History of Health Spending in the United States, 1960-2013

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Abstract:

U.S. health care expenditures have steadily increased as a share of gross domestic product (GDP) over the last half century, increasing from 5.0 percent of GDP in 1960 to 17.4 percent in 2013. Over this time period the mix of goods and services consumed as well as the payers, programs, and sponsors of health care spending have experienced dramatic changes. The objective of this paper is to analyze historical trends in health spending in the United States according to the major factors that influenced spending, including policy changes, legislation, recessions, prices, and public and private initiatives.

Introduction

In this article we analyzed historical trends in the National Health Expenditure Accounts (NHEA) from 1960 through 2013 according to the major factors that influenced spending, including policy changes, legislation, recessions, prices, and public and private initiatives. National health expenditures are first reviewed in terms of the overall economy and aggregate trends, and then periods of varying growth are divided into smaller health spending eras that range from the 1960-1965 pre-Medicare and Medicaid period to a recent era of slower growth that began in 2003.

Background

The NHEA comprise the official government estimates of aggregate health care spending in the United States. These annual estimates are comprehensive, mutually exclusive, and multi-dimensional and utilize a consistent methodology and classification structure from 1960 to 2013.

Interest in understanding U.S. health care expenditures and in tracking a comprehensive set of health spending estimates gained momentum in the 1920s, and that interest increased after the creation of Medicare and Medicaid in 1965, when economists and other experts sought to measure the effects that these programs and others had on overall health expenditures.[1] The NHEA were established using definitions and concepts generally consistent with the Bureau of Economic Analysis and the National Income and Product Accounts[2,3] and with international standards such as the System of Health Accounts[4] and System of National Accounts.[5] The NHEA are presented as a continuous series from 1960 through 2013 and in a matrix format, with spending data arranged by goods and services along one axis and by source of funding along the other [also included are estimates for public health and investment in the health care system (research, structures, and equipment)]. The estimates for health care goods and services in the NHEA are based on the North American Industry Classification System (NAICS), which

is an establishment-based classification system. The estimates for sources of funding, including out-of-pocket (OOP), health insurance, and other third-party payers, are based on government and private data. To ensure that the NHEA reflect changes to the health sector over time, the entire structure is examined periodically (typically every 5 years). As a result of these comprehensive reviews (or benchmarks) data sources are updated, and methodological, definitional, and classification-related changes are incorporated.[6]

The NHEA are widely consulted by the research and policy community and are often used in predictive and analytic modeling and as a point of comparison for other economic and health spending data.[7] Published studies have compared the NHEA estimates to those in the National Income and Product Accounts, the Medical Expenditure Panel Survey (MEPS), and the Consumer Expenditure Survey. [8,9,10] The NHEA also serve as the basis for other analyses, such as short-term and long-term projections and spending estimates by state and by age and gender.[11]

Aggregate Health Spending and the Overall Economy

Over the last half century, total U.S. health expenditures steadily increased as a share of gross domestic product (GDP), demonstrating the increased importance that society places on health care relative to other non-health goods and services. During 1960 - 2013, the health spending share of GDP increased from 5.0 to 17.4 percent (Exhibit 1). Over the same period, average annual growth in nominal national health expenditures was 9.2 percent compared to nominal GDP growth of 6.7 percent. After adjusting for economy-wide inflation (using the GDP price index), average annual health spending growth was 5.5 percent between 1960 and 2013 compared to 3.1 percent growth in GDP (Exhibit 2).

Each sector of the economy has a marginal impact on the change in GDP, which can be quantified as the dollar increase in spending for the sector divided by the dollar increase in GDP. For example, in 2013, nominal GDP increased by $605 billion over its 2012 level, while health

spending was $102 billion higher in 2013 compared to 2012. The additional $102 billion in health expenditures in 2013 accounted for 16.8 percent of the additional $605 billion in GDP. This ratio is known as the health spending marginal share of GDP.[12, 13]

Over time, the marginal contribution of health spending to GDP has tended to increase, as growth in health expenditures has typically outpaced that for overall economic output. This is particularly evident during economic recessions when as overall economic growth contracts but there is not a contemporaneous impact on the health sector (there has been a lagged relationship between the health sector and the economy with the largest impact on health spending growth occurring 2 -3 years after the end of the recessions) (Exhibit 3).[14, 15] On average from 1960-2008, the health spending marginal share of GDP averaged 15.3 percent. However, during or immediately after the recessions throughout at this period, the marginal impact spiked: in 1982 the marginal share of GDP was 28 percent; in 1991 the share was 35 percent; in 2002 it was 40 percent; and in 2008 it was 46 percent. These spikes generally occur as health expenditure growth remains relatively strong while overall economic growth slows or contracts.

From 1960 through 2013, health spending rose from $147 per person to $9,255 per person, an average annual increase of 8.1 percent. In comparison, per capita adjusted personal income was $2,267 in 1960, and in 2013 it reached $42,266, reflecting an average annual growth rate of 5.7 percent.[16] As overall health spending increased at a faster rate than personal income, household expenditures on health as a share of adjusted personal income grew from 4 percent in 1960 to 6 percent in 2013.[17]

Trends over time in personal health care spending (which excludes investment, public health, and government administration and net cost of health insurance) can be allocated to the price components (both economy-wide and medical-specific price inflation) and other non-price

factors (such as technology,[18] population, and use and intensity) that influence growth (Exhibits 4 and 5). In the 1960s and early 1970s, health expenditure growth was dominated by non-price factors, as expanded health insurance coverage and increased access to care led to strong growth in the use of goods and services. At the same time, the health sector was experiencing significant advances in technology and the practices used to treat patients.[19] When overall price inflation spiked in the mid-1970s to early 1980s, price increases accounted for the majority of the growth in personal health care spending. In the mid- to late 1990s, non-price factors once again accounted for the larger share of health expenditure growth as managed care plans leveraged price discounts from providers and shifted use from more costly settings (such as inpatient hospital care) to lower-cost alternatives.[20] In the late 1990s and early part of the 21st century, consumers demanded less restrictive managed care and, as a result, their use of services increased, continuing the strong influence that non-price factors had on health expenditures. At the same time, the emergence of several new blockbuster drugs and a dramatic increase in direct-to-consumer advertising contributed to greater use of prescription drugs. Between 2008 and 2011, the severe economic recession and modest recovery had a significant impact on health expenditures, as growth in non-price factors was low due to individuals moderating their use of health care goods and services.

As health care spending grew steadily between 1960 and 2013, the responsibility for covering these expenditures shifted among the sponsors of health care. The sponsors include the businesses, households, and governments that ultimately finance health care payers (such as private health insurance, Medicare, and Medicaid). In 1960, businesses, households, and other private sponsors financed 77 percent of health care expenditures, while governments sponsored the remaining 23 percent. However, by 2013 the shares had shifted significantly, with 57 percent

of health spending sponsored by businesses, households, and other private revenues and 43 percent sponsored by governments. Households experienced the largest shifts, declining from 56 percent in 1960 to 28 percent in 2013 as the OOP spending share of overall health expenditures fell, largely due to increased insurance coverage related to the implementation and expansion of government programs such as Medicare and Medicaid and increased enrollment in private health insurance (Exhibit 6). Over the same period, the Federal government's share of health expenditures increased from 11 percent to 26 percent.

International Comparison of Health Spending

The NHEA can also be used to compare health care spending in the U.S. with that in other developed countries. Based on common international definitions developed by the Organization for Economic Co-operation and Development (OECD), [21] the U.S. share of GDP consumed by health expenditures increased from 5.1 percent in 1960 to 16.4 percent in 2013. Over the same period, the average health spending share of GDP for OECD member countries, excluding the U.S., increased from 3.7 percent to 8.7 percent. However, between 2005 and 2013, the average annual growth rate in real per capita health expenditures in the U.S. (2.3 percent) was lower than the average growth rate for other OECD countries (3.4 percent). During the past few years (2009 – 2013), the average real per capita health expenditure growth rate of 1.5 percent in the U.S. was faster than the OECD average of just 0.5 percent, which was impacted by the global economy recovering from the severe economic downturn.[22, 23] On a relative basis the change in the share of the GDP from 2005 through 2012 was higher —a relative difference of 1.8 percentage points in the US versus 0.8 percentage points in the other OECD countries. Over the last 20 years, excess medical expenditure growth (increased spending above overall economic growth) in the U.S. was similar to that for other OECD countries.[24]

Health Spending Eras

In an effort to understand the broader trends in national health expenditures over the 54-year history of the NHEA, we identified five health spending eras that became evident when the data was analyzed. Specifically, the data showed periods with consistent trends over time (such as high price growth or slow overall health spending growth) or periods in which significant public or private initiatives that affected the entire health care system were implemented (such as the passage of Medicare and Medicaid).

Average Annual Growth, Health Spending Eras 1960-2013

		National Health Expenditures (NHE)		Personal Health Care (PHC)			Gross Domestic Product (GDP)		
Era	Description	NHE (nominal)	NHE (2009 dollars)	PHC (nominal)	Non-price	Price	GDP (nominal)	GDP (2009 dollars)	GDP Price Index
		Average Annual Growth							
1961 - 1965	**Pre-Medicare and Medicaid**	**8.9**	**7.5**	**8.3**	**6.2**	**2.1**	**6.5**	**5.0**	**1.4**
1966 - 1982	**Coverage Expansion and Rapid Price Growth**	**13.0**	**6.5**	**13.1**	**5.6**	**7.5**	**9.2**	**2.9**	**6.1**
1966 - 1973	Coverage expansion and growth utilization	11.9	7.2	12.0	6.9	5.1	8.5	4.0	4.4
1974 - 1982	Rapid growth in prices	13.9	5.8	14.1	4.5	9.7	9.9	2.0	7.7
1983 - 1992	**Payment Change and Moderate Price Growth**	**9.9**	**6.5**	**10.0**	**4.2**	**5.7**	**6.9**	**3.6**	**3.2**
1993 - 2002	**Cost Containment and Backlash**	**6.7**	**4.7**	**6.5**	**3.7**	**2.7**	**5.3**	**3.4**	**1.9**
1993 - 1999	Managed Care and government efforts to control costs	6.0	4.1	5.8	3.3	2.5	5.7	3.8	1.8
2000 - 2002	Managed care backlash and public payer changes	8.4	6.2	8.0	4.8	3.2	4.4	2.3	2.0
2003 - 2013	**Recent Slower Growth**	**5.4**	**3.2**	**5.5**	**2.8**	**2.7**	**3.9**	**1.8**	**2.1**
2003 - 2007	Steady slowdown in spending	7.1	4.2	7.0	3.7	3.2	5.7	2.9	2.7
2008 - 2013	Impact of the Great Recession and modest recovery	4.0	2.4	4.3	2.0	2.2	2.5	0.9	1.5
1961 - 2013	**Historical Spending**	**9.2**	**5.5**	**9.2**	**4.4**	**4.7**	**6.7**	**3.1**	**3.5**

Pre-Medicare and Medicaid (1960-1965)

Average Annual NHE growth—8.9%[25]*; Average Annual GDP growth*—6.5%[26]*; End-of-Period NHE-to-GDP Share—5.6*

Before the implementation of the Medicare and Medicaid programs, health expenditures were financed largely by private payers, with OOP and private health insurance spending accounting for just over two-thirds of all health care expenditures. Most of these payments were in the form of direct OOP payments from households, which accounted for almost half of health care spending (48 percent) in 1960. The OOP share dropped to 44 percent by 1965 as the private health insurance share increased from 21 percent to 24 percent, primarily due to enrollment in

private health insurance plans, which grew from 125.2 million in 1960 to 135.9 million in 1965—0.3 percentage point faster than population growth.[27]

During this era, the average annual growth rate for overall nominal health spending was 8.9 percent, while health expenditures in inflation-adjusted dollars increased, on average, 7.5 percent per year. Much of the growth in nominal personal health care spending during this period was due to non-price factors (such as use and intensity of services) as health care price growth was relatively slow at just 2.1 percent, on average, between 1960 and 1965.

Coverage Expansion and Rapid Price Growth (1966-1982)

Average Annual NHE growth—13.0%; Average Annual GDP growth—9.2%; End-of-Period NHE-to-GDP Share—10.0

Nominal health care spending grew rapidly during the period 1966 to 1982 at an average rate of 13.0 percent per year. When adjusted for inflation, however, health expenditures increased at an average rate of 6.5 percent per year over the period, or roughly 1 percentage point slower than during the pre-Medicare and Medicaid era. The fast nominal growth over this period was driven largely by expanded health insurance coverage (particularly in the late 1960s when Medicare and Medicaid were implemented) [28] and strong price inflation. The rapid rates of increase were broadly based, as most service categories experienced double-digit growth and the sales of retail medical products (including prescription drugs) grew at an average rate of just under 10 percent per year.

<u>Coverage Expansion and Growth in Utilization (1966-1973)</u>

Health spending growth for 1966 through 1973 averaged 11.9 percent per year, faster than the average growth rate for 1960 to 1965 of 8.9 percent. This acceleration was influenced by both expanded health insurance coverage associated with the implementation of Medicare and Medicaid and by faster medical price growth. The Medicare and Medicaid programs went into

effect on July 1, 1966 and were designed to provide financial assistance to the elderly for hospital services and other medical care, as well as subsidized health care for the poor.

The 1965 amendments to the Social Security Act that created the Medicare and Medicaid programs were a political compromise that combined three competing bills and laid the foundation for Medicare Part A, Medicare Part B, and Medicaid. [29, 30] Together, these three programs were called the three-layered cake. The first layer was based on the King-Anderson bill, which was a proposal to provide compulsory insurance for the 65-and-older population that would cover only hospital services and nursing home care and be funded by payroll taxes. Although the King-Anderson bill was initially defeated, it later became the basis for the Medicare Part A benefit. The second layer was based on the Byrnes bill, a proposal for a voluntary insurance program that would cover physician and other services and be financed by enrollee premiums subsidized by Federal funds (general revenue). The Byrnes bill became the foundation for the Medicare Part B benefit. Finally, the third layer was based on a legislative bill generally known as Eldercare, which proposed subsidized private health insurance for low-income individuals by expanding existing state and Federal assistance. The Eldercare bill became the basis for the Medicaid program.[31]

When the programs started in 1966, 18.9 million people enrolled in Medicare Part A, 17.6 million enrolled in Part B, and 4 million enrolled in Medicaid.[32, 33] During 1967 to 1973, Medicare expenditures grew, on average, 28.6 percent per year, and reached $10.7 billion and 23.1 million enrollees in 1973. During the first 3 years of the program, the rapid growth in Medicare spending was due to increased utilization of services (as pent-up demand and greater access to care increased health care consumption), rapid growth in hospital costs, and wider use of skilled nursing facilities.[34] In the later years of this period (1970-1973), Medicare

expenditures continued to increase rapidly, influenced largely by cost growth, particularly for outpatient hospital services.[35]

During Medicaid's first year, 28 states implemented the new program immediately, while other states needed time to begin program operations. [36,37] By 1973, enrollment had reached 17.0 million, and expenditures were $9.4 billion.[38] During the first 6 years of the program, enrollment expanded rapidly as most states completed Medicaid implementation and some states expanded coverage to individuals in optional eligibility groups.[39] Notably, the Arizona Medicaid program was not established until 1982, when it was created as a research and demonstration model.[40] At the same time, per enrollee Medicaid spending grew rapidly as the number of covered services increased due to states offering coverage for optional services. Additionally, amendments to the Social Security Act in 1971 and 1972 greatly expanded Medicaid enrollment and continued to increase the number of covered services, including care in Intermediate Care Facilities for the Mentally Retarded (now referred to as Intermediate Care Facilities for the Intellectually Disabled (ICFID)) and inpatient psychiatric care.[41]

The faster growth in health spending during 1966 through 1973 reflected not only increased utilization, but also faster price growth for medical care (especially hospital services) and for the overall economy. Economy-wide inflation (as measured by the GDP price index) averaged growth of 4.4 percent for 1966 to 1973, while personal health care prices increased by an average of 5.1 percent. In an attempt to slow price growth, the Economic Stabilization Program (ESP) was put in place for the period August 1971-April 1974. The first phase of the program began on August 15, 1971, with an immediate freeze on most prices, wages, salaries, and rents. Price controls were in effect for the entire economy from 1971 to 1973, while the

controls for medical care stayed in effect until 1974, resulting in lower health care prices and higher utilization during those years.[42]

The implementation of the Medicare and Medicaid programs caused a major shift among the sponsors of health care expenditures. Private businesses, households, and other private revenues declined as a share of NHE—from 76 percent in 1966 to 71 percent in 1967—as direct payments by the elderly population accounted for a smaller share. At the same time, the government share of spending increased from 24 percent in 1966 to 29 percent in 1967. Most of the increased burden of sponsoring health care expenditures during this period fell on the Federal Government, as evidenced by the share of Federal revenue spending for health care growing from 5.1 percent in 1966 to 7.4 percent in 1967[43].

Between 1966 and 1973, the growth rate for overall health expenditures ranged from between 10.2 percent and 13.5 percent; however, spending for nursing care facilities and home health care increased more rapidly than expenditures for other services over the period, averaging growth rates of 19.8 and 15.1 percent per year, respectively. Increased utilization of these services was driven in part by an influx of elderly individuals who were now covered by Medicare. Additionally, expenditures for hospitals, physicians, and dentists averaged double-digit growth for 1966 through 1973.

Rapid Price Growth (1974-1982)

The 1974-1982 period was characterized by high economy-wide inflation, driven in part by oil price shocks in the mid- to late 1970s and by three economic recessions that together spanned 38 months.[44, 45] Additionally, the removal of the ESP price controls in April of 1974 contributed to the rapid growth in overall prices during these years. Economy-wide inflation, as measured by the GDP price index, was at its highest from 1974 to 1982, averaging 7.6 percent and with growth rates ranging from 5.5 percent to 9.4 percent.[46] Over the same period, growth in

the personal health care price averaged 9.7 percent and ranged from 9.0 percent in 1974 to 10.5 percent in 1982. The growth in health care prices accounted for more than 60 percent of growth in nominal personal health care (which averaged 14.1 percent annually) each year from 1974 to 1982. In the late 1970s, hospitals were asked to voluntarily control prices (known as the Voluntary Effort), but this attempt to control growth was not successful and prices rebounded quickly.[47]

Although non-price factors, such as the use and intensity of services, did not contribute as significantly to growth during 1974-1982 as did prices, these factors still grew quickly over these years as demand for health care services increased due to numerous factors. Hospital outpatient visits grew on average 3.8 percent per year over the period, while admissions increased 1.5 percent per year and the average length of stay declined from 7.8 days in 1974 to 7.6 days in 1982.[48] At the same time, increases in the number of physicians, increased physician specialization, and increased insurance coverage contributed to growth in the use of physician services.[49] Additionally, severe influenza epidemics between 1979 and 1981 (the largest since 1968) and a severe heat wave in 1980 contributed to the increased use of medical services, particularly hospital inpatient care on the part of the elderly.[50] Along with increased utilization, the intensity of services also accelerated, specifically in the late 1970s and early 1980s as surgical rates and the use of laboratory testing grew in part as a result of increased concerns related to malpractice.[51]

While average growth in health spending for 1974-1982 was high for most goods, services, and payers, there was some variation in trends. The fastest growing category of health spending during this time was home health care, which had an average annual growth rate of 32.5 percent. Home health care prices increased 10.1 percent annually, more rapidly than most

other services, and the use of such care also increased dramatically over the period. Medicare payments for services provided by home health agencies increased at an average annual rate of 33.6 percent between 1974 and 1982. Prescription drugs and durable medical equipment were the slowest growing categories for 1974 to 1982, with expenditures increasing at rates of 9.2 and 8.2 percent, respectively. Not surprisingly, these two categories experienced the slowest average annual growth in prices over the period (7.5 percent for prescription drugs and 7.1 percent for durable medical equipment). Prescription drugs and durable medical equipment typically have higher out-of-pocket costs, which contributed to their slower rates of growth.

During 1974 through 1982, annual growth averaged 17.0 percent for private health insurance, 19.3 percent for Medicare, and 14.6 percent for Medicaid, while OOP spending grew more slowly at a 9.7-percent average annual rate. Although rapid underlying price increases contributed to the growth of all third-party payments, expanded coverage for the disabled (in late 1973) and rapid expansion of ICF/IDs (Intermediate Care Facilities for the Intellectually Disabled) also contributed to Medicare and Medicaid expenditure growth. At the same time, continued enrollment and benefit expansions, including rapid increases in the number of self-insured plans in the mid- to late 1970s, boosted growth in private health insurance.[52] The relatively slower growth in OOP expenditures also reflected increased insurance coverage as third-party payments replaced spending that was previously paid for directly by the consumer.

The Employee Retirement Income Security Act of 1974 (ERISA), which was enacted in September of 1974, had a significant impact on employer-sponsored private health insurance over this period and led to a dramatic increase in the number of self-insured employers. ERISA allowed states to continue to regulate insurance products but prohibited them from considering employee benefit plans as insurance. Employers who offered self-insured employee health plans

were thus exempt from state-specific regulations related to required benefits and reserve requirements and did not have to pay state premium taxes.[53] Because self-insured plans tend to be less costly than fully insured plans and allow employers more flexibility with plan design, the number of large employers that offered self-insured plans increased greatly after the passage of ERISA.[54] In 1970, such plans accounted for just 4 percent of private health insurance benefit payments; however, after the enactment of ERISA, that share grew to 10 percent in 1975 and to 31 percent in 1982.[55]

Payment Change and Moderate Price Growth (1983-1992)

*Annual Average NHE growth—9.9%**;** Annual Average GDP growth—6.9%; End-of-Period NHE-to-GDP Share—13.1*

For 1983 to 1992, nominal health spending moderated somewhat, with an average annual growth rate of 9.9 percent (compared to 13.0 percent for 1966 to 1982), while health expenditures in 2009 dollars increased 6.5 percent per year, which was the same rate of growth in inflation-adjusted dollars as during the 1966-1982 period (6.5 percent). The relatively slower increase in nominal spending over this period was driven largely by lower economy-wide and medical-specific price inflation. However, significant changes in the ways in which health care was provided and in the payment mechanisms used to finance that care also affected growth.

Economy-wide price growth for 1983 through 1992 averaged 3.2 percent year, much slower than the average growth rate of 7.7 percent for 1974 through 1982.[56] Personal health care prices also grew more slowly over the period, increasing on average 5.7 percent compared to 9.7 percent during 1974 to 1982. This slower growth was mostly a function of lower increases in economy-wide prices, though there was also greater cost consciousness by consumers, employers, and governments.[57] Some of the factors that significantly affected medical prices during this period were changes to Medicare program payments[58] and rapid increases in

enrollment in Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), and self-insured plans. Despite the slower growth in prices from 1983 through 1992, inflation accounted for just over half of the increase in personal health care expenditures during these years.

Non-price factors such as the use and intensity of services grew on average 4.2 percent between 1983 and 1992, about the same rate of growth as the prior era (1974-1982). During the 1980s and early 1990s, the use of services shifted somewhat from inpatient to outpatient care and from hospital care to other providers.[59] While payment changes (like the implementation of Medicare's Inpatient Prospective Payment System) encouraged the timely release of patients from inpatient care, improvements in technology (for example, less invasive procedures and improved diagnostic tools like Magnetic Resonance Imaging) led to increased use of outpatient treatments.[60] At the same time, hospitals began to explore new ways of providing health care, such as offering services at free-standing outpatient clinics (walk-in clinics), primary care centers, and home health departments.[61]

During the 1983-1992 period, the health sector experienced major shifts in the sources of funds that pay for health care as third-party payers took a more active role in managing costs. For example, the Medicare program underwent dramatic changes during this time. Following double-digit average growth in Medicare hospital spending during the 1960s and 1970s, the Tax Equality and Fiscal Responsibility Act of 1982 was enacted, requiring the Department of Health and Human Services and Congress to develop a prospective payment system (PPS) for hospitals. Starting in October 1983, the Medicare Inpatient PPS replaced the previous cost-based system and began paying for services according to a predetermined cost for treating patients with a specific diagnosis. The new payment system had an immediate impact on hospital utilization, as

some services previously provided on an inpatient basis were provided on an outpatient basis and in physicians' offices.[62] Additionally, in July 1984, after years of double-digit price growth in Medicare Part B expenditures, Congress imposed a freeze on Medicare physician fees that lasted through 1986. Finally, at the end of this period, in 1992, a new payment system was implemented for Part B spending (Physician Fee Schedule).

Other notable changes to the Medicare program occurred during 1983 to 1992. The Tax Equity and Fiscal Responsibility Act of 1982 allowed HMOs to provide coverage to Medicare beneficiaries on a risk basis and offered incentives for the government to use prepaid insurance arrangements.[63] In 1983, Medicare eligibility was expanded to Federal employees and, in 1984, to non-profit organizations and the self-employed. Lastly, in 1988, the Medicare Catastrophic Coverage Act was enacted, the first major expansion of the program since 1973.[64] This law added coverage for prescription drugs and other services and provided expanded coverage for inpatient hospitalization, skilled nursing care, and home health. Although the legislation was repealed in December of 1989, one of its provisions that was left in place required Medicaid to pay premiums, deductibles, and co-insurance for aged, blind, and disabled individuals whose incomes were below certain levels.

Medicaid spending growth averaged 13.0 percent for 1983 through 1992, slower than the 14.6 -percent average annual growth rate for 1974 through 1982. The Omnibus Budget Reconciliation Act of 1981 (OBRA 1981) reduced the Medicaid Federal Medical Assistance Percentage in 1982, 1983, and 1984, lowering the Federal Government's share of overall Medicaid payments. At the same time, OBRA 1981 made it more difficult for individuals to qualify for Medicaid coverage by changing eligibility for welfare benefits. During 1982 through 1984, states began to use Medicaid managed care plans (a new flexibility granted to them by

Congress) and the use of home and community-based waivers.[65] All of these efforts contributed to lower overall growth for the Medicaid program in the early 1980s. However, during the mid-to-late 1980s and early 1990s, several laws, including the Omnibus Budget Reconciliation Act of 1986, the Family Support Act of 1988 and the Omnibus Budget Reconciliation Act of 1990, further expanded Medicaid eligibility to pregnant women, infants, and children; emergency treatment to illegal immigrants who would otherwise qualify for Medicaid; and transitional assistance for families losing assistance under the Aid to Families with Dependent Children program.[66] These changes, along with rapid growth of ICFIDS, contributed to faster growth in the Medicaid program compared to the early 1980s.

Private health insurance coverage also changed significantly from 1983 through 1992, with increased enrollment in HMOs, PPOs, and self-insured plans. Following strong double-digit growth in the previous eras, employers continued to seek ways to control the increase in their health care expenditures. Enrollment in managed care plans, specifically HMOs, grew from 9 million in 1980 to almost 33 million in July 1990.[67] Additionally, employers' use of self-insured plans continued to demonstrate the strong growth that had begun in the latter half of the 1970s[68] [69] as many large companies moved to this type of arrangement in an attempt to control their health care expenditures, manage cash flow more efficiently, and avoid state regulation.

Most health care goods and services experienced slower expenditure growth from 1983 through 1992, with the notable exception of retail prescription drugs, which increased, on average, 12.1 percent per year over the period compared to an average annual growth rate of 9.2 percent during 1974-1982. Home health care was the fastest growing category, averaging a growth rate of 18.3 percent per year, while other non-durable medical products increased at the slowest rate—6.3 percent per year.

Cost Containment Followed by Backlash (1993-2002)

Annual Average NHE growth—6.7%; Annual Average GDP growth—5.3%; End-of-Period NHE-to-GDP Share—14.9

For 1993 through 2002, nominal health spending increased 6.7 percent (which amounts to a growth rate of 4.7 percent after adjusting for inflation). Health expenditures moderated from 1993 through 1999, with average annual growth of 6.0 percent (4.1 percent after adjusting for inflation); however, spending grew more quickly over the period 2000-2002, with growth of 8.4 percent per year (6.2 percent in inflation-adjusted dollars). Per capita spending increased from $3,504 in 1993 to $5,694 in 2002, while the health spending share of GDP increased from 13.4 to 14.9 percent. Most of the moderation in health spending growth in the 1990s was the result of cost-containment efforts by businesses and by Federal, state, and local governments. Businesses controlled costs by offering lower-premium health care plans with more tightly managed access to care, while governments passed legislation that curbed spending on Medicare and Medicaid. The slower growth in the mid- to late 1990s was followed by much faster growth during 2000 through 2002, as consumers demanded less restrictive health care plans and Medicare and Medicaid spending was expanded to ease some of the earlier reductions.

<u>Managed Care and Government Efforts to Control Costs (1993-1999)</u>

The period 1993 to 1999, also known as the managed care era, was characterized by rapid increases in enrollment in more restrictive forms of health insurance such as HMOs. HMOs and other managed care plans had their roots in the Health Maintenance Organization Act of 1973, but they became much more popular in the 1990s as employers used them as a method to contain costs and by 1998, enrollment in HMOs exceeded 64 million individuals.[70] During the 1990s, managed care plans slowed the rate of increase in health spending by negotiating lower prices with a tighter network of providers and by slowing the growth in utilization of health care good

and services.[71] From 1993 through 1999, personal health care price growth averaged 2.5 percent, much lower than the 5.7 percent growth in the 1983-1992 era; at the same time, non-price factors grew 3.3 percent, or just 1 percentage point slower than during the previous era (1983-1992).

HMOs and other managed care plans relied on gate keepers and capitated payments, among other cost-containment programs, and effectively shifted some utilization of services from hospitals to physicians. In addition, managed care organizations reduced costs by entering into financial arrangements with hospitals that were based on pre-negotiated charges, with substantial discounts included, and by limiting the utilization of inpatient hospital care.[72] As a result, hospital spending grew at an average annual rate of 4.0 percent per year during the managed care era, compared with 5.2 percent for physicians and clinical services.

Government health care programs continued to experience rapid growth in the early 1990s, and as a result Federal and state governments explored ways to reduce costs. The Balanced Budget Act of 1997 (BBA) was enacted to help contain Medicare and Medicaid spending, which had increased from 25.7 percent of overall health spending in 1983 to 32.5 percent in 1997. Some of the provisions of the BBA included establishing a skilled nursing facility PPS, freezing Medicare payments for inpatient hospital admissions, and reducing payment updates for almost all providers. There was also growing concern regarding fraud and abuse in the Medicare program, which led to a moratorium on the licensing and certification of participating home health agencies. The BBA, along with lower overall inflation, contributed to a 0.5-percent decline in Medicare spending in 1998 and to low growth of only 1.8 percent in the following year.

Another provision of the BBA allowed states the option of using Medicaid managed care plans without being granted a waiver.[73] These plans offered an effective way to control Medicaid

costs and many states expanded their use of managed care. As a result, after double-digit increases in previous periods, Medicaid spending growth slowed to just 7.8 percent from 1993 through 1999.

Managed Care Backlash and Public Payer Changes (2000-2002)

The highest rate of health spending growth since 1990 occurred in 2002, when growth was 9.6 percent. This strong increase followed accelerated growth of 7.1 and 8.5 percent in 2000 and 2001, respectively. Several major factors led to much faster increases in health spending than during the managed care era, including a shift away from the tightly managed health care plans that had become popular in the 1990s, rapid growth in prescription drug expenditures, and faster increases in government spending for health care. Health-specific price growth picked up during his era, increasing 3.2 percent, while non-price factors also grew more rapidly at 4.8 percent

The rapid enrollment growth in more tightly controlled managed care plans that was experienced during the period 1993-1999 reversed from 2000 through 2002, as individuals and employers shifted to less restrictive forms of managed care such as PPOs and point-of- service plans (POS). Consumers had become increasingly concerned that insurance companies were making decisions on treatment plans and that their options for care and choice of doctor were being constrained.[74] In response to these concerns, many states passed legislation that restricted the cost-containment mechanisms used by managed care plans. Additionally, the realization on the part of many employers that managed care savings were largely a one-time effect resulted in a willingness to move away from tightly managed care, thereby enabling individuals to select plans with less restrictive coverage.[75] Most of the slow growth during the 1990s was the result of the continued increase in the number of managed care enrollees, whose costs were initially lower. In the longer term, however, managed care insurers were still subject to the underlying forces that caused health costs to rise (such as technology and consumer demand).

Spending for hospital and physician and clinical services contributed to faster growth for 2000 to 2002, as health insurance coverage shifted to less restrictive plans and as providers improved their negotiating positions with insurers—the result of hospital mergers and larger physician practices.[76, 77] Hospital spending grew at an average annual rate of 7.3 percent during the period as the number of hospital mergers increased, strengthening hospitals' abilities to negotiate prices. [78]Average annual growth in physicians and clinical services was also 7.8 percent, due in part to increased use and intensity of services, particularly during visits related to imaging and prescription drug prescribing.[79]

Strong growth in health spending for 2000 through 2002 was also driven by a rapid increase in retail prescription drug expenditures. A surge in the introductions of new blockbuster drugs in the late 1990s, coupled with a dramatic increase in direct-to-consumer advertising, resulted in a 14.7-percent average annual growth rate for prescription drugs over the 3-year period. Insurers attempted to slow the rapid growth in drug spending by instituting tiered formularies with lower co-payments for less expensive generic drugs and higher co-payments for high-cost brand-name drugs.

As mentioned previously, the BBA was enacted to constrain Medicare and Medicaid spending growth. However, the actual impact of the law was greater than anticipated. For example, BBA-mandated Medicare payment reductions for home health care contributed to a large number (approximately 3,500) of agencies closing, merging, or withdrawing from the Medicare program.[80] Concerns that some of the provisions of the BBA were too severe, coupled with expanding Federal budget surpluses, led to the passage of the Balanced Budget Refinement Act of 1999 (BBRA) and the Benefits Improvement and Protection Act of 2000 (BIPA). The BBRA and BIPA halted or delayed some of the payment reductions that were part of the BBA,

while BIPA also expanded coverage under the Children's Health Insurance Program to additional uninsured children and teens. Medicare growth averaged 7.6 percent for 2000 to 2002 with particularly rapid growth in nursing home and home health care as provisions of the BBRA and BIPA relaxed the spending restrictions from the BBA.

Recent Slower Growth (2003-2013)

Annual Average NHE growth—5.4%; Annual Average GDP growth—3.9%; End-of-Period NHE-to-GDP Share—17.4

Health spending growth was slower from 2003 through 2013, increasing on average 5.4 percent per year (or just 3.2 percent in inflation-adjusted dollars). This period was influenced in part by two notable factors: a rapid increase in the number of comparatively less expensive generic drugs purchased and the most severe economic recession since the Great Depression of 1929. In the years that immediately followed the managed care backlash, health spending growth decelerated steadily from the 2002 peak of 9.6 percent to 6.3 percent in 2007. The sluggish growth over these 5 years was driven largely by slower increases in retail prescription drug expenditures, as well as by lagged impacts of the 2001 recession. From a payer perspective, private health insurance and Medicaid grew more slowly on average over these years, while Medicare (in part due to the implementation of Medicare Part D) and OOP spending growth accelerated. In the midst of the latest severe economic, which spanned all of 2008 and half of 2009, health expenditure growth slowed dramatically. The recession began in December of 2007 and had a limited impact on health spending that year as expenditures increased 6.3 percent, which was about the same rate as in 2006. However, as the recession intensified, health spending growth decelerated rapidly, falling to 4.8 percent in 2008 and to 3.8 percent in 2009. Health expenditures remained low thereafter, with growth rates increasing between 3.6 and 4.1 percent per year through 2013.

Retail prescription drug expenditures increased, on average, just 5.0 percent per year for 2003 through 2013, more slowly than during any other health spending era. This much slower growth was due largely to increased use of generic drugs during the period. While 39 percent of dispensed drugs were generic in 2002, by 2013 this share had more than doubled, accounting for 80 percent of total prescriptions dispensed.[81] This dramatic increase in the number of generic drugs consumed was driven largely by the loss of patent protection for numerous blockbuster drugs over the period; at the same time, the number of new product introductions, which tend to enter the market with high prices, was relatively low. The faster growth in generic drug use was further accelerated by health plans' increased use of tiered drug formularies, which required lower co-payments for generic drugs, and a continued shift to lower-cost mail-order pharmacies as an alternative to other retail channels. Slow growth in prescription drug prices from 2003 through 2013 also contributed to slower retail prescription drug spending. The average annual increase in prescription drug prices during these years was 3.2 percent, less than half the rate of growth for 1980 to 2002 (7.0percent).[82]

While overall spending growth for prescription drugs slowed dramatically during 2003 through 2013, the enactment of Medicare Part D, which was fully implemented in 2006, caused a one-time uptick in overall drug expenditures and also caused major shifts in the distribution of payers for prescription drugs. In 2006, overall retail prescription drug spending grew 9.3 percent due to the expanded drug coverage and the accompanying increased use of prescription drugs that year.[83] Not surprisingly, the share of prescription drug expenditures paid for by Medicare surged in 2006 to 18 percent (compared to 2 percent in 2005), while Medicaid, private health insurance, and OOP spending each declined as a share of total spending.

Health spending growth in the latter half of this era (2008-2013) was influenced mainly by the 2007-2009 recession and the subsequent modest recovery during 2010 through 2013. Economic recessions tend to have a lagged impact on the health sector; however, more severe downturns in the overall economy, as occurred with the most recent recession, tend to have more immediate and profound impacts on growth in health expenditures compared to less severe financial slowdowns.[84] During the recession health spending growth slowed quickly, dropping from 6.3 percent in 2007 to 4.8 percent in 2008 and to 3.8 percent in 2009. Several factors, including the highest unemployment rate in nearly three decades, a large decline in private health insurance enrollment, and significant reductions in household income, contributed to the more immediate impact on health expenditure growth in 2008 and 2009.[85]

These factors had a significant impact on the use of health care during and just after the recession. For example, slower growth in the use and intensity of health care spending per person helped to dampen the average annual growth in per person health spending during 2009 and 2011 and contributed just 0.1 percentage point to the overall average increase of 3.1 percent. This was a much lower contribution to health care spending growth than during 2004 – 2008 when use and intensity accounted for 1.8 percentage points of per capita health care spending growth of 5.3.[86] In 2010, growth in the use and intensity of health care goods and services declined 0.2 percent. The modest economic recovery and continued lagged impacts of the recession helped health expenditure growth to remain stable at historically low rates for 2010 through 2013. Also, during this period several provisions of the Affordable Care Act, primarily the coverage of the under 26 population and those with pre-existing conditions, had a modest impact on spending growth.

During the recession, as private health insurance enrollment declined and OOP expenditure growth slowed significantly, Medicaid enrollment surged, growing from 45.6 million in 2007 to 50.8 million in 2009. To help states pay for this increased Medicaid spending (at a point when state revenue was declining), the American Recovery and Reinvestment Act of 2009 increased the Medicaid Federal Medical Assistance Percentage rate for 27 months (a period of time that was later expanded to 33 months). As Federal spending for health care grew and private expenditure growth slowed, the government share of health spending increased from 40 percent in 2007 to 44 percent by 2009, while the business, household, and private revenue share decreased significantly from 60 percent to 56 percent by 2009. This decrease was primarily associated with private businesses as enrollment in employer-sponsored health insurance declined.

Conclusion

The health sector changed dramatically over the last half century, increasing from 5.0 percent of GDP in 1960 to 17.4 percent in 2013. Over time, the responsibility of paying for health care goods and services shifted significantly, as the household share of spending fell from 56 percent in 1960 to 28 percent in 2013, the government's share increased from 23 percent to 43 percent, and the share paid for by private business increased from 14 percent to 21 percent. Major factors such as price and utilization, overall economic cycles, and legislative changes—the most notable of which was the creation of Medicare and Medicaid—have significantly affected health expenditure trends since 1960. Over the next decade, health expenditures are projected to increase at an average annual rate of 5.8 percent between 2014 and 2024 and to account for approximately one-fifth of the U.S. economy by 2024,[87] largely shaped by an improving economy, the implementation of the Affordable Care Act's major coverage expansions, and an aging population.

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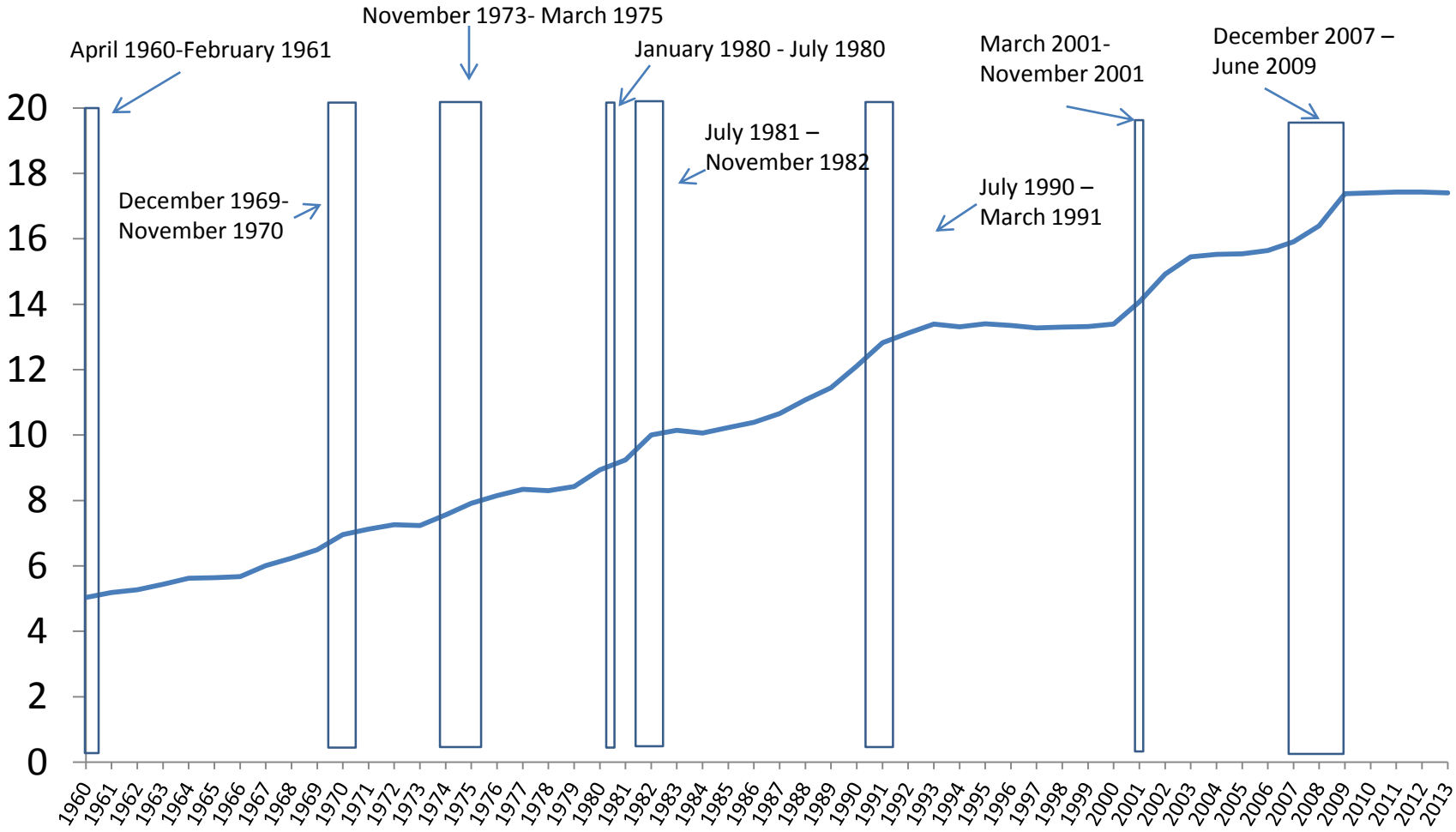
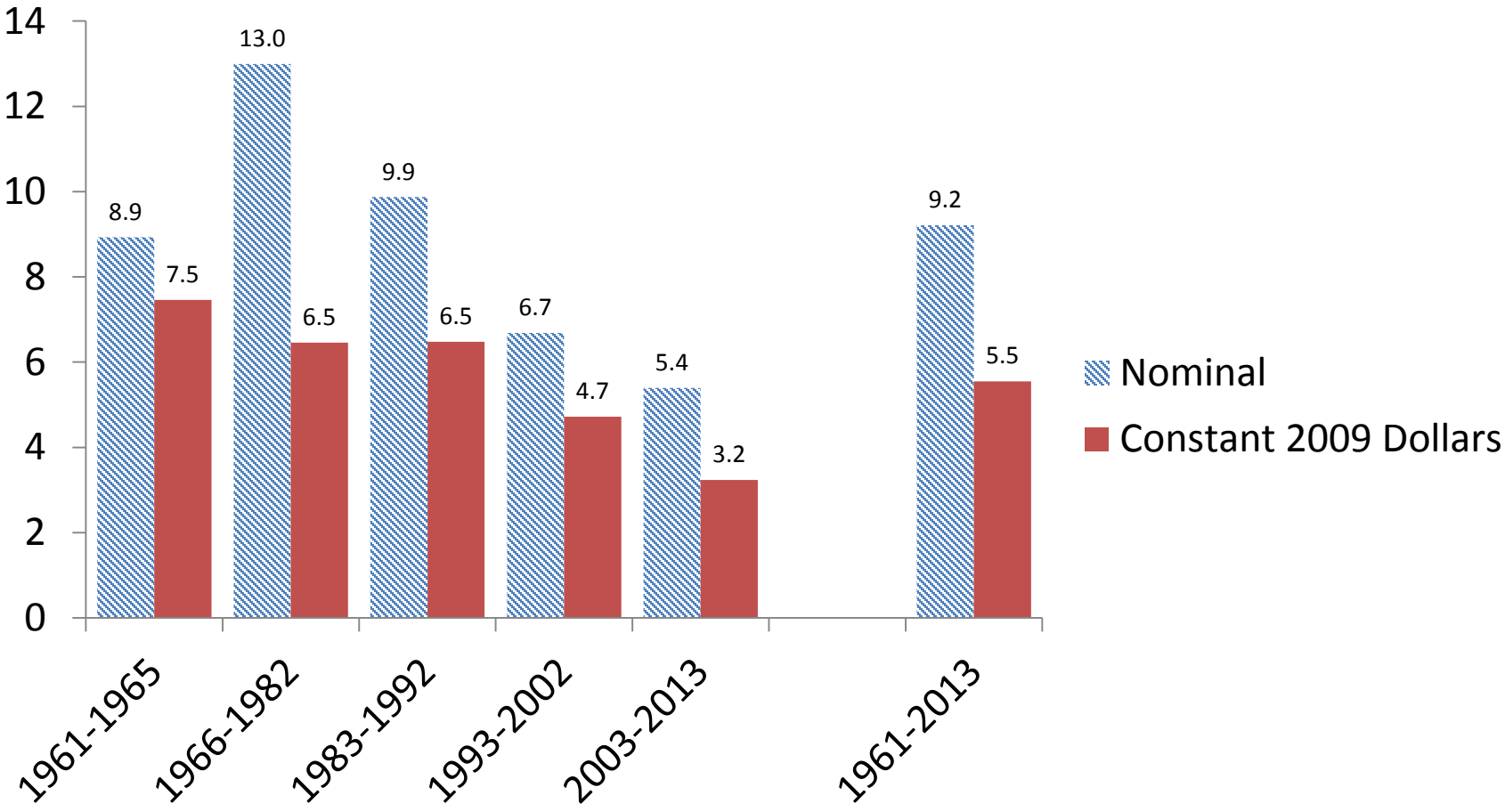
Exhibit 1
National Health Expenditures as a Share of Gross Domestic Product with Recessionary Periods, 1960-2013



SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group and the National Bureau of Economic Research.

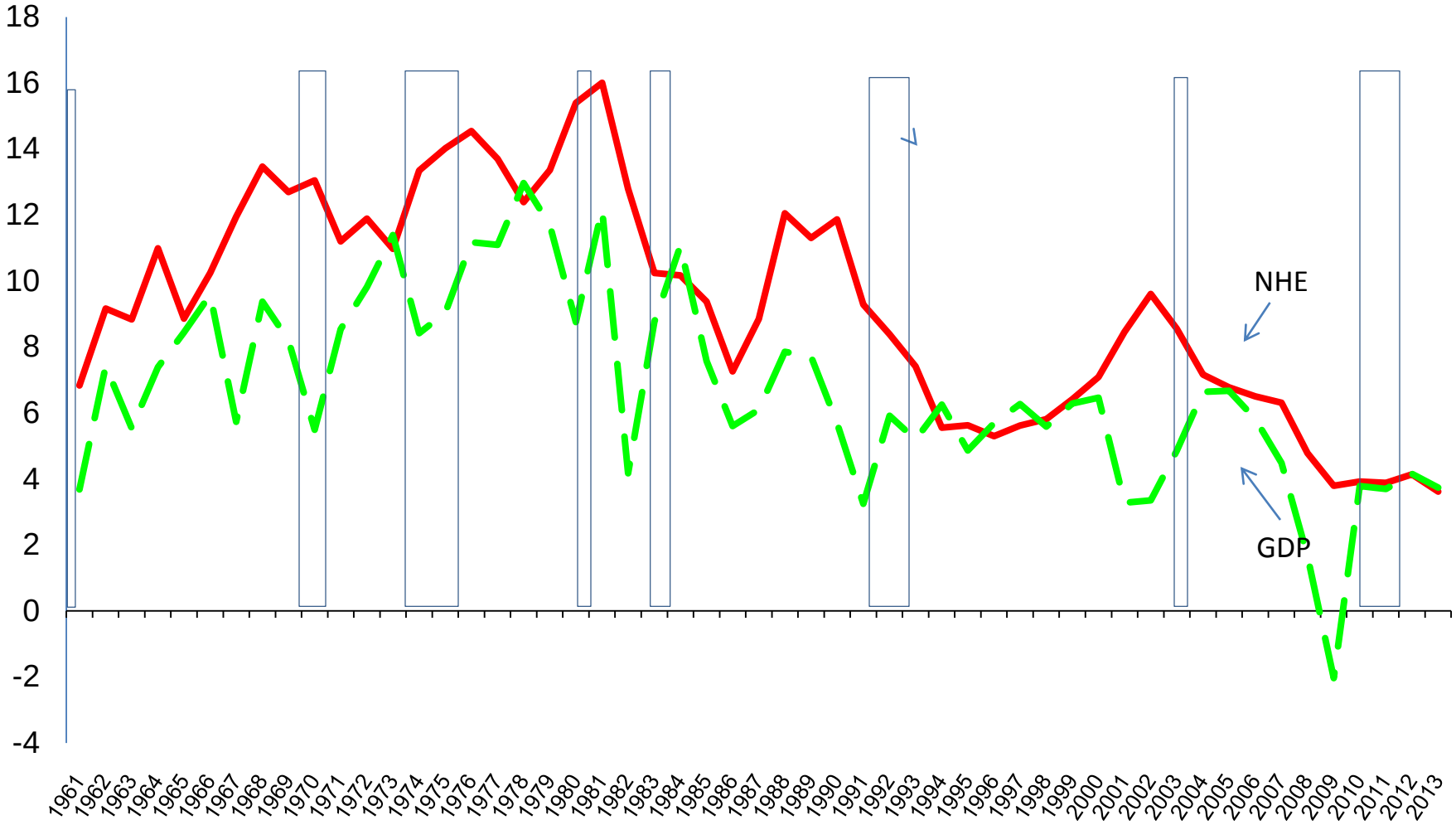
Exhibit 2
Average Annual Growth, NHE in Nominal and Constant Dollars, Selected Periods, 1961-2013



Note: Constant Dollar calculated using GDP Price Index.

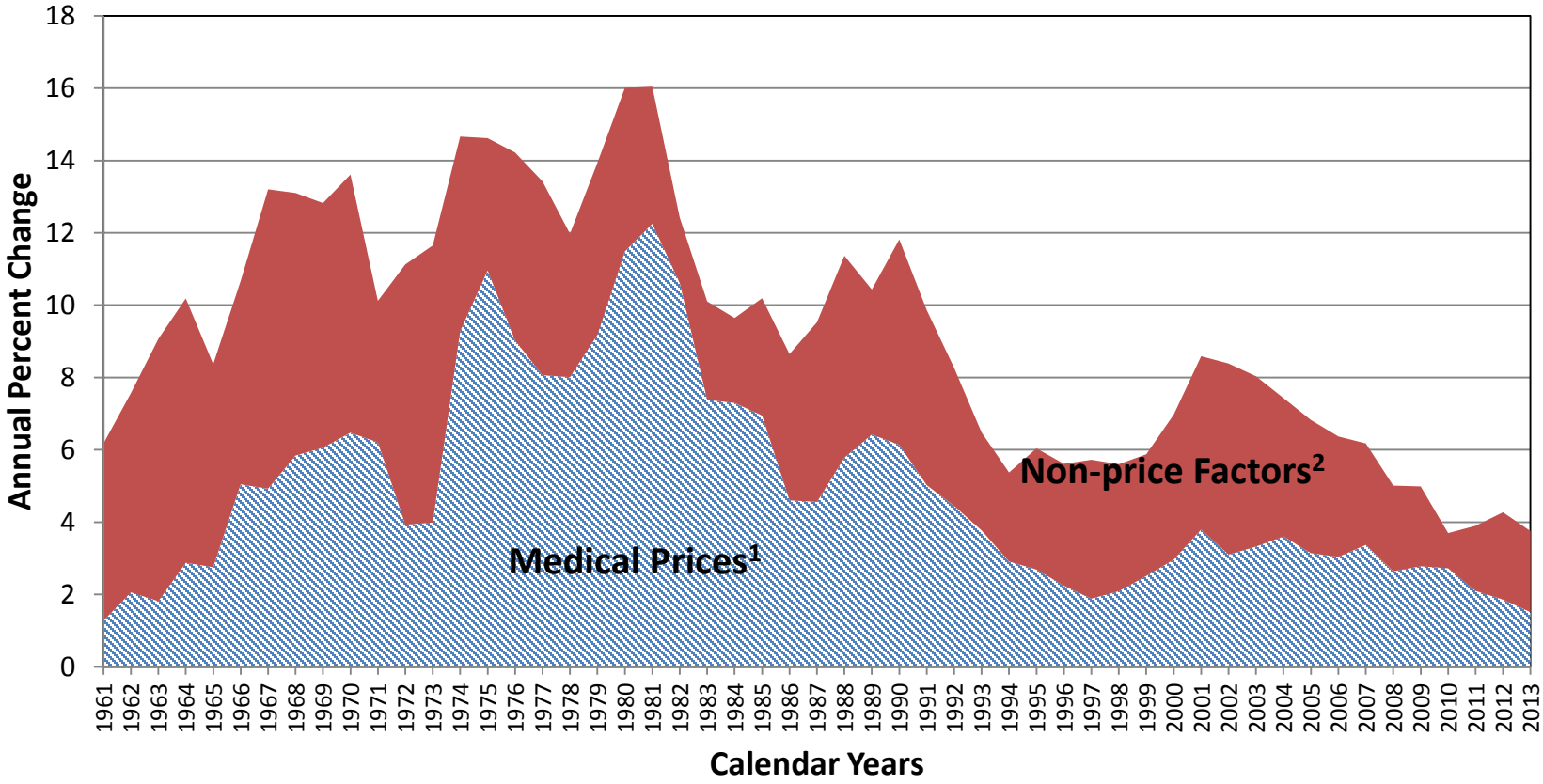
SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group and Department of Commerce, Bureau of Economic Analysis and National Bureau of Economic Research.

Exhibit 3
Growth in National Health Expenditures and Gross Domestic Product with Recessionary Periods, 1961-2013



Note: Bars show recessionary periods.
SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, Department of Commerce, Bureau of Economic Analysis and National Bureau of Economic Research.

Exhibit 4
Factors Accounting for Growth in Personal Health Care Expenditures, 1960-2013

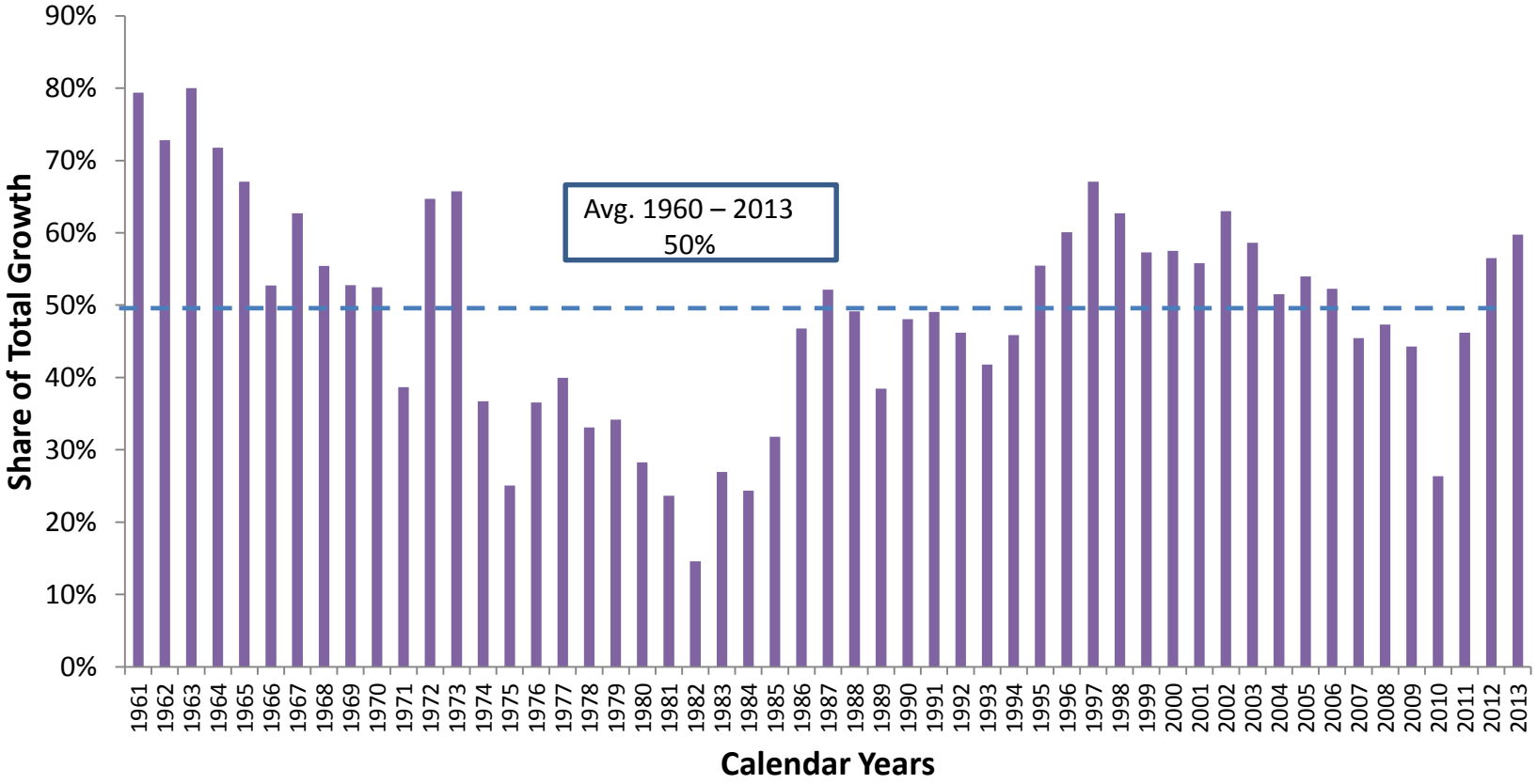


[1] Medical price growth, which includes economy-wide and excess medical-specific price growth, is calculated using the personal health care chain-type index constructed from the Producer Price Indexes for hospitals, offices of physicians, medical and diagnostic laboratories, home health care services, and nursing care facilities, as well as Consumer Price Indexes specific to each of the remaining personal health care components.

[2] Non-price factors include population growth and changes in the use and intensity of services. As a residual, nonprice factors also include any errors in measuring prices or total spending.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.

Exhibit 5
Contribution of Non-price Factors to Personal Health Care Expenditures Growth, 1960-2013



Notes: Medical price growth, which includes economy-wide and excess medical-specific price growth, is calculated using the personal health care chain-type index constructed from the Producer Price Indexes for hospitals, offices of physicians, medical and diagnostic laboratories, home health care services, and nursing care facilities; and Consumer Price Indexes specific to each of the remaining personal health care components. Non-price factors include population growth and changes in the use and intensity of services. As a residual, non-price factors also include any errors in measuring prices or total spending.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.

Exhibit 6
Share of National Health Expenditures by Sponsor, Selected Years, 1960-2013

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.