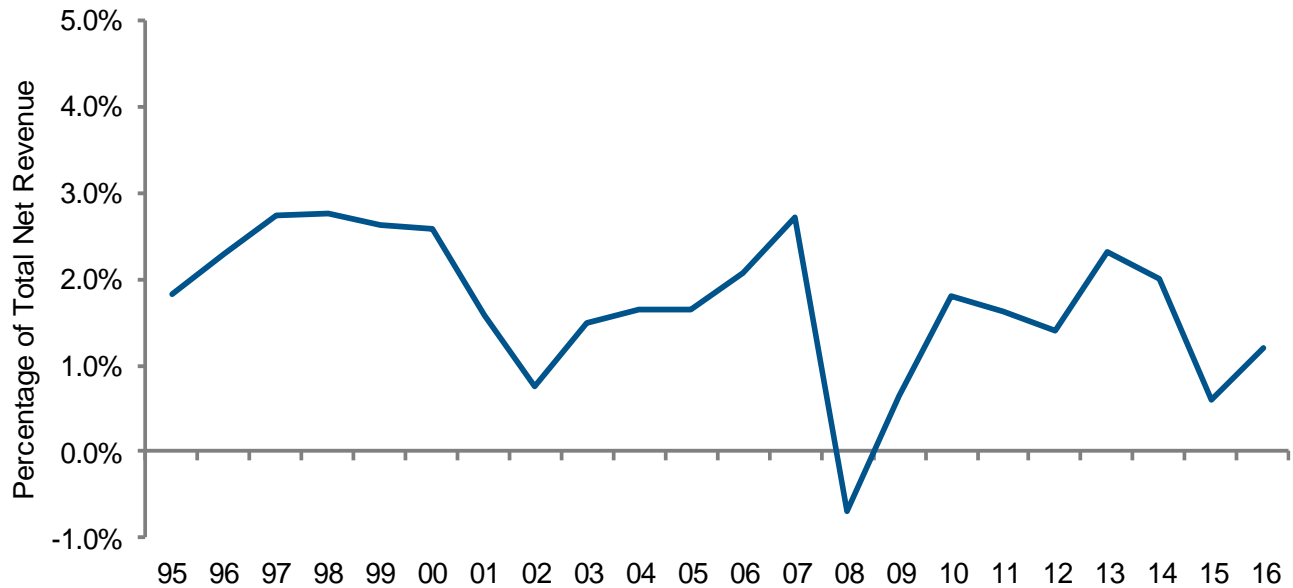
Chart 4.7: Hospital Payment Shortfall Relative to Costs for Medicare, Medicaid and Other Government, 1997 – 2016⁽¹⁾



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

- (1) Costs reflect a cap of 1.0 on the cost-to-charge ratio.

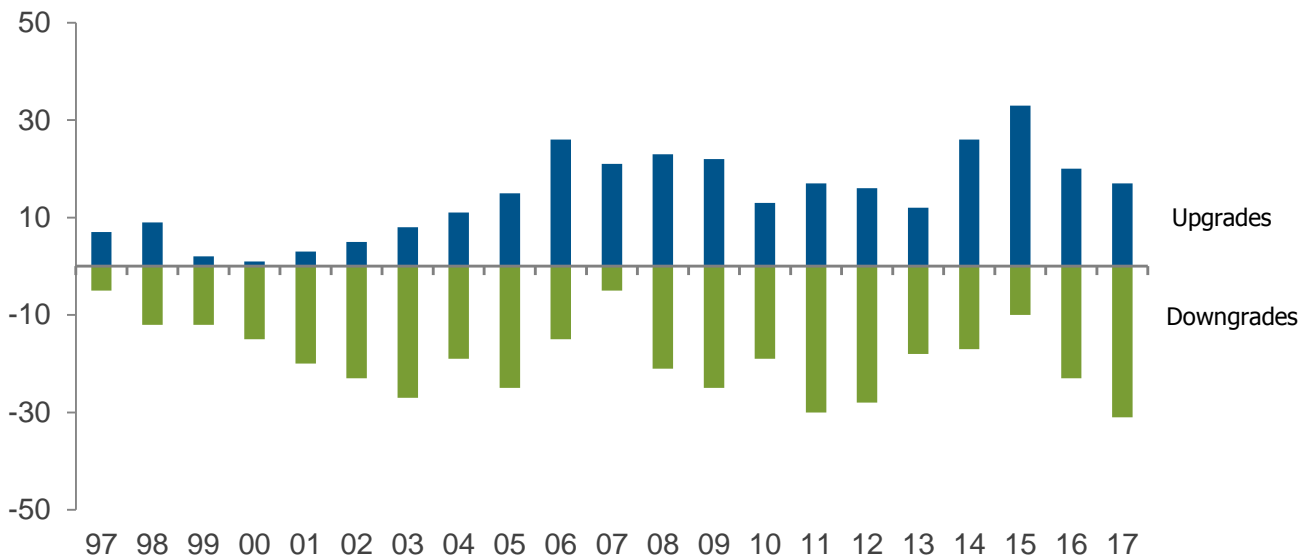
Chart 4.8: Income from Investments and Other Non-operating Gains⁽¹⁾ as a Percentage of Total Net Revenue, 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

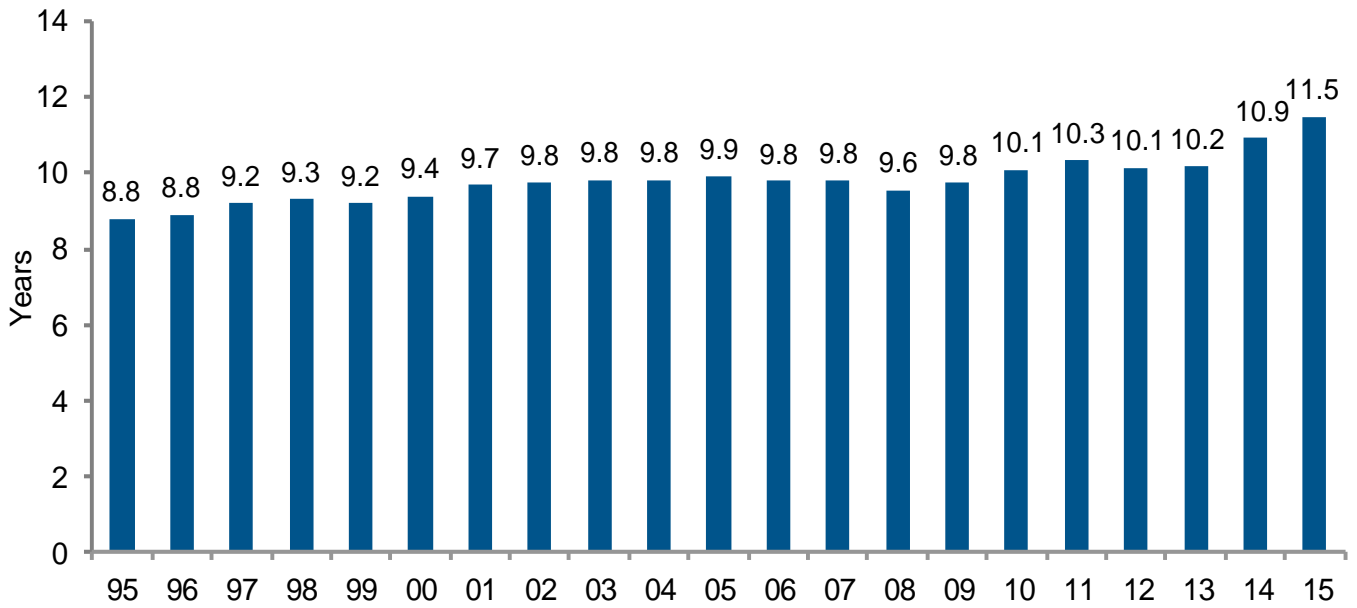
⁽¹⁾ Non-operating gains include income from non-operating activities, including investments, endowments and extraordinary gains, as well as the value of non-realized gains from investments.

Chart 4.9: Number of Bond Rating Upgrades and Downgrades, Not-for-profit Health Care, 1995 – 2017



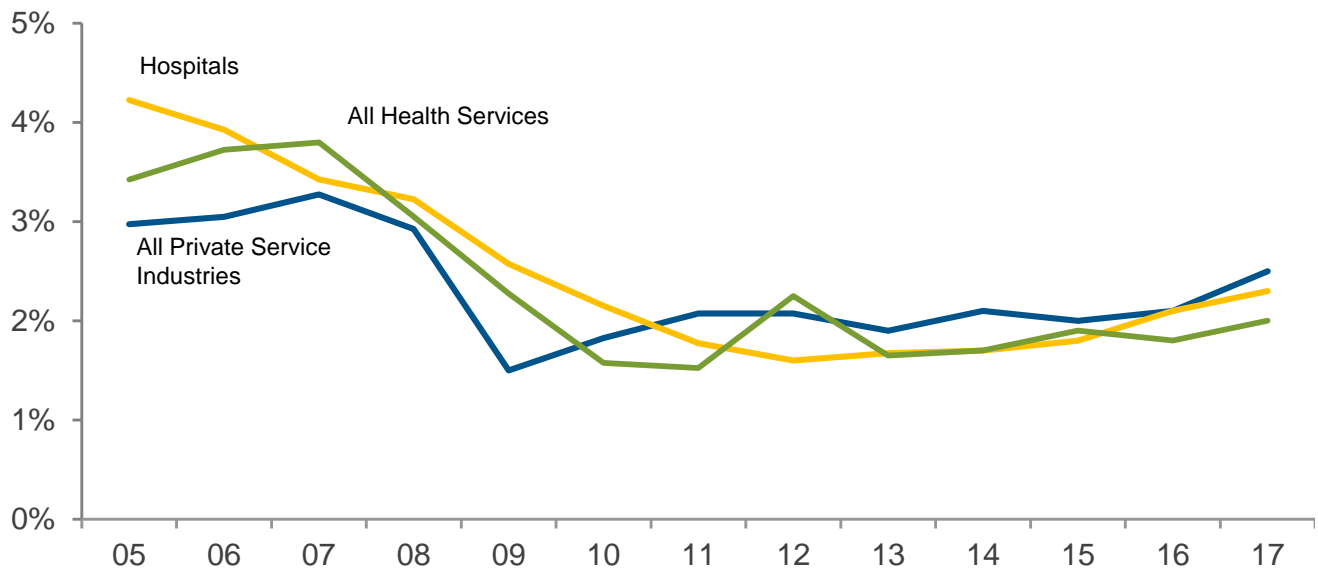
Source: Email correspondence with Fitch Ratings, Inc.

Chart 4.10: Median Average Age of Plant, 1995 – 2015



Source: Optum, *Almanac of Hospital Financial and Operating Indicators*, 2005, 2008, 2009, 2010, 2011, 2013, 2014, 2015, 2016, and 2017; CHIPS, *The Almanac of Hospital and Financial Operating Indicators*, 1994 and 1996-7.

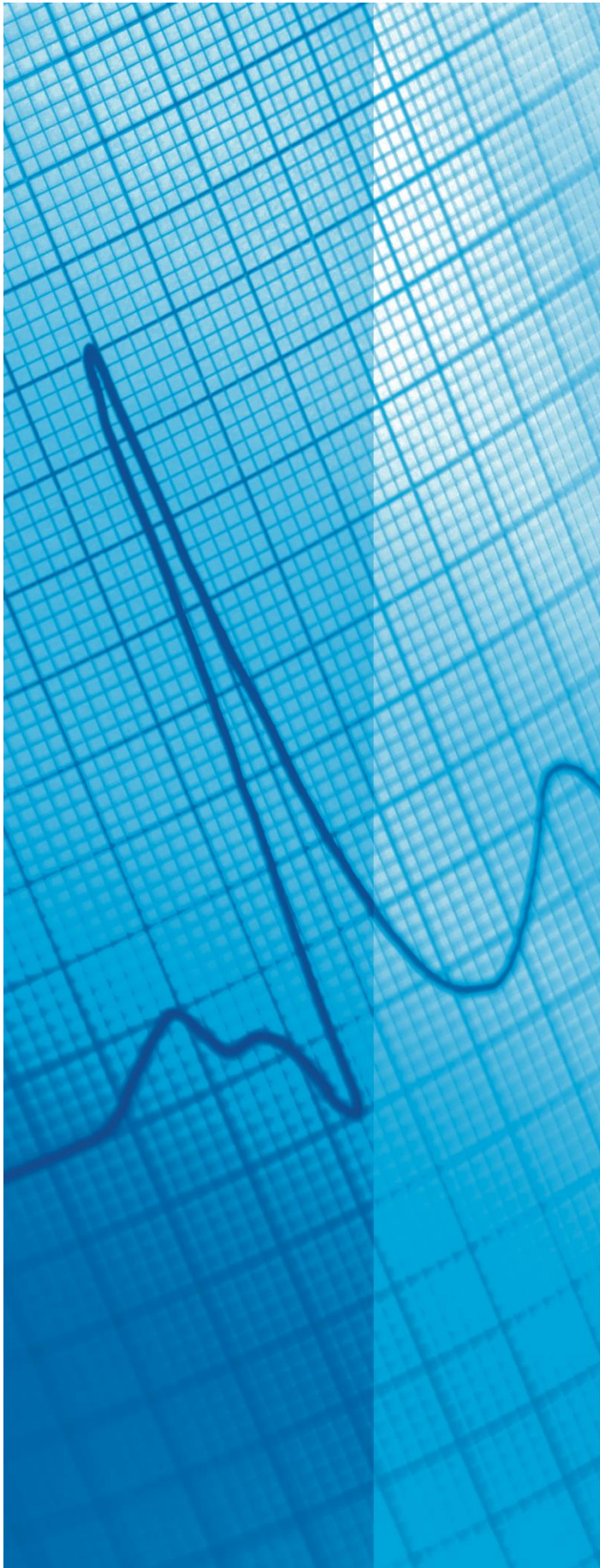
Chart 4.11: Percent Change in Employment Cost Index,⁽¹⁾ All Private Service Industries, All Health Services and Hospitals, 2005 – 2017⁽²⁾



Source: Bureau of Labor Statistics, Employment Cost Index, 12 months ending December 2017. Link: www.bls.gov.

⁽¹⁾ Total compensation.

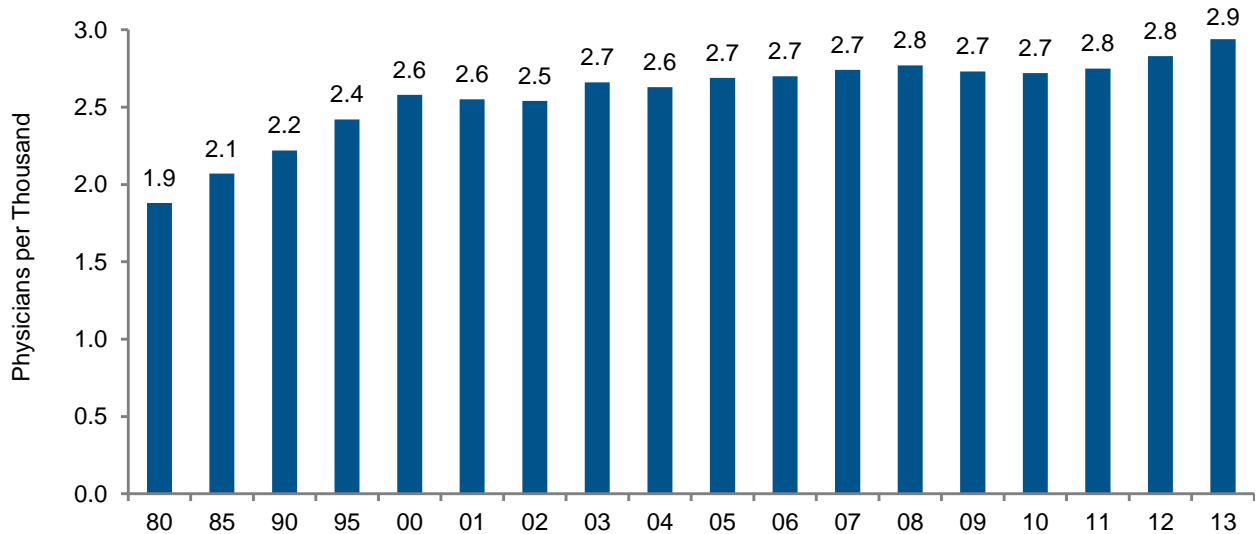
⁽²⁾ Data represent annualized 12 month percent change.



CHAPTER 5

Workforce

Chart 5.1: Total Number of Active Physicians per 1,000 Persons, 1980 – 2013

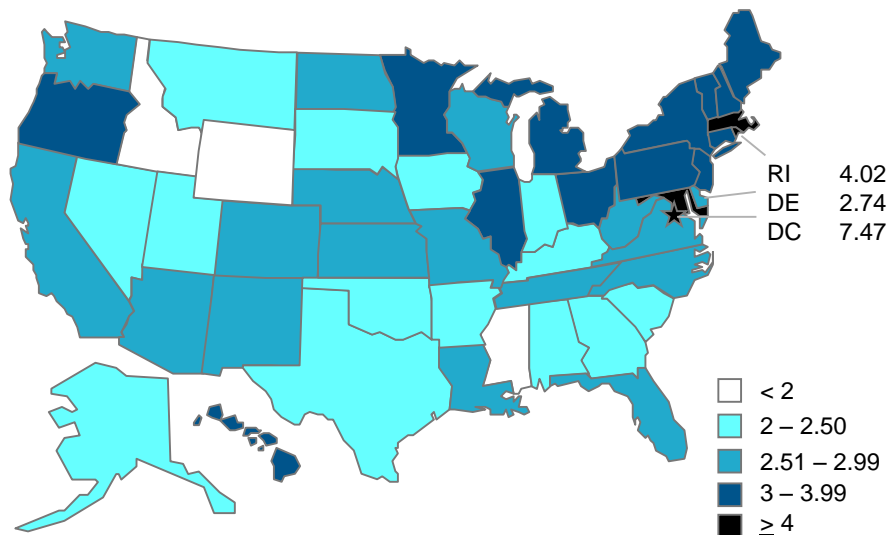


Source: National Center for Health Statistics. *Health, United States, 1982, 1996-97, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016.* Hyattsville, MD.

(1) 1980 does not include doctors of osteopathy.

(2) 2004 and later years include both federal and non-federal physicians. Prior to 2003, data included non-federal physicians only.

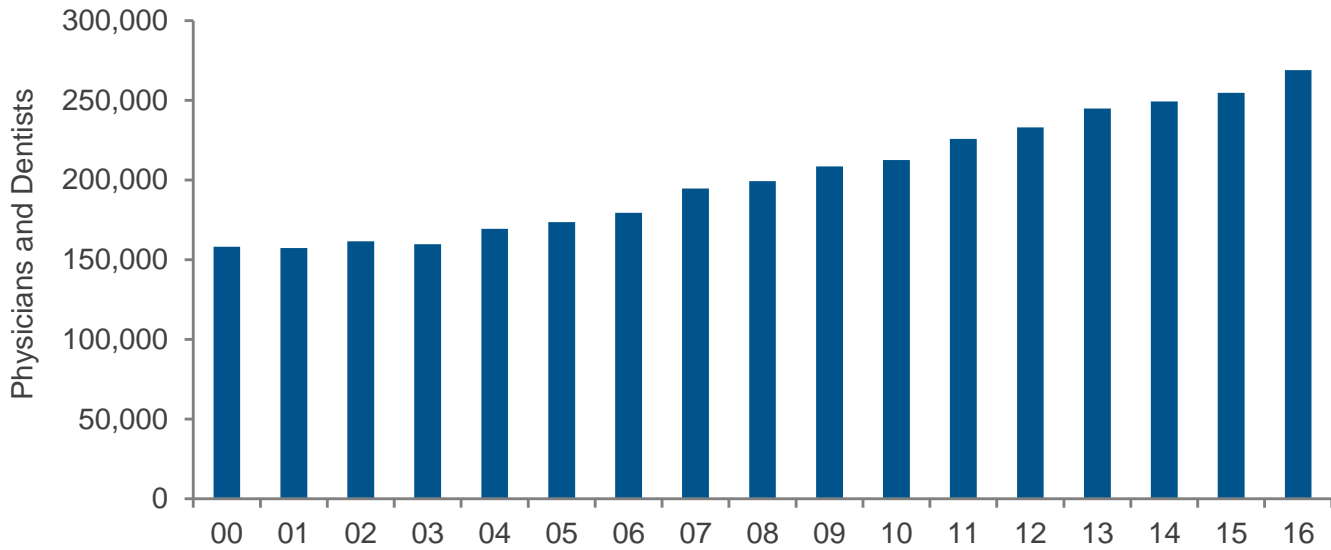
Chart 5.2: Total Number of Active Physicians⁽¹⁾ per 1,000 Persons by State, 2013



Source: National Center for Health Statistics. (2017). *Health, United States, 2016.* Hyattsville, MD.

(1) Includes active federal and non-federal doctors of medicine and active doctors of osteopathy.

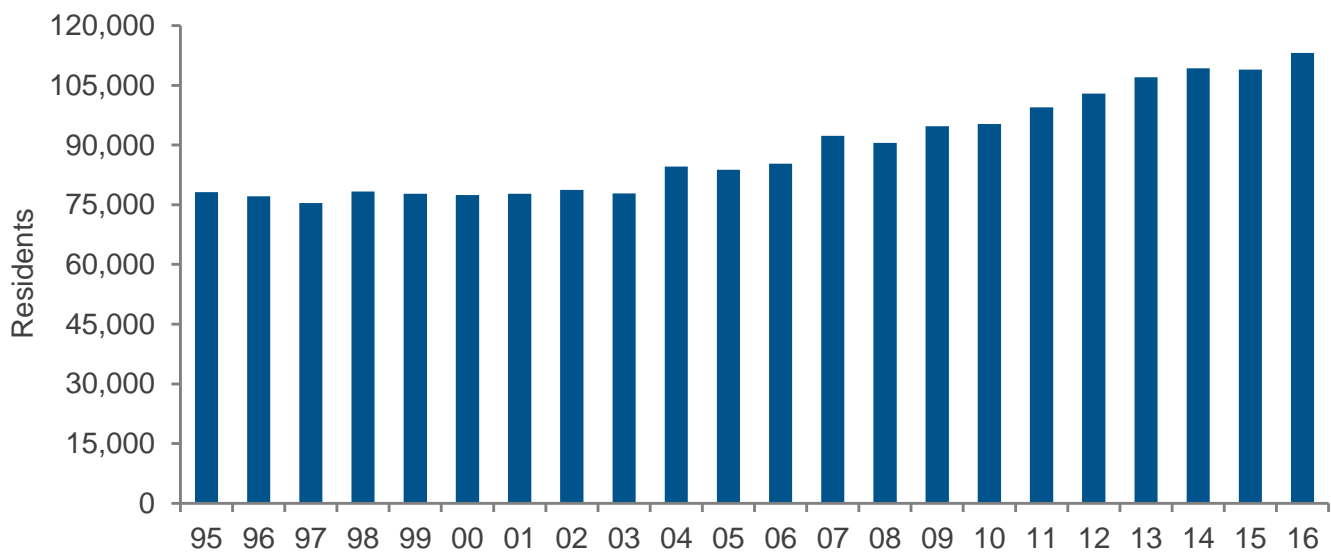
Chart 5.3: Number of Physicians and Dentists⁽¹⁾ Employed by Community Hospitals, 2000 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Includes full-time and part-time physicians, dentists, medical interns and residents, and dental interns and residents.

Chart 5.4: Medical and Dental Residents⁽¹⁾ in Training in Community Hospitals, 1995 – 2016

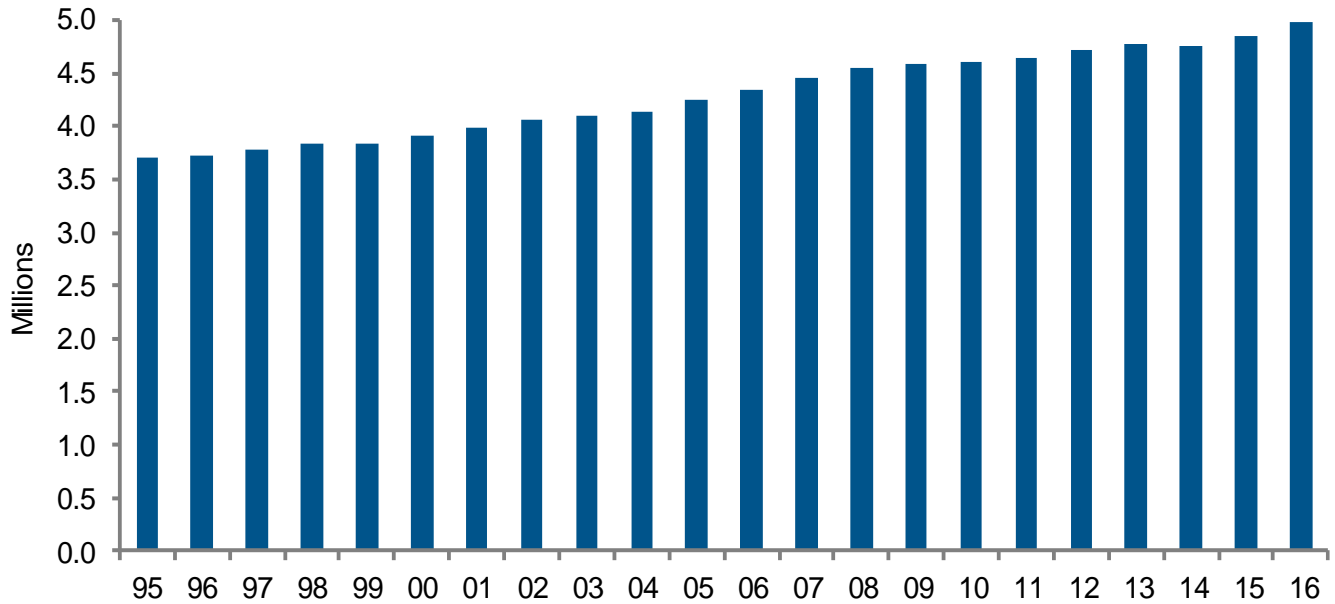


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Includes full-time equivalent interns and residents.

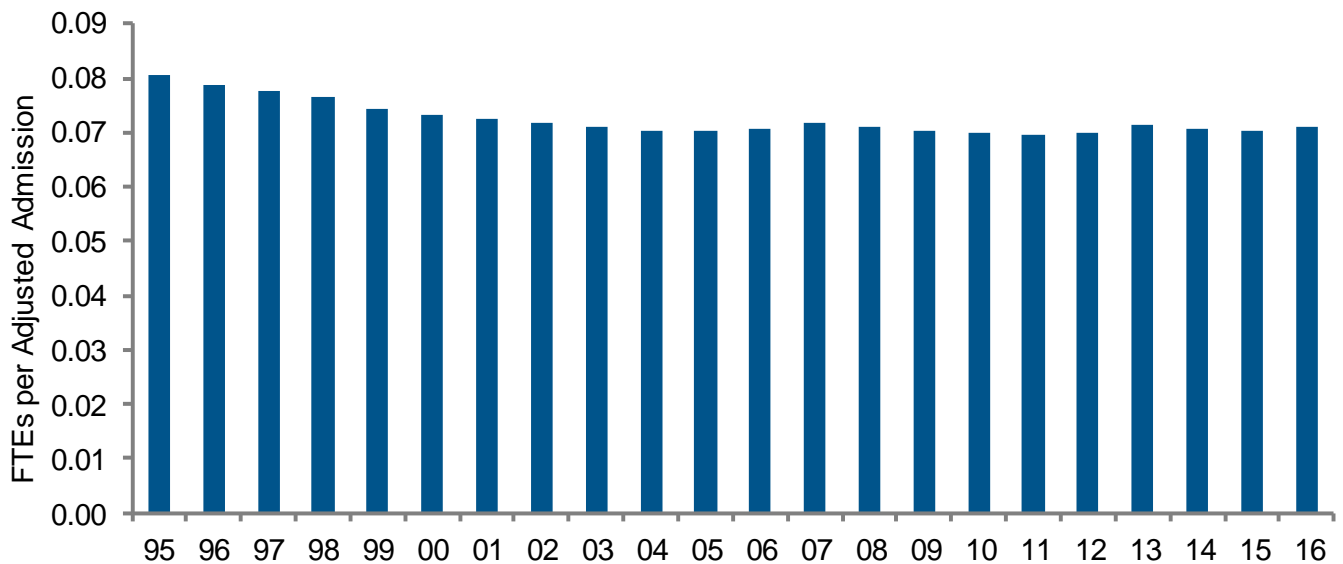
Chart 5.3 in 2014 and earlier years' Chartbooks.

Chart 5.5: Total Full-time Equivalent Employees Working in Hospitals, 1995 – 2016



Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
Chart 5.4 in 2014 and earlier years' Chartbooks.

Chart 5.6: Full-time Equivalent Employees per Adjusted Admission,⁽¹⁾ 1995 – 2016

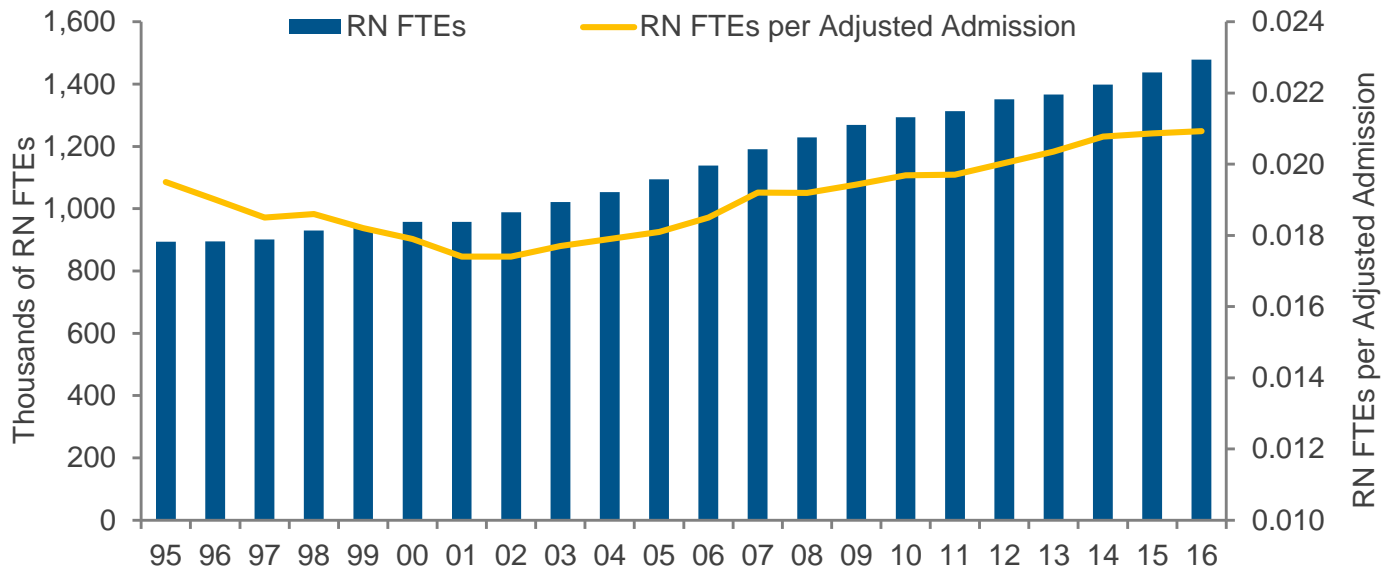


Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽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.

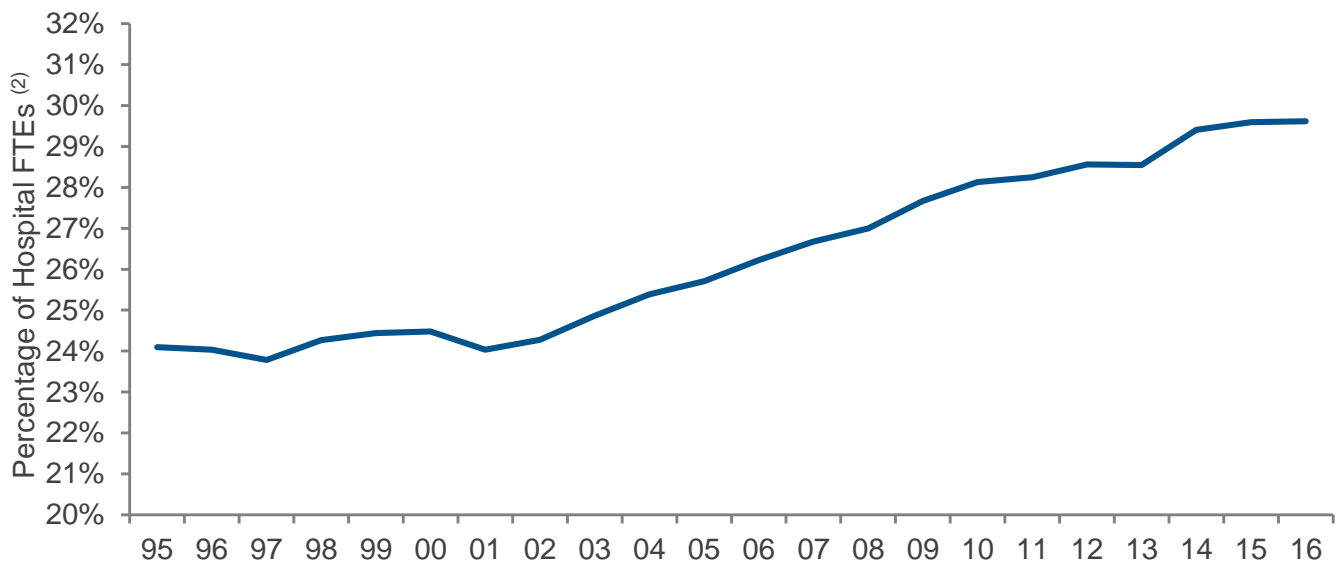
Chart 5.5 in 2014 and earlier years' Chartbooks.

Chart 5.7: Number of RN Full-time Equivalent Employees and RN FTEs per Adjusted Admission, 1995 – 2016



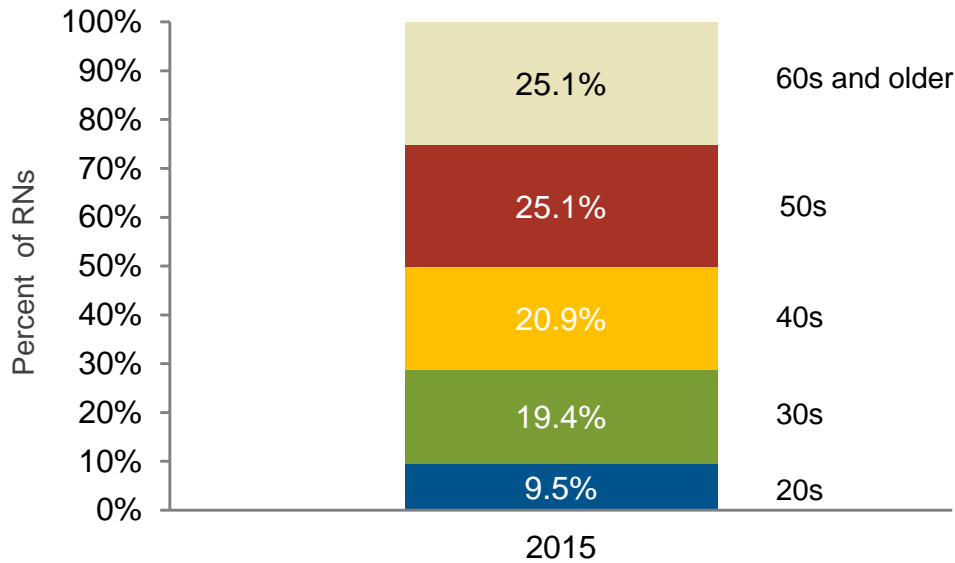
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
Chart 5.6 in 2014 and earlier years' Chartbooks.

Chart 5.8: RN Full-time Equivalents as a Percentage of Total Hospital Full-time Equivalents, 1995 – 2016



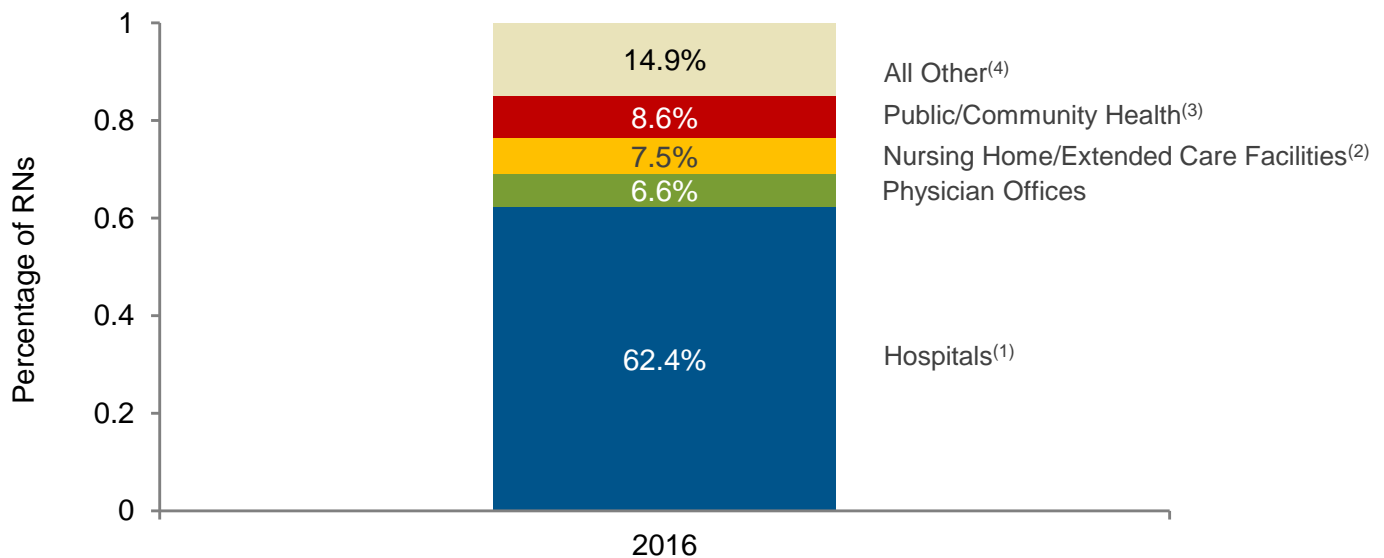
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
Chart 5.7 in 2014 and earlier years' Chartbooks.

Chart 5.9: Percent Distribution of RN Workforce by Age Group, 2015



Source: National Council of State Boards of Nursing. National Nursing Workforce Study 2015.
Link: <https://www.ncsbn.org/workforce.htm>.
Chart added in 2016.

Chart 5.10: RN Employment by Type of Provider, 2016



Source: Email correspondence with the Bureau of Labor Statistics.

⁽¹⁾ Category includes general medical and surgical hospitals, psychiatric and substance abuse hospitals and specialty hospitals.

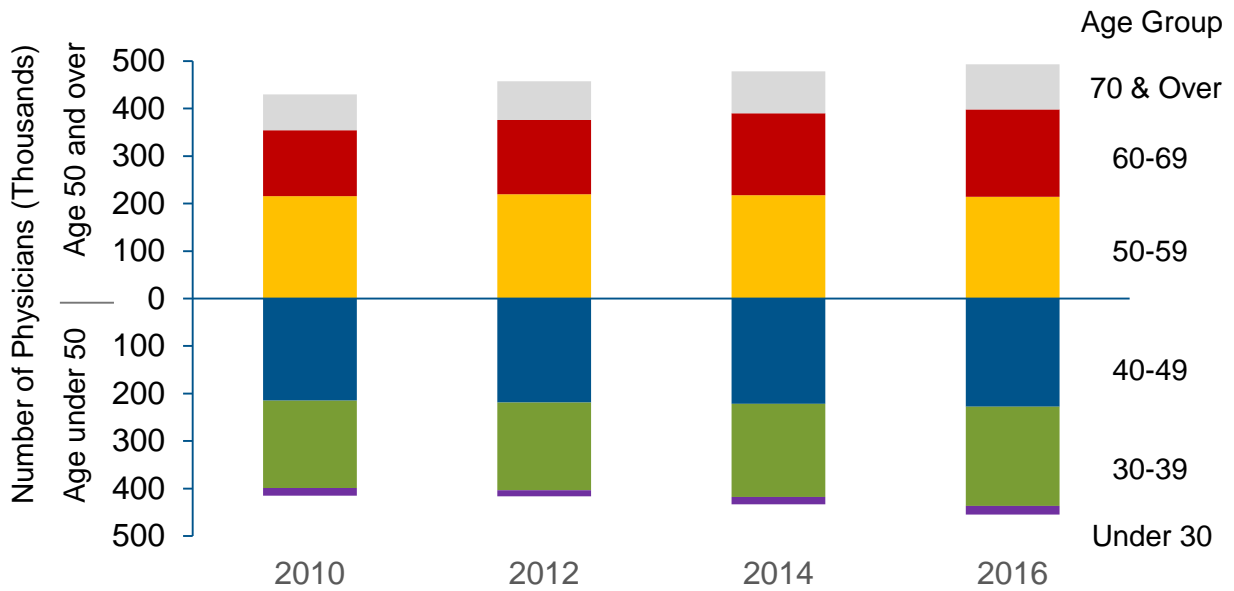
⁽²⁾ Category includes nursing care facilities, residential care facilities, continuing care retirement communities and assisted living facilities and other residential care facilities.

⁽³⁾ Category includes home healthcare services, elementary and secondary schools, individual and family services, community food and housing services and vocational rehabilitation services.

⁽⁴⁾ Category includes but is not limited to offices of dentists and other health practitioners, state and local government designations, outpatient care centers, educational support services, health and personal care stores, insurance carriers, junior colleges, colleges, universities, professional schools, technical and trade schools and other schools and instruction.

Chart added in 2016.

Chart 5.11: Number of Physicians⁽¹⁾ by Age, 2010, 2012, 2014 and 2016

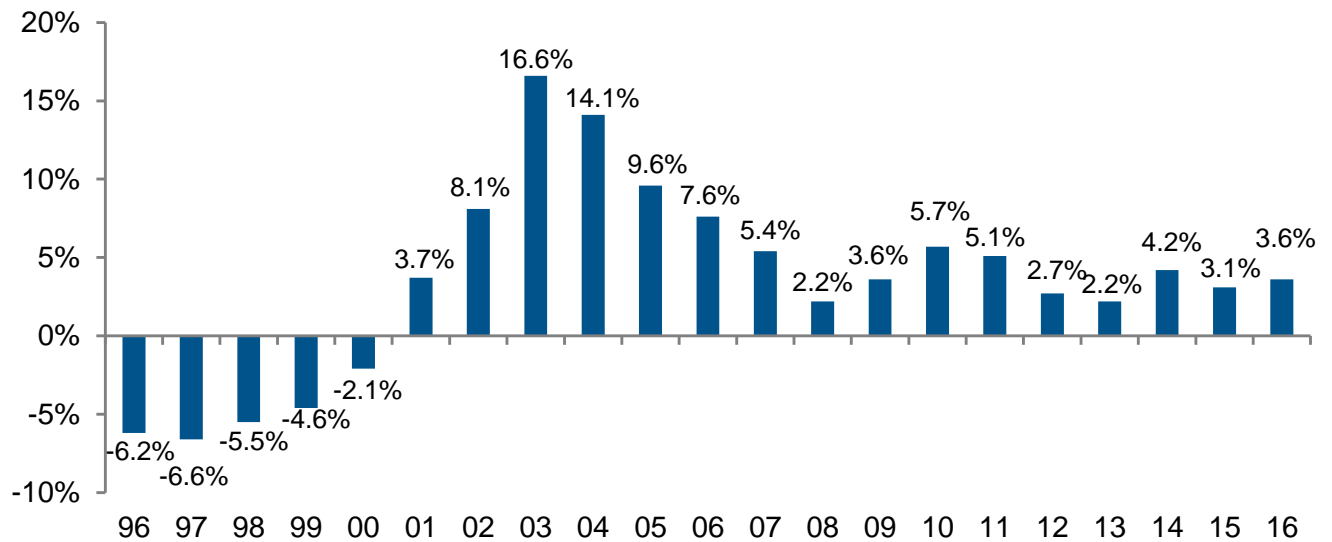


Source: Federation of State Medical Boards (FSMB). 2016 FSMB Census of Licensed Physicians.

(1) Includes actively licensed physicians. Resident physician licenses were excluded when such licenses could be identified.

Chart 5.11 was previously based on American Medical Association. (2015 Edition). Physician Characteristics and Distribution in the U.S. The document is no longer being updated.

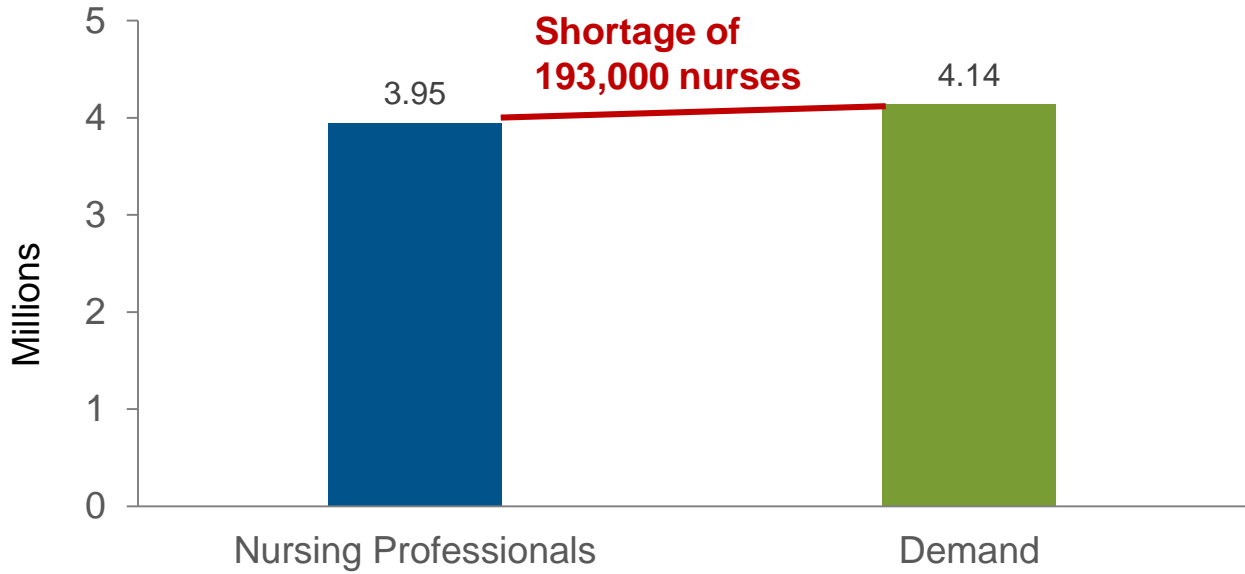
Chart 5.12: Annual Percentage Change in Entry Level Baccalaureate Nursing Enrollment, 1996 – 2016



Source: Email correspondence with the American Association of Colleges of Nursing.

Chart 5.11 in 2014 and earlier years' Chartbooks.

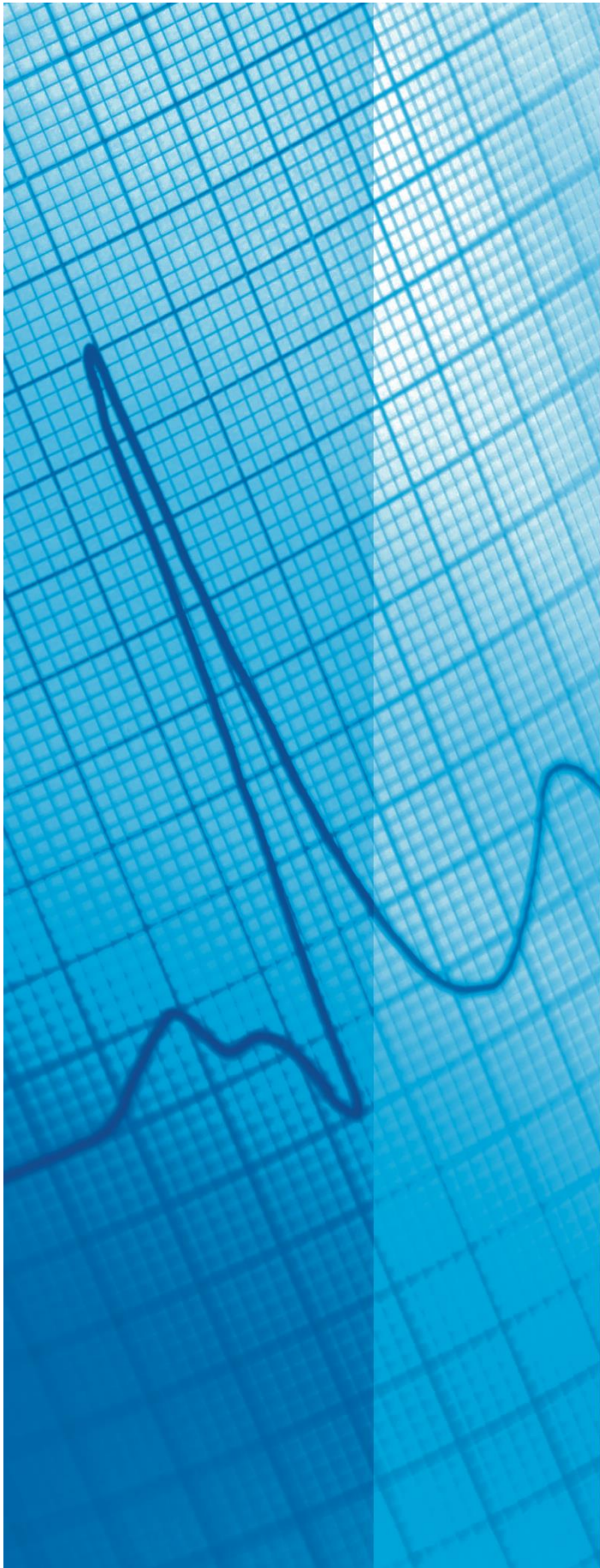
Chart 5.13: Projections of National Supply and Demand for Nursing Professionals, 2020



Source: Georgetown University Center on Education and the Workforce. *Nursing: Supply and Demand through 2020*. February 2015.

Chart previously titled as *National Supply and Demand Projections for FTE RNs*. Source: Project HOPE/Health Affairs as Buerhaus PI, Auerbach DI, Staiger DO. *The Recent Surge In Nurse Employment: Causes and Implications*. *Health Affairs*, 2009; 28(4):w657-68.

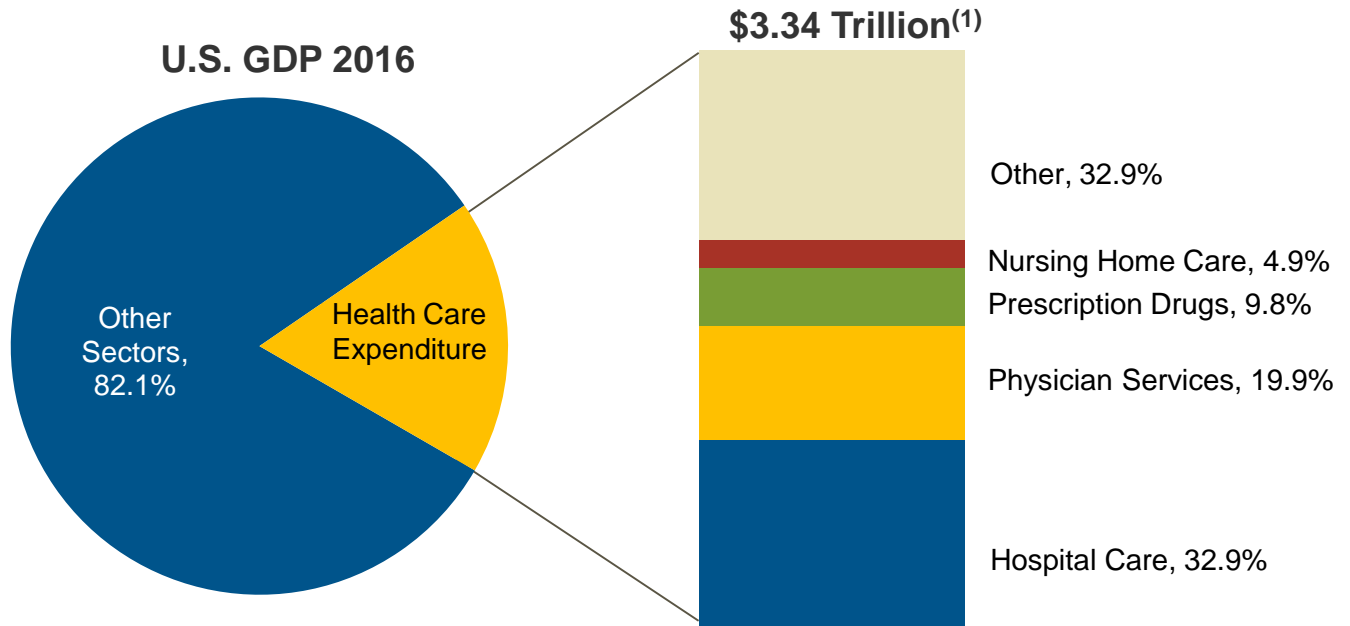
Chart 5.12 in 2014 and earlier years' Chartbooks.



CHAPTER 6

The Economic Contribution of
Hospitals

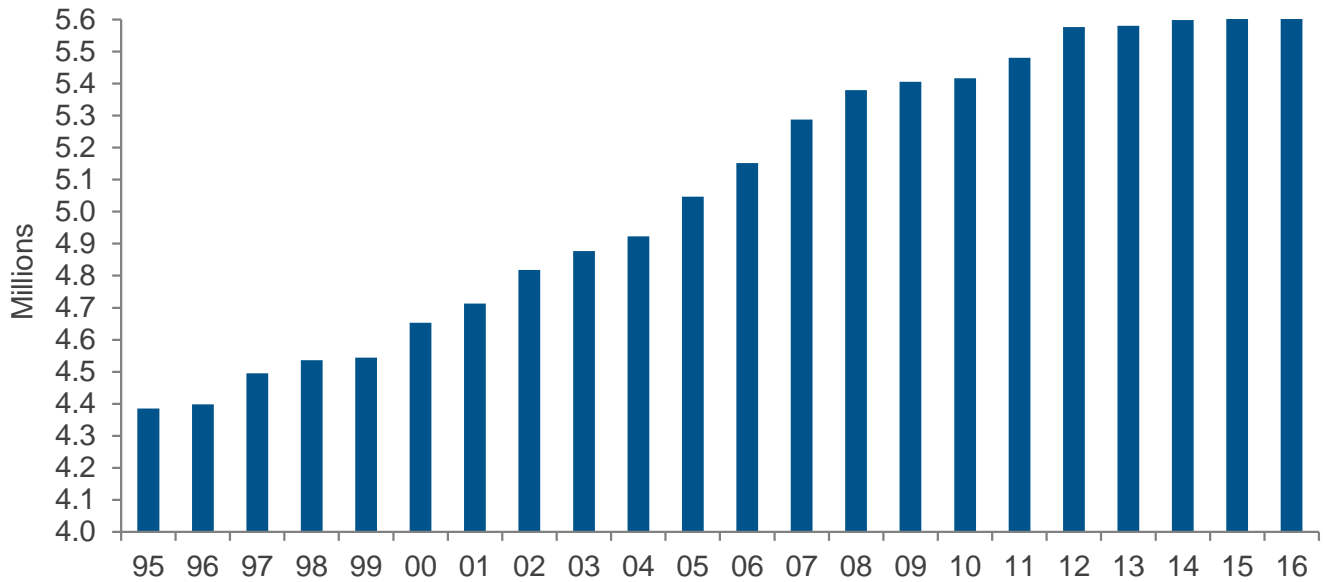
Chart 6.1: National Health Expenditures as a Percentage of Gross Domestic Product and Breakdown of National Health Expenditures, 2016



Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

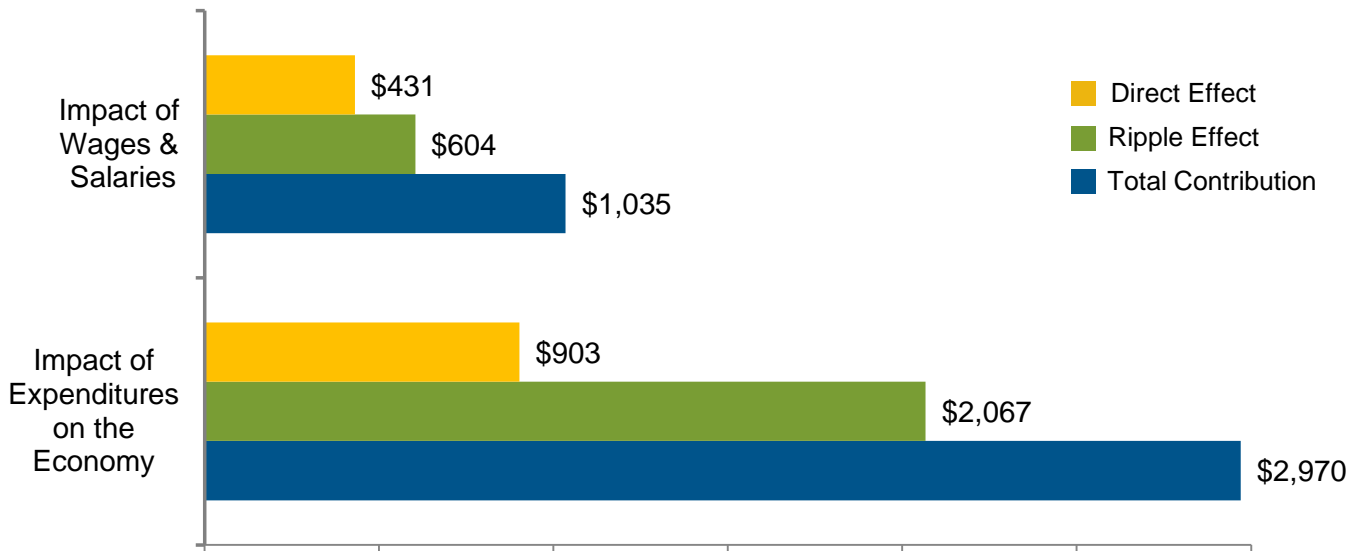
⁽¹⁾ Percentages were rounded, so they may not sum to 100 percent.

Chart 6.2: Number of Full-time and Part-time Hospital Employees, 1995 – 2016



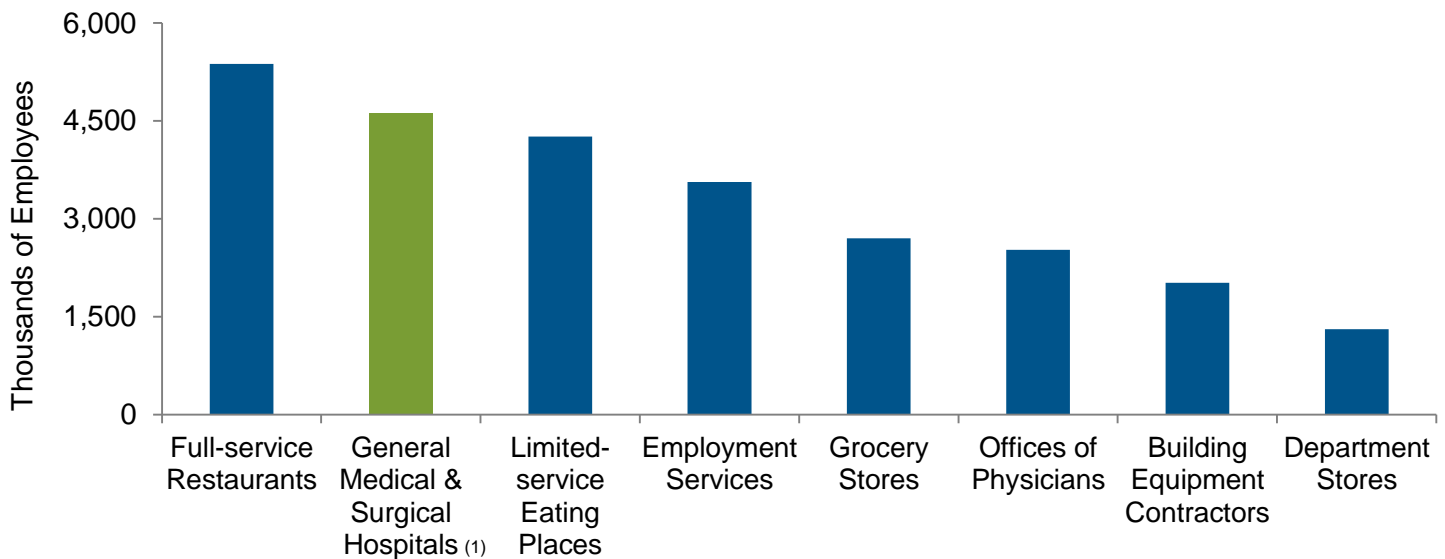
Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Chart 6.3: Impact of Community Hospitals on U.S. Economy (in \$ billions), 2016



Source: Analysis, using BEA RIMS-II (1997/2006) multipliers, released in 2008, applied to 2016 American Hospital Association Annual Survey data. Note: Multipliers released in 2010 and subsequent years no longer include the national level multipliers needed for this chart. The sum of the direct and ripple effect may be less than or greater than the total contribution due to rounding.

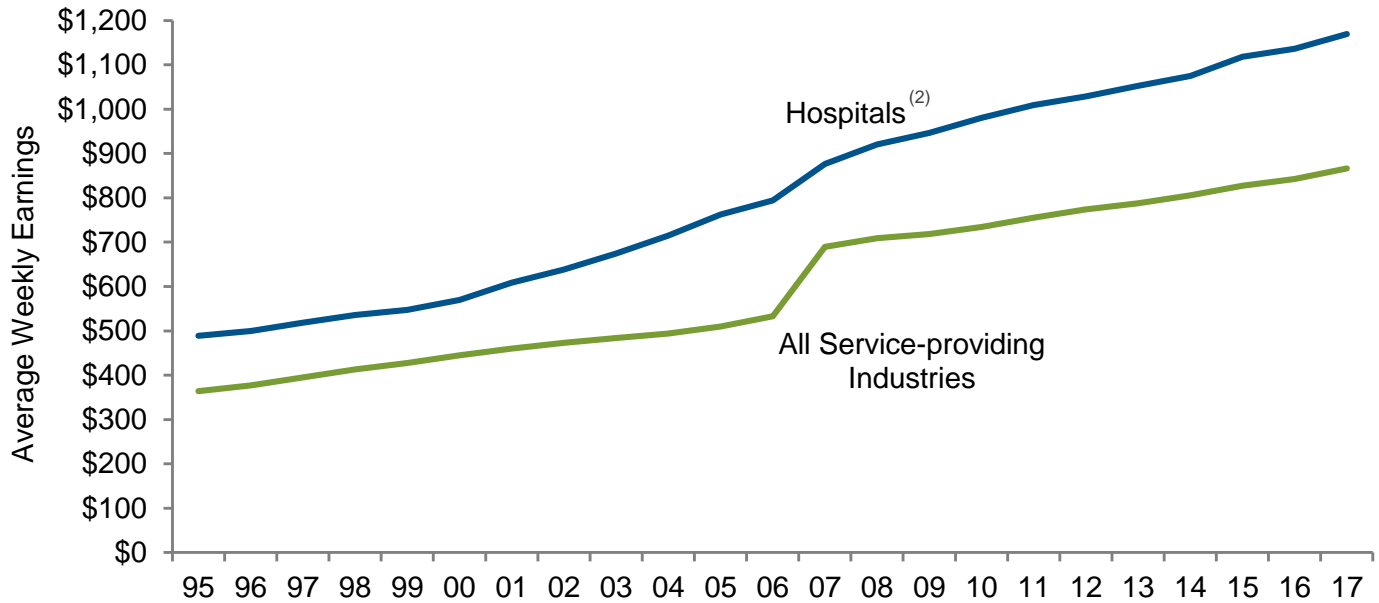
Chart 6.4: Hospital Employment vs. Employment in Other Industries, 2016



Source: Department of Labor, Bureau of Labor Statistics, Current Employment Statistics (CES) Survey, customized tables. Data released 2018. Link: <http://www.bls.gov/ces>.

(1) Does not include public hospitals.

Chart 6.5: Average Weekly Earnings of Workers, Hospitals⁽¹⁾ vs. All Service-providing Industries, 1995 – 2017



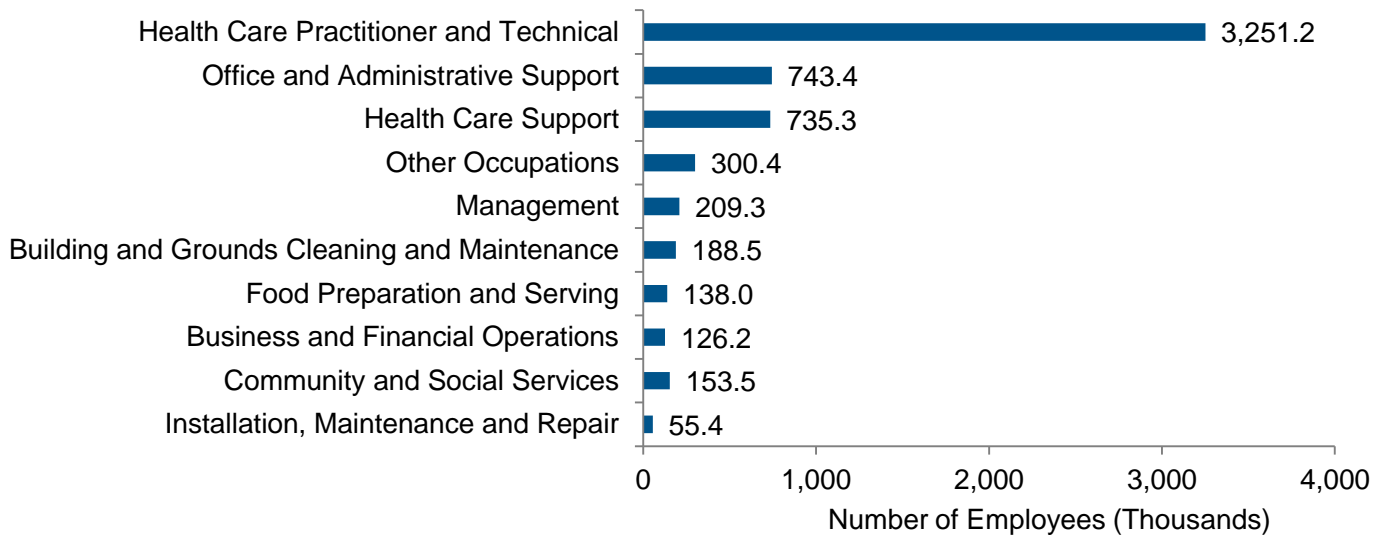
Source: Department of Labor, Bureau of Labor Statistics, Current Employment Statistics (CES) Survey, customized tables.

Data released 2018. Link: <http://www.bls.gov/ces>.

⁽¹⁾ Includes physicians employed by hospitals.

⁽²⁾ Does not include public hospitals.

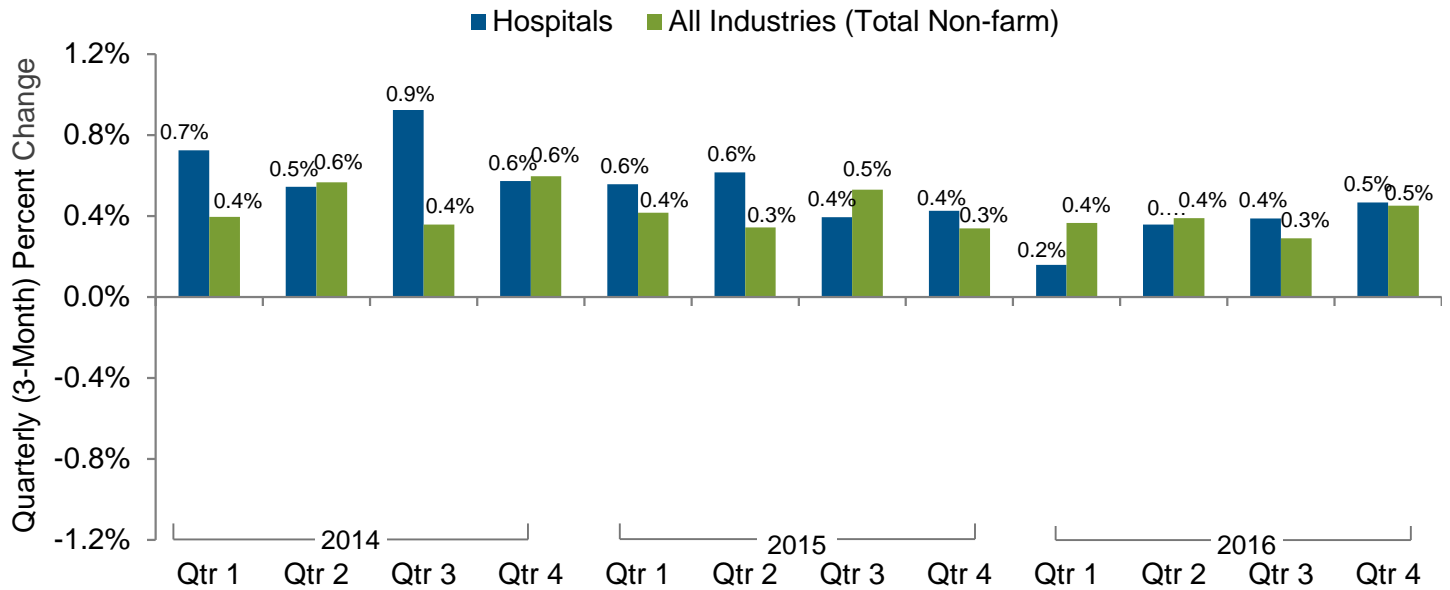
Chart 6.6: Hospital Employment by Occupation Type, 2016⁽¹⁾



Source: Department of Labor, Bureau of Labor Statistics, May 2015 National Industry-Specific Occupational Employment and Wage Estimates. Data released May 2017. Link: http://www.bls.gov/oes/2015/may/naics4_622100.htm.

⁽¹⁾ Does not include public hospitals.

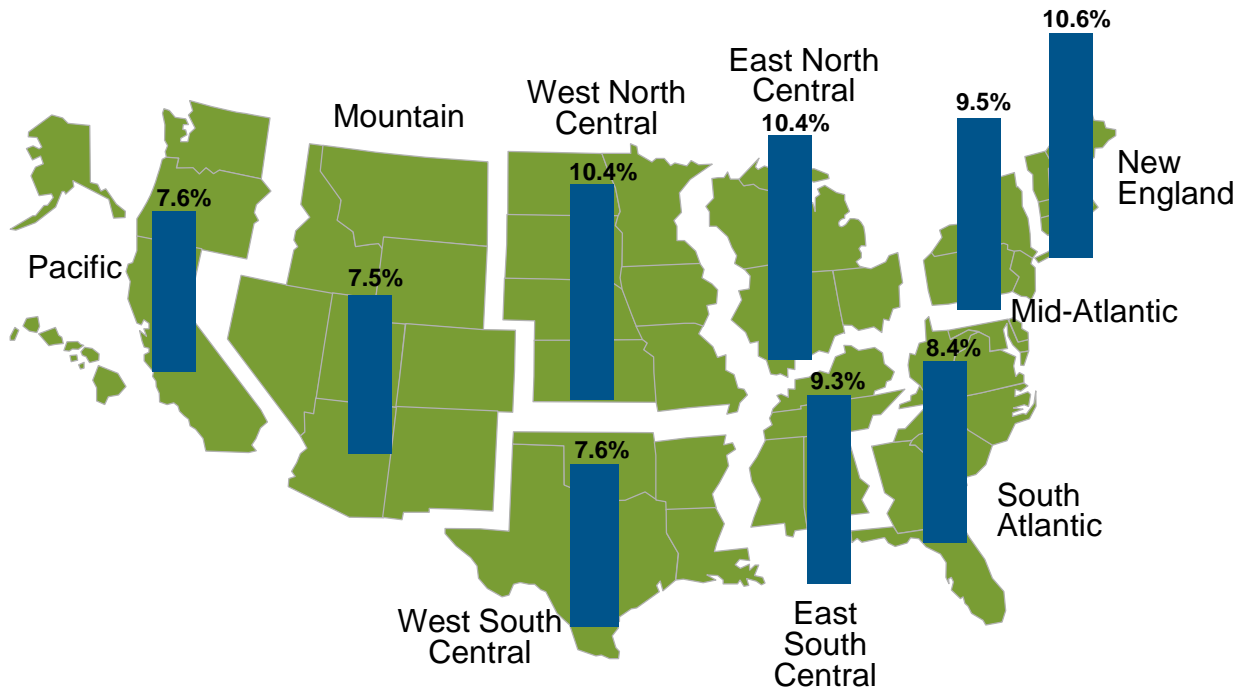
Chart 6.7: Percent Change in Employment, Seasonally-adjusted: Hospital vs. All Industries (Total Non-farm), 2015 – 2017



Source: Department of Labor, Bureau of Labor Statistics. Data released 2018. Link: <http://www.bls.gov/ces>.

(1) Does not include public hospitals.

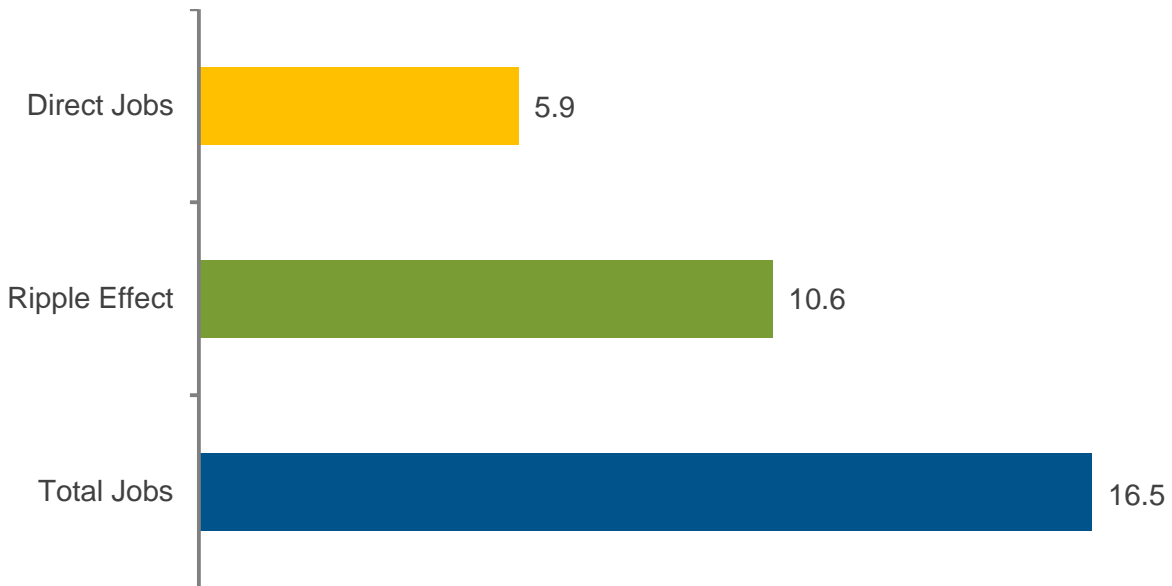
Chart 6.8: Percent of Total Regional Employment⁽¹⁾ by Hospitals, 2016



Source: Analysis of American Hospital Association 2016 Annual Survey data and 2016 total non-farm employment data from the Bureau of Labor Statistics.

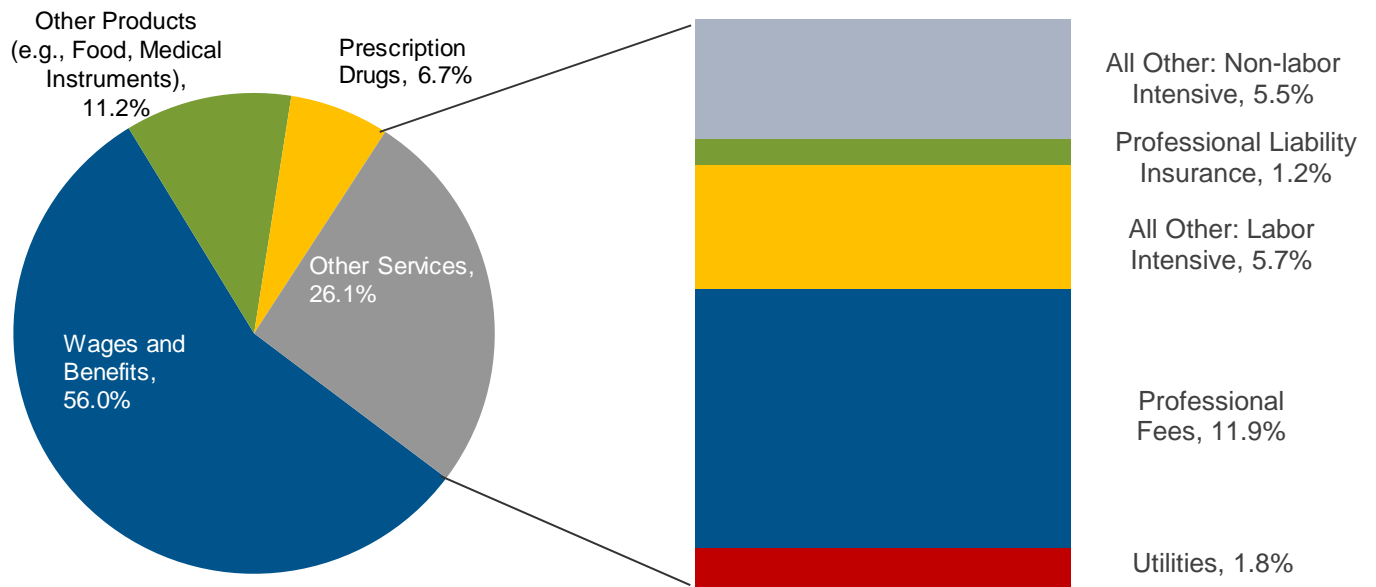
(1) Does not include farm employment.

Chart 6.9: Impact of Community Hospitals on U.S. Jobs (in millions), 2016



Source: Analysis, using BEA RIMS-II (1997/2006) multipliers, released in 2008, applied to 2016 American Hospital Association Annual Survey data. Note: Multipliers released in 2010 and subsequent years no longer include the national level multipliers needed for this chart. The sum of the direct and ripple effect may be less than or greater than the total contribution due to rounding.

Chart 6.10: Percent of Costs by Category in the Inpatient Prospective Payment System Hospital Market Basket, 2016



Source: AHA analysis of Centers for Medicare and Medicaid Services data, using base year 2014 weights.

(1) Does not include capital.

(2) Includes postage and telephone expenses.

Note: Base year 2014 Inpatient Prospective Payment System Market Basket weights do not incorporate impact of prescription drug price growth after the measurement period.

Chart 6.11: Hospital Impact on Sectors of the U.S. Economy
(in \$ billions), 2016

Industry	Economic Impact
Health care and social assistance	\$1,044.8
Manufacturing	\$444.9
Real estate and rental and leasing	\$281.3
Finance and insurance	\$189.8
Professional, scientific and technical services	\$123.4
Retail trade	\$121.3
Wholesale trade	\$97.2
Information	\$97.2
Transportation and warehousing	\$92.5
Administrative and waste management services	\$92.0
Accommodation and food services	\$76.3
Other services	\$74.4
Management of companies and enterprises	\$59.7
Utilities	\$52.8
Agriculture, forestry, fishing and hunting	\$43.6
Educational services	\$23.9
Arts, entertainment, and recreation	\$21.2
Mining	\$18.8
Construction	\$14.7
Total⁽¹⁾	\$2,969.9

Source: Analysis, using BEA RIMS-II (1997/2006) multipliers, released in 2008, applied to 2016 American Hospital Association Annual Survey data. Note: Multipliers released in 2010 and subsequent years no longer include the national level multipliers needed for this chart.

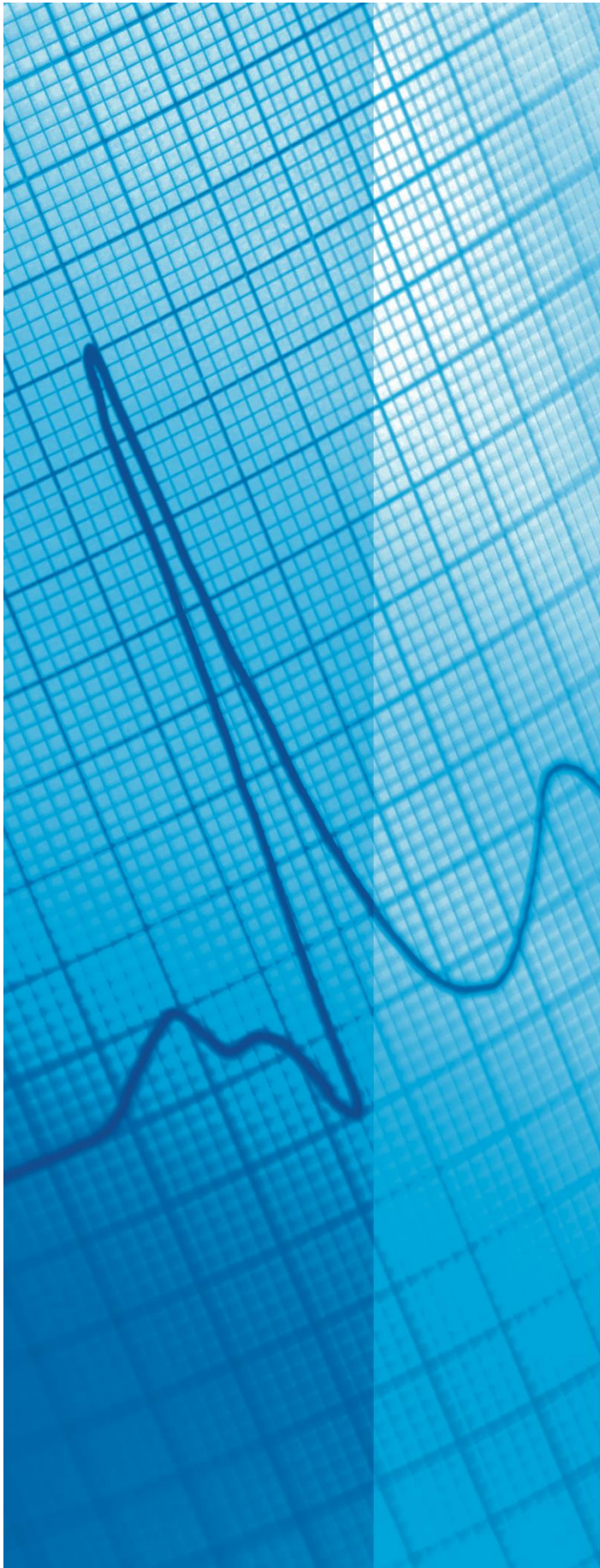
⁽¹⁾ Industries may not sum to total due to rounding.

Chart 6.12: Impact of Community Hospitals on U.S. Economy; All States, DC, and Total U.S., 2016

State Name	Number of Hospital Jobs (FT and PT)	Multiplier for Employment	Effect of Hospital Jobs on Total Jobs in State Economy	Percent of Total Employment Supported by Hospital Employment	Hospital Payroll and Benefits (\$ millions)	Multiplier for Earnings	Effect of Hospital Payroll and Benefits on Total Labor Income (\$ millions)	Hospital Expenditures (\$ millions)	Multiplier for Output	Effect of Hospital Expenditures on Total State Economic Output (\$ millions)
Alabama	91,054	2.1169	192,752	9.63%	\$4,977	1.7037	\$8,480	\$10,824	1.9624	\$21,241
Alaska	13,330	1.8375	24,494	7.90%	\$1,169	1.5034	\$1,758	\$2,291	1.6847	\$3,860
Arizona	89,094	2.3604	210,297	7.53%	\$6,317	1.8444	\$11,651	\$14,098	2.1440	\$30,227
Arkansas	51,992	1.9245	100,059	8.18%	\$3,022	1.6036	\$4,846	\$6,640	1.8265	\$12,127
California	544,508	2.2946	1,249,428	7.40%	\$50,360	1.8917	\$95,266	\$102,995	2.2403	\$230,740
Colorado	81,072	2.4431	198,067	7.46%	\$6,048	1.9477	\$11,780	\$13,248	2.3088	\$30,587
Connecticut	70,302	2.0148	141,644	8.52%	\$5,297	1.7206	\$9,114	\$11,387	2.0060	\$22,841
Delaware	22,627	2.0209	45,727	10.23%	\$1,829	1.6055	\$2,936	\$3,247	1.8608	\$6,042
District of Columbia	27,922	1.4004	39,102	4.97%	\$2,339	1.2775	\$2,988	\$4,503	1.3038	\$5,871
Florida	311,016	2.3749	738,632	8.55%	\$21,462	1.8666	\$40,060	\$47,057	2.1695	\$102,090
Georgia	157,773	2.4712	389,889	8.77%	\$10,512	1.9637	\$20,643	\$23,013	2.3259	\$53,526
Hawaii	19,283	2.1304	41,081	6.28%	\$1,781	1.6559	\$2,949	\$3,556	1.9130	\$6,803
Idaho	33,697	2.1372	72,017	10.09%	\$2,339	1.6109	\$3,768	\$4,456	1.8100	\$8,065
Illinois	246,394	2.3903	588,956	9.91%	\$16,912	2.0034	\$33,881	\$37,012	2.4119	\$89,270
Indiana	130,484	2.1345	278,518	9.10%	\$8,977	1.8110	\$16,257	\$20,474	2.1338	\$43,686
Iowa	70,772	1.9560	138,430	8.94%	\$4,401	1.6286	\$7,167	\$8,992	1.8602	\$16,726
Kansas	60,858	2.0441	124,400	8.94%	\$3,941	1.7094	\$6,736	\$7,849	2.0112	\$15,786
Kentucky	85,992	2.0919	179,887	9.50%	\$5,521	1.7301	\$9,551	\$12,662	2.0211	\$25,591
Louisiana	94,110	2.0276	190,817	9.78%	\$5,432	1.6743	\$9,095	\$12,494	1.8915	\$23,632
Maine	38,105	2.2283	84,909	14.11%	\$2,791	1.7339	\$4,840	\$5,281	1.9861	\$10,489
Maryland	103,951	2.0861	216,852	8.13%	\$7,303	1.7612	\$12,862	\$15,584	2.0473	\$31,904
Massachusetts	189,037	2.1807	412,233	11.65%	\$13,247	1.8146	\$24,037	\$28,226	2.1216	\$59,884
Michigan	222,605	2.2154	493,159	11.42%	\$14,739	1.8037	\$26,585	\$30,657	2.0894	\$64,055
Minnesota	154,540	2.3259	359,445	12.44%	\$9,789	1.8864	\$18,465	\$18,652	2.2206	\$41,418
Mississippi	59,775	1.9399	115,958	10.09%	\$3,503	1.5859	\$5,555	\$7,206	1.8060	\$13,015
Missouri	143,644	2.2544	323,831	11.43%	\$9,724	1.8175	\$17,673	\$21,356	2.1243	\$45,366
Montana	27,013	1.9503	52,683	11.36%	\$1,681	1.5636	\$2,628	\$3,279	1.7451	\$5,722
Nebraska	44,263	2.0544	90,934	9.06%	\$2,873	1.7231	\$4,951	\$5,924	1.9779	\$11,718
Nevada	28,824	2.1626	62,335	4.63%	\$2,428	1.6382	\$3,977	\$5,316	1.8644	\$9,912
New Hampshire	33,076	2.0361	67,346	10.08%	\$2,623	1.7486	\$4,587	\$4,815	1.9749	\$9,508
New Jersey	150,408	2.2622	340,253	8.37%	\$11,300	1.9016	\$21,488	\$22,540	2.2750	\$51,278
New Mexico	31,731	2.0955	66,492	8.05%	\$2,394	1.5849	\$3,793	\$5,292	1.7803	\$9,421
New York	454,001	1.9964	906,368	9.68%	\$41,492	1.6903	\$70,133	\$75,133	2.0211	\$151,851
North Carolina	174,235	2.3094	402,378	9.15%	\$11,473	1.8634	\$21,378	\$25,492	2.1928	\$55,900
North Dakota	24,913	1.8785	46,799	11.26%	\$1,914	1.5512	\$2,969	\$3,765	1.7483	\$6,582
Ohio	298,371	2.3361	697,024	12.83%	\$21,181	1.8746	\$39,705	\$42,234	2.2092	\$93,304
Oklahoma	56,839	2.1148	120,203	7.26%	\$3,606	1.7331	\$6,250	\$8,470	1.9833	\$16,799
Oregon	64,984	2.2213	144,349	7.73%	\$5,622	1.7097	\$9,611	\$11,399	1.9663	\$22,414
Pennsylvania	278,965	2.2505	627,811	10.68%	\$18,868	1.8929	\$35,716	\$42,325	2.2485	\$95,167
Rhode Island	21,760	2.0485	44,575	9.22%	\$1,813	1.6847	\$3,054	\$3,502	1.9391	\$6,792
South Carolina	81,547	2.2435	182,951	8.82%	\$5,162	1.7876	\$9,227	\$11,487	2.0914	\$24,023
South Dakota	24,574	1.8300	44,970	10.57%	\$1,840	1.5532	\$2,858	\$3,499	1.7448	\$6,105
Tennessee	117,592	2.2749	267,510	8.95%	\$7,514	1.8992	\$14,271	\$16,875	2.2489	\$37,950
Texas	367,909	2.4915	916,645	7.47%	\$28,048	2.0172	\$56,579	\$62,211	2.4247	\$150,843
Utah	47,108	2.3614	111,241	7.55%	\$2,866	1.8805	\$5,390	\$6,580	2.2133	\$14,563
Vermont	17,022	1.9953	33,964	10.85%	\$1,344	1.6072	\$2,160	\$2,315	1.8000	\$4,167
Virginia	125,458	2.0950	262,835	6.75%	\$8,859	1.7427	\$15,439	\$19,593	2.0310	\$39,793
Washington	117,035	2.1358	249,963	7.50%	\$9,753	1.7220	\$16,795	\$20,918	1.9966	\$41,765
West Virginia	45,855	1.8645	85,497	11.67%	\$2,904	1.5373	\$4,464	\$6,179	1.7036	\$10,526
Wisconsin	120,528	2.1030	253,470	8.76%	\$8,525	1.7618	\$15,020	\$18,504	2.0338	\$37,633
Wyoming	10,311	1.7096	17,628	6.37%	\$785	1.4369	\$1,128	\$1,486	1.5917	\$2,365
United States*	5,878,259	2.8048	16,487,341	11.33%	\$430,597	2.4031	\$1,034,767	\$902,891	3.2896	\$2,970,150

Source: Analysis, using BEA RIMS-II (2007/2016) multipliers for hospital NAICS Code 622000, released 2018, applied to American Hospital Association Annual Survey data for 2016. Hospital jobs are total part time and full time jobs. Hospital labor income is defined as payroll plus benefits. The percent of total employment supported by direct and indirect hospital employment is based on 2016 BLS data. Expenditures are defined as total expenditures minus bad debt. In previous years, expenditures were defined as net patient revenue plus other operating revenue.

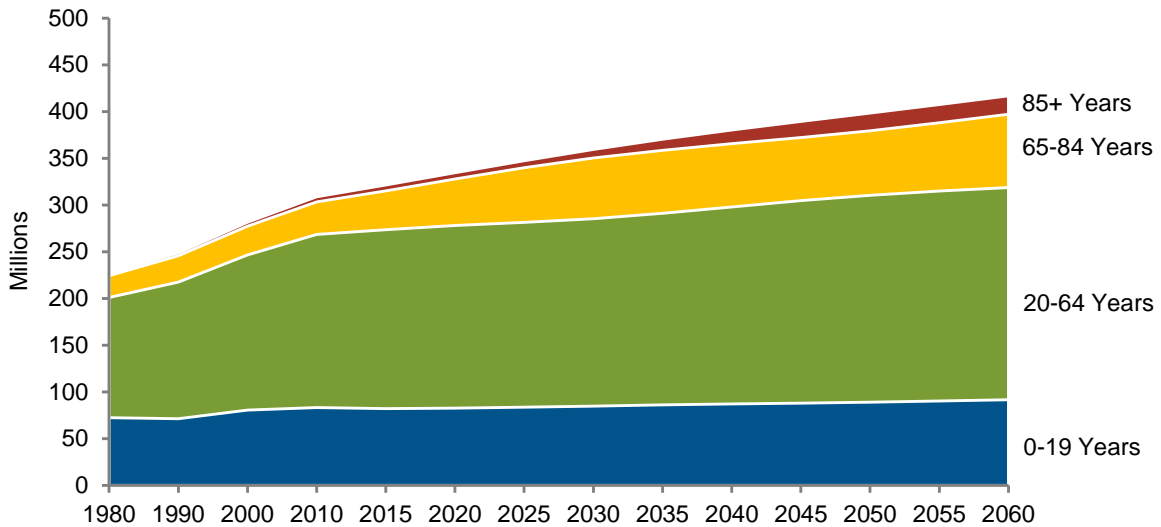
*Multipliers released in 2010 and subsequent years no longer include the national level multipliers needed for the U.S. summary row. BEA RIMS-II (1997/2006) multipliers released in 2008 and applied to 2015 AHA annual survey data were used instead.



CHAPTER 7

Community Health Indicators

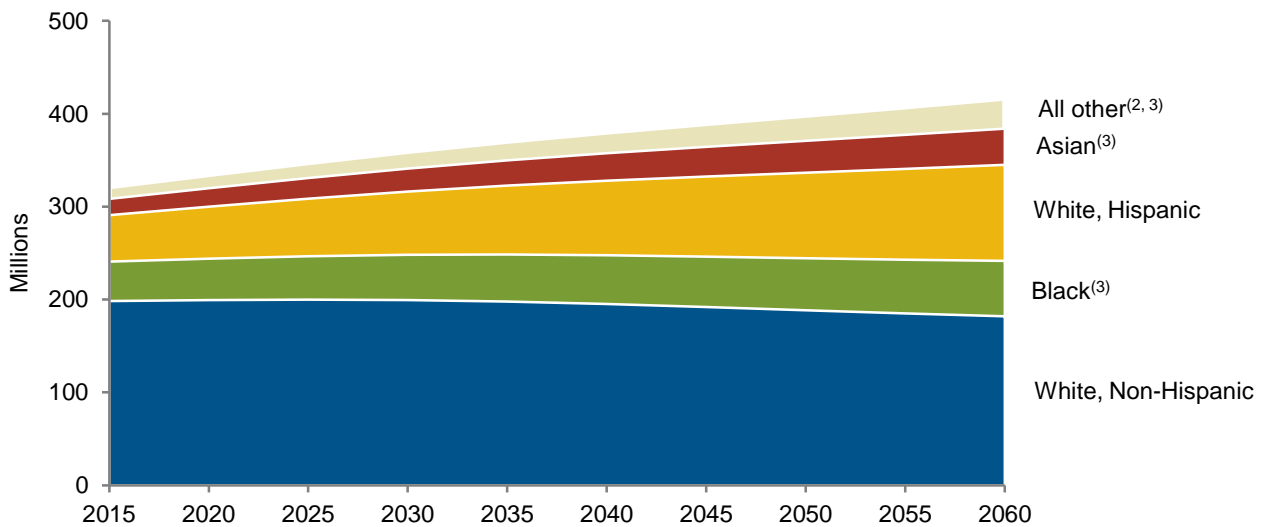
Chart 7.1: U.S. Population Trends and Projections by Age, 1980 – 2060⁽¹⁾



Source: U.S. Department of Commerce, Bureau of the Census. *Projections of the Population by Sex and Age for the United States: 2015-2060.*

⁽¹⁾ Years 2015 through 2060 are projections.

Chart 7.2: U.S. Population Trends and Projections by Race, 2015 – 2060⁽¹⁾



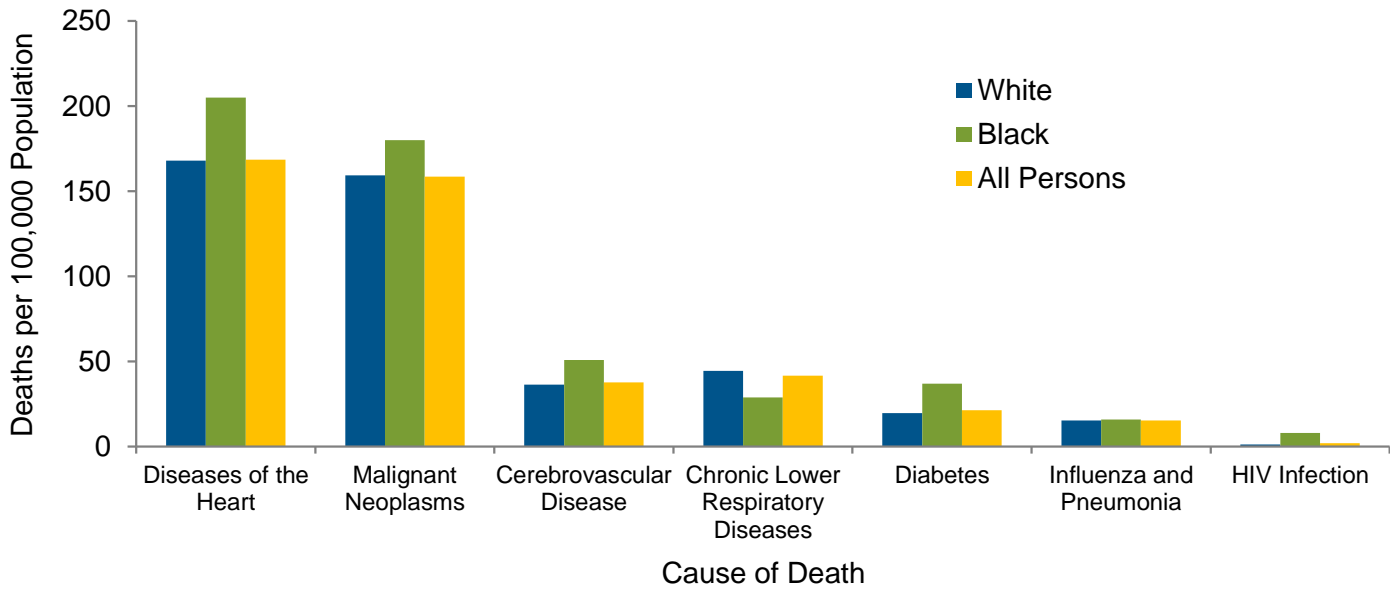
Source: U.S. Department of Commerce, Bureau of the Census. *Projections of the Population by Sex, Race, and Hispanic Origin for the United States: 2015-2060.*

⁽¹⁾ Years 2015 through 2060 are projections.

⁽²⁾ All other includes American Indian, Native Alaskan, Native Hawaiian, other Pacific Islander and two or more races.

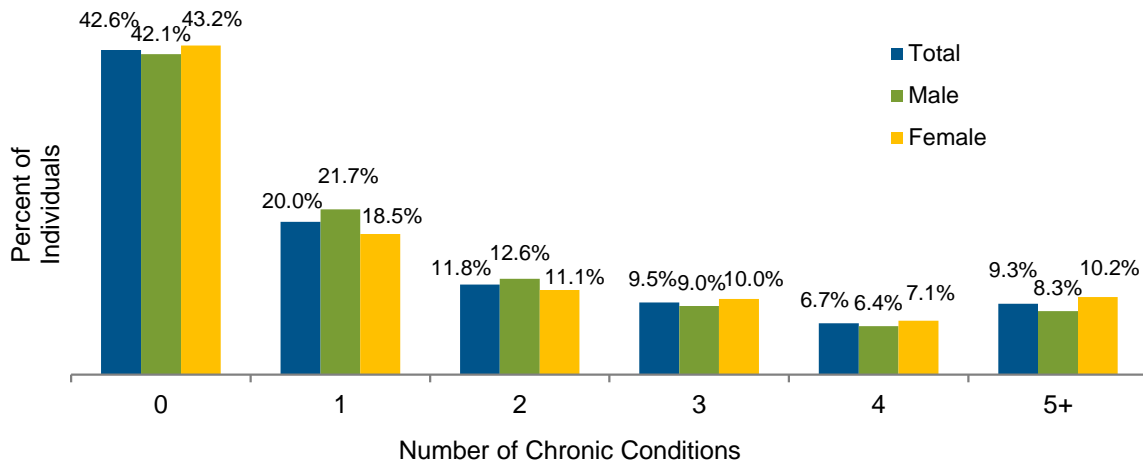
⁽³⁾ Black, Asian and all other categories include Hispanic and non-Hispanic individuals.

Chart 7.3: Age-adjusted Death Rates, Selected Causes, by Race, 2015



Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.
(1) Racial categories include individuals of both Hispanic and non-Hispanic origin.

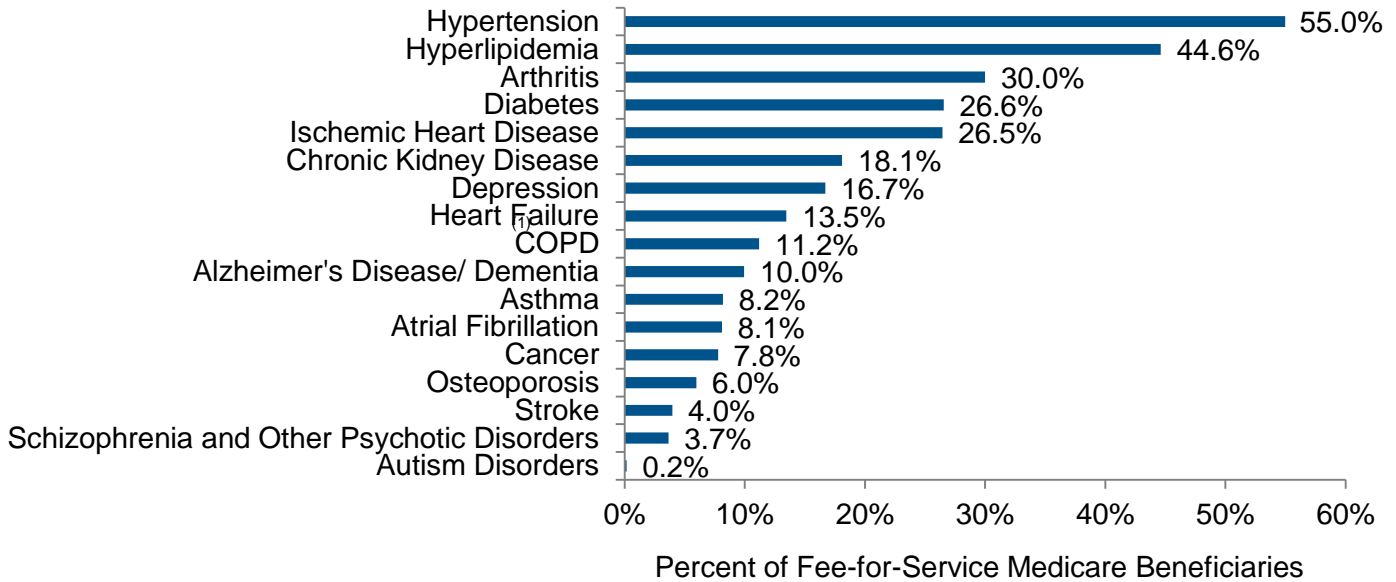
Chart 7.4: Percent of People with Chronic Conditions by Number and Sex,⁽¹⁾ 2013



Source: Analysis of 2013 Medical Expenditure Panel Survey data.

(1) The analysis was based on the following study: Anderson, G. (2010). *Chronic Care: Making the Case for Ongoing Care*. Johns Hopkins University and the Robert Wood Johnson Foundation. There were two distinct differences between this analysis and the study's methodologies. First, this analysis used the Chronic Conditions as defined by the Agency for Healthcare Research and Quality Medical Expenditure Panel Survey (MEPS) documentation. Second, it solely relied on MEPS 2013 data and did not use the two additional data sources that were referenced in the Anderson 2010 study (i.e., three opinion telephone surveys commissioned by the Partnership for Solutions and designed by Johns Hopkins and the 1996 Survey of Income and Program Participation data for characteristics of family caregivers).

Chart 7.5: Percent of Fee-for-Service Medicare Beneficiaries with Chronic Conditions, 2015

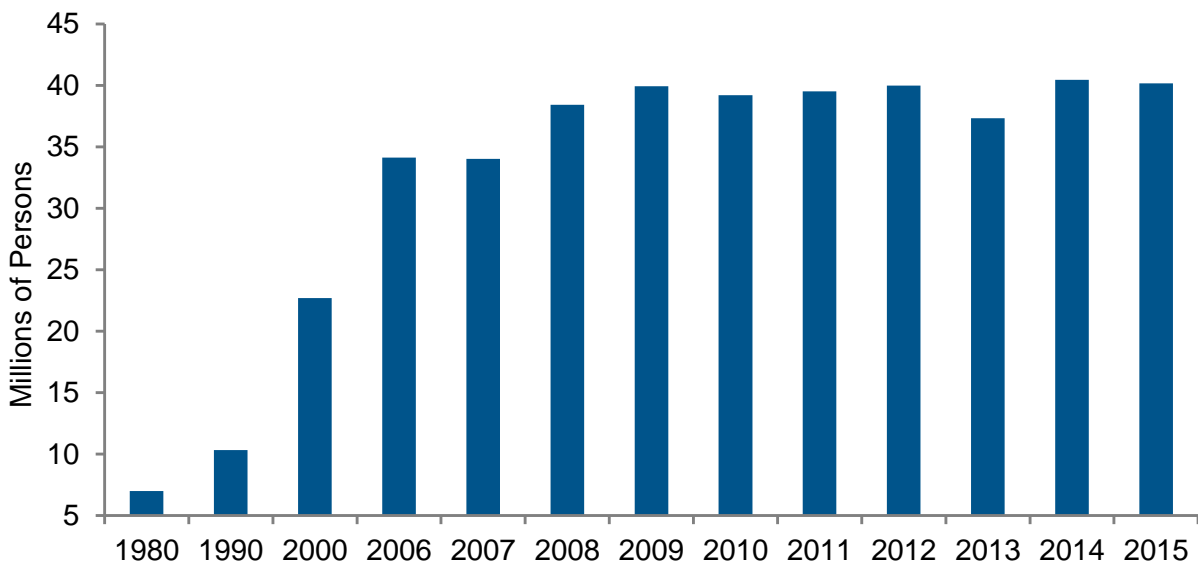


Source: Centers for Medicare & Medicaid Services. Medicare Chronic Condition Dashboard. Available at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/chronic-conditions-region/cc_region_dashboard.html

(1) Chronic obstructive pulmonary disease.

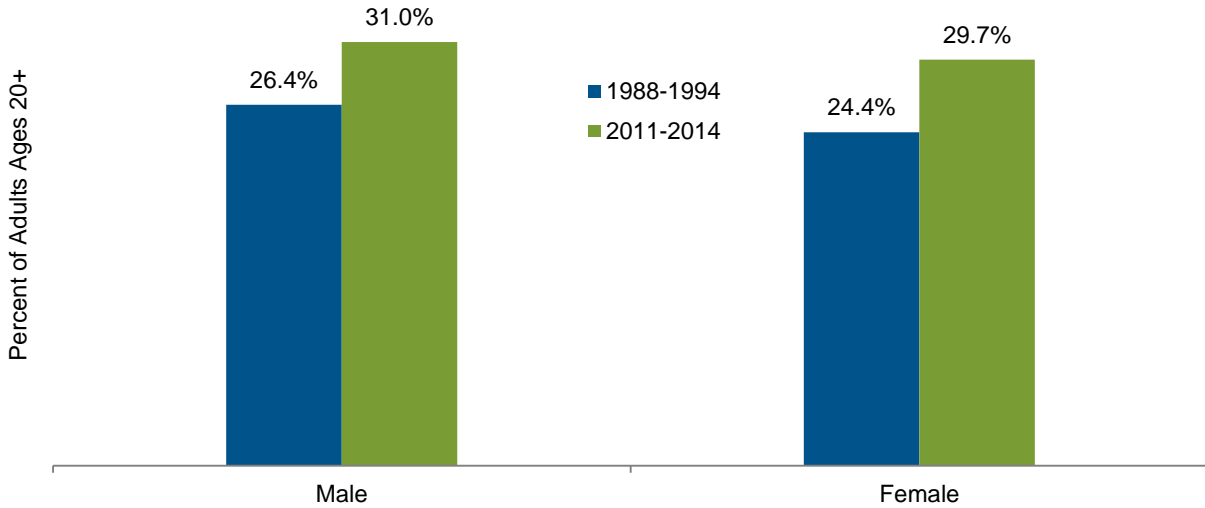
Previously Percent of People with Chronic Conditions by Type, 2006. Source: Anderson, G. (2010). *Chronic Care: Making the Case for Ongoing Care*. Johns Hopkins University and the Robert Wood Johnson Foundation.

Chart 7.6: Number of Persons with Asthma, 1980 – 2015



Source: Centers for Disease Control and Prevention (2002). *Surveillance of Asthma – United States, 1980-1999*. National Center for Health Statistics. National Health Interview Survey 2001, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 and 2015.

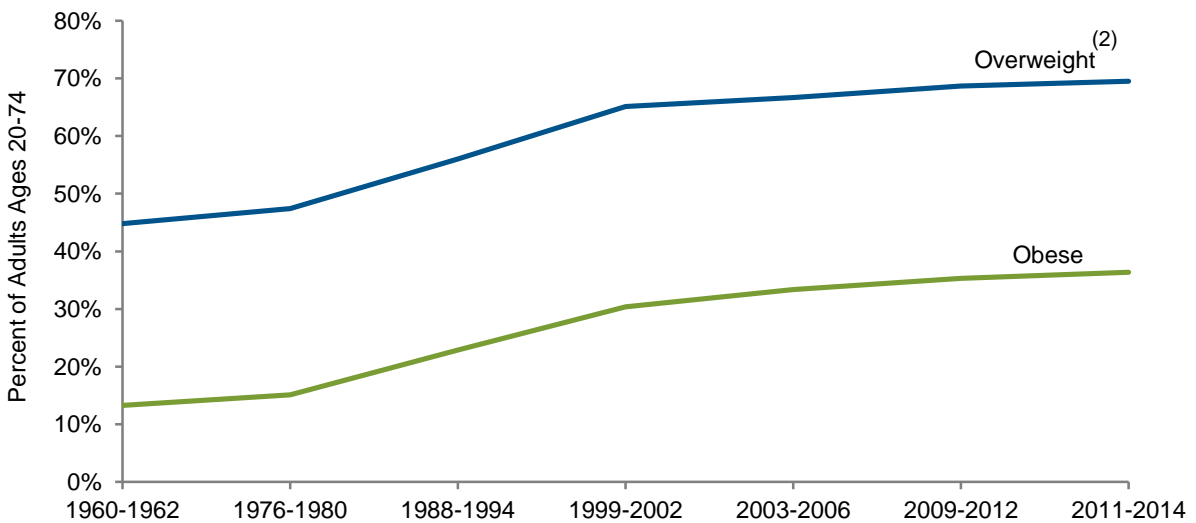
Chart 7.7: Percent of Adults with Hypertension by Sex,⁽¹⁾ 1988 – 1994 and 2011 – 2014



Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

⁽¹⁾ Data are age-adjusted to 2000 standard population

Chart 7.8: Percent of Adults Who Are Overweight and Obese,⁽¹⁾ 1960 – 2014

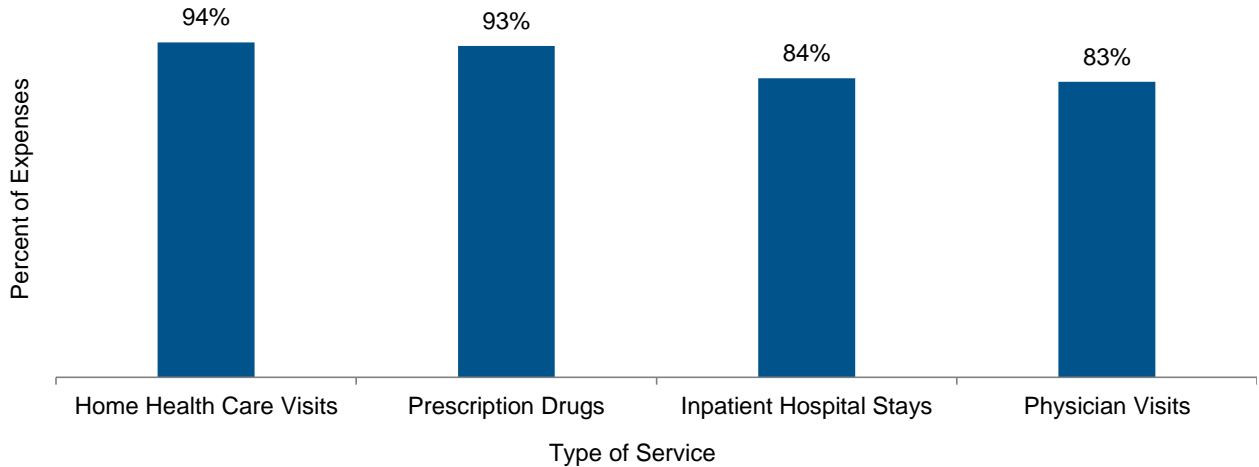


Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

⁽¹⁾ Data are age-adjusted to 2000 standard population.

⁽²⁾ Overweight includes obese.

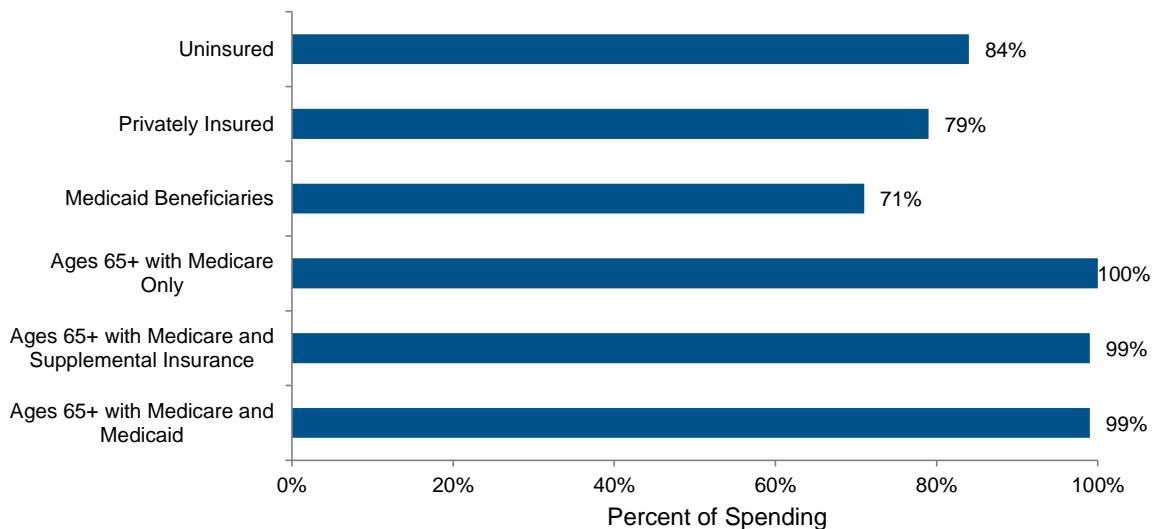
Chart 7.9: Percent of Expenses Used by People with Chronic Conditions by Service Type,⁽¹⁾ 2013



Source: Analysis of 2013 Medical Expenditure Panel Survey data.

⁽¹⁾ The analysis was based on the following study: Anderson, G. (2010). *Chronic Care: Making the Case for Ongoing Care*. Johns Hopkins University and the Robert Wood Johnson Foundation. There were two distinct differences between this analysis and the study's methodologies. First, this analysis used the Chronic Conditions as defined by the Agency for Healthcare Research and Quality Medical Expenditure Panel Survey (MEPS) documentation. Second, it solely relied on MEPS 2013 data and did not use the two additional data sources that were referenced in the Anderson 2010 study (i.e., three opinion telephone surveys commissioned by the Partnership for Solutions and designed by Johns Hopkins and the 1996 Survey of Income and Program Participation data for characteristics of family caregivers).

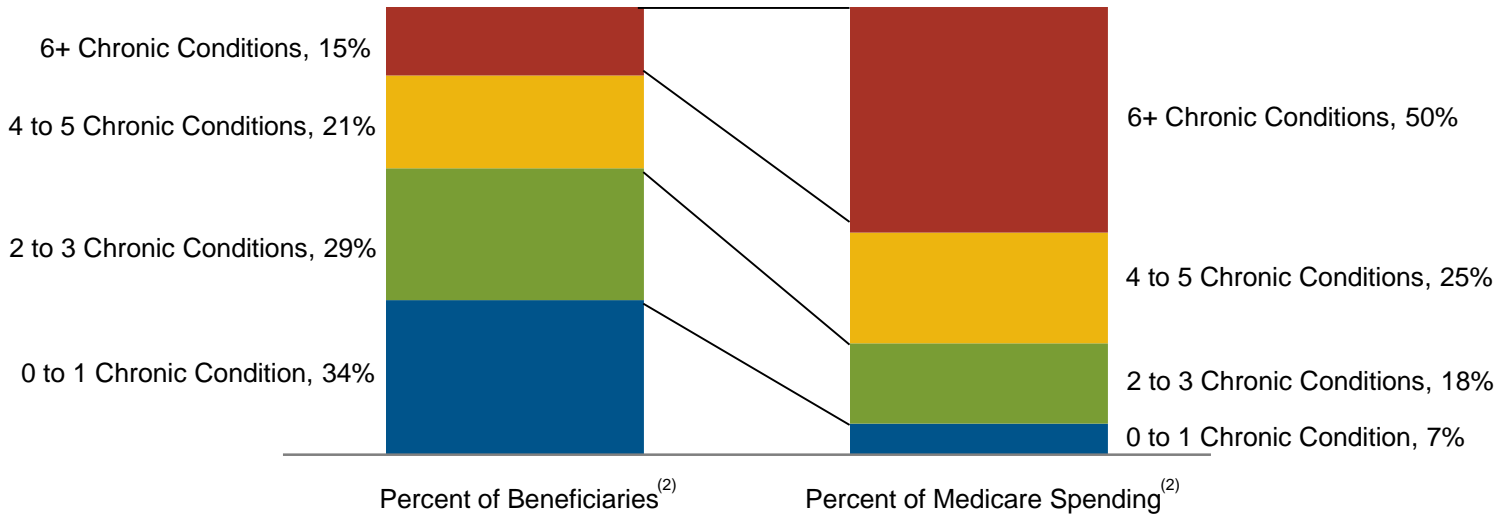
Chart 7.10: Percent of Spending for Individuals with Chronic Conditions by Insurance Status,⁽¹⁾ 2013



Source: Analysis of 2013 Medical Expenditure Panel Survey data.

⁽¹⁾ The analysis was based on the following study: Anderson, G. (2010). *Chronic Care: Making the Case for Ongoing Care*. Johns Hopkins University and the Robert Wood Johnson Foundation. There were two distinct differences between this analysis and the study's methodologies. First, this analysis used the Chronic Conditions as defined by the Agency for Healthcare Research and Quality Medical Expenditure Panel Survey (MEPS) documentation. Second, it solely relied on MEPS 2013 data and did not use the two additional data sources that were referenced in the Anderson 2010 study (i.e., three opinion telephone surveys commissioned by the Partnership for Solutions and designed by Johns Hopkins and the 1996 Survey of Income and Program Participation data for characteristics of family caregivers).

Chart 7.11: Percent of Medicare Fee-for-Service Beneficiaries vs. Percent of Medicare Spending, by Number of Chronic Conditions,⁽¹⁾ 2015



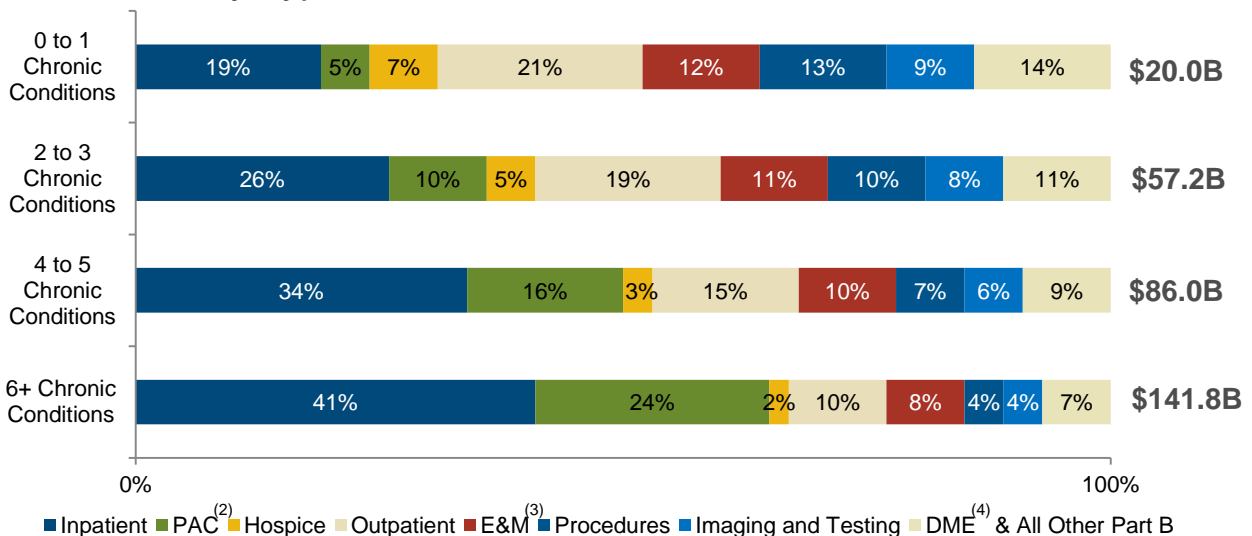
Source: Centers for Medicare & Medicaid Services. Medicare Chronic Condition Dashboard. Data released 2017. Available at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/chronic-conditions-region/cc_region_dashboard.html.

⁽¹⁾ Includes 15 CMS identified chronic conditions.

⁽²⁾ Percentages were rounded, so they do not add to 100 percent.

Previously *Percent of Population vs. Percent of Spending, by Number of Chronic Conditions, 2006*. Source: Anderson, G. (2010). *Chronic Care: Making the Case for Ongoing Care*. Johns Hopkins University and the Robert Wood Johnson Foundation.

Chart 7.12: Percent of Medicare Fee-for-Service Spending on Chronic Conditions, by Type of Service,⁽¹⁾ 2010



Source: Centers for Medicare & Medicaid Services. *Chronic Conditions Among Medicare Beneficiaries Chartbook 2012*.

Available at: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/Downloads/2012Chartbook.pdf>.

⁽¹⁾ Includes 15 CMS identified chronic conditions.

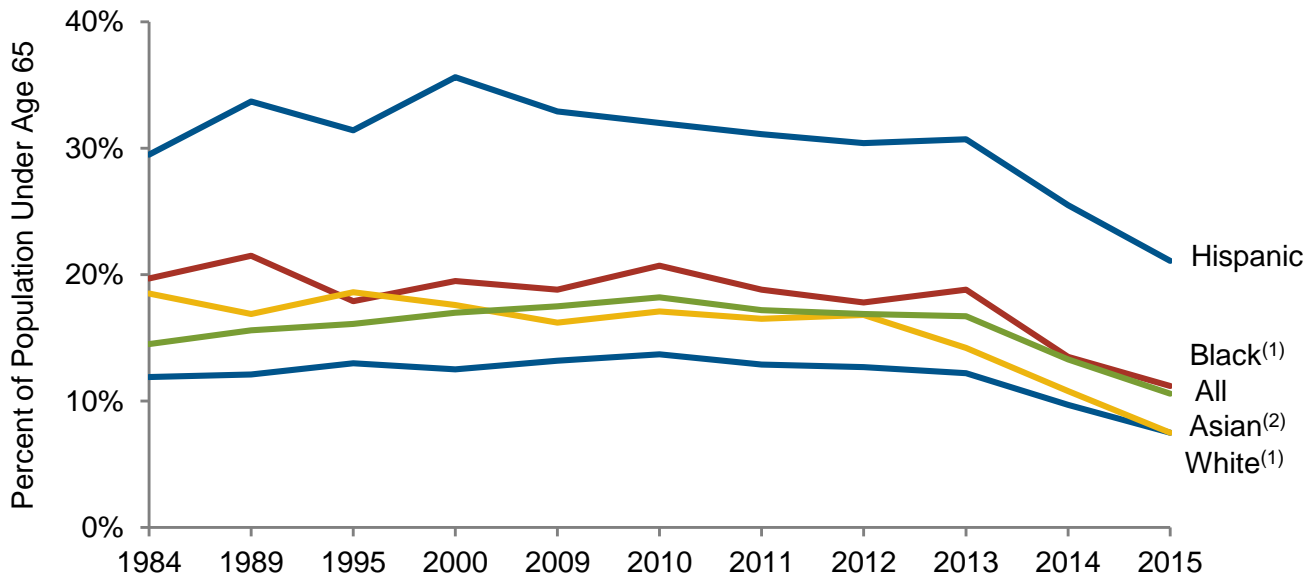
⁽²⁾ PAC = Post-Acute Care.

⁽³⁾ E&M = Evaluation & Management.

⁽⁴⁾ DME = Durable Medical Equipment.

Chart added in *Chartbook 2013*. Replaced: *Working Age Adults with Activity Limitations Due to Chronic Conditions, by Condition and Age, 2006-2007*. Source: National Center for Health Statistics. (2010). *Health, United States, 2009*. Hyattsville, MD.

Chart 7.13: Percent Uninsured by Race, 1984 – 2015

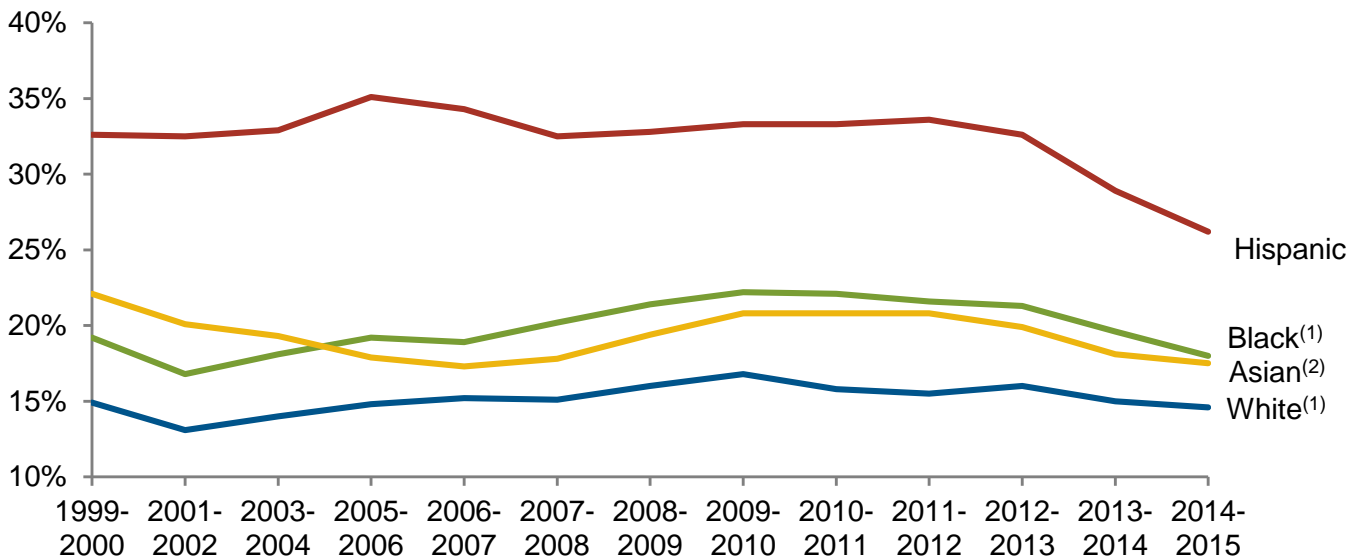


Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Includes individuals of non-Hispanic origin only.

(2) Includes individuals of Hispanic and non-Hispanic origin.

Chart 7.14: Percent of Adults with No Usual Source of Care by Race, 1997 – 2015

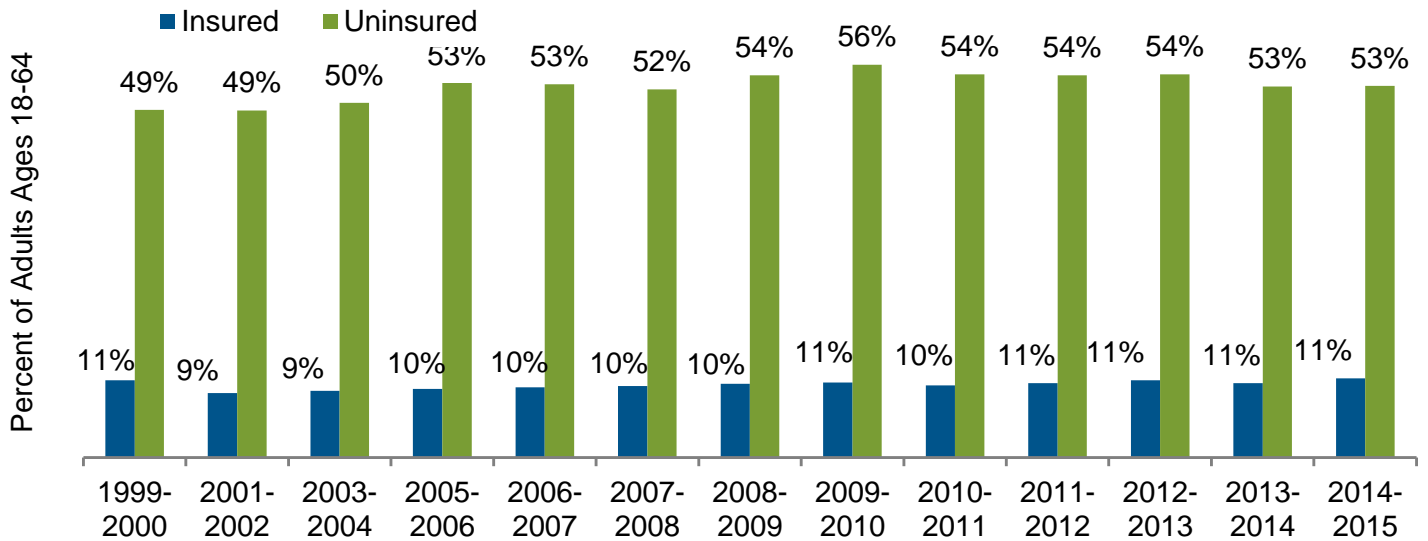


Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Includes individuals of non-Hispanic origin only.

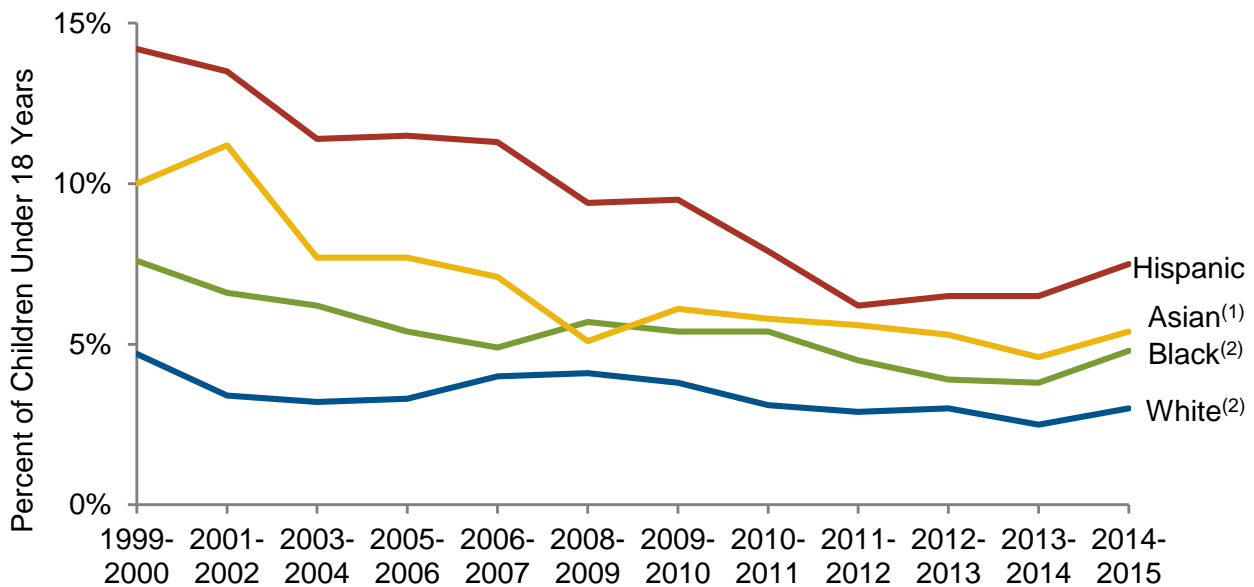
(2) Includes individuals of Hispanic and non-Hispanic origin.

Chart 7.15: Percent of Adults with No Usual Source of Care by Insurance Status, 1999 – 2015



Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

Chart 7.16: Percent of Children with No Usual Source of Care by Race, 1999 – 2015

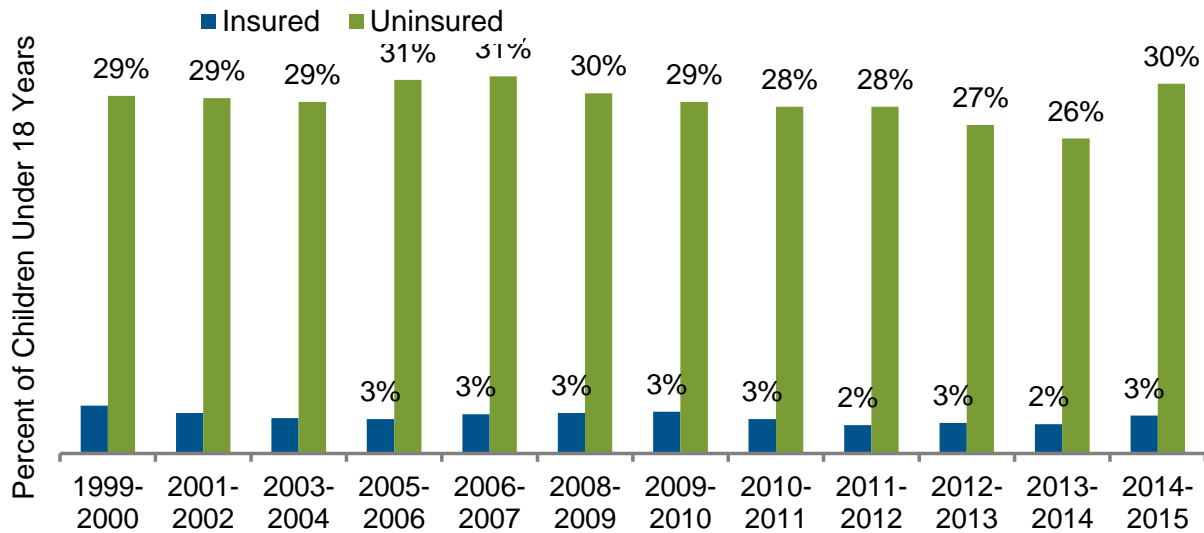


aSource: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

⁽¹⁾ Includes individuals of Hispanic and non-Hispanic origin.

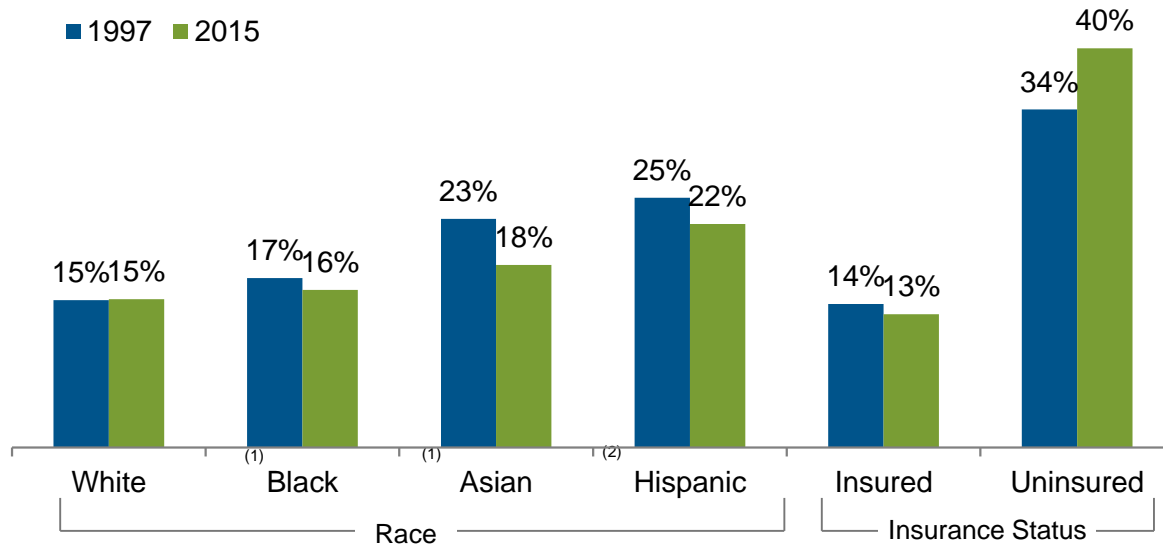
⁽²⁾ Includes individuals of non-Hispanic origin only.

Chart 7.17: Percent of Children with No Usual Source of Care by Insurance Status, 1999 – 2015



Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

Chart 7.18: Percent of Individuals with No Health Care Visits by Race, Insurance Status, 1997 and 2015

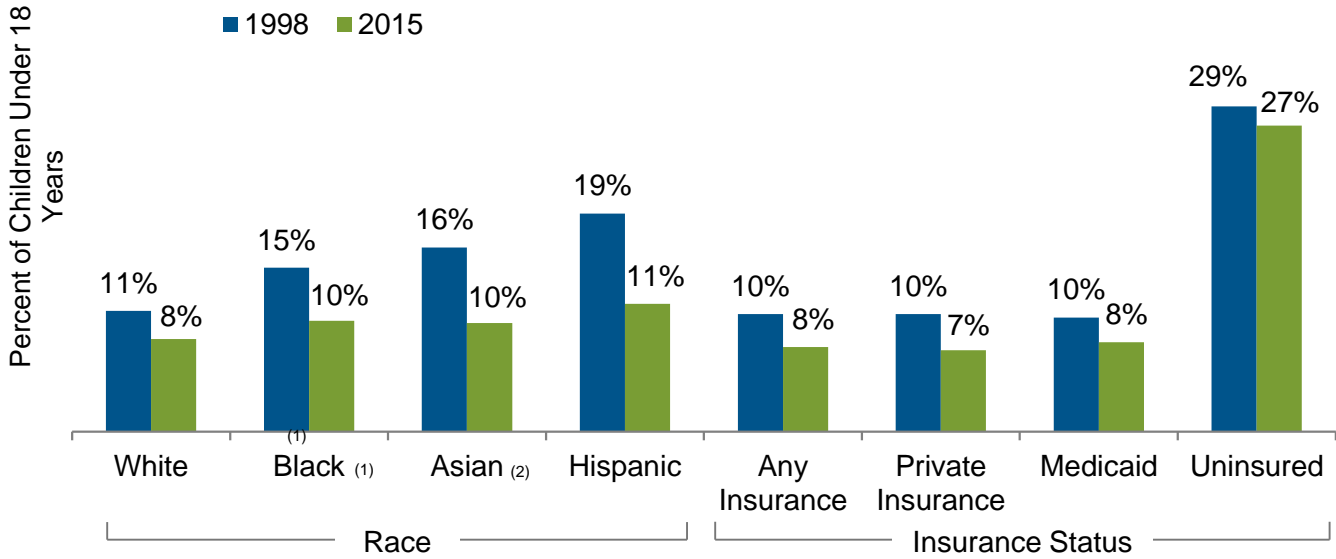


Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

⁽¹⁾ Includes individuals of non-Hispanic origin only.

⁽²⁾ Includes individuals of Hispanic and non-Hispanic origin.

Chart 7.19: Percent of Children with No Health Care Visits by Race, Insurance Status, 1998 and 2015

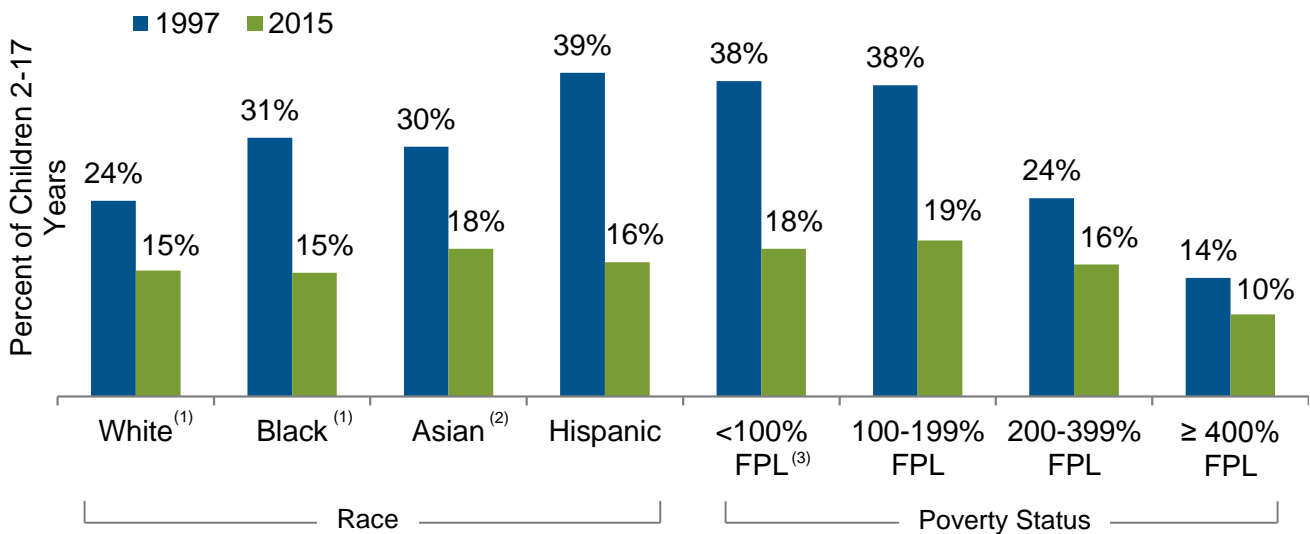


Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Includes individuals of non-Hispanic origin only.

(2) Includes individuals of Hispanic and non-Hispanic origin.

Chart 7.20: Percent of Children with No Dental Visits by Race, Poverty Status, 1997 and 2015



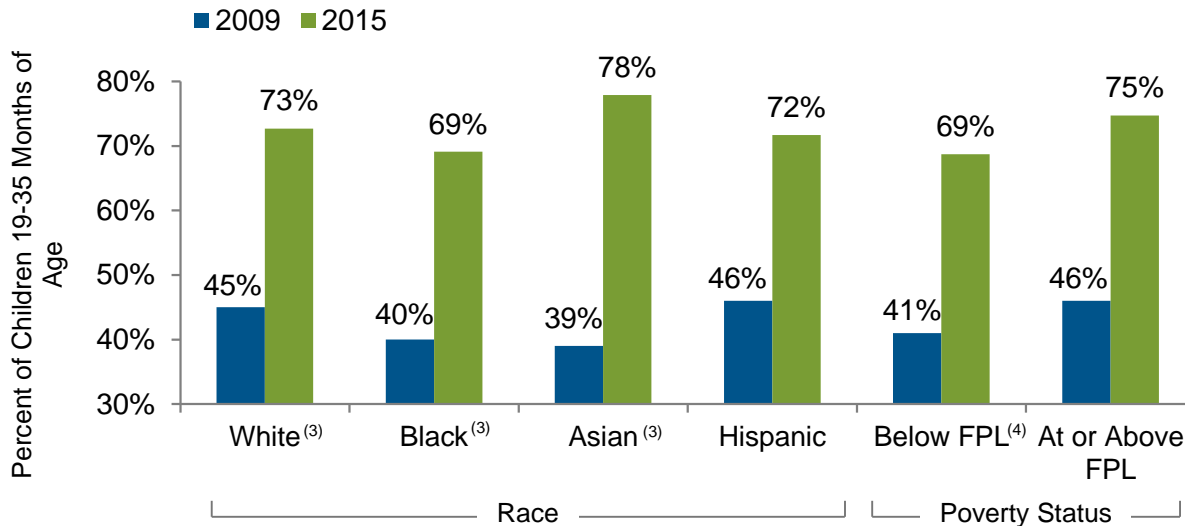
Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Includes individuals of non-Hispanic origin only.

(2) Includes individuals of Hispanic and non-Hispanic origin.

(3) FPL = federal poverty level.

Chart 7.21: Percent of Children Vaccinated⁽¹⁾ by Race, Poverty Status, 2009⁽²⁾ and 2015



Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

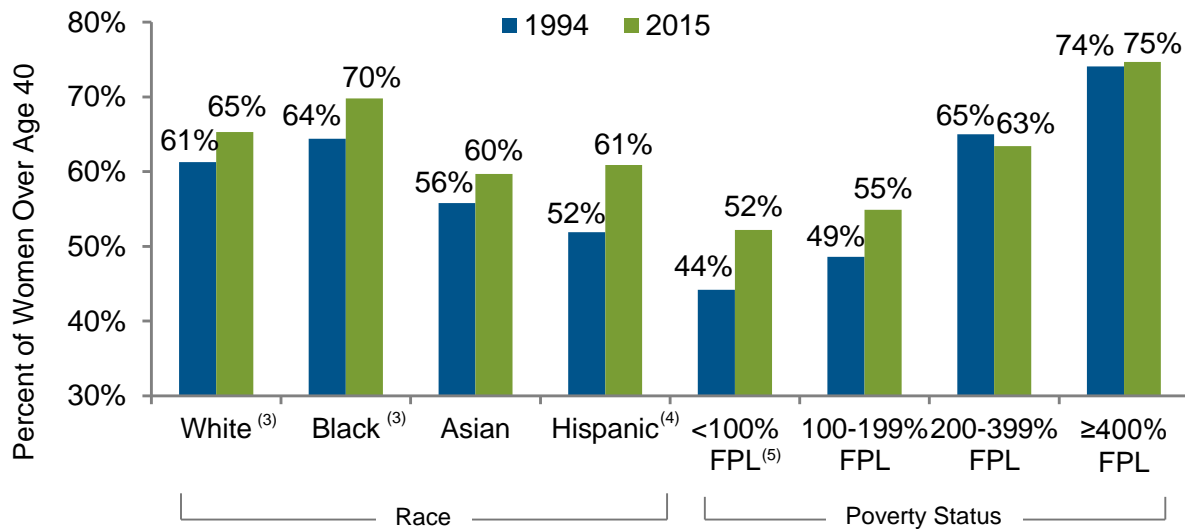
(1) Vaccinations include DTP, Polio, MMR, Hib, Hepatitis B, Varicella and PCV.

(2) Classification methodology changed for the Influenza Type B vaccine—before January 2009, NIS did not distinguish between Hib vaccine product types, so children who received three doses of the vaccine that required four doses were misclassified as fully vaccinated.

(3) Includes individuals of non-Hispanic origin only.

(4) FPL = federal poverty level.

Chart 7.22: Percent of Women⁽¹⁾ Receiving Mammography⁽²⁾ by Race, Poverty Status, 1994 and 2015



Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Women over 40 years of age.

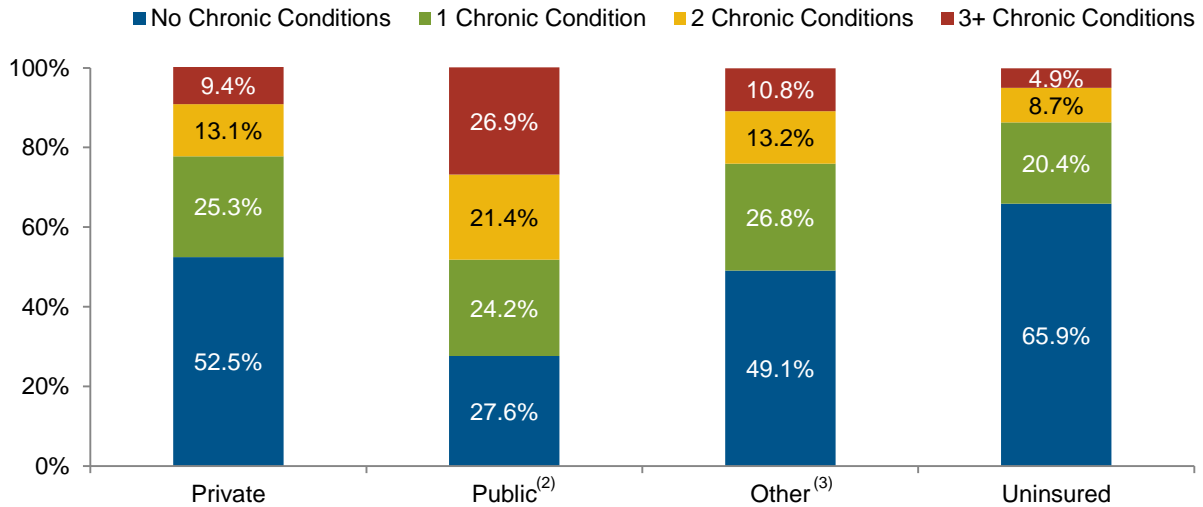
(2) Indicates use of mammography in two years prior to 1994 and 2013.

(3) Includes individuals of non-Hispanic origin only.

(4) Includes individuals of Hispanic and non-Hispanic origin.

(5) FPL = federal poverty level.

Chart 7.23: Percent of Adults⁽¹⁾ with Chronic Conditions by Insurance Type, 2012



Source: Centers for Disease Control and Prevention. Multiple Chronic Conditions Among US Adults: A 2012 Update. Available at: http://www.cdc.gov/pcd/issues/2014/13_0389.htm.

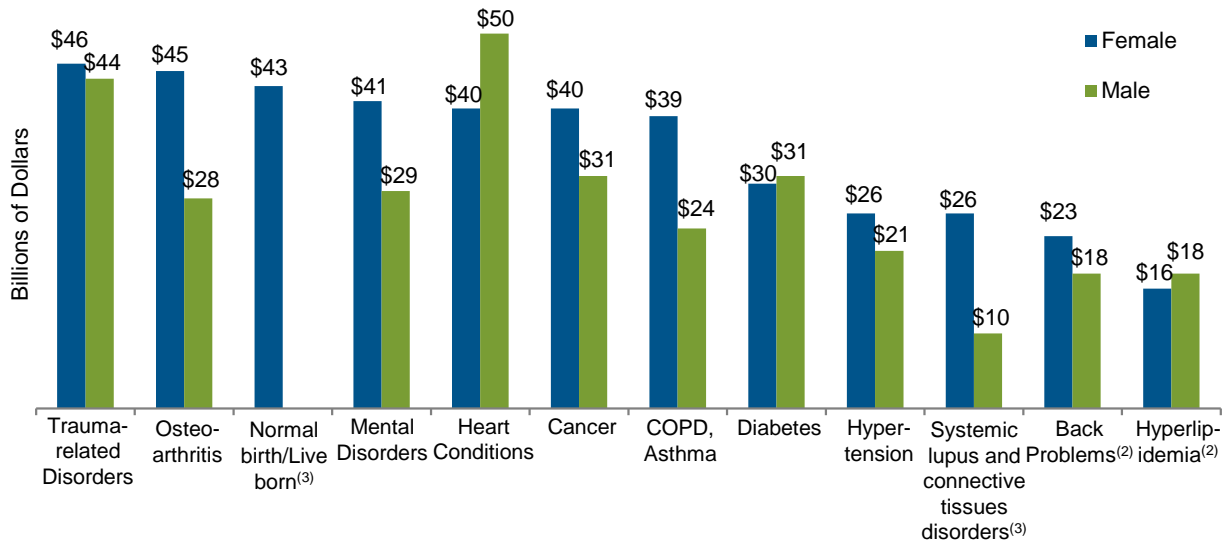
(1) Includes individuals 18 years of age and above.

(2) Public health insurance includes Medicaid, Children's Health Insurance Program and Medicare.

(3) Other health insurance includes state-sponsored health plans, other government programs and military health plans.

Chart added in Chartbook 2016.

Chart 7.24: Total Expenditures on Top 10 Most Costly Conditions Among Adults⁽¹⁾ by Sex, 2013



Source: Agency for Healthcare Research and Quality. Center for Financing, Access, and Cost Trends. Household Component of the Medical Expenditure Panel Survey, 2013. Available at: <https://meps.ahrq.gov/mepsweb/>.

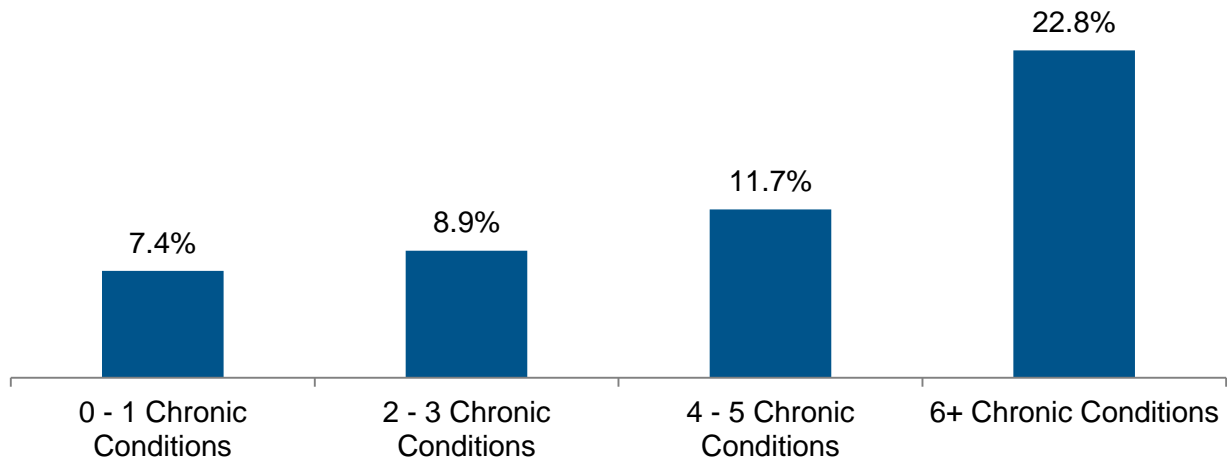
(1) Only includes adults ages 18 and older.

(2) Hyperlipidemia and Back Problems are not included among the top ten most costly conditions for females.

(3) Normal birth/live born and systemic lupus and connective tissues disorders are not included among the top ten most costly conditions for males.

Chart added in Chartbook 2016.

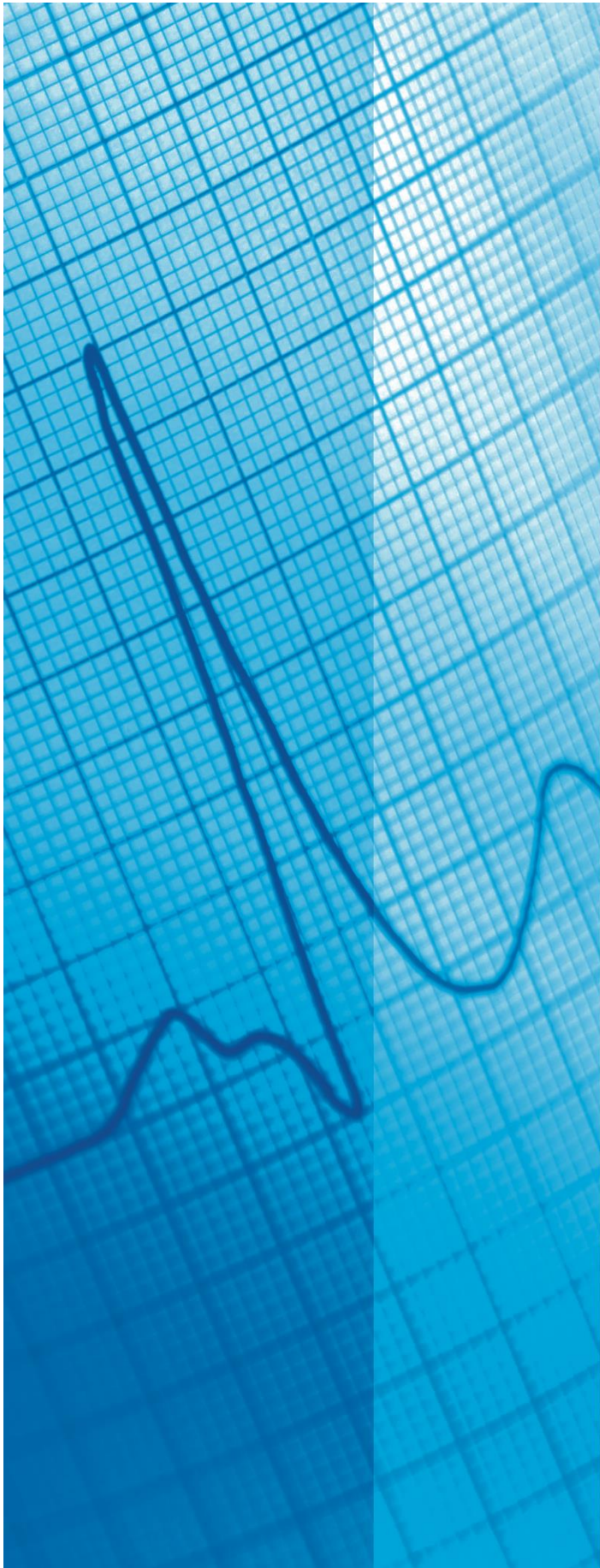
Chart 7.25: 30-Day Readmission Rate for Medicare Fee-for-Service Beneficiaries by Number of Chronic Conditions,⁽¹⁾ 2015



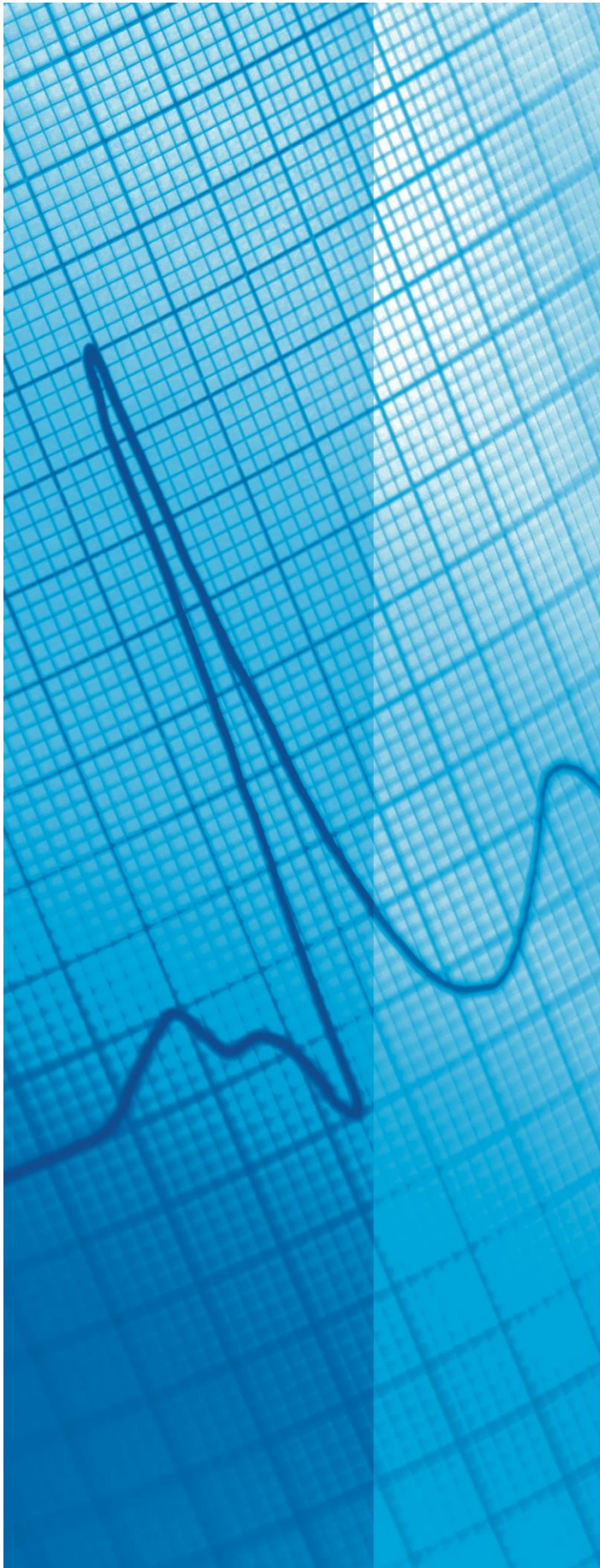
Source: Centers for Medicare & Medicaid Services. Medicare Chronic Condition Dashboard. Data released 2017. Available at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/chronic-conditions-region/cc_region_dashboard.html

⁽¹⁾ Includes 15 CMS identified chronic conditions.

Chart added in Chartbook 2013.



APPENDICES



APPENDIX 1

Supplementary Data Tables
Trends in the Overall
Health Care Market

Table 1.1: Total National Health Expenditures, 1980 – 2016⁽¹⁾

Year	Total National Health Expenditures				Prescription Drugs Total	
	Total		Per Capita		Nominal Dollars (billions)	Real Dollars ⁽²⁾ (billions)
	Nominal Dollars (billions)	Real Dollars ⁽²⁾ (billions)	Nominal Dollars	Real Dollars ⁽²⁾		
1980	\$255.3	\$255.3	\$1,110	\$1,110	\$12.0	\$12.0
1981	\$296.2	\$268.5	\$1,271	\$1,152	\$13.4	\$12.1
1982	\$334.0	\$285.2	\$1,421	\$1,214	\$15.0	\$12.8
1983	\$367.8	\$304.3	\$1,552	\$1,284	\$17.3	\$14.3
1984	\$405.0	\$321.2	\$1,695	\$1,344	\$19.6	\$15.6
1985	\$442.9	\$339.2	\$1,830	\$1,402	\$21.8	\$16.7
1986	\$474.7	\$356.9	\$1,945	\$1,463	\$24.3	\$18.3
1987	\$516.5	\$374.7	\$2,100	\$1,523	\$26.9	\$19.5
1988	\$579.3	\$403.5	\$2,336	\$1,627	\$30.6	\$21.3
1989	\$644.8	\$428.5	\$2,569	\$1,707	\$34.8	\$23.1
1990	\$721.4	\$454.8	\$2,840	\$1,791	\$40.3	\$25.4
1991	\$788.1	\$476.8	\$3,066	\$1,855	\$44.4	\$26.9
1992	\$854.1	\$501.6	\$3,285	\$1,929	\$47.0	\$27.6
1993	\$916.6	\$522.7	\$3,485	\$1,987	\$49.6	\$28.3
1994	\$967.2	\$537.8	\$3,636	\$2,022	\$53.0	\$29.5
1995	\$1,021.6	\$552.4	\$3,812	\$2,061	\$59.8	\$32.3
1996	\$1,074.4	\$564.3	\$3,965	\$2,082	\$68.1	\$35.8
1997	\$1,135.5	\$583.0	\$4,144	\$2,128	\$77.6	\$39.9
1998	\$1,202.0	\$607.6	\$4,339	\$2,194	\$88.5	\$44.7
1999	\$1,278.3	\$632.2	\$4,582	\$2,266	\$104.6	\$51.7
2000	\$1,369.1	\$655.1	\$4,855	\$2,323	\$121.0	\$57.9
2001	\$1,486.2	\$691.5	\$5,218	\$2,428	\$139.0	\$64.7
2002	\$1,628.6	\$746.0	\$5,666	\$2,595	\$157.9	\$72.3
2003	\$1,767.6	\$791.6	\$6,096	\$2,730	\$176.7	\$79.1
2004	\$1,895.7	\$826.9	\$6,479	\$2,826	\$192.8	\$84.1
2005	\$2,023.7	\$853.8	\$6,854	\$2,892	\$205.2	\$86.6
2006	\$2,156.2	\$881.3	\$7,232	\$2,956	\$224.1	\$91.6
2007	\$2,295.3	\$912.2	\$7,627	\$3,031	\$235.7	\$93.7
2008	\$2,399.1	\$918.2	\$7,897	\$3,022	\$241.5	\$92.4
2009	\$2,495.4	\$958.4	\$8,143	\$3,128	\$252.7	\$97.1
2010	\$2,598.8	\$982.0	\$8,412	\$3,179	\$253.1	\$95.6
2011	\$2,689.3	\$985.1	\$8,644	\$3,166	\$258.8	\$94.8
2012	\$2,797.3	\$1,003.9	\$8,924	\$3,203	\$259.2	\$93.0
2013	\$2,879.0	\$1,018.3	\$9,121	\$3,226	\$265.2	\$93.8
2014	\$3,026.2	\$1,053.3	\$9,515	\$3,312	\$298.0	\$103.7
2015	\$3,200.8	\$1,112.8	\$9,994	\$3,474	\$324.5	\$112.8
2016	\$3,337.2	\$1,145.7	\$10,348	\$3,553	\$328.6	\$112.8

Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

⁽²⁾ Expressed in 1980 dollars; adjusted using the overall Consumer Price Index for Urban Consumers.

Data for Charts 1.1, 1.3 and 1.10

Table 1.2: National Health Expenditures,⁽¹⁾ 1980 – 2025⁽²⁾

Year	Expenditures (billions)
1980	\$255.8
1990	\$724.3
2000	\$1,369.1
2001	\$1,486.2
2002	\$1,628.6
2003	\$1,767.6
2004	\$1,895.7
2005	\$2,023.7
2006	\$2,156.2
2007	\$2,295.3
2008	\$2,399.1
2009	\$2,495.4
2010	\$2,598.8
2011	\$2,689.3
2012	\$2,797.3
2013	\$2,879.0
2014	\$3,026.2
2015	\$3,200.8
2016	\$3,337.2
2017	\$3,539.3
2018	\$3,745.7
2019	\$3,965.5
2020	\$4,196.7
2021	\$4,441.8
2022	\$4,700.4
2023	\$4,972.2
2024	\$5,254.6
2025	\$5,548.8

Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

(1) Years 2015 – 2025 are projections.

(2) CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Data for Chart 1.7



Table 1.3: Consumer Out-of-pocket Payments for National Health Expenditures, 1995 – 2016⁽¹⁾

Year	Payment (billions)
1995	\$144.8
1996	\$150.4
1997	\$161.4
1998	\$176.9
1999	\$187.7
2000	\$198.9
2001	\$206.2
2002	\$219.3
2003	\$235.6
2004	\$248.5
2005	\$263.8
2006	\$273.3
2007	\$290.0
2008	\$295.2
2009	\$293.7
2010	\$299.7
2011	\$310.0
2012	\$318.3
2013	\$325.2
2014	\$330.1
2015	\$339.3
2016	\$352.5

Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Data for Chart 1.8



Table 1.4: Consumer Out-of-pocket Spending vs. Private Health Insurance Spending for Prescription Drugs, 1995 – 2016⁽¹⁾

Year	Out-of-pocket Payment (billions)	Private Health Insurance (billions)
1995	\$23.2	\$24.5
1996	\$24.2	\$30.1
1997	\$25.7	\$36.2
1998	\$27.5	\$42.6
1999	\$30.5	\$52.1
2000	\$33.6	\$61.1
2001	\$36.4	\$71.2
2002	\$40.8	\$79.8
2003	\$45.5	\$87.0
2004	\$48.1	\$95.1
2005	\$51.3	\$102.1
2006	\$51.2	\$102.0
2007	\$52.2	\$106.9
2008	\$49.6	\$109.7
2009	\$49.1	\$116.2
2010	\$45.2	\$116.1
2011	\$45.2	\$117.0
2012	\$45.1	\$112.9
2013	\$43.5	\$113.6
2014	\$44.8	\$128.1
2015	\$45.5	\$141.5
2016	\$45.0	\$142.6

Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

Data for Chart 1.10



Table 1.5: Number and Percent Uninsured, 1995 – 2016

Year	Number (millions)	Percent
1995	40.6	15.4%
1996	41.7	15.6%
1997	43.4	16.1%
1998	44.3	16.3%
1999	40.2	14.5%
2000	39.8	14.2%
2001	41.2	14.6%
2002	43.6	15.2%
2003	45.0	15.6%
2004	43.5	14.9%
2005	44.8	15.3%
2006	47.0	15.8%
2007	45.7	15.3%
2008	46.3	15.4%
2009	49.0	16.7%
2010	49.9	16.3%
2011	48.6	15.7%
2012	48.0	15.4%
2013	41.8	13.3%
2014	33.0	10.4%
2015	29.0	9.1%
2016	27.6	8.6%

Source: US Census Bureau, Health Insurance Coverage in the United States: 2016. Data released September 2017. Figure HIC-4. HIC-4. Health Insurance Coverage Status and Type of Coverage by State--All Persons: 2008 to 2016. Link: https://www2.census.gov/programs-surveys/demo/tables/health-insurance/time-series/acs/hic04_acs.xls

Data for Chart 1.13

Table 1.6: Average Percent Uninsured by State⁽¹⁾, 2015 – 2016

State	Average Percent Uninsured	State	Average Percent Uninsured
Alabama	9.1%	Montana	8.1%
Alaska	14.0%	Nebraska	8.6%
Arizona	10.0%	Nevada	11.4%
Arkansas	7.9%	New Hampshire	5.9%
California	7.3%	New Jersey	8.0%
Colorado	7.5%	New Mexico	9.2%
Connecticut	4.9%	New York	6.1%
Delaware	5.7%	North Carolina	10.4%
District of Columbia	3.9%	North Dakota	7.0%
Florida	12.5%	Ohio	5.6%
Georgia	12.9%	Oklahoma	13.8%
Hawaii	3.5%	Oregon	6.2%
Idaho	10.1%	Pennsylvania	5.6%
Illinois	6.5%	Rhode Island	4.3%
Indiana	8.1%	South Carolina	10.0%
Iowa	4.3%	South Dakota	8.7%
Kansas	8.7%	Tennessee	9.0%
Kentucky	5.1%	Texas	16.6%
Louisiana	10.3%	Utah	8.8%
Maine	8.0%	Vermont	3.7%
Maryland	6.1%	Virginia	8.7%
Massachusetts	2.5%	Washington	6.0%
Michigan	5.4%	West Virginia	5.3%
Minnesota	4.1%	Wisconsin	5.3%
Mississippi	11.8%	Wyoming	11.5%
Missouri	8.9%		

Source: US Census Bureau, Health Insurance Coverage in the United States: 2016. Data released September 2017. Figure HIC-4. HIC-4. Health Insurance Coverage Status and Type of Coverage by State--All Persons: 2008 to 2016. Link: https://www2.census.gov/programs-surveys/demo/tables/health-insurance/time-series/acs/hic04_acs.xls
⁽¹⁾Average percent uninsured represents a weighted average of the uninsured rate for the years indicated.

Data for Chart 1.14

Table 1.7: Medicaid Enrollees,⁽¹⁾ 1990, 1995, 2000, 2005, 2010 – 2018

Year	Aged (millions)	Blind/ Disabled (millions)	Children (millions)	Adults (millions)	Other Title XIX ⁽²⁾ (millions)	Total ⁽⁴⁾ (millions)
1990	3.2	3.7	11.2	6.0	1.1	25.2
1995	4.2	6.0	17.6	7.8	0.6	36.2
2000	4.6	7.5	22.0	10.4		44.5
2005	5.4	9.4	28.3	15.5		58.6
2010	5.5	10.4	33.5	18.3		67.7
2011	5.0	11.0	33.0	18.0		67.0
2012	6.0	11.0	34.0	20.0		71.0
2013	6.0	11.0	34.0	21.0		72.0
2014 ⁽³⁾	6.3	11.3	38.8	23.8		80.0
2015	7.7	12.8	42.1	34.5		97.0
2016	7.7	11.5	43.4	34.5		97.0
2017	7.6	11.5	43.3	34.4		98.0
2018	7.6	11.4	43.2	34.3		99.0

Source: Congressional Budget Office. Data released January 2017. Detail of Spending and Enrollment for CBO's January 2017 Baseline: Medicaid. Link: <https://www.cbo.gov/sites/default/files/recurringdata/51301-2017-01-medicaid.pdf>.

- (1) Does not include CHIP enrollees.
- (2) In 1997, the Other Title XIX category was dropped and the enrollees therein were subsumed in the remaining categories. Other Title XIX enrollees referred to others who received Medicaid benefits.
- (3) For 2014 onward, CBO changed from reporting annual enrollment to average monthly enrollment. Therefore, category values are derived from the total ever enrolled.
- (4) Parts may not sum to total due to rounding.

Data for Chart 1.16



Table 1.8: Percent Change in CHIP Enrollment by State, FY 2015 – FY 2016

State	Percent Change FY 15 – FY 16	State	Percent Change FY 15 - FY 16
Alabama	12.8%	Montana	-1.3%
Alaska	53.8%	Nebraska	-11.5%
Arizona	127.3%	Nevada	11.4%
Arkansas	7.8%	New Hampshire	7.8%
California	5.8%	New Jersey	7.3%
Colorado	20.4%	New Mexico	-12.2%
Connecticut	2.7%	New York	8.5%
Delaware	8.8%	North Carolina	9.3%
District of Columbia	30.6%	North Dakota	0.0%
Florida	-12.4%	Ohio	23.5%
Georgia	0.5%	Oklahoma	-1.5%
Hawaii	-5.4%	Oregon	15.5%
Idaho	4.2%	Pennsylvania	16.3%
Illinois	-1.4%	Rhode Island	15.8%
Indiana	14.3%	South Carolina	-17.0%
Iowa	2.8%	South Dakota	14.1%
Kansas	2.8%	Tennessee	-0.2%
Kentucky	6.6%	Texas	2.4%
Louisiana	19.1%	Utah	5.7%
Maine	4.2%	Vermont	11.3%
Maryland	-3.3%	Virginia	1.8%
Massachusetts	7.8%	Washington	44.5%
Michigan	-30.9%	West Virginia	43.5%
Minnesota	1.1%	Wisconsin	1.8%
Mississippi	1.6%	Wyoming	11.1%
Missouri	12.1%		

Source: Centers for Medicare & Medicaid Services. Data released July 2017. Number of Children Ever Enrolled Report.
 Link: <https://www.medicaid.gov/chip/downloads/fy-2016-childrens-enrollment-report.pdf>

Data for Chart 1.18

Table 1.9: Percentage of Employees with Employer-based Coverage Who Can Choose Conventional, PPO, HMO, POS, and HDHP/SO Plans, 1988 – 2017

	1988	1996	1999	2002	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Conventional⁽¹⁾	90%	52%	26%	14%	10%	10%	8%	5%	6%	7%	4%	4%	3%	2%	2%	1%
PPO	18%	45%	62%	74%	79%	79%	77%	80%	79%	76%	75%	76%	77%	72%	74%	73%
HMO	46%	64%	56%	50%	43%	42%	41%	44%	42%	39%	37%	34%	31%	32%	33%	33%
POS⁽²⁾		30%	45%	34%	23%	21%	24%	19%	14%	16%	14%	13%	13%	16%	13%	15%
HDHP/SO⁽³⁾					14%	18%	25%	28%	32%	40%	39%	43%	45%	51%	56%	57%

Source: The Kaiser Family Foundation and Health Research and Educational Trust. Data Released 2017. Employer Health Benefits: 1999, 2002, 2006 – 2017. Link: <http://files.kff.org/attachment/Report-Employer-Health-Benefits-Annual-Survey-2017>
KPMG Survey of Employer-Sponsored Health Benefits: 1988, 1996.

PPO: Preferred Provider Organization; HMO: Health Maintenance Organization.

(1) Conventional plans refer to traditional indemnity plans.

(2) Point-of-service (POS) plans not separately identified in 1988.

(3) In 2006, the survey began asking about HDHP/SO, high deductible health plans with a savings option.
with a savings option.

Data for Chart 1.19

Table 1.10: Percent Distribution of Employer-sponsored Health Insurance Enrollment by Type of Plan, 1988 – 2017

	1988	1996	1999	2002	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Conventional⁽¹⁾	73%	27%	10%	4%	3%	3%	2%	1%	1%	1%	<1%	<1%	<1%	1%	<1%	<1%
PPO	11%	28%	39%	52%	60%	57%	58%	60%	58%	55%	56%	57%	58%	52%	48%	48%
HMO	16%	31%	28%	27%	20%	21%	20%	20%	19%	17%	16%	14%	13%	14%	15%	14%
POS⁽²⁾		14%	24%	18%	13%	13%	12%	10%	8%	10%	9%	9%	8%	10%	9%	10%
HDHP/SO⁽³⁾					4%	5%	8%	8%	13%	17%	19%	20%	20%	24%	29%	28%

Source: The Kaiser Family Foundation and Health Research and Educational Trust. Data Released 2017. Employer Health Benefits: 1999, 2002, 2006 – 2017. Link: <http://files.kff.org/attachment/Report-Employer-Health-Benefits-Annual-Survey-2017>
KPMG Survey of Employer-Sponsored Health Benefits: 1988, 1996.

PPO: Preferred Provider Organization; HMO: Health Maintenance Organization.

(1) Conventional plans refer to traditional indemnity plans.

(2) Point-of-service (POS) plans not separately identified in 1988.

(3) In 2006, the survey began asking about HDHP/SO, high deductible health plans with a savings option.
with a savings option.

Data for Chart 1.20



Table 1.11: Growth in Medicare Spending per Beneficiary vs. Private Health Insurance Spending per Enrollee, 1995 – 2016^(1,2,3)

Year	Growth in Medicare Spending per Beneficiary	Growth in Private Health Insurance Spending per Enrollee
1995	7.2%	1.6%
1996	4.6%	1.6%
1997	4.2%	3.3%
1998	0.3%	4.8%
1999	2.8%	4.4%
2000	3.2%	6.1%
2001	8.4%	8.8%
2002	5.4%	9.3%
2003	4.9%	9.8%
2004	6.7%	8.1%
2005	5.8%	6.7%
2006	3.5%	6.4%
2007	2.6%	5.2%
2008	4.6%	6.3%
2009	3.2%	7.3%
2010	0.3%	4.9%
2011	1.4%	4.6%
2012	0.3%	5.5%
2013	-0.6%	2.9%
2014	1.9%	-0.4%
2015	0.8%	5.9%
2016	0.4%	6.2%

Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 6, 2017.

⁽¹⁾ CMS completed a benchmark revision in 2009, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1960). For more information on this revision, see <http://www.cms.gov/nationalhealthexpenddata/downloads/benchmark2009.pdf>.

⁽²⁾ Data reflects spending on benefits commonly covered by Medicare and Private Health Insurance.

⁽³⁾ CMS no longer includes the National Health Expenditure (NHE) table used to calculate growth in Medicare spending from 1994-2013. Data for 2014 and subsequent years reflects calculations using current NHE tables as recommended by CMS in email correspondence.

Table 1.12: Percentage of Medicaid Beneficiaries Enrolled in Medicaid Managed Care by State, 2011 and 2015

State	% Enrolled		State	% Enrolled	
	11	15		11	15
Alabama	61.1%	62.9%	Montana	76.1%	74.1%
Alaska	0.0%	0.0%	Nebraska	85.1%	95.7%
Arizona	88.7%	84.6%	Nevada	83.6%	87.7%
Arkansas	78.4%	80.5%	New Hampshire	0.0%	86.6%
California	60.1%	74.3%	New Jersey	77.7%	90.5%
Colorado	94.6%	96.1%	New Mexico	72.8%	78.6%
Connecticut	68.6%	0.0%	New York	76.7%	76.1%
Delaware	80.5%	89.2%	North Carolina	83.2%	79.8%
District of Columbia	67.4%	70.8%	North Dakota	63.6%	54.1%
Florida	63.8%	79.0%	Ohio	75.4%	74.4%
Georgia	91.3%	68.9%	Oklahoma	86.5%	66.2%
Hawaii	98.7%	98.9%	Oregon	98.2%	82.2%
Idaho	100.0%	100.0%	Pennsylvania	81.5%	86.2%
Illinois	67.8%	89.0%	Rhode Island	68.6%	100.0%
Indiana	70.3%	72.0%	South Carolina	100.0%	100.0%
Iowa	91.1%	93.8%	South Dakota	75.8%	75.1%
Kansas	87.4%	90.3%	Tennessee	100.0%	91.9%
Kentucky	89.4%	93.3%	Texas	70.7%	82.7%
Louisiana	65.3%	83.6%	Utah	99.8%	98.1%
Maine	49.3%	84.1%	Vermont	58.5%	65.4%
Maryland	74.6%	80.1%	Virginia	58.2%	69.1%
Massachusetts	53.1%	67.6%	Washington	88.1%	100.0%
Michigan	88.4%	97.2%	West Virginia	51.0%	38.5%
Minnesota	65.7%	74.4%	Wisconsin	63.7%	66.2%
Mississippi	87.2%	68.2%	Wyoming	0.0%	0.1%
Missouri	97.7%	97.7%	Nation	74.2%	79.7%

Sources: 1. Centers for Medicare & Medicaid Services, Office of the Actuary. Medicaid Managed Care Enrollment and Program Characteristics, 2015, released Winter 2016. Link: <https://www.medicaid.gov/medicaid/managed-care/downloads/enrollment/2015-medicaid-managed-care-enrollment-report.pdf>.

2. The Kaiser Family Foundation. State Health Facts. Total Medicaid Managed Care Enrollment. Link: <http://kff.org/medicaid/state-indicator/total-medicaid-mc-enrollment/>.

Data for Chart 1.24



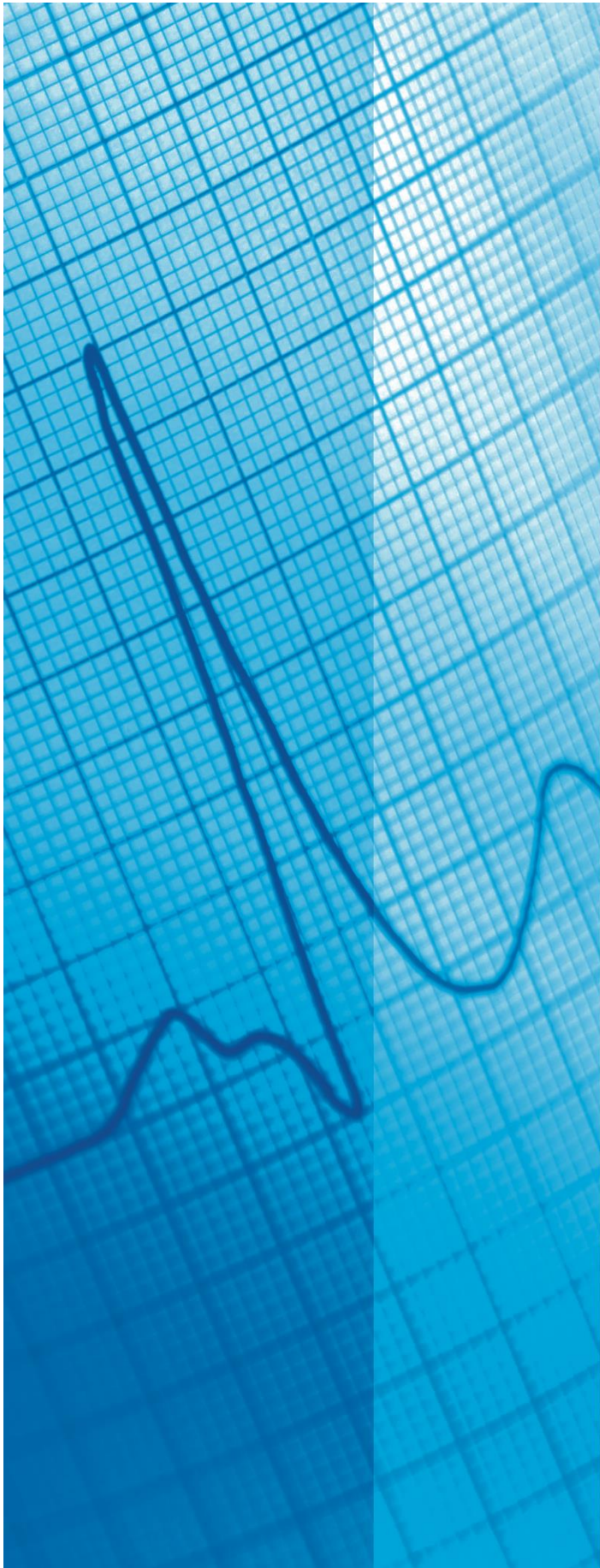
Table 1.13: Operating Margins of the Top Insurers, 2013 – 2015

	2013	2014	2015
Aetna	6.7%	7.3%	8.1%
Anthem⁽¹⁾	8.0%	5.9%	5.9%
United HealthCare	7.9%	7.9%	7.0%
Cigna	6.7%	9.5%	8.8%
Humana	5.0%	4.5%	4.5%

Source: YCharts data used for 2014 and 2015. Data from FactSet Research Systems Inc. used in 2012, 2013, and earlier years' Chartbooks.

⁽¹⁾ Wellpoint in 2014 and earlier years' Chartbooks. In December 2014, Wellpoint changed its name to Anthem.

Data for Chart 1.29



APPENDIX 2

Supplementary Data Tables
Organizational Trends



Table 2.1: Number of Community Hospitals,⁽¹⁾ 1995 – 2016

Year	All Hospitals	Urban ⁽²⁾	Rural ⁽²⁾	In Health System
1995	5,194	2,958	2,236	-
1996	5,134	2,908	2,226	-
1997	5,057	2,852	2,205	-
1998	5,015	2,816	2,199	-
1999	4,956	2,767	2,189	2,524
2000	4,915	2,740	2,175	2,542
2001	4,908	2,742	2,166	2,580
2002	4,927	2,749	2,178	2,606
2003	4,895	2,729	2,166	2,626
2004	4,919	2,916	2,003	2,668
2005	4,936	2,927	2,009	2,716
2006	4,927	2,926	2,001	2,755
2007	4,897	2,900	1,997	2,730
2008	5,010	3,012	1,998	2,868
2009	5,008	3,011	1,997	2,921
2010	4,985	2,998	1,987	2,941
2011	4,973	2,989	1,984	3,007
2012	4,999	3,019	1,980	3,100
2013	4,974	3,003	1,971	3,144
2014	4,926	3,071	1,855	3,183
2015	4,862	3,033	1,829	3,198
2016	4,840	3,015	1,825	3,231

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ All non-federal, short-term general and specialty hospitals whose facilities and services are available to the public.

⁽²⁾ Data on the number of urban and rural hospitals in 2004 and beyond were collected using coding different from previous years to reflect new Centers for Medicare & Medicaid Services wage area designations.

Data for Charts 2.1 and 2.4



Table 2.2: Number of Beds and Number of Beds per 1,000 Persons, 1995 – 2016

Year	Number of Beds	Beds per 1,000
1995	871,976	3.32
1996	862,352	3.25
1997	853,287	3.19
1998	839,988	3.11
1999	829,575	3.04
2000	823,560	2.93
2001	825,966	2.90
2002	820,653	2.85
2003	813,307	2.80
2004	808,127	2.75
2005	802,311	2.71
2006	802,658	2.68
2007	800,892	2.66
2008	808,069	2.66
2009	805,593	2.62
2010	804,943	2.60
2011	797,403	2.56
2012	800,566	2.55
2013	795,603	2.52
2014	786,874	2.47
2015	782,188	2.43
2016	780,272	2.41

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Data for Chart 2.2

Table 2.3: Beds per 1,000 Persons by State, 2015 and 2016

State	Beds per 1,000 Persons		State	Beds per 1,000 Persons	
	15	16		15	16
Alabama	3.02	3.11	Montana	3.68	3.50
Alaska	2.21	2.22	Nebraska	3.49	3.43
Arizona	1.98	1.93	Nevada	1.91	1.93
Arkansas	3.15	3.15	New Hampshire	2.12	2.09
California	1.79	1.79	New Jersey	2.29	2.33
Colorado	1.92	1.93	New Mexico	1.89	1.83
Connecticut	2.10	2.03	New York	2.67	2.66
Delaware	2.23	2.16	North Carolina	2.15	2.15
District of Columbia	5.34	5.06	North Dakota	4.21	4.30
Florida	2.62	2.61	Ohio	2.88	2.87
Georgia	2.40	2.40	Oklahoma	2.84	2.85
Hawaii	1.85	1.74	Oregon	1.68	1.63
Idaho	2.01	1.96	Pennsylvania	2.92	2.90
Illinois	2.47	2.48	Rhode Island	2.15	2.12
Indiana	2.62	2.55	South Carolina	2.50	2.48
Iowa	3.07	3.04	South Dakota	4.66	4.71
Kansas	3.37	3.32	Tennessee	3.01	2.91
Kentucky	3.19	3.15	Texas	2.28	2.23
Louisiana	3.04	3.00	Utah	1.78	1.78
Maine	2.62	2.55	Vermont	1.93	1.99
Maryland	1.96	1.92	Virginia	2.13	2.13
Massachusetts	2.28	2.30	Washington	1.67	1.66
Michigan	2.49	2.51	West Virginia	3.72	3.72
Minnesota	2.62	2.59	Wisconsin	2.16	2.12
Mississippi	4.09	4.03	Wyoming	3.13	2.93
Missouri	3.06	3.05			

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.
 US Census Bureau: National and State Population Estimates, July 1, 2016.
 Link: <https://www.census.gov/programs-surveys/popest/data/data-sets.2016.html>.

Data for Chart 2.3

Table 2.4: Percentage of Hospitals with Physician Affiliates⁽¹⁾ by Type of Relationship, 2005 – 2016

	05	06	07	08	09	10	11	12	13	14	15	16
Physician Hospital Organization	19%	19%	19%	17%	16%	16%	16%	16%	16%	16%	16%	17%
Independent Practice Association	14%	14%	13%	12%	12%	11%	10%	10%	10%	10%	11%	10%
Management Service Organization	9%	9%	9%	9%	9%	9%	9%	9%	9%	8%	9%	8%
Group Practice without Walls	4%	3%	3%	3%	3%	3%	3%	3%	4%	4%	3%	3%

Source: Analysis of American Hospital Association Annual Survey data, 2016, 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.

Table 2.5 in 2009 and earlier years' Chartbooks.

Data for Chart 2.6

Table 2.5: Percentage of Hospitals with Insurance Products by Type of Insurance, 2005 – 2016

	05	06	07	08	09	10	11	12	13	14	15	16
Preferred Provider Organization	19%	18%	17%	14%	14%	15%	15%	12%	14%	14%	15%	16%
Health Maintenance Organization	14%	14%	13%	12%	12%	12%	13%	13%	14%	14%	16%	16%
Indemnity or Fee for Service	6%	6%	6%	5%	5%	5%	5%	4%	5%	6%	6%	6%

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Table 2.6 in 2009 and earlier years' Chartbooks.

Data for Chart 2.7

Table 2.6: Percentage of Hospitals Offering “Non-hospital” Services,⁽¹⁾ 2005 – 2016

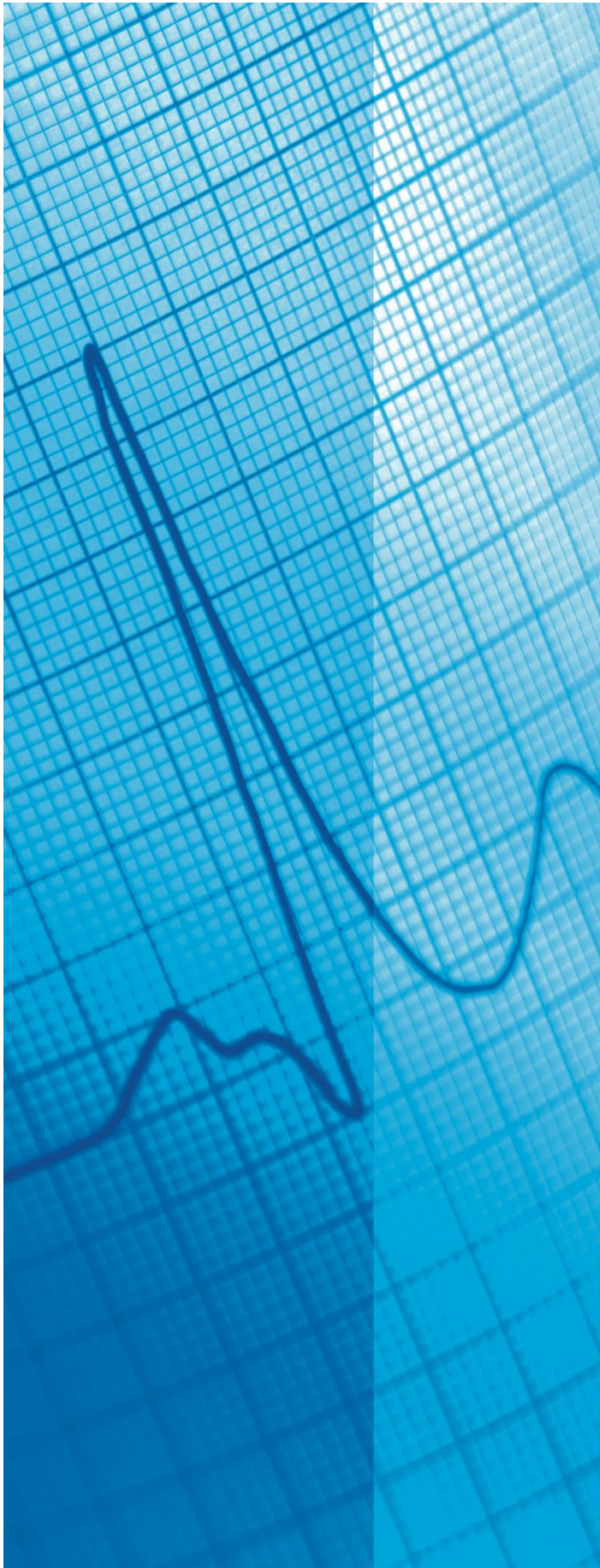
	05	06	07	08	09	10	11	12	13	14	15	16
Home Health Service	63%	63%	63%	61%	61%	60%	60%	60%	60%	61%	61%	61%
Skilled Nursing Facility	42%	42%	41%	40%	39%	37%	37%	38%	37%	38%	37%	37%
Other Long-term Care	14%	14%	14%	14%	14%	12%	12%	14%	12%	14%	13%	13%
Assisted Living	16%	16%	15%	15%	15%	15%	15%	15%	14%	14%	15%	15%
Hospice	60%	62%	63%	62%	62%	61%	62%	64%	64%	65%	66%	67%
Meals on Wheels	23%	23%	22%	22%	21%	21%	20%	20%	21%	21%	20%	21%

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Includes services offered in hospital, health system, network or joint venture.

Table 2.7 in 2009 and earlier years' Chartbooks.

Data for Chart 2.8



APPENDIX 3

Supplementary Data Tables
Utilization and Volume



Table 3.1: Trends in Inpatient Utilization in Community Hospitals, 1995 – 2016

Year	Inpatient Admissions in Community Hospitals	Inpatient Admissions per 1,000	Total Inpatient Days in Community Hospitals	Inpatient Days per 1,000	Inpatient Surgeries	Average Length of Stay
1995	30,945,357	117.8	199,876,367	760.7	9,700,613	6.5
1996	31,098,959	117.2	193,747,004	730.4	9,545,612	6.2
1997	31,576,960	118.0	192,504,015	719.3	9,509,081	6.1
1998	31,811,673	117.8	191,430,450	709.0	9,735,705	6.0
1999	32,359,042	118.7	191,884,270	703.7	9,539,593	5.9
2000	33,089,467	117.6	192,420,368	683.7	9,729,336	5.8
2001	33,813,589	118.7	194,106,316	681.6	9,779,583	5.7
2002	34,478,280	119.7	196,690,099	682.7	10,105,010	5.7
2003	34,782,742	119.6	196,649,769	676.2	9,940,922	5.7
2004	35,086,061	119.5	197,564,172	672.8	10,050,346	5.6
2005	35,238,673	119.2	197,073,770	666.4	10,097,271	5.6
2006	35,377,659	118.2	196,366,512	655.9	10,095,683	5.6
2007	35,345,986	117.3	194,549,348	645.7	10,189,630	5.5
2008	35,760,750	117.6	196,078,468	644.9	10,105,156	5.5
2009	35,527,377	115.7	192,656,804	627.5	10,100,980	5.4
2010	35,149,427	113.7	189,593,349	613.5	9,954,821	5.4
2011	34,843,085	111.8	187,072,013	600.4	9,638,467	5.4
2012	34,422,071	109.7	185,423,035	590.7	9,513,598	5.4
2013	33,609,083	106.3	182,370,189	576.9	9,147,264	5.4
2014	33,066,720	103.7	180,456,434	565.9	9,015,467	5.5
2015	33,260,348	103.5	181,555,387	564.9	8,920,775	5.5
2016	33,424,253	103.4	182,291,689	564.1	8,982,309	5.5

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.
 Link: <https://www.census.gov/programs-surveys/popest/data/data-sets.2016.html>.

Data for Charts 3.1, 3.2, 3.3, 3.4, 3.5 and 3.11



Table 3.2: Average Length of Stay in Community Hospitals by State, 2015 and 2016

State	Average Length of Stay		State	Average Length of Stay	
	15	16		15	16
Alabama	5.5	5.6	Montana	8.9	8.4
Alaska	7.2	7.5	Nebraska	6.7	6.7
Arizona	4.7	4.8	Nevada	5.7	5.7
Arkansas	5.2	5.1	New Hampshire	5.4	5.2
California	5.1	5.1	New Jersey	5.2	4.9
Colorado	5.1	5.2	New Mexico	4.9	4.8
Connecticut	5.3	5.2	New York	6.8	6.7
Delaware	5.3	5.2	North Carolina	5.4	5.4
District of Columbia	7.4	7.5	North Dakota	7.2	7.7
Florida	5.0	5.0	Ohio	5.0	5.0
Georgia	6.3	6.3	Oklahoma	5.5	5.6
Hawaii	6.5	6.4	Oregon	4.4	4.5
Idaho	4.9	5.0	Pennsylvania	5.5	5.5
Illinois	4.9	5.0	Rhode Island	4.9	4.8
Indiana	5.3	5.2	South Carolina	5.4	5.3
Iowa	6.1	6.1	South Dakota	10.2	9.8
Kansas	6.4	6.4	Tennessee	5.5	5.5
Kentucky	5.5	5.5	Texas	5.4	5.4
Louisiana	5.5	5.5	Utah	4.3	4.4
Maine	5.9	6.3	Vermont	6.1	5.9
Maryland	5.1	5.1	Virginia	5.6	5.7
Massachusetts	5.3	5.3	Washington	4.7	4.9
Michigan	5.0	5.0	West Virginia	5.9	5.9
Minnesota	6.1	6.1	Wisconsin	5.1	5.0
Mississippi	6.9	6.5	Wyoming	8.3	8.8
Missouri	5.2	5.3			

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Data for Chart 3.6



Table 3.3: Emergency Department Visits, Emergency Department Visits per 1,000 Persons and Number of Emergency Departments Reporting Visits, 1995 – 2016

Year	ED Visits (millions)	ED Visits per 1,000	Emergency Departments ⁽¹⁾
1995	94.7	360	4,923
1996	93.1	351	4,884
1997	92.8	347	4,813
1998	94.8	351	4,771
1999	99.5	365	4,679
2000	103.1	366	4,650
2001	106.0	372	4,621
2002	110.0	382	4,620
2003	111.0	382	4,570
2004	112.6	383	4,595
2005	114.8	388	4,611
2006	118.4	395	4,587
2007	120.8	401	4,565
2008	123.0	405	4,613
2009	127.3	415	4,594
2010	127.2	412	4,564
2011	129.5	415	4,461
2012	133.2	424	4,460
2013	133.6	423	4,440
2014	136.3	428	4,408
2015	141.5	440	4,353
2016	142.6	441	4,349

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.

Link: <https://www.census.gov/programs-surveys/popest/data/data-sets.2016.html>

⁽¹⁾ Defined as hospitals reporting ED visits in the AHA Annual Survey.

Data for Charts 3.7 and 3.8



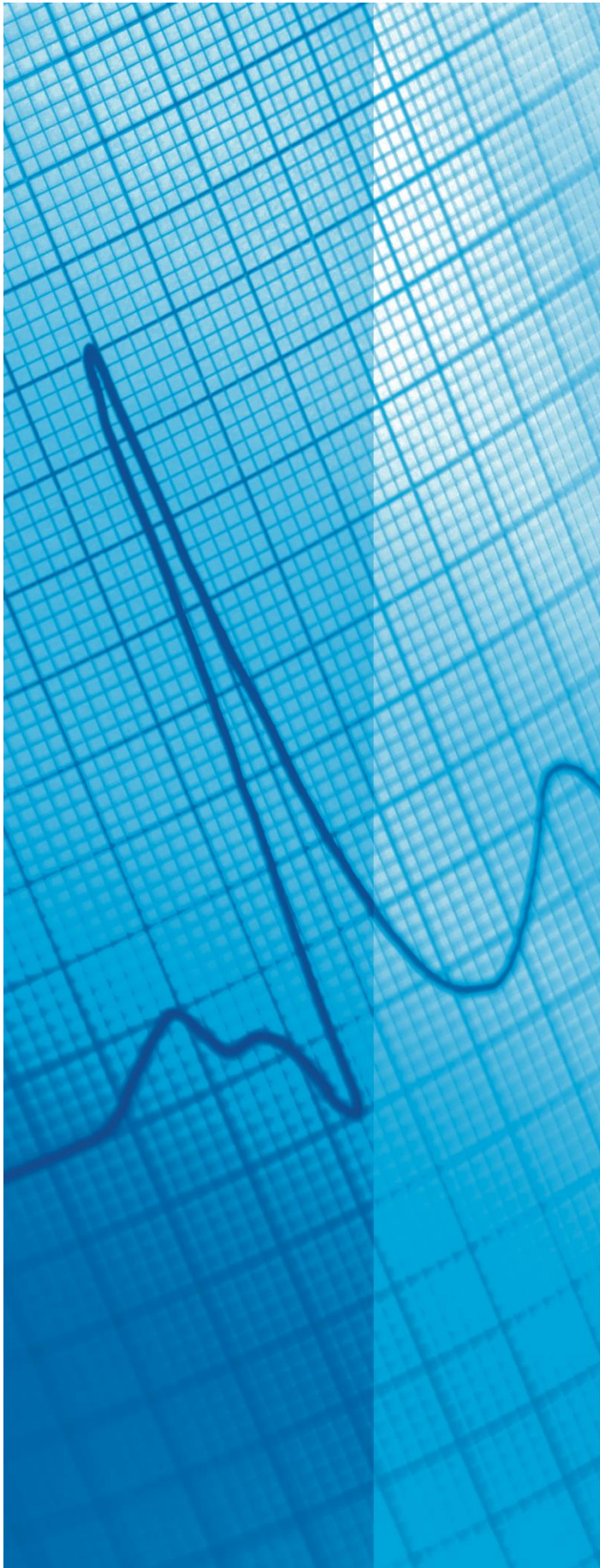
Table 3.4: Outpatient Utilization in Community Hospitals, 1995 – 2016

Year	Total Outpatient Visits	Outpatient Visits per 1,000	Outpatient Surgeries
1995	413,748,403	1,574.6	13,462,304
1996	439,863,107	1,658.3	14,023,651
1997	450,140,010	1,681.9	14,678,290
1998	474,193,468	1,756.3	15,593,614
1999	495,346,286	1,816.5	15,845,492
2000	521,404,976	1,852.8	16,383,374
2001	538,480,378	1,890.8	16,684,726
2002	556,404,212	1,931.1	17,361,176
2003	563,186,046	1,936.7	17,165,616
2004	571,569,334	1,946.4	17,351,490
2005	584,428,736	1,976.1	17,445,587
2006	599,553,025	2,002.5	17,235,141
2007	603,300,374	2,002.4	17,146,334
2008	624,098,296	2,052.6	17,354,282
2009	641,953,442	2,091.0	17,357,534
2010	651,423,717	2,107.8	17,357,177
2011	656,078,942	2,105.6	17,269,245
2012	674,971,331	2,150.2	17,297,633
2013	677,951,120	2,144.5	17,418,773
2014	693,106,685	2,173.7	17,386,061
2015	722,121,388	2,246.7	17,588,335
2016	747,089,013	2,312.1	18,224,816

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals. US Census Bureau: National and State Population Estimates, July 1, 2016.

Link: <https://www.census.gov/programs-surveys/popest/data/data-sets.2016.html>.

Data for Charts 3.9, 3.10 and 3.11



APPENDIX 4

Supplementary Data Tables
Trends in Hospital Financing

Table 4.1: Aggregate Total Hospital Margins⁽¹⁾ and Operating Margins⁽²⁾; Percentage of Hospitals with Negative Total Margins; and Aggregate Non-operating Gains as a Percentage of Total Net Revenue, 1995 – 2016

Year	Aggregate Total Hospital Margins	Aggregate Operating Margins	Percent of Hospitals with Negative Total Margins	Percent of Hospitals with Negative Operating Margins	Aggregate Non-operating Gains as a Percentage of Total Net Revenue
1995	5.6%	3.9%	20.4%	28.0%	1.8%
1996	6.7%	4.6%	19.4%	27.7%	2.3%
1997	6.7%	4.0%	20.4%	28.9%	2.7%
1998	5.8%	3.1%	26.6%	36.1%	2.8%
1999	4.6%	2.1%	32.5%	41.9%	2.6%
2000	4.6%	2.0%	32.0%	42.2%	2.6%
2001	4.2%	2.7%	29.4%	36.7%	1.6%
2002	4.4%	3.7%	29.3%	33.4%	0.8%
2003	4.8%	3.3%	29.9%	35.9%	1.5%
2004	5.2%	3.6%	26.5%	33.4%	1.7%
2005	5.3%	3.7%	25.4%	32.0%	1.7%
2006	6.0%	4.0%	24.3%	31.8%	2.1%
2007	6.9%	4.3%	21.6%	30.2%	2.7%
2008	2.6%	3.3%	32.4%	32.8%	-0.7%
2009	5.0%	4.4%	27.5%	30.1%	0.6%
2010	7.2%	5.5%	22.8%	28.3%	1.8%
2011	7.0%	5.5%	24.0%	28.4%	1.6%
2012	7.8%	6.5%	21.3%	25.9%	1.4%
2013	7.9%	5.7%	24.0%	30.5%	2.3%
2014	8.3%	6.4%	23.3%	29.9%	2.0%
2015	7.9%	7.4%	22.6%	25.5%	0.6%
2016	7.8%	6.7%	26.4%	30.6%	1.2%

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Total Hospital Margin is calculated as the difference between total net revenue and total expenses divided by total net revenue.

⁽²⁾ Operating Margin is calculated as the difference between operating revenue and total expenses divided by operating revenue.

Data for Charts 4.1, 4.2 and 4.8



Table 4.2: Distribution of Inpatient vs. Outpatient Revenues, 1995 – 2016

Year	Gross Outpatient Revenue	Gross Inpatient Revenue
1995	30%	70%
1996	31%	69%
1997	33%	67%
1998	33%	67%
1999	34%	66%
2000	35%	65%
2001	35%	65%
2002	35%	65%
2003	35%	65%
2004	36%	64%
2005	37%	63%
2006	38%	62%
2007	38%	62%
2008	40%	61%
2009	41%	59%
2010	42%	58%
2011	43%	57%
2012	44%	56%
2013	45%	55%
2014	46%	54%
2015	47%	53%
2016	48%	52%

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Data for Chart 4.3



Table 4.3: Annual Change in Hospital Operating Revenue and Expenses per Adjusted Admission,⁽¹⁾ 1995 – 2016

Year	Expenses per Adjusted Admission	Operating Revenue per Adjusted Admission	Percent Change Expenses	Percent Change Operating Revenue
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%
1999	\$6,509	\$6,647	1.9%	0.9%
2000	\$6,668	\$6,806	2.5%	2.4%
2001	\$6,980	\$7,172	4.7%	5.4%
2002	\$7,355	\$7,636	5.4%	6.5%
2003	\$7,796	\$8,065	6.0%	5.6%
2004	\$8,166	\$8,469	4.7%	5.0%
2005	\$8,535	\$8,865	4.5%	4.7%
2006	\$8,970	\$9,345	5.1%	5.4%
2007	\$9,377	\$9,797	4.5%	4.8%
2008	\$9,788	\$10,123	4.4%	3.3%
2009	\$10,045	\$10,503	2.6%	3.7%
2010	\$10,313	\$10,917	2.7%	3.9%
2011	\$10,533	\$11,146	2.1%	2.1%
2012	\$11,221	\$12,004	6.5%	7.7%
2013	\$11,651	\$12,359	3.8%	3.0%
2014	\$12,015	\$12,843	3.1%	3.9%
2015	\$12,359	\$13,342	2.9%	3.9%
2016	\$12,780	\$13,695	3.4%	2.7%

Source: Analysis of American Hospital Association Annual Survey data, 2016, 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.

Data for Chart 4.4



Table 4.4: Aggregate Hospital Payment-to-cost Ratios for Private Payers, Medicare, and Medicaid, 1995 – 2016

Year	Medicare ⁽¹⁾	Medicaid ⁽²⁾	Private Payer
1995	99.4%	94.0%	124.0%
1996	102.4%	94.9%	121.6%
1997	103.7%	96.0%	117.5%
1998	101.9%	96.6%	115.8%
1999	100.0%	95.7%	115.1%
2000	99.1%	94.5%	115.7%
2001	98.4%	95.8%	116.5%
2002	97.9%	96.1%	119.0%
2003	95.3%	92.3%	122.3%
2004	91.9%	89.9%	128.9%
2005	92.3%	87.1%	129.4%
2006	91.3%	85.8%	130.3%
2007	90.6%	87.9%	132.2%
2008	90.9%	88.7%	128.3%
2009	90.1%	89.0%	134.1%
2010	92.4%	92.8%	133.5%
2011	91.4%	94.7%	134.5%
2012	85.9%	88.9%	148.9%
2013	87.9%	89.8%	143.6%
2014	88.5%	90.0%	143.7%
2015	87.9%	89.7%	144.1%
2016	86.8%	88.1%	144.8%

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

(1) Includes Medicare Disproportionate Share Hospital payments.

(2) Includes Medicaid Disproportionate Share Hospital payments.

Data for Chart 4.6



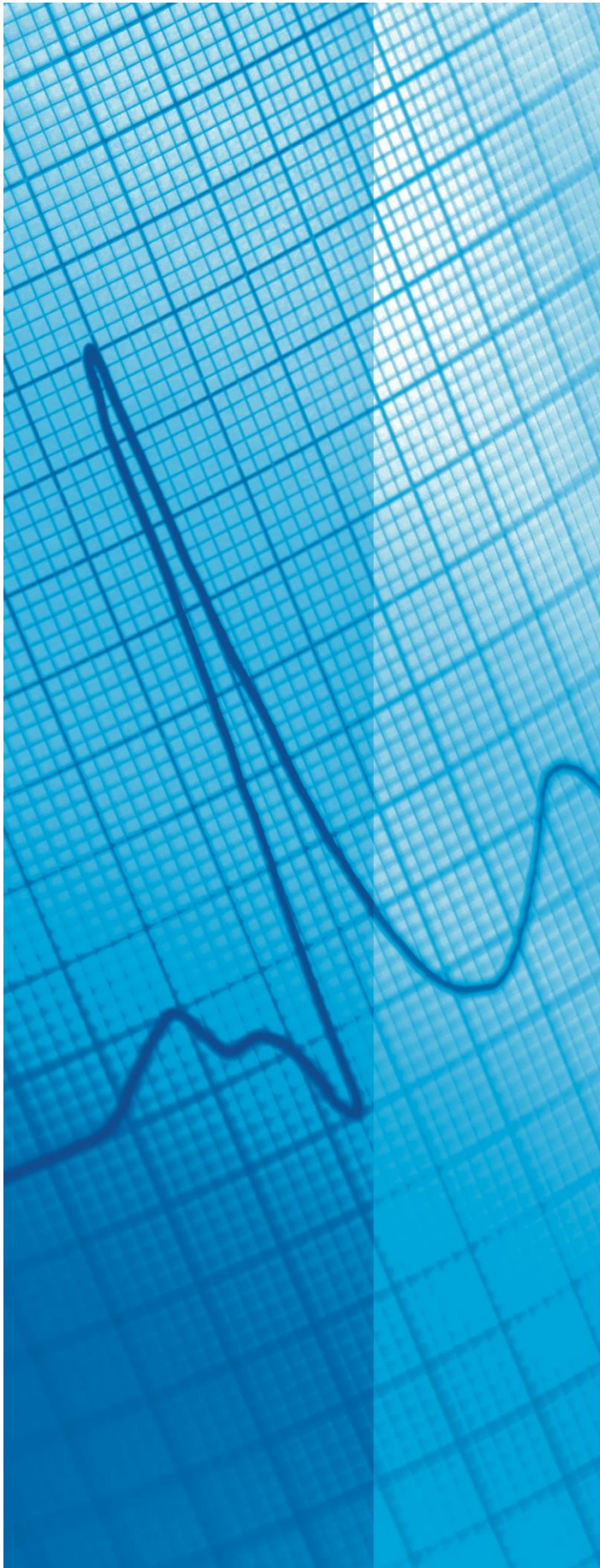
Table 4.5: Hospital Payment Shortfall Relative to Costs for Medicare, Medicaid, and Other Government, 1997 – 2016⁽¹⁾

Year	Medicare (billions)	Medicaid (billions)	Other Government (billions)
1997	\$4.3	-\$1.6	-\$0.7
1998	\$2.3	-\$1.4	-\$0.6
1999	-\$0.1	-\$1.9	-\$0.4
2000	-\$1.4	-\$2.6	-\$0.5
2001	-\$2.4	-\$2.1	-\$0.7
2002	-\$3.4	-\$2.3	-\$0.6
2003	-\$8.1	-\$5.0	-\$0.5
2004	-\$15.0	-\$7.1	-\$0.5
2005	-\$15.5	-\$9.8	-\$0.4
2006	-\$18.6	-\$11.3	\$1.1
2007	-\$21.5	-\$10.4	\$1.4
2008	-\$21.9	-\$10.5	\$1.2
2009	-\$25.2	-\$11.3	\$0.4
2010	-\$20.1	-\$7.8	\$0.4
2011	-\$23.8	-\$6.0	\$0.0
2012	-\$42.3	-\$13.7	-\$1.3
2013	-\$37.9	-\$13.2	-\$1.5
2014	-\$37.3	-\$14.2	-\$1.1
2015	-\$41.6	-\$16.3	\$0.4
2016	-\$48.8	-\$20.0	\$0.3

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Costs reflect a cap of 1.0 on the cost-to-charge ratio.

Data for Chart 4.7



APPENDIX 5

Supplementary Data Tables
Workforce

Table 5.1: Total Number of Active Physicians⁽¹⁾ per 1,000 Persons by State, 2012 and 2013

State	Physicians per 1,000 Persons		State	Physicians per 1,000 Persons	
	12	13		12	13
Alabama	2.18	2.24	Montana	2.24	2.31
Alaska	2.42	2.50	Nebraska	2.48	2.60
Arizona	2.42	2.55	Nevada	1.96	2.03
Arkansas	2.09	2.15	New Hampshire	3.06	3.20
California	2.69	2.78	New Jersey	3.25	3.35
Colorado	2.76	2.91	New Mexico	2.41	2.52
Connecticut	3.76	3.84	New York	3.83	3.94
Delaware	2.64	2.74	North Carolina	2.54	2.64
District of Columbia	7.38	7.47	North Dakota	2.50	2.53
Florida	2.65	2.72	Ohio	2.95	3.14
Georgia	2.23	2.34	Oklahoma	2.15	2.23
Hawaii	2.97	3.08	Oregon	2.91	3.07
Idaho	1.84	1.92	Pennsylvania	3.31	3.51
Illinois	2.87	3.01	Rhode Island	3.82	4.02
Indiana	2.26	2.33	South Carolina	2.34	2.41
Iowa	2.20	2.32	South Dakota	2.38	2.46
Kansas	2.45	2.54	Tennessee	2.68	2.77
Kentucky	2.33	2.46	Texas	2.23	2.32
Louisiana	2.68	2.72	Utah	2.19	2.26
Maine	3.20	3.37	Vermont	3.62	3.82
Maryland	3.95	4.09	Virginia	2.72	2.81
Massachusetts	4.46	4.70	Washington	2.74	2.84
Michigan	3.01	3.15	West Virginia	2.60	2.71
Minnesota	3.03	3.11	Wisconsin	2.73	2.79
Mississippi	1.86	1.95	Wyoming	1.92	1.95
Missouri	2.74	2.89			

Source: National Center for Health Statistics. (2016). *Health, United States, 2015*. Hyattsville, MD.
⁽¹⁾ Includes active federal and non-federal doctors of medicine and active doctors of osteopathy.

Data for Chart 5.2



Table 5.2: Number of Physicians and Dentists⁽¹⁾ Employed by Community Hospitals, 2000 – 2016

Year	Residents
2000	158,057
2001	157,312
2002	161,467
2003	159,801
2004	169,251
2005	173,544
2006	179,420
2007	194,641
2008	199,289
2009	208,382
2010	212,418
2011	225,771
2012	233,025
2013	244,830
2014	249,191
2015	254,572
2016	268,881

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Includes full-time and part-time physicians, dentists, medical interns and residents, and dental interns and residents.

Data for Chart 5.3



Table 5.3: Medical and Dental Residents⁽¹⁾ in Training in Community Hospitals, 1995 – 2016

Year	Residents
1995	78,137
1996	77,160
1997	75,398
1998	78,345
1999	77,796
2000	77,411
2001	77,731
2002	78,715
2003	77,813
2004	84,628
2005	83,823
2006	85,320
2007	92,311
2008	90,543
2009	94,729
2010	95,270
2011	99,458
2012	102,904
2013	107,029
2014	109,309
2015	108,961
2016	113,109

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

⁽¹⁾ Includes full-time equivalent interns and residents.

Table 5.2 in 2014 and earlier years' Chartbooks.

Data for Chart 5.4

Table 5.4: Total Full-time Equivalent Employees Working in Hospitals and Full-time Equivalents per Adjusted Admission,⁽¹⁾ 1995 – 2016

Year	FTE Personnel	FTE per Adjusted Admission
1995	3,707,958	0.081
1996	3,724,843	0.079
1997	3,789,752	0.078
1998	3,831,068	0.077
1999	3,837,964	0.075
2000	3,911,412	0.073
2001	3,987,274	0.073
2002	4,069,495	0.072
2003	4,108,628	0.071
2004	4,147,941	0.070
2005	4,256,899	0.070
2006	4,343,480	0.071
2007	4,465,028	0.072
2008	4,549,560	0.071
2009	4,584,624	0.070
2010	4,599,752	0.070
2011	4,649,615	0.070
2012	4,730,948	0.070
2013	4,786,087	0.071
2014	4,754,880	0.071
2015	4,858,527	0.071
2016	4,991,748	0.071

Source: Analysis of American Hospital Association Annual Survey data, 2016, 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 5.3 in 2014 and earlier years' Chartbooks.

Data for Charts 5.5 and 5.6

Table 5.5: Number of RN⁽¹⁾ Full-time Equivalent Employees, RN Full-time Equivalent Employees per Adjusted Admission⁽²⁾ and RN Full-time Equivalents as a Percentage of Total FTEs, 1995 – 2016

Year	RN FTEs (thousands)	RN FTEs per Adjusted Admission	RN FTEs as a Percent of Total FTEs
1995	893.7	0.0195	24.1%
1996	895.1	0.0190	24.0%
1997	901.2	0.0185	23.8%
1998	929.7	0.0186	24.3%
1999	938.1	0.0182	24.4%
2000	957.6	0.0179	24.5%
2001	958.0	0.0174	24.0%
2002	988.1	0.0174	24.3%
2003	1,021.3	0.0177	24.9%
2004	1,053.1	0.0179	25.4%
2005	1,094.2	0.0181	25.7%
2006	1,138.6	0.0185	26.2%
2007	1,191.2	0.0192	26.7%
2008	1,228.4	0.0192	27.0%
2009	1,268.7	0.0194	27.7%
2010	1,293.9	0.0197	28.1%
2011	1,313.6	0.0197	28.3%
2012	1,351.2	0.0200	28.6%
2013	1,366.4	0.0204	28.5%
2014	1,398.3	0.0208	29.4%
2015	1,437.7	0.0209	29.6%
2016	1,478.7	0.0209	29.6%

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

(1) RN: Registered Nurse; FTE: Full-time Equivalent

(2) 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 in 2014 and earlier years' Chartbooks.

Data for Charts 5.7 and 5.8

Table 5.6: Percent Distribution of RN Workforce by Age Group, 2015

Age Group	2015
20s	9.5%
30s	19.4%
40s	20.9%
50s	25.1%
60s and older	25.1%

Source: National Council of State Boards of Nursing. National Nursing Workforce Study 2015.
 Link: <https://www.ncsbn.org/workforce.htm>.
 Chart Added in 2016.

Data for Chart 5.9

Table 5.7: RN Employment by Type of Provider, 2016

	2016
Percent Employed by Hospitals ⁽¹⁾	62.4%
Percent Employed by Physician Offices	6.6%
Percent Employed by Nursing Homes/Extended Care Facilities ⁽²⁾	7.5%
Percent Employed by Public/Community Health ⁽³⁾	8.6%
All Other ⁽⁴⁾	14.9%

Source: Email correspondence with the Bureau of Labor Statistics.

- (1) Category includes general medical and surgical hospitals, psychiatric and substance abuse hospitals and specialty hospitals.
- (2) Category includes nursing care facilities, residential care facilities, continuing care retirement communities and assisted living facilities and other residential care facilities.
- (3) Category includes home healthcare services, elementary and secondary schools, individual and family services, community food and housing services and vocational rehabilitation services.
- (4) Category includes but is not limited to offices of dentists and other health practitioners, state and local government designations, outpatient care centers, educational support services, health and personal care stores, insurance carriers, junior colleges, colleges, universities, professional schools, technical and trade schools and other schools and instruction.

Chart added in 2016.

Data for Chart 5.10

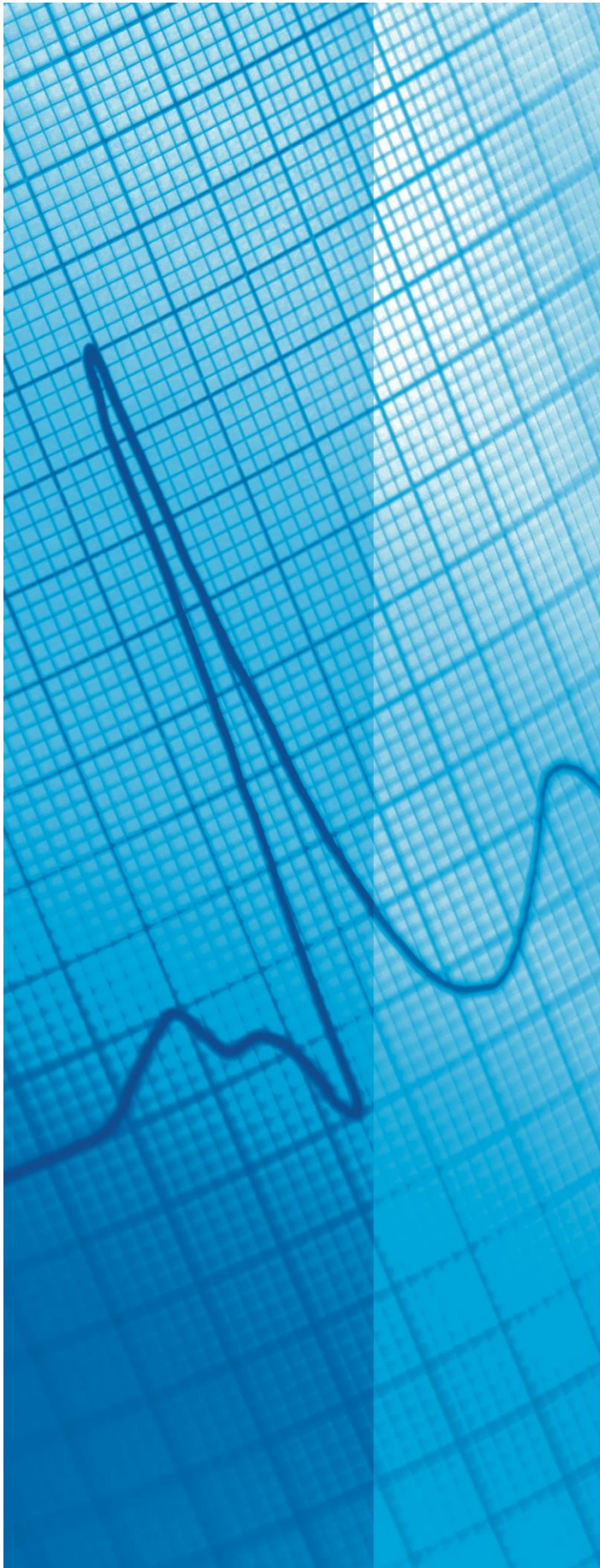
Table 5.8: Number of Physicians⁽¹⁾ by Age, 2010, 2012, 2014 and 2016

Age Group	2010	2012	2014	2016
Under 30	17	12	15	18
30-39	184	185	196	209
40-49	215	219	222	228
50-59	216	220	218	214
60-69	139	156	172	184
Over 70	76	82	88	95
Total # of Physicians	845	874	911	948

Source: Federation of State Medical Boards (FSMB). 2016 FSMB Census of Licensed Physicians.

(1) Includes actively licensed physicians. Resident physician licenses were excluded when such licenses could be identified. Previously Table 5.5 in 2014 and earlier years' Chartbooks.

Data for Chart 5.11



APPENDIX 6

Supplementary Data Tables
The Economic Contribution of
Hospitals



Table 6.1: Number of Full-time and Part-time Hospital Employees, 1995 – 2016

Year	Employees (thousands)
1995	4,384.8
1996	4,397.9
1997	4,495.5
1998	4,536.4
1999	4,544.4
2000	4,652.9
2001	4,713.4
2002	4,818.1
2003	4,876.7
2004	4,922.9
2005	5,047.1
2006	5,152.1
2007	5,287.5
2008	5,379.9
2009	5,405.6
2010	5,416.7
2011	5,480.3
2012	5,576.9
2013	5,580.1
2014	5,598.6
2015	5,709.7
2016	5,878.3

Source: Analysis of American Hospital Association Annual Survey data, 2016, for community hospitals.

Data for Chart 6.2



Table 6.2: Hospital Employment vs. Employment in Other Industries, 2017

Title	Employment (thousands)
Full-service Restaurants	5449.8
General Medical & Surgical Hospitals ⁽¹⁾	4682.9
Limited-service Eating Places	4392.5
Employment Services	3611.3
Grocery Stores	2707.8
Offices of Physicians	2587.4
Building Equipment Contractors	2097.7
Department Stores	1181.6

Source: Department of Labor, Bureau of Labor Statistics, Current Employment Statistics (CES) Survey, customized tables. Data released 2018. Link: <http://www.bls.gov/ces>.

⁽¹⁾ Does not include public hospitals.

Data for Chart 6.4



Table 6.3: Average Weekly Earnings of Workers, Hospitals⁽¹⁾ vs. All Service-providing Industries, 1995 – 2017

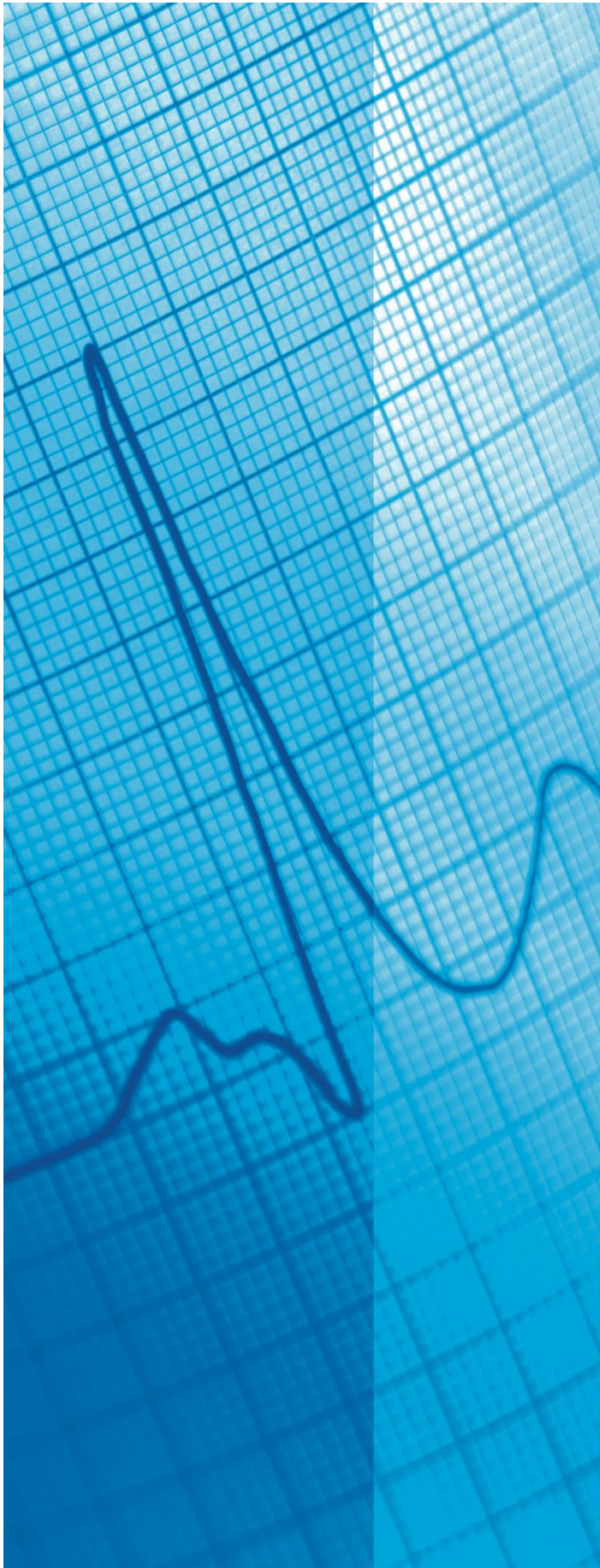
Year	Hospitals ⁽²⁾	All Service-providing Industries
1995	\$488.68	\$364.14
1996	\$499.54	\$376.72
1997	\$518.48	\$394.77
1998	\$535.47	\$412.78
1999	\$547.33	\$427.30
2000	\$569.90	\$445.00
2001	\$608.41	\$460.32
2002	\$638.23	\$473.10
2003	\$674.34	\$483.89
2004	\$715.12	\$493.67
2005	\$762.07	\$509.58
2006	\$794.24	\$532.84
2007	\$876.80	\$689.40
2008	\$920.70	\$708.77
2009	\$946.11	\$718.28
2010	\$980.15	\$733.96
2011	\$1,009.52	\$755.20
2012	\$1,028.91	\$774.14
2013	\$1,052.42	\$787.96
2014	\$1,074.90	\$806.08
2015	\$1,118.08	\$827.16
2016	\$1,136.13	\$842.56
2017	\$1,169.65	\$866.21

Source: Department of Labor, Bureau of Labor Statistics, Current Employment Statistics (CES) Survey, customized tables. Data released 2018. Link: <http://www.bls.gov/ces>.

⁽¹⁾ Includes physicians employed by hospitals.

⁽²⁾ Does not include public hospitals.

Data for Chart 6.5



APPENDIX 7

Supplementary Data Tables
Community Health Indicators

Table 7.1: U.S. Population Trends and Projections by Age, 1980 – 2060⁽¹⁾

Year	Population 0-19 Years (thousands)	Population 20-64 Years (thousands)	Population 65-84 Years (thousands)	Population 85+ Years (thousands)
1980	72,416	128,631	23,306	2,193
1990	71,322	146,146	28,162	3,080
2000	80,473	165,957	30,752	4,240
2010	83,268	185,210	34,775	5,493
2015	82,110	191,429	41,526	6,304
2020	82,625	195,439	49,715	6,726
2025	83,673	197,742	58,438	7,482
2030	84,767	200,527	64,977	9,131
2035	86,153	204,951	67,324	11,908
2040	87,135	210,741	67,711	14,634
2045	87,967	216,717	67,453	17,259
2050	88,992	221,342	69,024	18,971
2055	90,267	224,675	73,016	19,455
2060	91,610	227,022	78,441	19,724

Source: U.S. Department of Commerce, Bureau of the Census. *Projections of the Population by Sex and Age for the United States: 2015-2060.*

⁽¹⁾ Years 2015 through 2060 are projections.

Data for Chart 7.1

Table 7.2: U.S. Population Trends and Projections by Race, 2015 – 2060⁽¹⁾

Year	White, Non-Hispanic (thousands)	Black ⁽²⁾ (thousands)	White, Hispanic (thousands)	Asian ⁽²⁾ (thousands)	All Other ^(2,3) (thousands)
2015	198,354	42,456	55,092	17,538	13,006
2020	199,400	44,590	61,590	19,869	14,687
2025	199,867	46,725	68,150	22,278	16,506
2030	199,403	48,768	74,810	24,726	18,448
2035	197,810	50,678	81,490	27,175	20,504
2040	195,197	52,485	88,133	29,603	22,684
2045	191,919	54,244	94,674	31,997	25,000
2050	188,419	56,007	101,064	34,359	27,459
2055	185,039	57,817	107,307	36,686	30,066
2060	181,930	59,693	113,398	38,965	32,823

Source: U.S. Department of Commerce, Bureau of the Census. *Projections of the Population by Sex, Hispanic Origin, and Race for the United States: 2015-2060*.

⁽¹⁾ Years 2015 through 2060 are projections.

⁽²⁾ Black, Asian, and All Other categories include individuals of Hispanic and non-Hispanic origin.

⁽³⁾ All Other includes American Indian, Native Alaskan, Native Hawaiian, other Pacific Islander and two or more races.

Data for Chart 7.2

Table 7.3: Age-adjusted Death Rates, Selected Causes, by Race, 2015

Cause of Death	All Persons (per 100,000)	White ⁽¹⁾ (per 100,000)	Black ⁽¹⁾ (per 100,000)
Diseases of the Heart	168.5	167.9	205.1
Malignant Neoplasms	158.5	159.4	180.1
Cerebrovascular Disease	37.6	36.4	50.8
Chronic Lower Respiratory Diseases	41.6	44.5	28.9
Diabetes	21.3	19.6	37.0
Influenza and Pneumonia	15.2	15.2	15.9
HIV Infection	2.0	1.1	7.9

Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

⁽¹⁾ Racial categories include individuals of both Hispanic and non-Hispanic origin.

Data for Chart 7.3

Table 7.4: Number of Persons with Asthma, 1980 – 2015

Year	Total (millions)
1980	6.98
1990	10.31
2000	22.70
2006	34.13
2007	34.01
2008	38.43
2009	39.93
2010	39.19
2011	39.50
2012	39.98
2013	37.33
2014	40.46
2015	40.15

Source: Centers for Disease Control and Prevention (2002). "Asthma Surveillance – United States, 1980-1999." National Center for Health Statistics. National Health Interview Survey 2001, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 and 2015.

Data for Chart 7.6

Table 7.5: Percent of Adults Who Are Overweight and Obese,⁽¹⁾ 1960 – 2014

Years	Overweight ⁽²⁾	Obese
1960-1962	44.8%	13.3%
1976-1980	47.4%	15.1%
1988-1994	56.0%	22.9%
1999-2002	65.1%	30.4%
2003-2006	66.7%	33.4%
2009-2012	68.7%	35.3%
2011-2014	69.5%	36.4%

Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Data are adjusted to 2000 standard population.

(2) Overweight includes obese.

Data for Chart 7.8

Table 7.6: Percent Uninsured by Race,⁽¹⁾ 1984 – 2015

Year	All	White ⁽²⁾	Black ⁽²⁾	Asian ⁽³⁾	Hispanic
1984	14.5%	11.9%	19.7%	18.5%	29.5%
1989	15.6%	12.1%	21.5%	16.9%	33.7%
1995	16.1%	13.0%	17.9%	18.6%	31.4%
2000	17.0%	12.5%	19.5%	17.6%	35.6%
2009	17.5%	13.2%	18.8%	16.2%	32.9%
2010	18.2%	13.7%	20.7%	17.1%	32.0%
2011	17.2%	12.9%	18.8%	16.5%	31.1%
2012	16.9%	12.7%	17.8%	16.8%	30.4%
2013	16.7%	12.2%	18.8%	14.2%	30.7%
2014	13.3%	9.7%	13.5%	10.8%	25.5%
2015	10.6%	7.5%	11.2%	7.5%	21.1%

Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

(1) Data for population under age 65.

(2) Includes individuals of non-Hispanic origin only.

(3) Includes individuals of Hispanic and non-Hispanic origin.

Data for Chart 7.13

Table 7.7: Percent of Persons with No Usual Source of Care by Race, 1997 – 2015

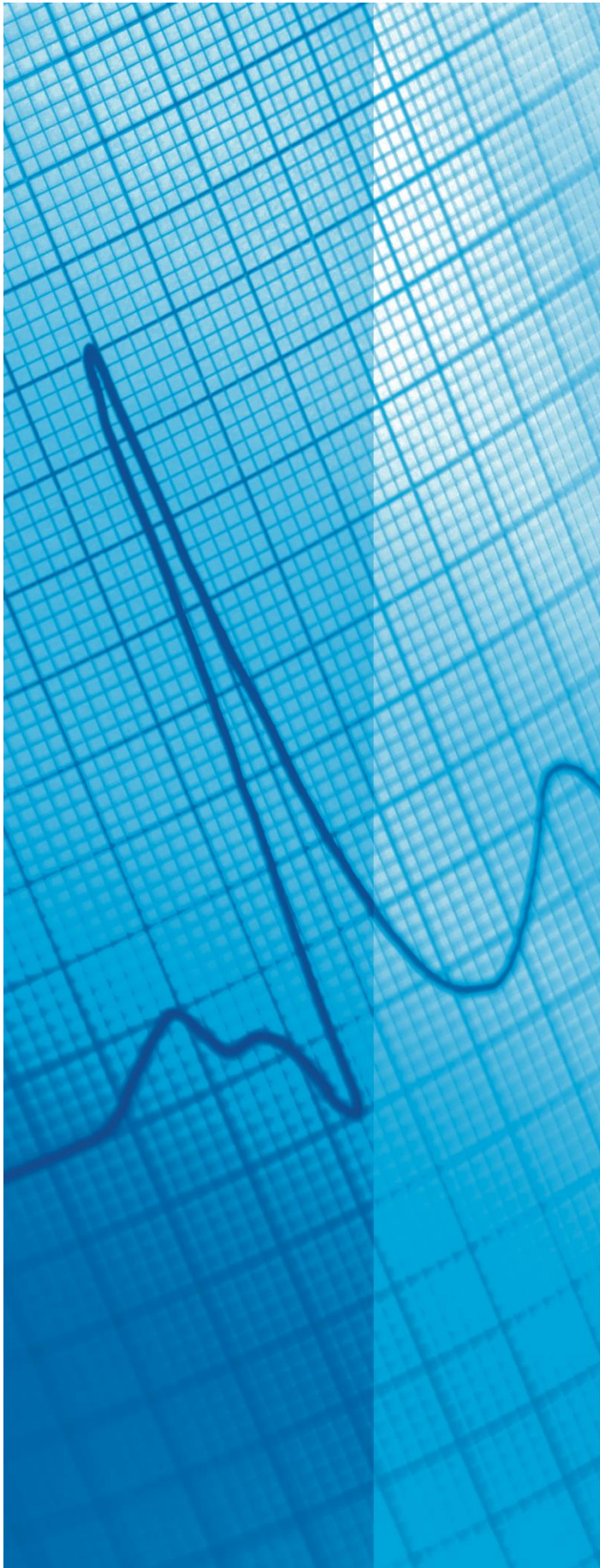
Year	White ⁽¹⁾	Black ⁽¹⁾	Asian ⁽²⁾	Hispanic
Adults, Ages 18 – 64				
1997-1998	15.4	19.3	21.7	30.4
1999-2000	14.9	19.2	22.1	32.6
2001-2002	13.1	16.8	20.1	32.5
2003-2004	14.0	18.1	19.3	32.9
2005-2006	14.8	19.2	17.9	35.1
2006-2007	15.2	18.9	17.3	34.3
2007-2008	15.1	20.2	17.8	32.5
2008-2009	16.0	21.4	19.4	32.8
2009-2010	16.8	22.2	20.8	33.3
2010-2011	15.8	22.1	20.8	33.3
2011-2012	15.5	21.6	20.8	33.6
2012-2013	16.0	21.3	19.9	32.6
2013-2014	15.0	19.6	18.1	28.9
2014-2015	14.6	18.0	17.5	26.2
Children Under 18 Years				
1997-1998	4.5	8.8	10.7	13.2
1999-2000	4.7	7.6	10.0	14.2
2001-2002	3.4	6.6	11.2	13.5
2003-2004	3.2	6.2	7.7	11.4
2005-2006	3.3	5.4	7.7	11.5
2006-2007	4.0	4.9	7.1	11.3
2008-2009	4.1	5.7	5.1	9.4
2009-2010	3.8	5.4	6.1	9.5
2010-2011	3.1	5.4	5.8	7.9
2011-2012	2.9	4.5	5.6	6.2
2012-2013	3.0	3.9	5.3	6.5
2013-2014	2.5	3.8	4.6	6.5
2014-2015	3.0	4.8	5.4	7.5

Source: National Center for Health Statistics. (2017). *Health, United States, 2016*. Hyattsville, MD.

⁽¹⁾ Includes individuals of non-Hispanic origin only.

⁽²⁾ Includes individuals of Hispanic and non-Hispanic origin.

Data for Charts 7.14, 7.16



GLOSSARY

Adjusted Admission – An aggregate measure of workload reflecting the sum of admissions and equivalent admissions attributed to outpatient services. The number of equivalent admissions attributed to outpatient services is derived by multiplying admissions by the ratio of outpatient revenue to inpatient revenue.

Assisted Living – Special combination of housing, supportive services, personalized assistance and health care designed to respond to the individual needs of those who require assistance in activities of daily living. Supportive services are available, 24 hours a day, to meet scheduled and unscheduled needs, in a way that promotes maximum independence and dignity for each resident and encourages the involvement of a resident's family, neighbors and friends.

Average Age of Plant – Accumulated depreciation divided by current depreciation expense.

Community Hospitals – Nonfederal, short-term general, and special hospitals whose facilities and services are available to the public (e.g., obstetrics and gynecology; eye; ear, nose, and throat; rehabilitation; orthopedic; and other individually described specialty services).

FTE per Adjusted Admission – The number of full-time equivalent staff, converted to the number of employees who work full-time divided by the number of adjusted admissions.

Group Practice without Walls – Hospital sponsored physician group. The group shares administrative expenses, although the physicians remain independent practitioners.

Health System – Hospitals belonging to a corporate body that owns and/or manages health provider facilities or health-related subsidiaries. The system may also own non-health-related facilities.

Home Health Service – Service providing nursing, therapy, and health related home-maker or social services in the patient's home.

Horizontal Integration – Merging of two or more firms at the same level of production in some formal, legal relationship. In hospital networks, this may refer to the grouping of several hospitals, outpatient clinics with the hospital, or a geographic network of various health care services.

Hospice – Program providing palliative care, chiefly medical relief of pain and supportive services, addressing the emotional, social, financial, and legal needs of terminally ill patients and their families. This care can be provided in a variety of settings, both inpatient and at home.

Hospital Income from Investments and Other Non-operating Gains – Income not associated with the central operations of the hospital facility. 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.

Hospital Total Net Revenue – Net patient revenue plus all other revenue, including contributions, endowment revenue, governmental grants, and all other payments not made on behalf of individual patients.

Hospital Operating Margin – Difference between operating revenue and operating expenses divided by operating revenue; excludes non-operating revenue.

Hospital Total Margin – Difference between total net revenue and total expenses divided by total net revenue.

Independent Practice Association (IPA) – Legal entity that holds managed care contracts and contracts with physicians to provide care either on a fee-for-service or capitated basis.

Inpatient Surgery – Surgical services provided to patients who remain in the hospital overnight.

Long Term Care – Package of services provided to those who are aged, chronically ill, or disabled. Services are delivered for a sustained period to individuals who have a demonstrated need, usually measured by functional dependency.

Management Services Organization (MSO) – Corporation often owned by the hospital or a physician/hospital joint venture that provides management services to one or more medical group practices. As part of a full-services management agreement, the MSO purchases the tangible assets of the practices and leases them back, employs all non-physician staff and provides all supplies/administrative systems for a fee.

Meals on Wheels – Hospital sponsored program which delivers meals to people, usually the elderly, who are unable to prepare their own meals. Low cost, nutritional meals are delivered to individuals' homes on a regular basis.

Medicaid Margin – Difference between revenue from Medicaid and expenses associated with treating Medicaid patients, divided by revenue from Medicaid.

Medicare Margin – Difference between revenue from Medicare and expenses associated with treating Medicare patients, divided by revenue from Medicare.

Niche Providers – Providers that focus on a specific set of medical services, a particular population, or a limited set of medical conditions.

Non-patient Hospital Costs – Costs not associated with direct patient care, such as the costs of running cafeterias, parking lots and gift shops.

Outpatient Surgery – Scheduled surgical services provided to patients who do not remain in the hospital overnight. In the AHA Annual Survey, outpatient surgery may be performed in operating suites also used for inpatient surgery, specially designated surgical suites for outpatient surgery or procedure rooms within an outpatient care facility.

Outpatient Visit – Visit by a patient not lodged in the hospital while receiving medical, dental, or other services. Each patient visit to a discrete unit constitutes one visit regardless of the number of diagnostic and/or therapeutic treatments received. Total outpatient visits should include all clinic visits, referred visits, observation services, outpatient surgeries and emergency room visits.

Payment-to-cost Ratio – Ratio illustrating the relationship between hospital payments and costs; a ratio equal to "1" reflects payments at 100 percent of costs.

Physician Hospital Organization (PHO)

Closed PHO – Joint venture between a hospital and physicians who have been selected on the basis of cost-effectiveness and/or high quality. The PHO can act as a unified agent in managed care contracting, own a managed care plan, own and operate ambulatory care centers or ancillary services projects, or provide administrative services to physician members.

Open PHO – Joint venture between a hospital and all members of the medical staff who wish to participate. The open PHO can act as a unified agent in managed care contracting, own a managed care plan, own and operate ambulatory care centers or ancillary services projects, or provide administrative services to physician members.

Private Pay Margin – Difference between revenue from non-government payers and expenses associated with treating private pay patients, divided by revenue from non-government payers.

Skilled Nursing Facility – Institution, or part of an institution, which is primarily engaged in providing to residents a certain level of skilled nursing care and/or rehabilitation services for the injured, disabled, or sick.

Uncompensated Care – Care provided by hospitals for which hospitals do not receive payment.

Underwriting – A health insurer or health plan accepts responsibility for paying the health care services of covered individuals in exchange for dollars, usually referred to as premiums. When a health insurer collects more in premiums than it pays in claim costs and administrative expenses, an underwriting gain is said to occur. If the total expenses exceed the premium dollars collected, an underwriting loss occurs.

Underwriting Cycle – Repeating pattern of gains and losses within the insurance industry.

Vertical Integration – Organization of production whereby one business entity controls or owns all stages of the production and distribution of goods or services. In health care, vertical integration can take different forms but most often refers to physicians, hospitals and health plans combining their organizations or processes in some manner to increase efficiencies and competitive strength or to improve quality of care. Integrated delivery systems or healthcare networks are generally vertically integrated.