# Paying For National Health Insurance—And Not Getting It

Taxes pay for a larger share of U.S. health care than most Americans think they do.

## by Steffie Woolhandler and David U. Himmelstein

**ABSTRACT:** The threat of steep tax hikes has torpedoed the debate over national health insurance. Yet according to our calculations, the current tax-financed share of health spending is far higher than most people think: 59.8 percent. This figure (which is about fifteen percentage points higher than the official Centers for Medicare and Medicaid Services [CMS] estimate) includes health care-related tax subsidies and public employees' health benefits, neither of which are classified as public expenditures in the CMS accounting framework. U.S. tax-financed health spending is now the highest in the world. Indeed, our tax-financed costs exceed total costs in every nation except Switzerland. But the *sub rosa* character of much tax-financed health spending in the United States obscures its regressivity. Public spending for care of the poor, elderly, and disabled is hotly debated and intensely scrutinized. But tax subsidies that accrue mostly to the affluent and health benefits for middle-class government workers are mostly below the radar screen. National health insurance would require smaller tax increases than most people imagine and would make government's role in financing care more visible and explicit.

In A POLITICAL CULTURE characterized by "read my lips/over my dead body," the threat of huge tax increases silences the debate over national health insurance. Never mind that Canadians, Australians, and Western Europeans spend about half what we do on health care, enjoy universal coverage, and are healthier. Their taxes to finance health care are higher; or are they?

The Centers for Medicare and Medicaid Services (CMS) pegs the government's share of health spending in the United States at 45.3 percent (\$548 billion in 1999).<sup>1</sup> This figure reflects an accounting framework based on who wrote the last check in the sequence from individual households to providers—a government program or private payer.<sup>2</sup> Thus, the CMS classifies health benefits for soldiers as government health expenditures, since government actually writes the checks to pay military hospitals and doctors. In contrast, health benefits for FBI agents are

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The CMS's approach abstracts from the fact that premiums collected by private insurers may have originated either in the private sector or in government (for example, under the Federal Employees Health Benefits Program, or FEHBP). What the CMS actuaries call "publicly financed" health care therefore will be less than what would properly be called "tax-financed" health care.

To measure tax-financed health care, one should analyze the flow of funds as it first emerges from the private sector (households/individuals or employers) (Exhibit 1). In this alternative accounting framework, taxes paid to the government, which it then uses to pay for health care—whether directly (for example, through Medicaid) or indirectly (for example, through the FEHBP)—would constitute tax-financed care. Money that individuals or private employers pay directly to insurers or health care providers would be classified as "private"—with one important caveat: that many of these "private" payments are subsidized by taxes. For instance, if Jones earns \$50,000 in salary plus \$6,000 in employer-paid health benefits, she pays no taxes on the \$6,000 (and the employer deducts it as a business expense).<sup>3</sup> In contrast, if Jones were to receive a \$6,000 pay increase, she would pay an additional \$2,779 in taxes: \$1,551 in federal income tax, \$310 in state income tax, and \$918 in payroll taxes.

When government grants Jones a \$2,779 tax preference, these funds must be made up from elsewhere, if one makes the reasonable assumption that government wishes to keep its budget in balance. Government could simply reduce its spend-

#### **EXHIBIT 1**

Flow Of Health Care Financing Funds Among Individuals/Employers, Providers, Government, And Private Insurers



SOURCE: Authors' analysis.

ing on other programs by \$2,779; for example, it could cut welfare payments or defense spending. In that case, the people who had hitherto received those government funds would be forced to sacrifice indirectly for Jones's health insurance policy. It seems reasonable to call this government-coerced redistribution of economic privilege a form of "tax financing" for part of Jones's health care.

Alternatively, government might choose to ask all other taxpayers to pay slightly more in taxes to cover the shortfall occasioned by granting Jones a \$2,779 tax preference. Here, too, government coercion redistributes income from other taxpayers to Jones, in this case explicitly through taxes. One would have no trouble calling this transfer "tax financing" of part of Jones's health care.

In either case, 46.3 percent (\$2,779/\$6,000) of Jones's health insurance premium was effectively "tax-financed" through the power of government to make such redistributions. Indeed, the Office of Management and Budget (OMB) publishes its estimate of the federal income tax subsidy to private health spending—under the rubric "tax expenditure"—as part of the federal budget. But the CMS does not include this subsidy in its national health accounts.

Below, we calculate total tax-financed health spending, including these tax subsidies as well as government spending for public employees' coverage. We reach a surprising conclusion: Our allegedly private health care system is funded mainly by taxes. Indeed, Americans pay the world's highest taxes to finance health care.

#### **Materials And Methods**

We calculated U.S. public spending and tax subsidies for health care for selected years between 1965 and 1999 by totaling (1) direct government payments for health-related activities (for example, Medicare, Medicaid, veterans' and military health care, subsidies to public hospitals, and public health and research programs); (2) government payments for health benefits for public employees; and (3) tax subsidies for the purchase of health insurance and health care. We refer to the total of these three categories as "total tax-financed health expenditures."

■ **Direct government payments.** We used figures from the CMS Office of the Actuary, for direct government spending for health care programs, research, and so forth.<sup>4</sup>

■ Public employees' benefit costs. Estimating government spending on private insurance for public employees for the earlier years is straightforward; the CMS (then HCFA) published tabulations of these figures for 1965–1995.<sup>5</sup> However, comparable tabulations are not available for 1999.

To compute the 1999 figure, we combined data on federal workers with separate data on state and local government employees. We calculated federal health benefits by multiplying FEHBP enrollment by the federal government's average premium contribution.<sup>6</sup> We then added an estimate of state and local government spending for employee health benefits from the Medical Expenditure Panel Survey (MEPS).<sup>7</sup>

**Tax subsidies.** Calculating the value of tax subsidies is complex because the

government offers several tax preferences to health spending. First, employer-paid health insurance benefits are exempt from income and payroll taxes. In addition, health costs paid with pretax dollars via "flexible spending accounts" are taxexempt. Finally, individual taxpayers can deduct health care costs that exceed 7.5 percent of their adjusted gross income.

*Federal income tax subsidies.* For years since 1975 we used the OMB's estimates of the federal income tax subsidy to health care.<sup>8</sup> Unfortunately, there are no OMB estimates prior to 1975. Hence, for our 1965 and 1970 estimates we adjusted the 1975 OMB figure downward to reflect health costs and tax rates in those years.<sup>9</sup>

*Social Security (SS) payroll tax subsidies.* We calculated the value of this subsidy by multiplying total employer spending for health benefits by the SS tax rate for each year (for example, 12.4 percent in 1999).<sup>10</sup> Because income above a cap (\$72,600 in 1999) is not subject to SS taxes, we assumed that high-income persons do not receive this subsidy and adjusted our estimates downward accordingly.<sup>11</sup>

*Medicare Hospital Insurance (HI) payroll tax subsidies.* We calculated the value of this exemption by multiplying total employer spending for health benefits by the HI payroll tax rate for each year (for example, 2.9 percent in 1999).<sup>12</sup> For 1970–1990 we adjusted this figure downward to account for employees with earnings above the HI tax cap, using the same methodology as for SS. There was no income cap on HI taxes in 1995 or 1999.

State and local income tax subsidies. We calculated the value of this exemption by multiplying the value of the federal income tax subsidy by the ratio of local and state income tax receipts to federal income tax receipts.<sup>13</sup>

Adjustment to avoid double counting of payroll and income taxes. We made a small downward adjustment—about 3.4 percent of total tax subsidies in 1999—to avoid double counting of the income and payroll tax subsidies.<sup>14</sup>

Adjustment to avoid double counting of tax subsidies to government employees. The OMB estimate of health-related tax subsidies includes tax subsidies to government employees. Because we already included the entire government contribution to its employees' health benefits as a tax-financed expenditure, we adjusted the OMB estimate (and our calculation of state and local tax subsidies) downward by government employers' share of total employer-paid health benefits.

We compared U.S. figures for health spending (per capita and as a share of gross domestic product [GDP]) to data for other nations compiled by the Organization for Economic Cooperation and Development (OECD).<sup>15</sup> Data for other nations were converted to U.S. dollars using GDP purchasing power parities (PPPs). Where figures for 1999 were not yet available, we used 1998 data.

# **Study Results**

Tax-financed health expenditures totaled \$723.8 billion in 1999, \$2,604 per capita, or 59.8 percent of total health spending (Exhibit 2). Between 1965 and 1999 direct government health spending, public employers' benefit spending, and tax

	1965	1970	1975	1980	1985	1990	1995	1999
National health expenditures								
(NHE)	\$41.0	\$73.1	\$129.8	\$245.8	\$426.5	\$695.6	\$987.0	\$1,210.7
Federal government								
Medicare	0.0	7.7	16.3	37.4	71.8	110.2	184.8	213.6
Medicaid	0.0	2.8	7.4	14.5	22.7	42.5	86.2	107.7
Other health programs	4.7	7.0	12.3	19.4	27.6	39.8	52.9	63.5
Public employee health benefits	0.2	0.3	1.2	2.2	4.3	9.2	11.3	13.2
Tax subsidies	1.7	3.5	7.0	19.1	31.3	49.8	75.5	95.4
State/local government								
Medicaid	0.0	2.4	6.0	11.5	18.3	31.1	57.9	79.3
Other health programs	5.5	7.6	12.9	22.0	34.2	58.7	76.4	84.6
Public employee health benefits <sup>a</sup>	0.3	0.7	2.2	7.6	18.2	33.5	47.1	52.4
Tax subsidies	0.1	0.4	0.9	2.5	4.7	6.9	11.9	14.2
Total tax-financed (billions)	\$12.6	\$32.4	\$66.3	\$136.2	\$233.1	\$383.4	\$604.0	\$723.8
Tax-financed (\$ per capita)	\$63	\$154	\$301	\$592	\$963	\$1,509	\$2,254	\$2,604
Tax-financed as percent of NHE	30.7%	44.4%	51.0%	55.4%	54.6%	55.1%	61.2%	59.8%

#### EXHIBIT 2 Tax-Financed Health Expenditures, Billions Of Dollars, Selected Years 1965–1999

SOURCE: Authors' analysis.

<sup>a</sup> 1999 estimate is from a data source that results in lower estimates than data sources used for earlier years.

subsidies all rose more rapidly than did overall health care costs (Exhibit 3).

As a share of tax-financed health expenditures, tax subsidies and public employees' benefit costs rose, despite the surge in direct federal spending after the passage of Medicare and Medicaid. Conversely, the proportion accounted for by direct spending (what the CMS labels "public-sector health expenditures") fell. In 1999 tax subsidies accounted for 15.1 percent of tax-financed health expenditures, public employee health benefits for 9.1 percent, and direct government health spending for 75.8 percent.

In 1965 U.S. tax-financed health expenditures per capita were well below the total spending levels in most other developed nations (Exhibit 4) and similar to government spending in other wealthy nations. By 1999 tax-financed health expenditures per capita in the United States exceeded total health spending per ca-

EXHIBIT 3
Tax-Financed Expenditures As A Percentage Of Total Health Expenditures, Selected
Years 1965–1999

	1965	1970	1975	1980	1985	1990	1995	1999	
Federal direct spending	11.4%	24.0%	27.8%	29.0%	28.6%	27.7%	32.8%	31.8%	
State/local direct spending	13.5	13.7	14.6	13.6	12.3	12.9	13.6	13.5	
Public employee benefits	1.2	1.4	2.6	4.0	5.3	6.1	5.9	5.4	
Tax subsidies	4.6	5.3	6.1	8.8	8.4	8.2	8.9	9.1	

SOURCE: Authors' analysis.





**SOURCE:** For U.S. figure, authors' calculations. For all other countries, Organization for Economic Cooperation and Development, *OECD Health Data 2000* and *OECD Health Data 2001* (Paris: OECD, 2001 and 2002).

NOTE: All figures have been converted to U.S. dollars using gross domestic product (GDP) purchasing power parities (PPPs).

pita in every other nation except Switzerland (Exhibit 5) and dwarfed government spending in any other nation.



EXHIBIT 5 Public And Private Per Capita Health Care Spending In Ten Countries, 1998 Or 1999

SOURCE: For U.S. figure, authors' calculations. For all other countries, Organization for Economic Cooperation and Development, OECD Health Data 2001 (Paris: OECD, 2002).

NOTE: All figures have been converted to U.S. dollars using gross domestic product (GDP) purchasing power parities (PPPs), a 1998.

## Comment

Most Americans have private health insurance. Citizens of most other wealthy nations have national health insurance. Hence the perception that those nations' health care systems are public while ours is private. But these labels obscure the predominance of private medical practice and hospitals in Canada and most European countries and the dominance of tax-financed health care in the United States. As shown in Exhibit 5, Americans now pay higher taxes per capita for financing health care than do any other nation's citizens.

The huge role of the government in financing American health care is obscured by the fact that nearly one-third of these tax dollars meander through private insurers on their way to the patient's bedside. What originates as taxes paid by private households ends up as recycled "private" spending in the CMS accounts. Insurance firms not only siphon off overhead and profits in the process, they also inflict huge paperwork burdens and costs on providers. We have detailed these costs in the past. For 1999 we estimate that health administration spending was more than \$309 billion.<sup>16</sup> At least half of this could have been saved through a shift to national health insurance.<sup>17</sup> Disinterested civil servants, and even skeptics, agree that U.S. health care costs need not rise under national health insurance because administrative savings would roughly offset the increased costs of care for today's uninsured and underinsured persons.<sup>18</sup>

While national health insurance wouldn't cost Americans more, it would mean that taxes would pay a bigger share of health care costs and that private insurance and patients would pay a smaller share. Yet government now spends far more on health care—and national health insurance would require a smaller tax increase—than most Americans believe. The step from our current level of tax financing—59.8 percent—to Canada or Australia's 70 percent is less steep than the CMS figures on public spending imply. About \$130 billion per year—the amount of the recent tax cuts—would get us from here to there.

■ **Regressivity of tax subsidies.** The *sub rosa* character of much tax-financed health spending in the United States veils the regressive pattern of government funding. Highly visible Medicaid spending benefits the poor; obscure but burgeoning tax subsidies benefit the affluent who are most likely to have employer-paid coverage and whose higher marginal tax rates translate into greater tax savings.<sup>19</sup> For instance, in 1998 federal tax subsidies alone averaged \$2,357 for families with incomes above \$100,000 but only \$71 for families with incomes below \$15,000.<sup>20</sup>

■ Impact on households. The complexity of U.S. health care financing also masks its impact on household budgets. In 1999 a family of four with the mean per person expenditures spent \$17,432 (4 × \$4,358) on health care: \$7,016 for premiums (including the private employer–paid portion, net of tax subsidies) and out-of-pocket costs; and \$10,416 in health care–related taxes. Of their taxes, \$1,578 funded health-related tax subsidies; \$943 paid for health benefits for public employees; and \$7,895 paid for Medicare, Medicaid, and so forth. Even many uninsured Americans

# "Were national health insurance to replace private coverage, employees or employers (or both) would gain taxable income."

pay thousands of dollars in taxes for the health care of others.

■ **Growth of tax-financed share.** The tax-financed share of overall health care spending nearly doubled between 1965 and 1999, jumping after the introduction of Medicare and Medicaid in 1966. Ironically, the ascendancy of market-based health policies in the early 1990s coincided with a second bump in the tax-financed share of health spending. The exuberant growth of for-profit medicine was nourished by generous dollops of tax dollars. The small dip in the tax-financed share in 1999 probably reflects both the booming private economy and an artifact (a discontinuity in the data sources for public employee benefits costs).

**Government versus private employer purchasing role.** The federal government is now the largest purchaser of private coverage in the United States, followed by the State of California.<sup>21</sup> Although only 19.4 percent of all civilian workers were public employees in 1999, local, state, and federal governments accounted for 22.5 percent of civilian employer health spending (up from 9.4 percent in 1965).<sup>22</sup> While 64 percent of Americans have employment-based coverage, many of these are public employees, receive their principal coverage from Medicare or Medicaid, or purchase coverage through an employer but pay the whole premium themselves; privatesector employers contribute to the principal coverage of only 43.1 percent of Americans.<sup>23</sup> But even this figure greatly overstates private employers' role in funding care; they rarely pay the entire premium, and their contribution is tax-subsidized. Moreover, government picks up the tab for many of the costliest patients-the elderly and disabled. Private employers' share of health spending in 1999 was at most 19.2 percent, under the extreme assumption that none of the tax subsidies accrue to employers.<sup>24</sup> If one assumes the opposite extreme—that all of the tax subsidy for employer-paid coverage accrues to employers-their contribution falls to only 11.0 percent of health spending. Even the higher figure hardly justifies private employers' enormous influence on health policy.

■ Comparison with other estimates. Our estimates of tax subsidies in 1999 and 1985 are similar to previous estimates based on different methods.<sup>25</sup> We may slightly overstate the SS tax subsidy if higher-income employees receive costlier health benefits than do covered employees with incomes below the SS income cap. Conversely, our estimate may understate state/local income tax subsidies if locales with high income tax rates have higher-than-average employer contributions for coverage. We excluded tax subsidies to not-for-profit hospitals (\$6.3 billion in 1995), other health care providers, and pharmaceutical firms, as well as reduced payroll tax revenues due to the flexible spending account exemption.<sup>26</sup> Hence, our estimate is probably conservative.

However, the value of current tax subsidies provides only a rough estimate of

the increased tax collections that would accrue if the tax subsidies were abolished. Were national health insurance to replace private coverage, employees or employers (or both) would gain taxable income, but many would find means to shelter part of this new income from taxes. A variety of other ripple effects would occur. Some insurance employees would lose jobs and income; employers' costs to administer coverage would fall; and employees who have been reluctant to change jobs or retire for fear of losing coverage would face fewer constraints.

■ International comparisons. For international comparisons we used 1998 data for nations whose 1999 figures were not yet available. Because health care inflation has been modest in these nations, increased spending between 1998 and 1999 could not greatly affect our findings. The OECD figures for health spending in other nations do not adjust for tax subsidies for private health care spending or for government purchases of supplemental private health insurance for public employees. No comprehensive data are available to quantify these items. However, such uncounted government health spending must be small, since total private insurance expenditures are low.<sup>27</sup> In any case, tax-financed health spending in the United States exceeds the total health budget—public plus private—of virtually every other nation.

Our health care financing system is usually portrayed as largely private. "Public money, private control" is a more apt description.

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#### NOTES

- Centers for Medicare and Medicaid Services, Office of the Actuary, "National Health Expenditures by Type of Service and Source of Funds: Calendar Years 1960–99," www.hcfa.gov/stats/nhe-oact/tables/ nhe99.csv (12 November 2001).
- 2. The CMS figures for government health spending continue to include all Medicare and military health spending, even funds that now flow through private HMOs, presumably for historical reasons.
- This example is based on Massachusetts tax rates and on the average family premium in Massachusetts in 1996. See J.M. Branscome et al., "Private Employer-Sponsored Health Insurance: New Estimates by State," *Health Affairs* (Jan/Feb 2000): 139–147.
- 4. This category corresponds to the CMS definition of the public share of health spending. CMS Office of the Actuary, "National Health Expenditures."
- C.A. Cowan et al., "Business, Households, and Government: Health Spending, 1994," *Health Care Financing Review* 17, no. 4 (1996): 157–178; and C.A. Cowan and B.R. Braden, "Business, Households, and Government: Health Care Spending, 1995," *Health Care Financing Review* 18, no. 3 (1997): 195–206.
- 6. The Fact Book, 2000 Edition: Federal Civilian Workforce Statistics (Washington: Office of Personnel Management, 2000).
- 7. For the 1999 MEPS data on state/local government health benefit expenditures, see Agency for Healthcare Research and Quality, "1999 Employer-Sponsored Health Insurance Data: National Totals for Enrollees and Cost of Health Insurance Coverage for the Private and Public Sectors," August 2001, www.meps.ahrq. gov/mepsdata/ic/1999/index499.htm (10 April 2002). The MEPS data are only available for 1996–1999. They appear to yield a lower estimate of state and local government spending for employee benefits than the CMS tabulations that we used for 1965–1995. Although the size of this discrepancy in public benefit costs is unknown, the MEPS estimate of total personal health spending is at least 6.7 percent lower than the National Health Accounts. See T. Selden et al., "Reconciling Medical Expenditure Estimates from the

MEPS and the NHA, 1996," *Health Care Financing Review* 23, no. 1 (2001): 161–178. Hence, our estimate of government employees' health benefits for 1999 is probably low.

- Office of Management and Budget, Special Analyses: Budget of the United States Government—Fiscal Years 1976, 1978, 1980, 1982, 1985, 1987, 1989 (Washington: U.S. Government Printing Office, various years); OMB, Budget of the United States Government, Fiscal Year 1992 (Washington: U.S. GPO, 1991); and OMB, Analytic Perspectives: Budget of the United States Government, Fiscal Years 1996, 1997, 1998, 1999, 2000 (Washington: U.S. GPO, various years).
- 9. Specifically, we first calculated the 1975 income tax subsidy for employer-paid coverage as a percentage of employer-paid health benefits (14.46 percent) and the income tax subsidy for individuals' deductions for out-of-pocket health spending as a percentage of total out-of-pocket health spending (6.23 percent). For our 1970 estimate, we multiplied these percentages by 1970 figures for employer-paid health benefits and out-of-pocket health spending, respectively. See Cowan et al., "Business, Households, and Government: Health Spending, 1994." We then adjusted these dollar figures for the small change in effective income tax rate (total income taxes collected/total adjusted gross income) between 1970 and 1975. We generated the 1965 estimate in a similar manner.
- 10. Social Security Administration, "Tax Rate Table," www.ssa.gov/OACT/COLA/taxRates.html (10 April 2002).
- 11. Because high-income individuals are already paying the maximum SS payroll tax, they would pay no additional SS tax if they received income in lieu of tax-exempt health benefits. We analyzed the Annual Demographic Survey (March supplement) of the Current Population Survey (CPS), www.bls.census.gov/cps/ads/adsmain.htm (27 August 2001), to calculate the proportion of persons with employer-paid health insurance whose incomes exceeded that year's SS income cap. We adjusted the estimated tax subsidy downward by this proportion. For instance, in 1999, 90.6 percent of persons with employer-paid health coverage had incomes below \$72,600. Hence, the SS tax subsidy for 1999 is as follows: (Employer health benefit spending) × 12.4% × 90.6%. Because the CPS did not ask about employer-paid health coverage in 1975 and 1970, we based our downward adjustment for these years on the proportion of all workers with incomes above the SS cap. Because no CPS data of any kind are available for 1965, we based our adjustment for that year on the proportion of persons exceeding the SS income cap in 1970.
- 12. SSA, "Tax Rate Table."
- 13. U.S. Bureau of the Census, *Statistical Abstract of the United States* (Washington: Bureau of the Census, various years).
- 14. The employer-paid portions of SS and HI payroll taxes are exempt from income taxes. If health benefits were subject to taxes, the employer-paid portion of payroll taxes would rise slightly. To compensate for these increased payroll costs, employers would probably trim wages (L.J. Blumberg, "Who Pays for Employer-Sponsored Health Insurance?" *Health Affairs* [Nov/Dec 1999]: 58–61), lowering employees' incomes and hence their income tax liability. In Jones's case, she would receive not the full \$6,000 as taxable income, but \$5,541 (\$459 having gone to cover the employer's share of additional payroll taxes).

To calculate the correction needed to avoid double counting, we divided the income tax subsidy for employer-paid insurance by total employer-paid health benefits, to estimate the effective tax subsidy rate. We then multiplied this rate by the value of the employer-paid share (one-half) of the SS and HI payroll tax subsidies.

- 15. Organization for Economic Cooperation and Development, OECD Health Data 2001 (Paris: OECD, 2001).
- 16. We totaled administrative costs of health insurers, hospitals, physicians' offices, nursing homes, and other health care settings. For insurance overhead, see S. Heffler et al., "Health Spending Growth Up in 1999; Faster Growth Expected in the Future," *Health Affairs* (Mar/Apr 2001): 193–203. For hospital administration, we analyzed FY 1999 Hospital Cost Reports. For details on methods, see S. Woolhandler, D.U. Himmelstein, and J.P. Lewontin, "Administrative Costs in U.S. Hospitals," *New England Journal of Medicine* 329, no. 6 (1993): 400–403.

We estimated physicians' billing and administrative costs by summing (1) the value of physicians' time devoted to billing and administration (see D.K. Remler, B.M. Gray, and J.P. Newhouse. "Does Managed Care Mean More Hassles for Physicians?" *Inquiry* 37, no. 3 [2000]: 304–316); (2) the full payroll costs of office clerical staff, and an allocated share of payroll for other office personnel (see J.D. Wassenaar and S.L. Thran, eds., *Physician Socioeconomic Statistics*, 2000–2002 *Edition* [Chicago: American Medical Association, 2001]); and (3) an allocated share of the cost of office space and other professional expenses such as legal fees, accounting, and so forth, but excluding medical equipment and supplies (ibid.).

We estimated nursing home administration costs based on analysis of California data, www.oshpd.

cahwnet.gov/hid/infores/ltc/finance/archive/downloads/ltcf1299.exe (1 October 2001). Finally, using the 2000 CPS we calculated the total wage bill for administrative staff employed in health care settings other than hospitals, nursing homes, and practitioners' offices. Because our estimate excludes benefit or office space costs for these personnel, it understates actual administrative costs.

- S. Woolhandler and D.U. Himmelstein. "The Deteriorating Administrative Efficiency of U.S. Health Care," New England Journal of Medicine 324, no. 18 (1991): 1253–1258.
- 18. U.S. General Accounting Office, Canadian Health Insurance: Lessons for the United States, Pub. no. GAO/HRD-91-90 (Washington: U.S. GPO, 1991); Congressional Budget Office, Universal Health Insurance Coverage Using Medicare's Payment Rates (Washington: U.S. GPO, 1991); and J.F. Sheils and R.A. Haught, Analysis of the Costs and Impact of Universal Health Care Coverage under a Single Payer Model for the State of Vermont (Falls Church, Va.: Lewin Group, August 2001).
- 19. For data on the regressivity of tax subsidies, see A.C. Enthoven, "Health Tax Policy Mismatch," *Health Affairs* (Winter 1985): 5–14; W.P. Brandon, "Health-Related Tax Subsidies: Government Handouts for the Affluent," *New England Journal of Medicine* 307, no. 15 (1982): 947–950; and J. Sheils and P. Hogan, "Cost of Tax-Exempt Health Benefits in 1998," *Health Affairs* (Mar/Apr 1999): 176–181. For the relationship between income and probability of employer-sponsored coverage, see J. Budetti et al., *Risks for Midlife Americans: Getting Sick, Becoming Disabled, or Losing a Job and Health Coverage* (New York: Commonwealth Fund, 2000).
- 20. Sheils and Hogan, "Cost of Tax-Exempt Health Benefits in 1998."
- 21. R. Pear, "H.M.O.'s Plan to Drop Medicare, Calling Fees Too Low," New York Times, 22 September 2001.
- 22. Data on government employment and total employment are from our analysis of the 2000 CPS. Our CPS analysis also shows that in 1999, 69.0 percent of public-sector employees had coverage paid for, at least in part, by their employer, versus 51.6 percent of private-sector workers.
- O. Carrasquillo et al., "A Reappraisal of Private Employers' Role in Providing Health Insurance," New England Journal of Medicine 340, no. 2 (1999): 109–114.
- 24. The 19.2 percent figure is the total employer share of health spending minus the government employer share.
- See Sheils and Hogan, "Cost of Tax-Exempt Health Benefits in 1998"; Enthoven, "Health Tax Policy Mismatch"; and D.M. Fox and P. Fronstin, "Public Spending for Health Care Approaches 60 Percent" (Letter), *Health Affairs* (Mar/Apr 2000): 271–273.

Our 1999 tax subsidy estimate is almost identical to that of Sheils and Hogan, save for our exclusion of the tax subsidy for employer-paid coverage for government workers. We excluded this tax subsidy to avoid double counting because we credit the entire value of public employees' employer-paid coverage to government. Adding in the tax subsidy would, arguably, mean crediting government with a tax subsidy to itself. Our approach to estimating the tax-financed share of health spending differs from that of Fox and Fronstin. Their numerator (tax-financed spending) resembles ours, but they use a higher figure for total health spending (the denominator); they added tax subsidies to total spending rather than subtracting them from the privately financed share. As a result, their method yields a higher estimate of total health spending than do the National Health Accounts.

- For tax subsidies to not-for-profit hospitals, see E.M. Silverman, J.S. Skinner, and E.S. Fisher, "When Money Is the Mission," New England Journal of Medicine 31, no. 23 (1999): 1769.
- 27. OECD, OECD Health Data 2001.