

Chapter 12: Distribution of Health Services

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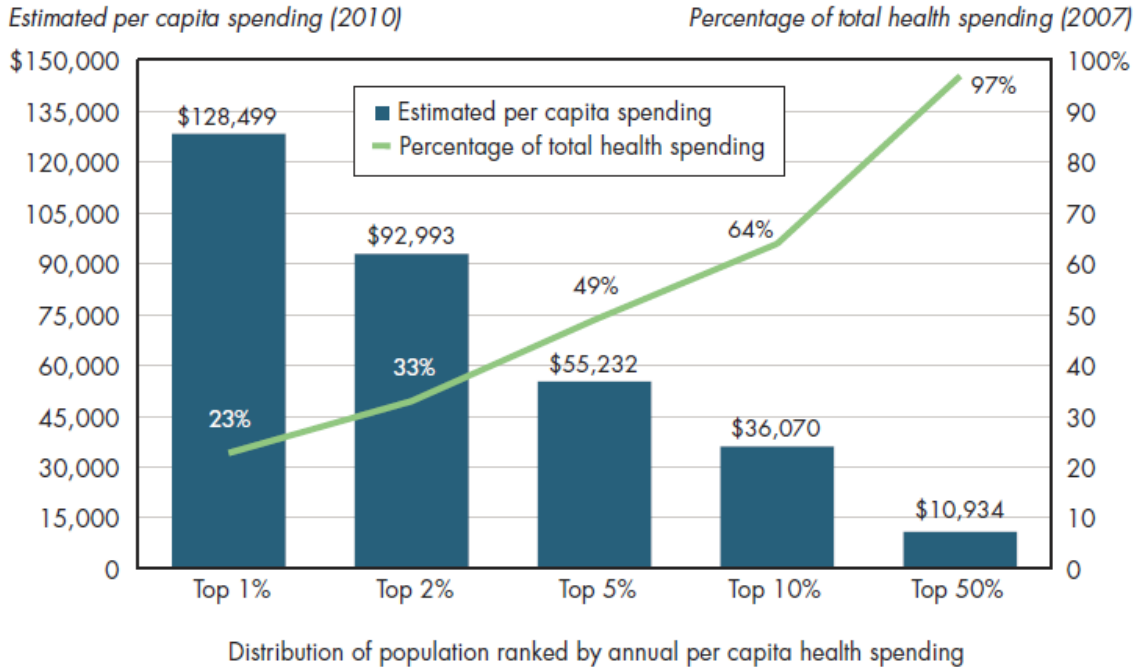
Chapter 1

12.1 1% of Population Accounts for 25% of Health Spending¹

The 1 percent of the population that has the highest annual health expenses accounts for almost 25 percent of health spending (figure 12.1a). Their annual spending in 2010 likely exceeded \$125,000. Those in the top 5 percent account for just less than half of all spending, with average annual expenditures that exceed \$50,000. With the average U.S. worker earning less than \$50,000 a year, these numbers demonstrate the desirability of some kind of health insurance coverage. Few but the wealthiest families are in a position to self-insure spending at these amounts.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10097/1.1/>>.

12.1a One percent of the population accounts for approximately 25 percent of health spending; 5 percent accounts for almost half



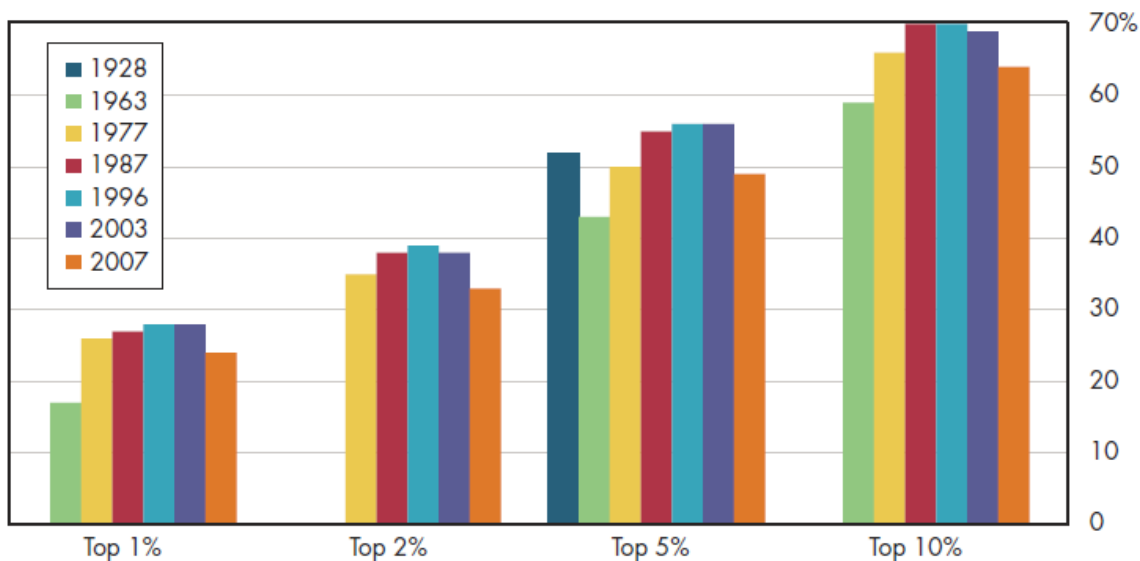
Note: Percentages are for the civilian, non-institutionalized population based on Medical Expenditures Panel Survey (MEPS) data for 2007. 2010 per capita spending has been calculated from 2007 figures, adjusted to account for increased personal health spending per capita and to reduce differences between MEPS and NHE estimates.

At the other end of the distribution, individuals in the bottom half of spenders account for only 3 percent of annual health costs. Their average annual spending is less than \$350. Leaving aside administrative costs, an actuarially fair premium to cover only the catastrophic expenses of the top one percent would be almost \$1300 a year. To cover the risk of being in the top 5 percent would require annual premiums of approximately \$2,800. The challenge in a voluntary health insurance system is to convince a sizable share of those who have expected expenses of less than \$350 to spend almost \$3,000 to secure protection against risks that have only a 5 percent chance of occurring. The more low-risk individuals who opt out, the higher will be the premiums needed for those who remain. This greatly exaggerates the challenge when people are separated into different age groups. In that case, the difference between the lowest and highest spenders shrinks considerably.

Only selected snapshots in time are available. The concentration of health spending might have become somewhat larger between 1963 and 1996 (figure 12.1b). However, there is evidence that it has fallen slightly in subsequent years. All the data from 1996 through 2007 come from the same household survey. Thus, one cannot dismiss the changes observed prior to that as an artifact of differences in methods of collecting this kind of statistics. Only one data point (from 1928) shows that the top 5 percent of spenders accounted for just over half of spending. This situation is almost identical to the share of spending accounted for by the same group 40 years later. In light of the enormous changes in technology that occurred in the intervening decades, there is no reason to expect such stability in the degree of health expenditure concentration.

12.1b The concentration of health spending has been stable over decades, but there is some indication it has declined recently

Percentage of total annual health spending accounted for by group



Distribution of population ranked by annual per capita health spending

1.1 Downloads

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- Figure 12.1a Image Slide (as it appears above)²
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- Figure 12.1b Image Slide (as it appears above)⁴
- Figure 12.1b Editable Slide (can be formatted as desired)⁵

1.2 References

- Author's calculations.
- Berk ML and AC Monheit. The Concentration of Health Care Expenditures, Revisited. *Health Affairs* 2001; 20(2):9-18.
- Cohen SB and W Yu. The Concentration and Persistence in the Level of Health Expenditures over Time: Estimates for the U.S. Population, 2006-2007. Agency for Healthcare Research and Quality. Rockville MD. March 2010.
- Department of Health and Human Services. Agency for Healthcare Research and Quality.
- Zuvekas SH and JW Cohen. Prescription Drugs and the Changing Concentration of Health Care Expenditures. *Health Affairs* 2007; 26(1):249-57.

²<https://hub.mili.csom.umn.edu/content/m10097/latest/12.1aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10097/latest/12.1aDATA.ppt>

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Chapter 2

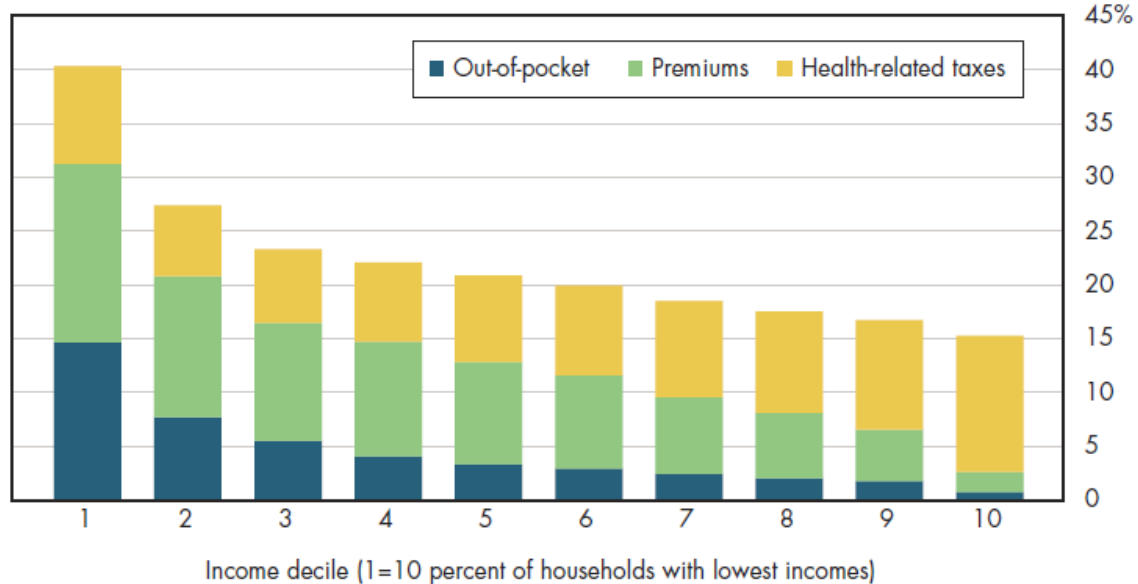
12.2 The Lowest-Income Families Have 2.5 Times Burden of Paying for Health Care Than That of the Highest-Income Families¹

Households at the bottom of the income distribution devote more than 40 percent of their income to paying for health care (figure 12.2a). The corresponding number for those who have the highest incomes is approximately 15 percent. Thus, the relative burden (measured in terms of shares of income) is approximately 2½ times more for the first group compared with the last.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10098/1.2/>>.

12.2a The net burden of health-related expenditures is approximately 2½ times as large for extremely low-income families compared with extremely high-income families

Spending as percentage of family income (2002)



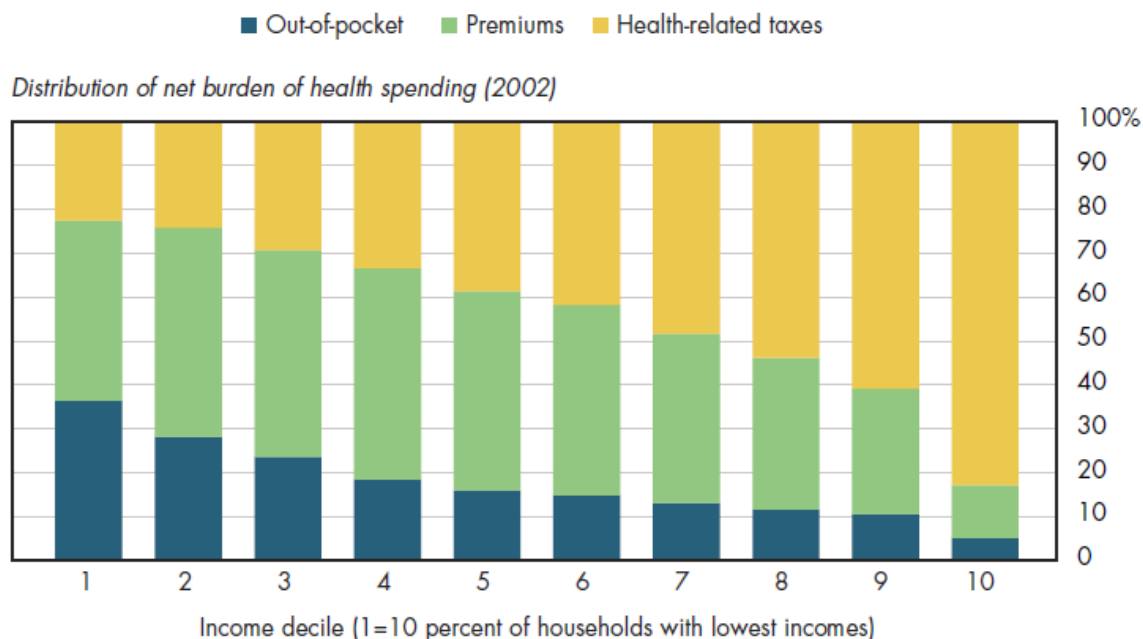
Note: The family burden of health expenditures includes out-of-pocket spending; premium payments for group and non-group health insurance (including the employer share) and Medicare Parts B and D; and health-related taxes, including payroll taxes for Medicare Part A and the family's share of other taxes used to pay for publicly-financed health care.

These data account for the entire burden of health spending for families in each income group. The spending data shown include the readily visible amounts paid by the family for out-of-pocket spending and premiums but also the hidden costs, such as the net employer share of premiums after subtracting any tax subsidies for health coverage. The hidden costs also include each family's estimated share of various payroll, income, and other taxes used to finance Medicare, Medicaid, and other health care spending.

Two points are worth noting. First, the burden at the lowest end of the distribution would be considerably less if it were based on actual annual expenditures by these households rather than income (which is negative or zero for a non-trivial number of households in the lowest-income bracket). Second, tax-financed health care is to some considerable degree targeted for those who have lower incomes (refer to figure 4.2b). Therefore, a measure of actual expenditures for health care (including tax-subsidized care) would result in a ratio that would likely be much higher. Thus, the net burden is considerably more evenly distributed than if families had to pay for all health expenses entirely on their own.

Out-of-pocket spending accounts for more than 30 percent of this burden for the lowest income families compared with less than 5 percent for those with the highest incomes (figure 12.2b). Conversely, health-related taxes make up more than 80 percent of the burden at the highest end of the income distribution compared with just over 20 percent for those at the lowest end. The premium share of the burden increases to the middle of the income distribution but declines thereafter.

12.2b Even for the lowest-income families, health-related taxes account for more than 20 percent of the net burden of paying for health care



2.1 Downloads

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2.2 References

- A. Selden TM. Using Adjusted MEPS Data to Study Incidence of Health Care Finance. Agency for Healthcare Research and Quality. http://www.ahrq.gov/about/annual_conf09/selden/selden.ppt (accessed July 16, 2010).

²<https://hub.mili.csom.umn.edu/content/m10098/latest/12.2aIMG.ppt>

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*CHAPTER 2. 12.2 THE LOWEST-INCOME FAMILIES HAVE 2.5 TIMES
BURDEN OF PAYING FOR HEALTH CARE THAN THAT OF THE
HIGHEST-INCOME FAMILIES*

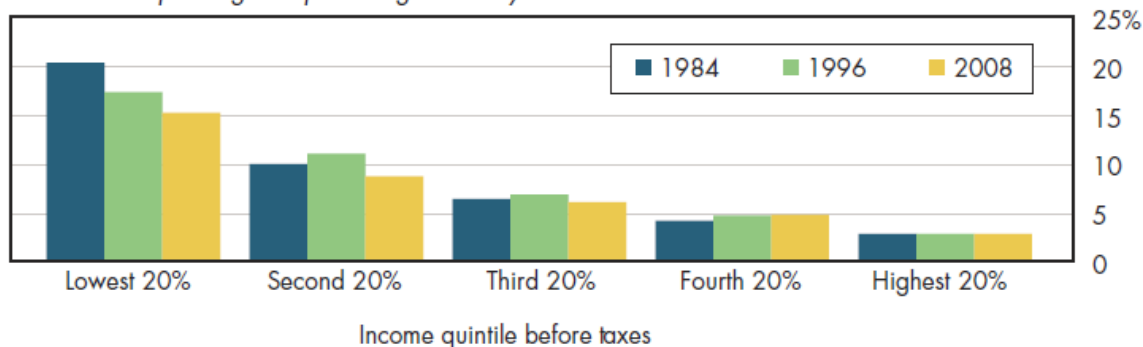
Chapter 3

12.3 Burden of Paying for Health Care Has Increased¹

Over the past 25 years, the direct visible burden of health spending has decreased for those in the lowest fifth of households ranked by income (figure 12.3a). For those in the higher income brackets, this burden has increased slightly (second highest quintile) or remained stable (top quintile). These data count only out-of-pocket spending and direct premiums paid by the family.

12.3a Direct health spending has been declining as a share of family after-tax income for families with the lowest incomes

Direct health spending as a percentage of family income

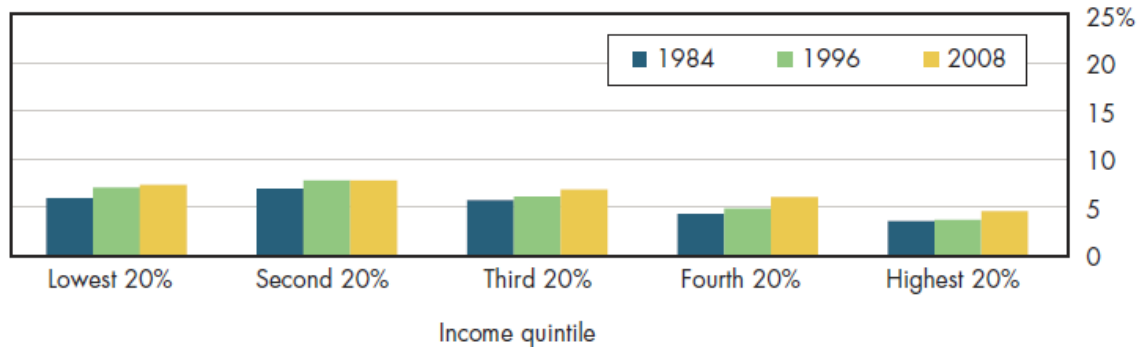


Moreover, a different scenario emerges if measures include health spending relative to annual consumption expenditures instead of income (figure 12.3b). Incomes can greatly vary from year to year and many economists believe that actual expenditures more closely reflect a family's permanent income. That is, if a family experiences a decline in income perceived to be temporary (for example, a lost job or a decision to return to school), it likely will borrow temporarily to avoid a steep decline in lifestyle that otherwise would result from limiting spending to income. From this perspective, the direct health spending burden is quite similar across households with widely varying incomes. However, according to this measure, this burden also has been rising for most income groups.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10099/1.1/>>.

12.3b The burden of health spending is far smaller when compared with consumption rather than with spending

Direct health spending as a percentage of family consumption expenditures



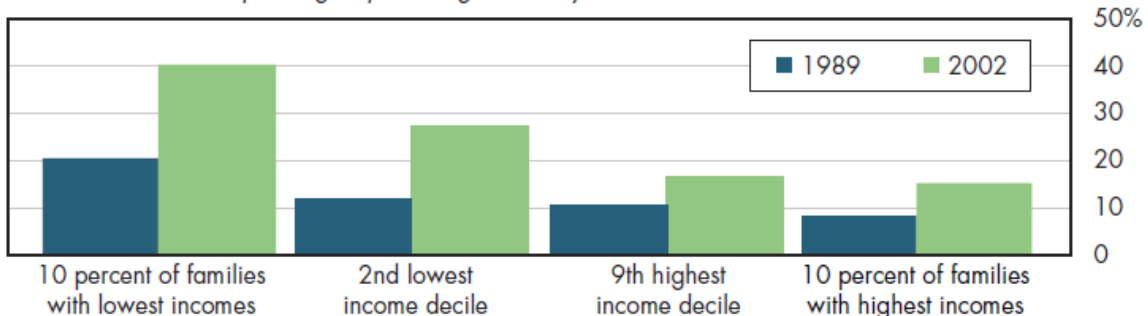
Note: Direct health spending includes only the family share of premiums paid for private or public health insurance, along with all out-of-pocket spending on medical services.

Note that switching from income to consumption reduces the burden in the lowest income quintile by approximately eight percentage points. This reduction would be even larger for the lowest decile rather than quintile because, by necessity, anyone who has a negative or zero income would be forced to borrow. Thus, the 40 percent net burden shown previously would be much lower using an arguably more accurate measure of permanent income.

The most complete way to look at burdens considers both hidden and unhidden costs and subsidies. One snapshot used methods similar (though not identical) to the net burden estimates described previously in figure 12.2a. Interestingly, this 1989 analysis also found approximately a two-and-a-half to one ratio between the net burden at the bottom compared with the top 10 percent of the income distribution (figure 12.3c). The absolute level of these burdens was approximately half the levels observed in 2002. The net burden rose almost equally across the income distribution. Consequently, the relative burden grew neither larger nor smaller during this period. No good way exists to determine whether this pattern is typical for the period that preceded it, or whether it has continued until the present.

12.3c Since 1989, the total net burden of health-related expenditures has approximately doubled at both ends of the income distribution

Net burden of health spending as percentage of family income



Note: The net burden of health spending includes out-of-pocket spending; premium payments for group and non-group health insurance (including the employer share) and Medicare Parts B and D; and health-related taxes, including payroll taxes for Medicare Part A and the family's share of other taxes used to pay for publicly financed health care.

3.1 Downloads

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- Figure 12.3c Image Slide (as it appears above)⁶
- Figure 12.3c Editable Slide (can be formatted as desired)⁷

3.2 References

- A. Department of Health and Human Services. Agency for Healthcare Research and Quality.
- B. Department of Labor. Bureau of Labor Statistics.
- C. Holahan J and S Zedlewski. Who Pays for Health Care in the United States? Implications for Health System Reform. *Inquiry* 1992; 29:231-48.
- D. Selden TM. Using Adjusted MEPS Data to Study Incidence of Health Care Finance. Agency for Healthcare Research and Quality. http://www.ahrq.gov/about/annual_conf09/selden/selden.ppt (accessed July 16, 2010).

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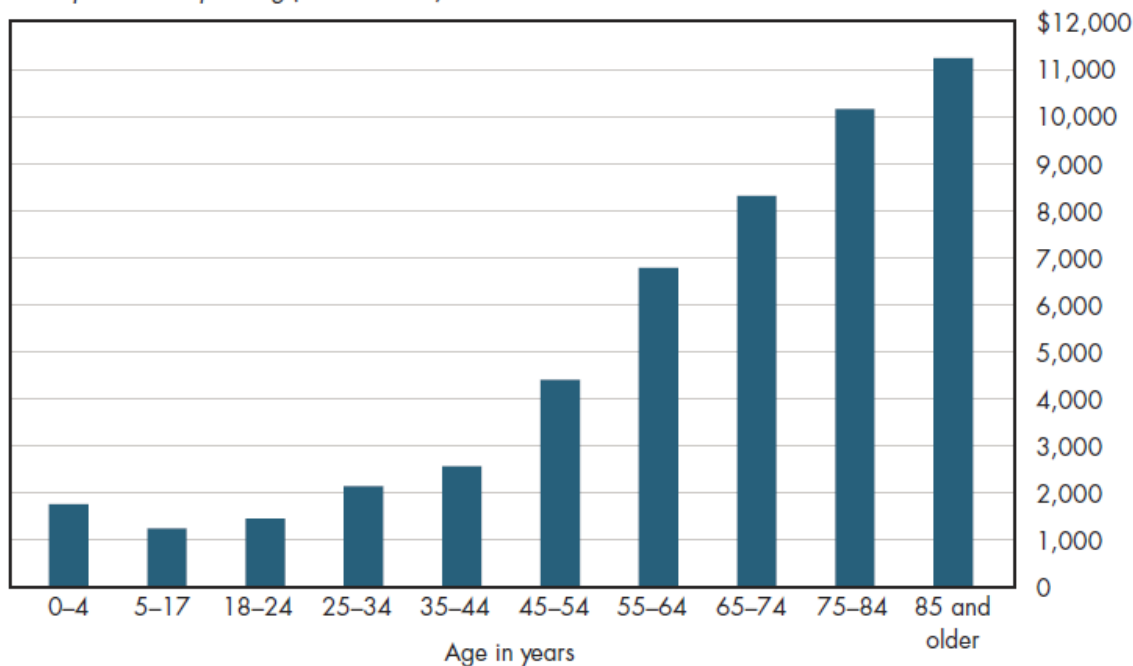
Chapter 4

12.4 Per Capita Health Spending Increases with Age¹

Total health spending by the "oldest old" is approximately nine times as much as is spending by school-age children (figure 12.4a). These numbers are for only the civilian non-institutionalized population. Because approximately one in six of the "oldest old" (age 85 and over) are in nursing homes and the average annual cost of a nursing home stay exceeds \$75,000, this ratio would be considerably higher were costs of the nursing home population included.

12.4a Annual health spending increases sharply by age; health costs for the "oldest old" are approximately nine times as high as for school-age children

Per capita health spending (2007 dollars)



The relatively low expense for children helps explain why it has been easier politically to secure expansions in Medicaid and SCHIP coverage for children rather than for non-elderly adults. Expenditures at childbirth

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10100/1.1/>>.

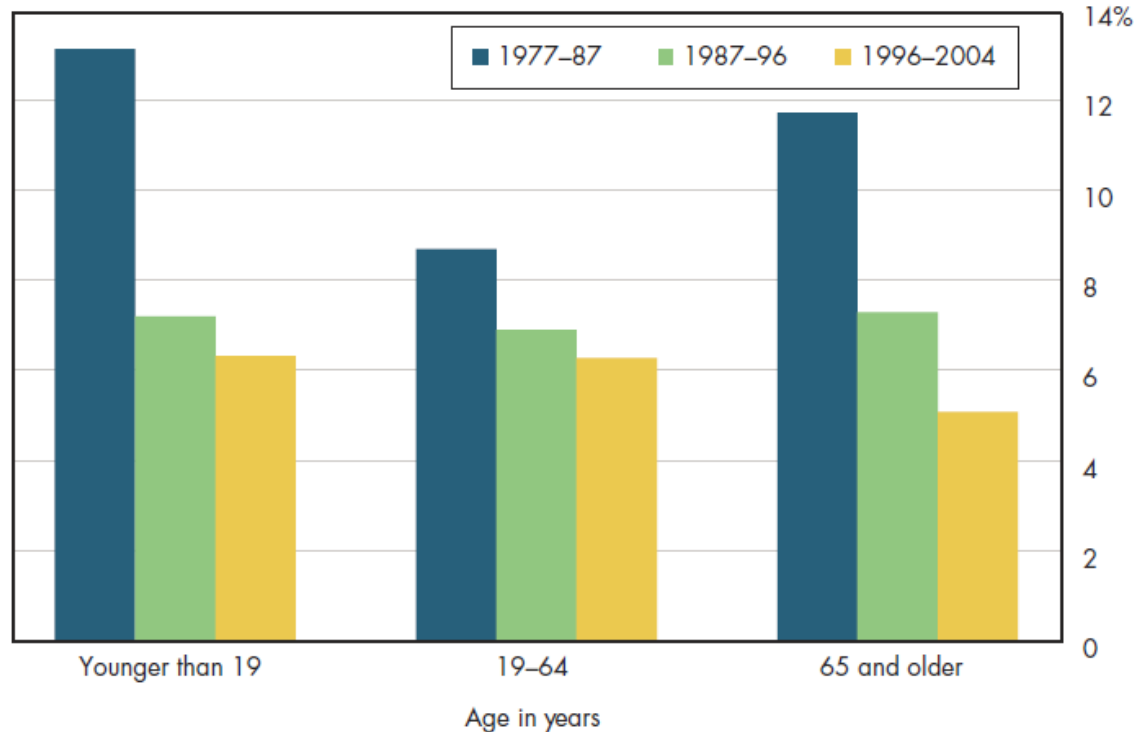
are one important reason why pre-school health spending is higher than for school-age children. Forty percent of births are covered by Medicaid, which contributes to higher spending in the postnatal period, especially for newborns who otherwise would have been uninsured.

Conversely, the relatively low spending among those ages 18-34 helps explain why these so-called "young invincibles" tend to have a much higher rate of being uninsured. In the group market, premiums are community-rated, which often makes them not a particularly good deal for young adults unless the employer substantially subsidizes the premium. In some states, the non-group market also faces community-rating restrictions or what is called "modified community rating." In many of these states, insurers can offer different rates based on age but within rating bands. The new health reform law will do the same. The difference between premiums for the most expensive age category and the lowest ages cannot vary by more than a factor of 3:1, even though it is clear from figure 12.4a that actuarially, the cost difference between age categories is substantially greater. The consequence will be higher rates for young adults than they would otherwise face in a less regulated environment.

Between 1977 and 2004, the average annual increase in expenditures declined for every major age category (figure 12.4b). These declines were much greater for children and the elderly than for other groups. Should the health reform law be fully implemented, this downward trend might reverse itself for two reasons. First, the expansion of coverage to tens of millions of uninsured will boost their previous levels of spending. Second, various regulations are having the effect of increasing premiums in the short run.

12.4b The rate of increase in per capita health spending declined for all age groups between 1977 and 2004, though at varying rates

Compound annual growth rate in per capita health spending



4.1 Downloads

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4.2 References

- A. Department of Health and Human Services. Agency for Healthcare Research and Quality.
- B. Department of Health and Human Services. Centers for Medicare and Medicaid Services.
- C. Waldo DR, ST Sonnefeld, DR McCusick and RH Arnett III. Health Expenditures by Age Group, 1977 and 1987. Health Care Financing Review 1989; 10(4):111-20.

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⁵<https://hub.mili.csom.umn.edu/content/m10100/latest/12.4bDATA.ppt>

Chapter 5

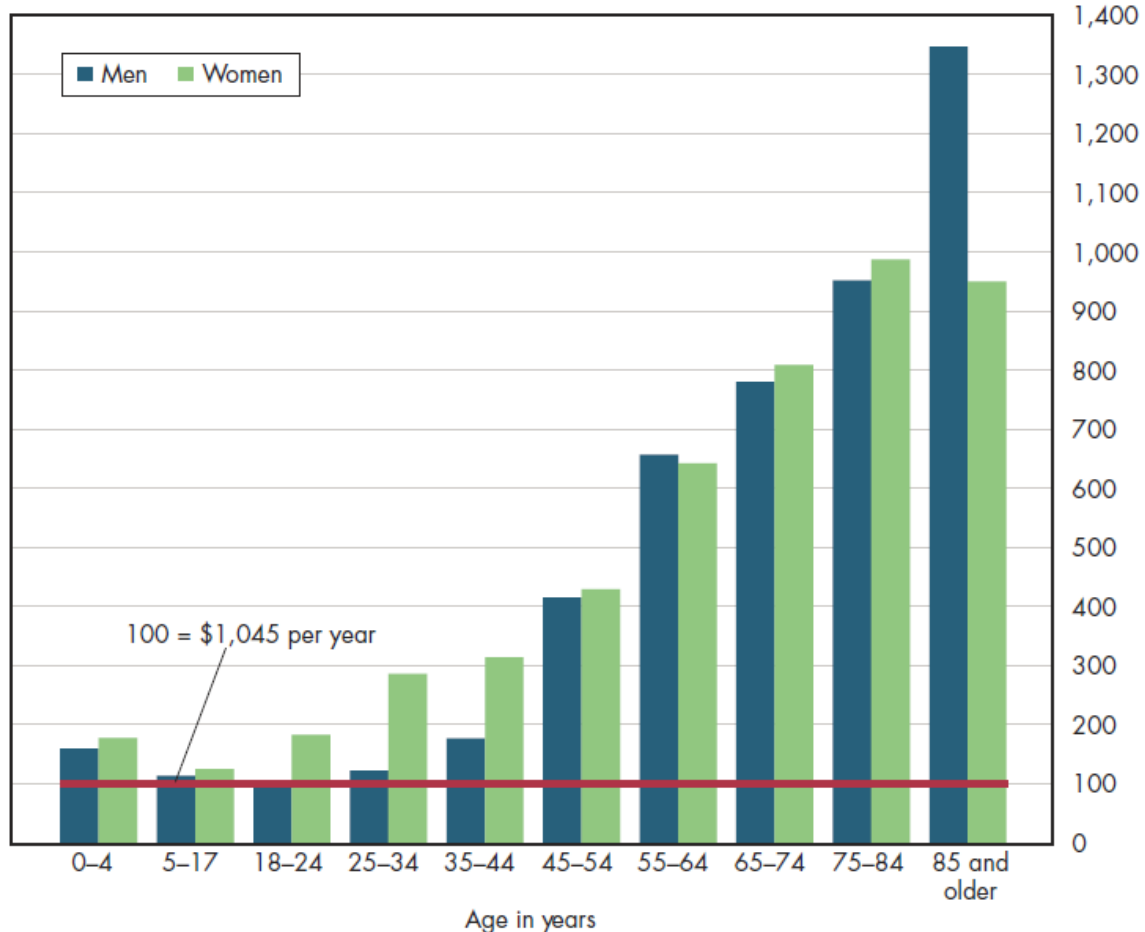
12.5 Difference between Men and Women's Health Costs Depends on Age¹

When spending by gender is separated, the rise in spending with age no longer is inexorable. In reproductive years, women's health expenditures are approximately twice as large as that for men (figure 12.5). In 2007, the average childbirth cost \$8,800. Because the average fertility rate is 2.1 births per female age 15-44, this alone would add more than \$500 a year to annual spending by females. Figure 12.5 is indexed to health spending for males age 18-24 rather than in raw dollars. This difference between men and women during childbearing years is approximately \$1,000; thus, childbirth accounts for much but not all of the difference.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10101/1.1/>>.

12.5 From childbirth through reproductive years and in early years of retirement, health spending for females is higher than for males

Index: 100=annual per capita health spending for males 18–24 (2007)



Female health spending also is slightly more in the early years of retirement, but for the "oldest old," there is a dramatic shift. Men's health spending soars to more than 15 times the level of their 18 to 24-year-old counterparts, but women's spending actually declines. Recall that these data exclude the institutionalized population. Because women have a higher rate of nursing home use compared with men at all ages 65 and older, inclusion of nursing home costs likely would yield a different result. With 16 percent of oldest-old women in nursing homes and average nursing home costs of approximately \$75,000 a year, this alone would add more than \$10,000 to their per capita spending but only half that amount to men's.

Much of the male-female difference in spending at age 85 and older relates to the high cost of dying. Decedents cost approximately 50 percent more than do survivors of the same age and diagnosis. However, they cost several multiples of the spending made by the average survivor at any given age (decedents are more likely to be sick). Because female life expectancy at age 85 is more than 20 percent higher than that of men's, a higher share of remaining lifetime health costs for males will consist of decedent spending.

End-of-life costs account for approximately 10-12 percent of all health spending. The exact fraction that is publicly financed is unknown. Approximately 80 percent of decedents qualify for Medicare, of whom 20 percent also qualify for Medicaid. Assuming that 100 percent of costs for "dual eligibles" and only half of costs for Medicare eligibles are covered by public insurance, this would imply that taxpayers fund approximately half of end-of-life care. The true number likely is higher.

5.1 Downloads

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5.2 References

A. Department of Health and Human Services. Centers for Medicare and Medicaid Services.

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*CHAPTER 5. 12.5 DIFFERENCE BETWEEN MEN AND WOMEN'S
HEALTH COSTS DEPENDS ON AGE*

Chapter 6

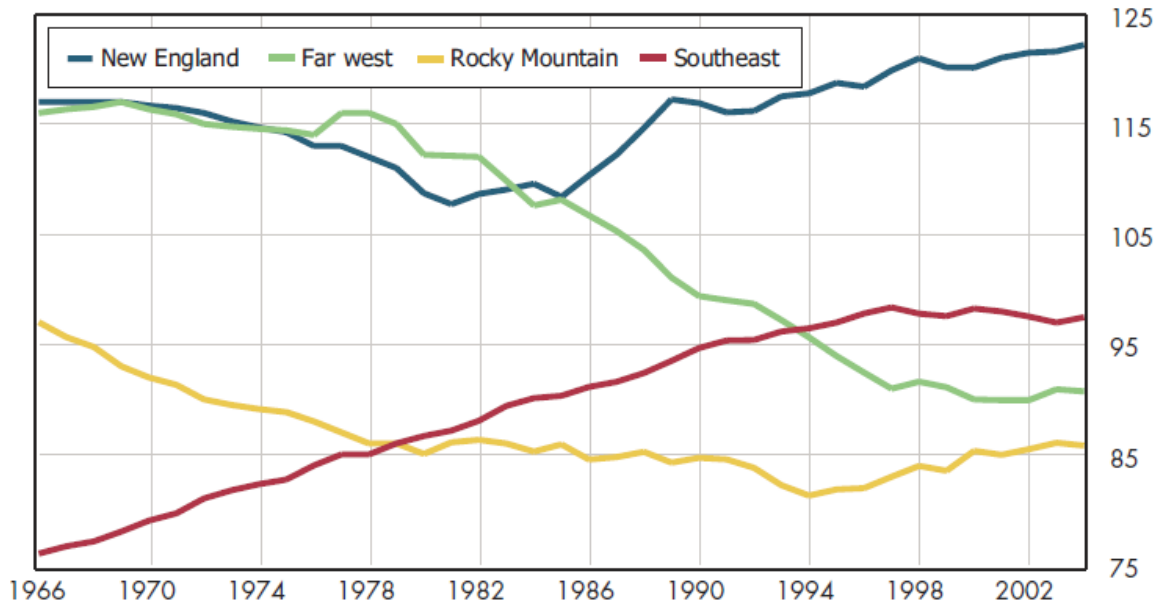
12.6 Regional Differences in Health Spending per Capita Have Narrowed then Widened¹

There is approximately a 40 percent difference between the regions having the highest and lowest health expenditures per capita (figure 12.6a). New England's per capita spending is more than 20 percent higher than the national average, and spending in the Rocky Mountain states is approximately 15 percent less than the U.S. average. This overall difference is approximately the same today as it was in the year Medicare and Medicaid started.

¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10102/1.1/>>.

12.6a Regional differences in per capita health spending narrowed from 1966 to approximately 1985 and widened thereafter

Index: per capita health spending by location of service (100=U.S. average)



Note: Data not available for years 1967–68, 1970–71, or 1973–75, so they have been interpolated to avoid distorting the length of the bottom axis.

What has changed, however, are the relative ranks of some of the regions. The most dramatic change occurred in the Far West region, which in 1966 had the second highest level of per capita health spending, barely behind that of New England. In the decades that followed, the region's spending fell from 15 percent above the national average to approximately 10 percent below the average by 2004 (the latest year these data are available). The Rocky Mountain region also improved its relative position by approximately 10 percentage points.

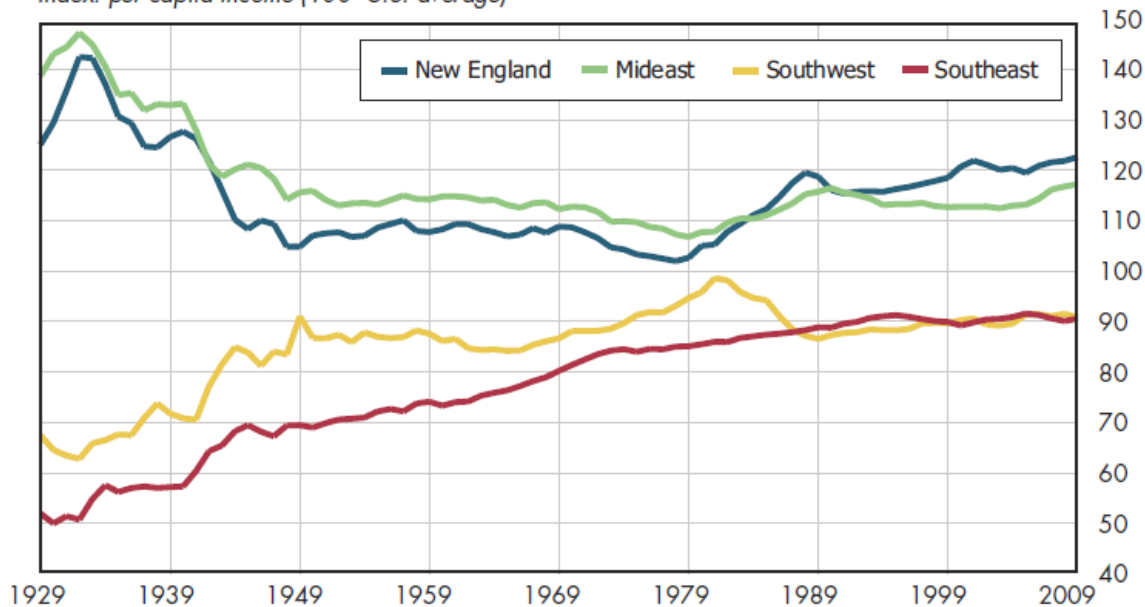
In contrast, the Southeast climbed from having expenditures 25 percent below the nation's to an amount that by 2004 was only 5 percent lower. New England reduced its relative spending from 1966 to the early 1980s but thereafter gained approximately 15 percentage points relative to the U.S. average.

No single explanation for these trends exists. The Far West result was driven largely by California, which in the 20 years before 2004, arguably had the most competitive health care system in the country. New England is notable for generally having taken a more regulatory approach to health cost containment (refer to figure 14.3). These contrasting approaches to health regulation surely are not the only explanation for these large changes. However, the differences in approaches were so stark that it seems unlikely that they contributed nothing to New England's now having a level of health spending that is 35 percent higher than that of the Far West.

During at least half of the twentieth century, per capita incomes across regions had been converging until the mid-1970s, after which they grew somewhat (figure 12.6b). As an approximation, health spending per capita has mirrored this trend.

12.6b Regional income disparities have narrowed considerably over the past 80 years but have widened somewhat since 1979

Index: per capita income (100=U.S. average)



Note: New England = CT, ME, MA, NH, RI, VT; Southeast = AL, AR, FL, GA, KY, LA, MI, NC, SC, TN, VA, WV; Mideast = DE, DC, MD, NJ, NY, PA; Southwest = AZ, NM, OK, TX.

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6.2 References

- Author's calculations.
- Department of Commerce. Bureau of Economic Analysis.
- Department of Health and Human Services. Centers for Medicare and Medicaid Services.

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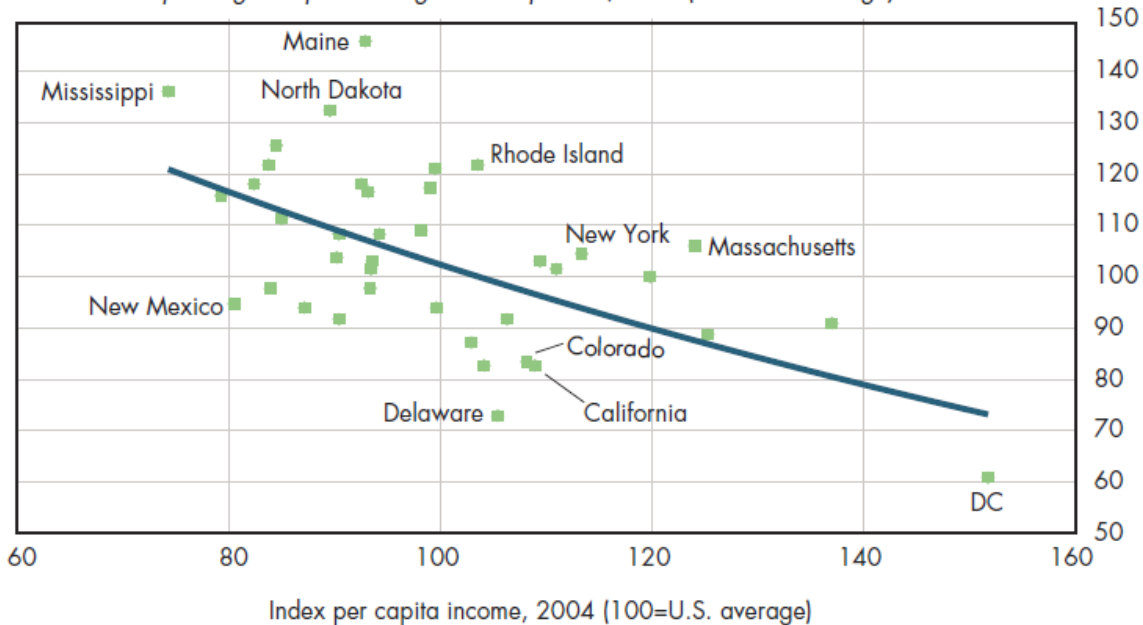
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Chapter 7

12.7 Regional Differences in Health Spending Burden Have Narrowed then Increased¹

What matters more to citizens and policymakers is the relative burden of health spending rather than its absolute level. An approximate measure of this burden examines state health spending as a share of gross state product (the state equivalent of gross domestic product). In contrast with per capita spending, this measure declines with per capita income (figure 12.7a). That is, the states with the highest per capita incomes tend to have lower health spending burdens. The best-fitting prediction line explains only 37 percent of the differences across states; thus, many other factors must determine the size of any given state's health spending burden. Recall that Mississippi had the lowest health spending per capita, but its relative spending burden is higher than any other state's except Maine.

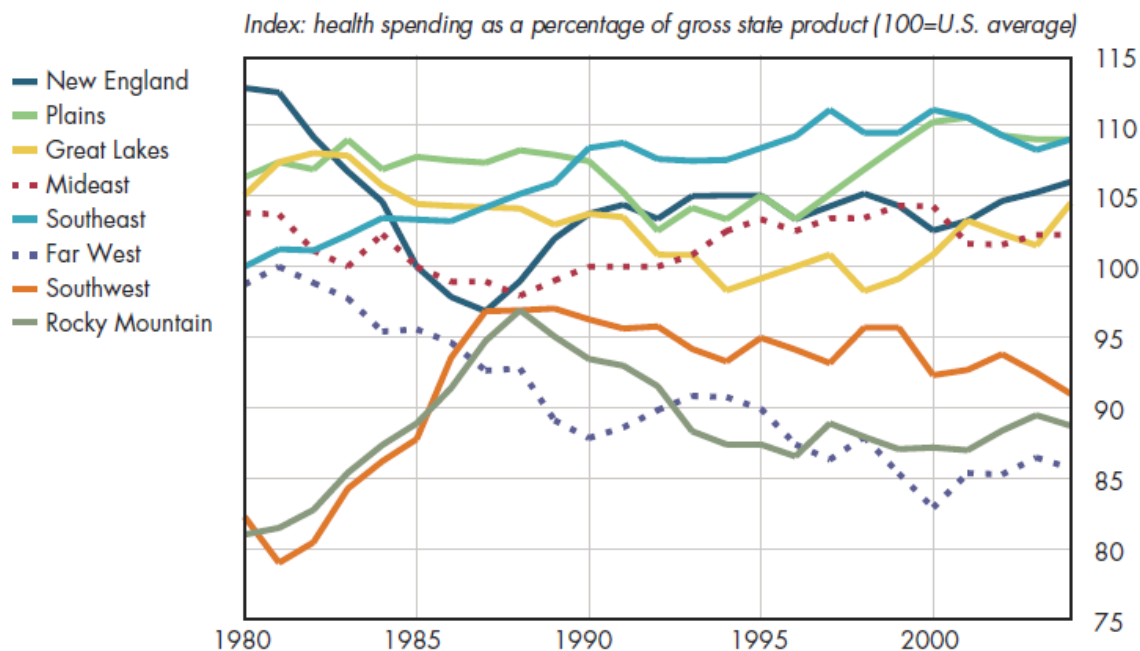
¹This content is available online at <<https://hub.mili.csom.umn.edu/content/m10103/1.1/>>.

12.7a Differences in per capita income alone account for more than 30 percent of differences in health spending burdens across states*Index: health spending as a percent of gross state product, 2004 (100=U.S. average)*

However, even according to this view, several states in the Northeast region other than Maine have burdens visibly higher than would be predicted from their level of income. Whereas California had a level of per capita spending almost 20 percentage points lower than would be expected from the state's per capita income, its burden is only 10 percentage points lower.

At the regional level, one explanation why New England's per capita health spending grew so high is that it could afford to do so. Although its per capita spending was 22 percent higher than the national average in 2004, its burden was only 6 percent higher (figure 12.7b). Even under this alternative view, the Far West made dramatic gains relative to the nation. Its burden was the same as the national average in 1980 but by 2004 had fallen to 15 percentage points below that average. For the regions as a group, differences declined quickly between 1980 and 1987. In those years, all regions had burdens within 7 percent of the U.S. average.

12.7b In only 25 years, there have been large changes in the relative burden of health spending across regions



Note: New England = CT, ME, MA, NH, RI, VT; Far West = CA, NV, OR, WA, AK, HI; Rocky Mountain = CO, ID, MT, UT, WY; Southeast = AL, AR, FL, GA, KY, LA, MI, NC, SC, TN, VA, WV; Mideast = DE, DC, MD, NJ, NY, PA; Southwest = AZ, NM, OK, TX; Great Lakes = IL, IN, MI, OH, WI; Plains = IA, KS, MN, MO, NE, ND, SD.

Subsequently, the spread between the regions has grown to approximately 25 percentage points between the Far West and the Southeast, which has a burden approximately 15 percent above the average.

7.1 Downloads

Download PowerPoint versions of both figures.

- Figure 12.7a Image Slide (as it appears above)²
- Figure 12.7a Editable Slide (can be formatted as desired)³
- Figure 12.7b Image Slide (as it appears above)⁴
- Figure 12.7b Editable Slide (can be formatted as desired)⁵

7.2 References

- Author's calculations.
- Department of Commerce. Bureau of Economic Analysis.
- Department of Health and Human Services. Centers for Medicare and Medicaid Services.

²<https://hub.mili.csom.umn.edu/content/m10103/latest/12.7aIMG.ppt>

³<https://hub.mili.csom.umn.edu/content/m10103/latest/12.7aDATA.ppt>

⁴<https://hub.mili.csom.umn.edu/content/m10103/latest/12.7bIMG.ppt>

⁵<https://hub.mili.csom.umn.edu/content/m10103/latest/12.7bDATA.ppt>

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Keywords are listed by the section with that keyword (page numbers are in parentheses). Keywords do not necessarily appear in the text of the page. They are merely associated with that section. *Ex.* apples, § 1.1 (1) **Terms** are referenced by the page they appear on. *Ex.* apples, 1

H health spending, § 1(1), § 2(5), § 3(9), § 4(13), § 5(17), § 6(21), § 7(25)

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