



# Hidden Health Tax:

**Americans  
Pay a Premium**

Families USA

---

**Hidden Health Tax:  
Americans Pay a Premium**

© 2009 by Families USA

**Families USA**

1201 New York Avenue NW, Suite 1100

Washington, DC 20005

Phone: 202-628-3030

Fax: 202-347-2417

E-mail: [info@familiesusa.org](mailto:info@familiesusa.org)

*This publication is available online at [www.familiesusa.org](http://www.familiesusa.org).*

*Cover design by Nancy Magill*

---

## INTRODUCTION

**A**s the number of Americans without health insurance continues to rise, so too do the costs borne by those who have coverage, who face what might be called a “hidden health tax.” Private health insurance premiums are higher, at least in part, because uninsured people who receive health care often cannot afford to pay the full amount themselves. The costs of this uncompensated care are shifted to those who have insurance, ultimately resulting in higher insurance premiums for businesses and families.

During 2007 and 2008, one out of every three non-elderly Americans—86.7 million people—went without health insurance for some period of time.<sup>1</sup> When those who do not have health insurance get sick, their first response is often to avoid or delay seeking care due to the cost.

When the uninsured do obtain care, they struggle to pay as much as they can afford. Often, however, the uninsured cannot afford to pay the entire bill, and a portion of it goes uncompensated. To make up for these uncompensated care costs, doctors and hospitals charge insurers more for the services provided to patients who do have health coverage. In turn, the costs that are shifted to insurers are passed on in the form of higher premiums to consumers and businesses that purchase health coverage.

This cost shift to health insurance premiums is a “hidden health tax.” To quantify this “tax,” Families USA contracted with Milliman, Inc., an independent actuarial consulting firm, to analyze federal Medical Expenditure Panel Survey (MEPS) data and data from other federal and private sources. Based on these data, Milliman estimated the total national cost of uncompensated care provided to the uninsured, and it quantified that amount spread across the privately covered, non-Medicare, non-Medicaid population.

## KEY FINDINGS

While people without health insurance often delay or forgo care, in 2008, the uninsured received \$116 billion worth of care from hospitals, doctors, and other providers.

Those costs were covered in the following ways:

- The uninsured paid for, on average, more than one-third (37 percent) of the total costs of the care they received out of their own pockets.
- Third-party sources, such as government programs and charities, paid for another 26 percent of that care.
- The remaining amount, approximately \$42.7 billion in 2008, was unpaid and constituted uncompensated care.

To make up for this uncompensated care, the costs were shifted to insurers in the form of higher charges for health services. These higher charges are then passed on to families and businesses as higher premiums. The impact of this hidden health tax on annual premiums for families and individuals in 2008 was as follows:

- For family health care coverage, the hidden health tax was \$1,017.
- For health coverage provided to single individuals, the hidden health tax was \$368.

## DISCUSSION

### Who Are the Uninsured?

Families USA recently released estimates of the number of people who went without insurance for during 2007 and 2008. These estimates, developed by The Lewin Group for Families USA, found that 86.7 million people—one out of three Americans under the age of 65—were uninsured for some period of time during 2007 and 2008. Of these, 25 percent were uninsured for the full 24 months, and nearly three-quarters (74.5 percent) were uninsured for more than six months.<sup>2</sup> As shocking as these numbers are, it must be noted that they were derived *before* the recent rise in unemployment and the resulting increase in the number of uninsured Americans.<sup>3</sup>

Contrary to popular perception, the overwhelming majority of uninsured people are workers or live in families in which at least one member works. The Lewin Group found that four out of five individuals (79.2 percent) who went without health insurance during 2007-2008 were employed or in a family with an employed adult; 69.7 percent were in families with a worker who was employed full-time.<sup>4</sup>

There are several reasons why people with jobs lack health insurance. First, not all jobs offer health insurance benefits. The likelihood that an employer offers health benefits to its workers varies considerably. Small employers, low-wage employers, and employers with older workers are less likely to be able to afford to offer health coverage to their employees. Second, some employees who have been hired recently may be in a “waiting period” before coverage starts. In 2008, three out of four employers (75 percent) imposed a waiting period for coverage, with the average waiting period being just over two months.<sup>5</sup> Third, some employees who are offered coverage by their employer do not sign up for that coverage because they cannot afford to pay the portion of the premium that is not paid by their employer. In 2008, full-time workers who received job-based health insurance were asked to pay, on average, \$3,354 per year in premiums for family coverage.<sup>6</sup> In addition, some young and healthy workers decline coverage, taking on the financial risk of unexpected illness.

Other uninsured people include workers who have recently lost their jobs due to layoffs or other factors beyond their control. For the families of those who become unemployed, the loss of income is often compounded by the loss of health insurance. Some workers who lose job-based health insurance are eligible to remain temporarily on their former employer’s plan through the federal COBRA statute or a state COBRA-like law that pertains to small employers. However, the premiums for COBRA continuation coverage are often unaffordable for laid-off workers and their families: In 2008, the average monthly COBRA premium for a family was \$1,069, compared to the average monthly unemployment check of \$1,278. Thus, a laid-off worker would have to spend, on average, 84 percent of his or her unemployment check on health insurance.<sup>7</sup>

Recognizing this problem, Congress created a temporary (nine-month) subsidy for COBRA premiums for laid-off workers in the economic stimulus legislation that was signed into law in February (the American Recovery and Reinvestment Act). This law expires at the end of 2009.<sup>8</sup> Moreover, the subsidy pays only 65 percent of the premium cost; for many out-of-work families, the remaining 35 percent is unaffordable.

Some working uninsured do try to purchase health insurance in the private, individual (non-group) market. However, the cost of purchasing health insurance in this market is often prohibitively high and the coverage less than adequate. Worse, for many people in less-than-perfect health, health coverage is unavailable.<sup>9</sup>

Many people wrongly assume that Medicaid, a national program designed to insure those with low incomes, is available to help low-wage uninsured workers. Medicaid is really 51 different programs run by the states and the District of Columbia with 51 different sets of rules about who is eligible for coverage, different income guidelines, and different enrollment procedures. In almost all states, Medicaid income eligibility differs based on family status. In 43 states, adults who do not have dependents living with them can never qualify for Medicaid or any other public coverage, even if they are penniless. In most states, a child is eligible for public health coverage (through either Medicaid or the Children's Health Insurance Program—CHIP) if that child's family income is below 200 percent of the federal poverty level (\$35,200 for a family of three in 2008). For parents, the income eligibility levels are much lower than they are for children. The median income eligibility limit for parents among the 50 states is 67 percent of poverty—in 2008, only \$11,792 in annual income for a family of three.<sup>10</sup> A parent in a family of three working full-time all year at minimum wage would earn “too much” to qualify for Medicaid in half the states (even though the family's annual income would be below the poverty level).

### What Happens When the Uninsured Need Health Care?

Previous reports by Families USA and others have clearly shown the negative effects of being uninsured.<sup>11</sup> Going without health coverage places families at risk, both physically and financially. Because of the high cost of health care, uninsured people are less likely to get the care that they need when they need it, and they are more likely to delay seeking care as long as possible. When a condition becomes so serious that treatment can no longer be delayed, the uninsured seek care, and they often suffer devastating economic consequences associated with paying for this care.

We know that uninsured people often do not receive health care when they need it. Uninsured adults are nearly eight times as likely as the privately insured to go without needed care due to cost (23 percent versus 3 percent).<sup>12</sup> Uninsured adults with chronic conditions are at particular risk, with nearly half (49 percent) going without needed medical care or prescription drugs due to cost. Moreover, uninsured adults with chronic conditions are 4.5 times more likely than insured adults to report an unmet need for medical care or prescription drugs.<sup>13</sup> In addition, the uninsured are less likely to receive preventive care and screenings. Adults without insurance are nearly seven times more likely to have gone without any preventive care in the last year than insured adults (41 percent versus 6 percent),<sup>14</sup> and uninsured women are twice as likely as insured women to have gone without a Pap test in the last year (40 percent versus 20 percent).<sup>15</sup>

We also know that uninsured people delay seeking medical care and end up sicker when they do get care. For example, uninsured adults are more likely to be diagnosed with a disease in an advanced stage. Uninsured women are substantially more likely to be diagnosed with breast cancer in a later stage and to have larger tumors; they are also more likely to experience a delay in receiving treatment following diagnosis and are less likely to complete chemotherapy treatments than privately insured women.<sup>16</sup> In addition, uninsured people are substantially more likely to die prematurely than people with insurance: At least 22,000 people between the ages of 25 and 64 died in 2006 due to a lack of health insurance.<sup>17</sup>

When a health condition becomes serious, uninsured people (or parents worried about their children) will go to a doctor or hospital even if they do not know how they can pay for those services. After they obtain care, they may face significant, unaffordable bills. In fact, people who were uninsured at any time during 2007 were nearly twice as likely as those who were insured all year to have problems with medical bills or medical debt (61 percent versus 33 percent).<sup>18</sup> To pay their debt, uninsured people may use up all of their savings, borrow money, charge credit cards for large bills that will take years to repay, or take out a loan or mortgage on their home. When those resources are gone, people with medical debt may face problems paying for food, heat, clothing, and other basic necessities.<sup>19</sup> For these families, staying afloat as debt mounts is, at best, a struggle.

### Who Pays for Health Care for the Uninsured?

As the number of uninsured Americans rises, people with insurance also are struggling to afford rising health insurance premiums. And these two problems—uninsurance and high premiums—are interrelated. In fact, the presence of people without health insurance in our nation's health care system adds to the cost of the health insurance premiums that American consumers and businesses must pay for coverage. This is a hidden health tax that everyone with private health insurance pays. How large is this hidden health tax?

To answer this question, Families USA contracted with Milliman, Inc., an independent actuarial consulting firm, to analyze federal Medical Expenditure Panel Survey (MEPS) data and other federal data sources (see the Technical Appendix on page 15 for Milliman's detailed discussion of data sources and methodology).



### ■ Quantifying the Hidden Health Tax

First, Milliman looked at how much people without insurance pay out of pocket for their own care. When people without insurance seek treatment and incur medical bills, they struggle to pay as much as they can, often making great personal sacrifices to do so. People without insurance, on average, pay for more than one-third (37 percent) of the total cost of health care services they receive out of their own pockets.

Second, Milliman analyzed other sources of payment for care that is received by the uninsured, such as workers' compensation and the Department of Veterans Affairs (VA); other government programs, including Medicaid Disproportionate Share (DSH) funds; as well as private charities. They found that these programs and charitable sources pay for another 26 percent of the care that is received by the uninsured.

Third, Milliman calculated the dollar value of the remaining amount. This net "uncompensated care" was approximately \$42.7 billion in 2008. (These estimates do not include the cost of the care provided to insured people that is never paid—costs that people with insurance are sometimes unable to pay, such as high deductibles, high copayments, charges for uncovered services, and other out-of-pocket costs.)

Finally, Milliman spread this uncompensated care cost across the insured, non-Medicare, non-Medicaid population to arrive at annual costs of \$1,017 per insured family and \$368 per insured single person in 2008.

### ■ Passing on the Hidden Health Tax

How does the unpaid cost of this care for the uninsured actually end up being passed on in the form of higher private health insurance premiums? Providers attempt to recover these uncompensated care dollars primarily by increasing charges for those with private insurance. This cost shift is borne almost exclusively by private insurance programs because the federal Medicare program's rules do not allow Medicare provider payments to easily adjust upward in response to this pressure. Likewise, state Medicaid programs use state-set reimbursement rate schedules to pay for services, or these services are delivered under state managed care contracts with insurers. Consequently, uncompensated care costs are passed on to consumers and businesses primarily through higher private insurance premiums. The extent to



which providers can do this varies from state to state; nonetheless, the rates always reflect a significant amount of uncompensated care. On average, this translated into a surcharge of \$368 for individual premiums and a surcharge of \$1,017 for family premiums in 2008 due to uncompensated care.

Ironically, as the cost of health insurance increases, more people find themselves unable to afford insurance. And, as more people lose insurance, there are more people who can't pay all of their medical bills, and a further cost shift to private premiums is required. This results in a vicious cycle of escalating numbers of uninsured people and higher insurance premiums.

### How Do the Findings for 2008 Compare to Earlier Estimates?

In 2005, Families USA released *Paying a Premium: The Added Cost of Care for the Uninsured*. That report presented an estimate of the impact of the cost of uncompensated care that is received by the uninsured on individual and family private health insurance premiums. The 2005 estimate was developed for Families USA by Dr. Kenneth Thorpe, Robert W. Woodruff Professor and Chair of the Department of Health Policy and Management, Rollins School of Public Health, Emory University.<sup>20</sup> Dr. Thorpe found that the impact of uncompensated care on premium costs for family health insurance provided by private employers in 2005 included an extra \$922 in premiums due to the cost of care for the uninsured; premiums for individual coverage cost an extra \$341.

To reexamine the question of the impact of the cost of uncompensated care on private health insurance premiums in 2008, Families USA contracted with the private actuarial consulting firm, Milliman, Inc. We decided to use Milliman for two reasons. First, by using a second expert consultant, our goal was to establish additional credibility for quantifying the impact on premiums of uncompensated care provided to the uninsured. Second, Milliman is a well-respected actuarial consulting firm that provides independent analysis to businesses and is recognized for its health industry expertise.

Dr. Thorpe's estimates used similar federal data sources and a similar (but not identical) methodology to estimate the impact of uncompensated care on premiums. Therefore, it is appropriate to compare the \$922 impact on family premiums in 2005 to the \$1,017 impact on family premiums in 2008. Likewise, the \$341 impact on individual premiums in 2005 can be compared to the \$368 impact on individual premiums in 2008.

Milliman's methodology varied from Dr. Thorpe's in several ways. The data that are available for this analysis in 2009 are more complete and sophisticated than the data available in 2005, when Dr. Thorpe performed his estimates. In addition, Milliman supplemented the federal data with actuarial relationships from the private insurance market. The Milliman study is an original calculation based on new data—they did not simply trend forward Dr. Thorpe's numbers using medical inflation.

### **How Can We Reduce the Hidden Health Tax on Insurance Premiums?**

Now that we know the impact on health insurance premiums of having uninsured individuals and families in our health care system, can we reduce this “tax” and capture the savings to lower health insurance premiums? The answer is yes. This can be accomplished if we take several critical policy steps that are part of the current health care reform debate. Obviously, Congress would need to make health coverage affordable for all Americans. This can be done by building on the two primary pillars of coverage in our existing health care system: (1) public programs such as Medicaid, CHIP, and Medicare; and (2) job-based insurance. A growing consensus in Congress and around the country suggests that the likeliest path to reform would be a hybrid public-private solution that builds on the existing Medicaid program and extends it to everyone who is low-income. For individuals and families who have incomes above the eligibility level for an expanded Medicaid program, significant sliding-scale subsidies for the purchase of private health insurance, including for job-based coverage, would be needed.

In addition, to successfully cut the hidden health tax, Congress must regulate private insurance markets. If we eliminate a significant portion of uncompensated care by covering the currently uninsured, we can expect that doctors and hospitals will not need to build these costs into their charges. If physicians and hospitals lower their charges for services to insurers, then premiums should go down. However, a decline in premiums is not necessarily automatic. Government has tools—or can easily develop them—to serve as a reasonable and fair watchdog of both providers and insurers, ensuring that pricing is transparent and that the savings realized from reducing uncompensated care are passed on to the employers and individuals who pay premiums.

## CONCLUSION

Going without health insurance profoundly affects both the economic and physical well-being of uninsured Americans. They may be burdened by debt or even driven into bankruptcy. What is more, their health may suffer from delaying or doing without necessary care. And in too many cases, their lives are shortened. But the uninsured are not the only people who bear the consequences. Indeed, everyone is affected.

As this crisis grows and more people lose their coverage, the amount of uncompensated care can be expected to rise—and with it, the hidden health tax. The resulting higher premiums will only exacerbate our nation's health care crisis. This crisis is likely to be addressed in 2009 as Congress and the President seek meaningful health care reform.

---

## Coverage Works: Insuring America's Workers Is Good for the Economy

### Investing in health coverage produces a healthier and more productive workforce

- Insured employees are healthier.<sup>21</sup> People without health coverage are more likely to delay or forgo necessary care.<sup>22</sup> As a result, they are more likely to be diagnosed with diseases, such as cancer, in a later stage,<sup>23</sup> and they are more likely to die prematurely than people who have health coverage.<sup>24</sup>
- Providing health coverage also increases productivity because healthier workers are more productive.<sup>25</sup> Three in four employers believe that health benefits are extremely, very, or somewhat important for improving employee productivity.<sup>26</sup>
- Insured workers are absent less frequently and miss fewer days of work than those without coverage.<sup>27</sup> Moreover, 58 percent of small employers that offer health benefits say that doing so has an impact on reducing absenteeism, with 17 percent reporting that it has a major impact.<sup>28</sup>
- Business executives also attest to a link between health and productivity. More than six in 10 believe a strong connection exists between “the health of the workforce, its productivity, and bottom-line company impacts.”<sup>29</sup>
- Because of the shorter lives and poor health of the uninsured, our economy loses billions of dollars a year. In fact, economists estimate that up to \$200 billion is lost each year due to uninsurance.<sup>30</sup>

### Investing in health coverage helps the labor market function more efficiently

- In our current system, in which some employers offer coverage and others don't, there is a phenomenon called “job lock,” where people stay in their jobs so that they can keep their health coverage.<sup>31</sup> This limits job mobility and stifles market efficiency. In fact, evidence suggests that job lock reduces job mobility by approximately 25 percent.<sup>32</sup>
- The fear of going without health coverage discourages individuals from leaving their existing jobs and starting new businesses of their own. When this entrepreneurial spirit is dampened, the new ideas, new products, and competitiveness that new businesses bring to the economy is lost, and productivity is hurt.<sup>33</sup>
- Workers with health problems have lower job mobility. For example, one study found that chronically ill workers who rely on their employer for health coverage are about 40 percent less likely to leave their job than chronically ill workers who do not rely on their employer for coverage.<sup>34</sup> Another study found that workers with a history of health problems such as diabetes, cancer, or heart attack, and those who have substantial medical expenses, stay at jobs substantially longer because of job-based health coverage.<sup>35</sup>

- For workers who rely on their employer to provide insurance for chronically ill family members, job lock keeps them in jobs that they might otherwise leave. For example, women who depend on job-based coverage and have a chronically ill family member are 65 percent less likely to leave their job than women with a chronically ill family member who do not rely on their employer for health coverage.<sup>36</sup>

### Investing in health coverage creates a stronger workforce in the future

- Today's children are the key to the productivity of tomorrow's workforce. Providing coverage for kids helps to ensure that they receive the preventive checkups and well-child care that is vital to ensuring appropriate social, emotional, and cognitive development.<sup>37</sup>
- Access to timely health care, including preventive care and the early detection of health problems, helps to ensure that children are ready to achieve in school. For example:
  - Children with asthma are absent from school more frequently than their peers without asthma,<sup>38</sup> missing more than 14 million days of school each year.<sup>39</sup> Having health coverage improves children's access to the medications and treatment they need to control chronic diseases such as asthma, allowing them to miss fewer days of school.
  - Good oral health is essential to overall physical health and to academic achievement. Conversely, poor oral health is closely linked with school absence and lower levels of educational attainment.<sup>40</sup> Timely access to preventive dental care and treatment is a sound investment in our nation's children and in the future of our economy.
  - Children with untreated vision problems are more likely to have trouble in school, and they have lower test scores.<sup>41</sup> Ensuring that all children have quality health coverage that includes vision care will help give kids the healthy start they need to excel in school.
- A healthy childhood is more likely to lead to a brighter economic future. Conversely, poor childhood health can limit economic success in adulthood.<sup>42</sup>
  - Poor childhood health hinders educational attainment. Children in poor health miss more days of school and complete fewer years of schooling.<sup>43</sup>
  - Children who are less healthy are more likely to become adults with poorer health. Even when educational attainment is controlled for, poor health in adulthood is linked to lower wages and lower levels of employment.<sup>44</sup>

## ENDNOTES

- <sup>1</sup> Kim Bailey, *Americans at Risk: One in Three Uninsured* (Washington: Families USA, March 2009).
- <sup>2</sup> Ibid.
- <sup>3</sup> Stan Dorn, *Health Coverage in a Recession* (Washington: The Urban Institute, December 2008).
- <sup>4</sup> Kim Bailey, op. cit.
- <sup>5</sup> Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2008 Annual Survey* (Washington: Kaiser Family Foundation, 2008).
- <sup>6</sup> In 2008, the average annual premiums for employer-sponsored health insurance were \$4,704 for individuals and \$12,680 for families. The average employer contributions were \$3,983 and \$9,325, respectively. Kaiser Family Foundation and Health Research and Educational Trust, op. cit.
- <sup>7</sup> Cheryl Fish-Parcham and Claire McAndrew, *Squeezed! Caught between Unemployment Benefits and Health Care Costs* (Washington: Families USA, January 2009).
- <sup>8</sup> *American Recovery and Reinvestment Act of 2009*, Public Law 111-5, 111th Cong., 1st sess. (February 17, 2009), Sec. 3000 et seq. The COBRA subsidy is addressed in Division B, Title III.
- <sup>9</sup> Ella Hushagan and Cheryl Fish-Parcham, *Failing Grades: State Consumer Protections in the Individual Health Insurance Market* (Washington: Families USA, June 2008).
- <sup>10</sup> Data on file with Families USA.
- <sup>11</sup> For example, Kim Bailey, op. cit.; Beth Wikler and Kim Bailey, *Dying for Coverage: New State Reports from Families USA* (Washington: Families USA, March-April 2008); Kaiser Commission on Medicaid and the Uninsured, *The Uninsured: A Primer, Key Facts about Americans without Health Insurance* (Washington: Kaiser Family Foundation, October 2008).
- <sup>12</sup> Kaiser Commission on Medicaid and the Uninsured, *The Uninsured: A Primer, Key Facts about Americans without Health Insurance* (Washington: Kaiser Family Foundation, October 2008).
- <sup>13</sup> The Urban Institute and the University of Maryland, Baltimore County, *Uninsured Americans with Chronic Health Conditions: Key Findings from the National Health Interview Survey* (Washington: Robert Wood Johnson Foundation, May 2005).
- <sup>14</sup> Kaiser Commission on Medicaid and the Uninsured, op. cit.
- <sup>15</sup> Kaiser Family Foundation, *Women's Health Insurance Coverage* (Washington: Kaiser Family Foundation, October 2008).
- <sup>16</sup> Cathy J. Bradley, David Neumark, Lisa M. Shickle, and Nicholas Farrell, "Differences in Breast Cancer Diagnosis and Treatment: Experiences of Insured and Uninsured Patients in a Safety Net Setting," *Inquiry* 45, no. 3 (Fall 2008): 323-339; Michael Halpern, John Bian, Elizabeth Ward, Nicole Schrag, and Amy Chen, "Insurance Status and Stage of Cancer at Diagnosis among Women with Breast Cancer," *Cancer* 110, no. 2 (June 11, 2007): 403-411.
- <sup>17</sup> Stan Dorn, *Uninsured and Dying Because of It: Updating the Institute of Medicine Analysis on the Impact of Uninsurance on Mortality* (Washington: The Urban Institute, January 2008).
- <sup>18</sup> Sara R. Collins, Jennifer L. Kriss, Michelle M. Doty, and Sheila D. Rustgi, *Losing Ground: How the Loss of Adequate Health Insurance Is Burdening Working Families: Findings from the Commonwealth Fund Biennial Health Insurance Surveys, 2001-2007* (Washington: The Commonwealth Fund, August 2008).
- <sup>19</sup> Ibid.; Peter J. Cunningham, *Trade-Offs Getting Tougher: Problems Paying Medical Bills Increase for U.S. Families, 2003-2007* (Washington: Center for Studying Health System Change, September 2008).
- <sup>20</sup> Kathleen Stoll, *Paying a Premium: The Added Cost of Care for the Uninsured* (Washington: Families USA, June 2005).
- <sup>21</sup> Paul Fronstin and Alphonse G. Holtmann, *Productivity Gains from Employment-Based Health Insurance* (Washington: Employee Benefit Research Institute, April 2000).
- <sup>22</sup> Kaiser Commission on Medicaid and the Uninsured, op. cit.
- <sup>23</sup> Cathy J. Bradley, David Neumark, Lisa M. Shickle, and Nicholas Farrell, op. cit.; Michael Halpern, John Bian, Elizabeth Ward, Nicole Schrag, and Amy Chen, op. cit.
- <sup>24</sup> Stan Dorn, op. cit.
- <sup>25</sup> Wayne N. Burton, Daniel J. Conti, Chin-Yu Chen, Alyssa B. Schultz, and Dee W. Edington, "The Role of Health Risk Factors and Disease on Worker Productivity," *The Journal of Occupational and Environmental Medicine* 41, no. 10 (October 1999): 863-877; Paul Fronstin and Alphonse G. Holtman, op. cit.

- <sup>26</sup> Rachel Christensen, Paul Fronstin, Karl Polzer, and Ray Werntz, *Employer Attitudes and Practices Affecting Health Benefits and the Uninsured* (Washington: Employee Benefit Research Institute, October 2002).
- <sup>27</sup> Jennifer H. Lofland and Kevin D. Frick, "Effect of Health Insurance on Workplace Absenteeism in the U.S. Workforce," *Journal of Occupational and Environmental Medicine* 46, no. 1 (January 2006): 13-21.
- <sup>28</sup> Paul Fronstin and Ruth Helman, *Small Employers and Health Benefits: Findings from the 2000 Small Employer Benefits Survey* (Washington: Employee Benefit Research Institute, October 2000).
- <sup>29</sup> Thomas Parry and William Molmen, *On the Brink of Change: How CFOs View Investments in Health and Productivity* (San Francisco: Integrated Benefits Institute, 2002), as cited in Ronald Loeppke, Michael Taitel, Dennis Richling, Thomas Parry, Ronald Kessler, Pam Hymel, and Doris Konicki, "Health and Productivity as a Business Strategy," *Journal of Occupational and Environmental Medicine* 49, no. 7 (July 2007): 712-721.
- <sup>30</sup> Sarah Axeen and Elizabeth Carpenter, *The Cost of Doing Nothing: Why the Cost of Failing to Fix Our Health System Is Greater than the Cost of Reform* (Washington: New America Foundation, November 2008).
- <sup>31</sup> Business Week, "Held Hostage by Health Care: Fear of Losing Coverage Keeps People at Jobs Where They're Not Their Most Productive," *Business Week*, January 29, 2007; Brigitte C. Madrian, "Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?" *The Quarterly Journal of Economics* 109, no. 1 (February 1994): 27-54.
- <sup>32</sup> Brigitte C. Madrian, op. cit.
- <sup>33</sup> Jon R. Gabel and Jeremy D. Pickreign, *Risky Business: When Mom and Pop Buy Health Insurance for Their Employees* (New York: The Commonwealth Fund, April 2004).
- <sup>34</sup> Kevin T. Stroupe, Eleanor D. Kinney, and Thomas J. J. Knesner, "Chronic Illness and Health Insurance-Related Job Lock," *Journal of Policy Analysis and Management* 20, no. 3 (Summer 2001): 525-544.
- <sup>35</sup> Inas Rashad and Eric Sarpong, *Employer-Provided Health Insurance and the Incident of 'Job-Lock': Is There a Consensus?* (Atlanta: Department of Economics, Georgia Health Policy Center, May 2006).
- <sup>36</sup> Kevin T. Stroupe, op. cit.
- <sup>37</sup> RAND, "Children at Risk: Consequences for School Readiness and Beyond," *RAND Labor and Population Research Brief* (Santa Monica, CA: RAND, 2005).
- <sup>38</sup> Sheniz Moonie, David A. Sterling, Larry W. Figgs, and Mario Castro, "The Relationship between School Absence, Academic Performance, and Asthma Status," *Journal of School Health* 78, no. 3 (March 2008): 140-148.
- <sup>39</sup> David M. Mannino, David M. Homa, Lara J. Akinbami, Jeanne E. Moorman, Charon Gwynn, and Stephen C. Redd, "Surveillance for Asthma—United States, 1980–1999," *Morbidity and Mortality Weekly Report* 51, no. SS-1 (March 2002): 1–13, available online at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5101a1.htm>.
- <sup>40</sup> U.S. Government Accountability Office, *Oral Health: Dental Disease Is a Chronic Problem among Low-Income and Vulnerable Populations* (Washington: GAO, 2000); U.S. Department of Health and Human Services, *Oral Health in America: A Report of the Surgeon General* (Rockville, MD: National Institute of Dental and Craniofacial Research, HHS, 2000); Katrina Holt and Karen Kraft, *Oral Health and Learning: When Children's Oral Health Suffers, So Does Their Ability to Learn* (Washington: National Maternal and Child Oral Health Resource Center, 2003), available online at <http://www.mchoralhealth.org/pdfs/learningfactsheet.pdf>.
- <sup>41</sup> W. R. Williams, A. H. A. Latif, L. Hannington, and D. R. Watkins, "Hyperopia and Educational Attainment in a Primary School Cohort," *Archives of Disease in Childhood* 90 (February 2005): 150-153; Danna Ethan and Charles E. Basch, "Promoting Healthy Vision in Students: Progress and Challenges in Policy, Programs, and Research," *Journal of School Health* 78, no. 8 (August 2008): 411-416.
- <sup>42</sup> Anne Case and Christina Paxson, "Children's Health and Social Mobility," *Future Child* 16, no. 2 (Fall 2006): 151-173.
- <sup>43</sup> Ibid.
- <sup>44</sup> Ibid.





## TECHNICAL APPENDIX

Prepared by:

Milliman, Inc.  
New York

Bruce Pyenson, FSA, MAAA  
Principal and Consulting Actuary

Sara Goldberg, FSA, MAAA  
Consulting Actuary

with

Mark Heit, Senior Consultant  
Sellers Dorsey and Associates, LLC

May 14, 2009

## Table of Contents

Executive Summary . . . . .	17
Cost of Uncompensated Care for the Uninsured . . . . .	19
Privately Insured Costs . . . . .	24
Estimates . . . . .	26
Differences from Earlier Families USA Estimates . . . . .	27
Important Notices & Limitations . . . . .	28
References . . . . .	29

## EXECUTIVE SUMMARY

The high cost of medical care, together with social, tax, and economic policies, have created the risks faced by tens of millions of Americans who are uninsured or could soon become uninsured. In this paper, we develop estimates for the uncompensated costs incurred by the uninsured when they obtain medical care. The uninsured pay for much of those costs themselves, and social or charity programs pay for another portion. However, a significant portion of the medical costs that uninsured people incur are uncompensated. That uncompensated cost is the focus of this paper.

Hospitals and physicians that provide uncompensated care may try to recover those costs by increasing the amounts they collect from insurance programs. This is a form of cost shifting. Because the Medicare and Medicaid programs have strict reimbursement policies, cost shifting to programs through increasing fees for Medicaid or Medicare patients is not likely. Consequently, we spread our estimate of uncompensated care across the privately uninsured population, which consists of working-age people and their dependents who are covered through employer-sponsored coverage and privately purchased insurance. Our national 2008 estimates of the uncompensated care per privately insured family and per privately insured individual are as follows:

### Estimated 2008 Cost of Uncompensated Care for the Uninsured

	Cost per Unit
Implied Annual Cost per Privately Insured Family	\$ 1,017
Implied Annual Cost per Privately Insured Individual	\$ 368

The above estimates assume that all uncompensated care is shifted to the insured. In considering these figures, we caution the reader that the premiums paid by or on behalf of the insured would not automatically go down by these amounts if the uninsured were covered, absent other relevant policy and regulatory changes. Similarly, these amounts are not necessarily the incremental cost of covering the uninsured.

In developing these estimates, we measured annual charges and expenditures for medical care and prescription drugs obtained by the full-year uninsured, partial-year uninsured, and full-year insured, using the federal Medical Expenditures Panel Survey-Household Component (MEPS-HC) data from 2006, identifying sources of payment as a portion of total expenditures for each cohort. We applied an insured reimbursement-to-charge ratio to partial- and full-year uninsured charges. Estimates shown for the uninsured reflect both full-year and partial-year uninsured individuals.

We adjusted our uninsured cost estimate to reconcile to the National Health Expenditures Accounts. We then reduced the uninsured costs for the portion we believed to be compensated, separately for the full-year and part-year uninsured. Next, we subtracted the portion of federal and state Medicaid Disproportionate Share Hospital (DSH) payments we believe are actually used to fund uncompensated care for the uninsured. We divided this net uncompensated care cost by the annual cost of employer-sponsored or nongroup insurance derived primarily from MEPS-HC data. This percentage was then applied to privately insured individual and family costs paid by medical benefits to yield the additional cost for family and individual units attributable to unfinanced, uncompensated care.

In 2009, there is a broad consensus that the United States needs to provide universal coverage, and that consensus may turn into policy details and reality. While this paper provides numbers and cost estimates, the authors feel compelled to remind the reader that the biggest burden of the uninsured falls on the people without insurance who need expensive medical care. We present numbers, which is our area of expertise, but the real story is about people.

There are many direct and indirect consequences of uninsurance, including adverse health outcomes, developmental problems for children, and personal bankruptcy. In addition, the risk of losing employer-sponsored coverage discourages worker mobility, especially for workers considering moving to small business. When people have coverage, they do tend to use medical care more than when they do not have coverage. We do not consider any of these issues in this paper.

This research was commissioned by Families USA, and our report reflects the findings of the authors. Milliman does not intend to endorse any position or legislation or benefit any third party through this work, including the positions supported by Families USA. As with any economic or actuarial forecast, our work cannot accurately capture all factors, and other estimates using other data, assumptions, and methods will likely produce different results. We urge the reader to consider the information in our full Technical Appendix, as the Executive Summary does not contain all important details.

## COST OF UNCOMPENSATED CARE FOR THE UNINSURED

In this section, we describe how we estimated the cost of unfinanced, uncompensated care that is provided to the uninsured.

To develop the cost of uncompensated care, we first estimated the total cost of care for the uninsured, including costs for people who are uninsured for part of the year. We then subtracted the amounts that are paid by the uninsured and other direct sources. We next considered other sources of funding, primarily Medicaid Disproportionate Share Hospital (DSH) funding. As we started with 2006 Medical Expenditure Panel Survey-Household Component (MEPS-HC) data, we made several adjustments to account for changes since 2006 to produce our 2008 estimates.

### MEPS Analysis

We used the 2006 MEPS-HC data set<sup>1</sup> plus other sources to estimate annual spending of partial-year and full-year uninsureds. We considered all reported medical and prescription drug costs. Because the charges that appear on providers' bills are often much larger than the negotiated amounts paid by private insurers and employers, we made adjustments to reflect typical insured reimbursement rates.

MEPS assembles statistics through an interview process that includes obtaining claims documentation from individuals and their medical providers. Each year, about 34,000 Americans are interviewed. The data obtained in this way contrast to typical medical expenditure data for the insured population, where full, claims-level data on millions of lives are available to researchers. Insured data show, for each claim, details such as dates of service, amounts allowed and paid, cost-sharing, and diagnosis and procedure code information. Such detailed data are not available for the uninsured, which is one of the challenges in determining their cost of care and the services they obtain. Consequently, many researchers investigating uninsured costs use MEPS, as we have.

MEPS-HC 2006 was the most recent version available when we performed our analysis. We compared certain results from MEPS-HC 2005 and found them consistent with results from the 2006 database.

### MEPS Source of Payment Categories

The first step in our MEPS analysis was to estimate patient-specific payments collected by providers for care that is provided to partial- and full-year uninsured people.

MEPS allocates funding into source of payment categories based on interviews with individuals and their medical providers. For each category, we assumed a percentage that represents patient-specific payments. The following table shows the payment categories, the portion of the total expenditures according to MEPS, and our allocation of these categories to capture direct payments for uninsured medical costs.

### MEPS-HC 2006 Payment Sources of the Full-Year Uninsured

Source of Payment Categories	Original % of Total Payments Made among Full-Year Uninsured	Milliman Assumption of Direct Patient Cost Payments
Self Pay	52%	100%
Medicare	0%	100%
Medicaid	0%	100%
Private	0%	100%
Veterans Affairs	9%	100%
Tricare	0%	100%
Workers Compensation	3%	100%
Other Private	20%	67%
Other Federal	0%*	50%
Other State & Local	1%	0%
Other Public	10%	0%
Other Sources	5%	0%
<b>Total</b>	<b>100%</b>	<b>77%</b>

\* Less than 0.51%

As shown in the table above, we reduced the MEPS figures for the five bottom categories. Other researchers may have attributed lower portions to patient-specific payments,<sup>2</sup> while others may have attributed higher portions.<sup>3</sup> The most important of the categories we adjusted are “Other Private” and “Other Public.” Because of how MEPS defines the uninsured and their broad definition of “Self Pay” funding, we believe the “Other Private” category is a misallocation to uninsured individuals of other funds. Similarly, we believe “Other Public” is either a misallocation of general funds to specific patients or perhaps an allocation of DSH payments, which we add in a separate step. Providers’ accounting of funding for the uninsured is imperfect, and organizations often also confuse non-funded cost categories such as bad debt and charity care.<sup>4,5</sup>

### Partial- and Full-Year Uninsured Expenditures and Billed Charges

In summary, we subtracted the adjusted provider collected payments made by or on behalf of the uninsured from the full value of services rendered to the uninsured. We estimated medical and prescription drug billed charges separately for the partial-year and the full-year uninsured cohorts in MEPS. Because the full value of services provided is presented in MEPS as billed charges, which are generally grossly inflated, we applied a discount in the form of the percent of billed charges used for reimbursement in an insured setting.

We compared the demographics of partial-year and full-year uninsureds as part of our MEPS analysis. We demographically adjusted the full-year uninsured amounts to produce estimates for the partial-year uninsureds during their period of uninsurance, as full-year uninsureds are slightly older with higher costs.<sup>6</sup>



For collected payments, we first found annual reimbursements for full-year uninsured. We estimated annual reimbursement for partial-year uninsureds by multiplying the full-year per-person uninsured expenditures by a demographic adjustment factor and by the average uninsured portion of the year as indicated in MEPS. We multiplied this per-person result by the number of partial-year uninsureds in MEPS and added this amount to full-year uninsured payments to arrive at total uninsured reimbursement.

The next step was to estimate the value of uninsureds' services, which are, of course, higher than the collected amounts. We estimated billed charges among partial-year uninsureds similarly to reimbursement, by assuming the full-year per-person annual charges and adjusting for demographic differences and for the average number of months that partial-year uninsureds were insured.

We added partial-year and full-year uninsured billed charges to estimate total billed charges, and we multiplied this result by the full-year insured reimbursement as percent of billed charges found in MEPS-HC. We offset these adjusted uninsured billed charges by adjusted collected reimbursement to yield our estimate of MEPS-based uncompensated costs of the uninsured.

## Adjustments to MEPS Payments

In addition to the source of payment changes and assumptions on partial-year uninsureds as described above, we made additional adjustments to the results from MEPS-HC 2006.

**National Health Expenditures:** Since MEPS-HC data understate national cost estimates, we increased MEPS costs by a factor of 1.22, using our interpretation of a detailed study by the staff from the Agency for Healthcare Research and Quality.<sup>7</sup>

**Medical Cost Trend:** We trended 2006 cost levels to 2008 by applying trends reported in the 2008 *Milliman Medical Index*.<sup>8</sup> This increased the 2006 costs by 16.6 percent for the two-year period.

**Population Changes since 2006:** The United States population makeup changed between 2006 and 2008, including the insured and uninsured populations, and we adjusted our figures from 2006 MEPS to account for the change. Based on our analysis of a recent CDC report using National Health Information Survey data, Bureau of Labor Statistics (BLS) monthly unemployment data, and an estimate of the relationship between the unemployment rate and the number of uninsured described in recent literature, we increased the number of uninsured by 2.0 percent.<sup>9, 10, 11</sup> We assumed the demographics of the uninsured population remained the same between 2006 and 2008, meaning we assumed that costs would not change due to demographics (e.g., age and sex) between 2006 and 2008. We also used health insurance coverage status data from the 2008 U.S. Census Current Population Survey (CPS) to develop independent estimates of the number of uninsured and the number of individuals with private insurance. After adjusting the CPS data for double-counting, the estimates are consistent with those produced from other sources.<sup>12</sup>

## Disproportionate Share Hospital (DSH) Payment Assumptions

DSH payments are administered through the Centers for Medicare and Medicaid Services (CMS) to provide additional funds to hospitals that serve a disproportionate number of Medicaid beneficiaries, low-income, and/or uninsured people.

There are two broad categories of DSH:

- Medicare DSH, which is intended to supplement hospitals' costs for Medicare patients; and
- Medicaid DSH, which may be used to fund Medicaid services or care for the uninsured.

Medicare DSH is paid to hospitals based upon a statutory formula that measures a hospital's overall proportion of low-income Medicare and Medicaid patients (the Disproportionate Patient Percentage, or DPP). This ratio is then translated into a Medicare payment adjustment that implicitly recognizes the higher costs of low-income Medicare beneficiaries. The DPP has no direct relationship to the uninsured or to the uncompensated care costs associated with the uninsured population.

Unlike Medicare DSH, Medicaid DSH payments are administered at the state level. Each state is allocated a certain amount of Medicaid DSH funding through a statutory formula. States then develop their own rules and regulations that dictate the purpose and distribution of these funds. Like Medicaid program expenditures, approved Medicaid DSH payments are eligible for federal matching funds based on each state's specific Federal Medical Assistance Percentage (FMAP). States are required to identify and supply non-federal funds in order to be eligible to draw down federal funds, and they do so through a variety of state and local financing mechanisms. The DSH rules give states significant discretion in how they allocate DSH payments, but a hospital's total DSH payments cannot exceed the total unreimbursed costs of treating Medicaid and uninsured patients.

Some Medicaid DSH payments go to purposes that are clearly not associated with the uninsured—for example, payments for Institutions for Mental Disease (IMD), and our calculations adjusted Medicaid DSH to remove these amounts. In addition, many states use DSH payments to supplement Medicaid payments that insufficiently reimburse hospitals for the costs of Medicaid beneficiaries. Because these “non-uninsured” DSH uses do not directly reduce hospital costs for the uninsured, we did not include these DSH payments as funding hospitals' uncompensated care.

We note that DSH payments are poorly documented in Medicare hospital cost reports (CMS-2552). The uninsured and uncompensated care data that hospitals report do not affect their reimbursement and are therefore inconsistently reported. The lack of reliable hospital-reported data, the multiple permissible uses of DSH funds, and the fungible

nature of hospital reimbursement create significant uncertainty and variability in the calculation of hospital uncompensated care. Our treatment of DSH is based on an analysis of multiple data sources, and it utilizes a set of reasonable assumptions; however, other researchers may reasonably arrive at different conclusions when assessing the relationship between Medicaid DSH and uncompensated costs.

In our model, we used the federal fiscal year (FFY) 2008 and 2009 Medicaid DSH allotments as shown in the *Federal Register*, creating a 2008 calendar year figure by blending  $\frac{3}{4}$  of FFY 2008 with  $\frac{1}{4}$  of FFY 2009.<sup>13, 14, 15</sup>

We made the following adjustments to the Medicaid DSH payments:

- Increased 2009 DSH allotments to reflect the 2.5 percent enhancement to statewide DSH allotments authorized in the American Recovery and Reinvestment Act. Hawaii's and Tennessee's DSH allotments were not eligible for this increase.<sup>16</sup>
- Reduced Tennessee's DSH allotment by 70 percent of the total allocation to reflect that only 30 percent of their DSH allotment may be used for hospital DSH payments, according to the terms of the state's Section 1115 waiver.<sup>17</sup>
- Reduced statewide DSH allotments by each state's respective IMD limit (including the ARRA-related 2.5 percent increase) to reflect our assumption that states maximize the use of Medicaid DSH to fund state costs for IMDs. This calculation utilized 2008 and 2009 data published in the *Federal Register*.<sup>18, 19, 20</sup>
- Reduced the impact that the non-federal share of DSH payments has on hospital uncompensated care to account for creative financing mechanisms employed by states. These mechanisms allow states to generate federal DSH funding without the associated local funds necessarily offsetting uncompensated care. Based on an analysis of a report on this topic, we assumed that 76 percent of the non-federal share of Medicaid DSH funds is potentially available funds.<sup>21</sup>
- Reduced the remaining federal and state Medicaid DSH payments by 28.3 percent to account for the portion of hospital payments (excluding estimated bad debt) attributable to the Medicaid funding shortfall. To calculate this, we supplemented our findings from the Medicare cost reports with American Hospital Association summary data for 2007.<sup>22, 23, 24</sup>

We did not include Medicare DSH payments in the calculation of hospital uncompensated care costs. These funds are intended to support the costs of Medicare patients, not the uninsured.

## PRIVATELY INSURED COSTS

This section describes our development of the medical costs paid through benefit programs for privately insured working-age people and their covered dependents. This information is important to our analysis, because we divide the uncompensated cost of care for the uninsured by the privately insured cost to develop the summary information presented in the Executive Summary. We separately considered employer-sponsored policies and individual (or nongroup) policies. The former make up the majority of private policies. We follow the approach of our major data sources, MEPS, and consider only comprehensive coverage and not limited-benefit policies such as the so-called “mini-med” benefits. We excluded Medicare (including MediGap) and Medicaid.

### Employer-Sponsored Insurance Costs

We analyzed the distribution as well as premium levels of employee, employee plus one, and family policies published in the Medical Expenditures Panel Survey-Insurance Component (MEPS-IC) 2006 summary tables.<sup>25</sup> The distribution and cost relativities were reasonably consistent with Milliman’s published actuarial guidelines.<sup>26</sup> We trended the premium levels to 2008 using the 2008 *Milliman Medical Index*.<sup>27</sup>

Using this distribution of contracts, we developed an aggregate 2008 employer-sponsored premium level. We multiplied this by the estimated number of private sector employees enrolled in health benefit programs, using MEPS-IC summary information and Federal Employees Health Benefits Program data for 2006,<sup>28</sup> to achieve total employer-sponsored costs for 2008.

### Nongroup Insurance Costs

We also included individual (nongroup) policies as part of the private insurance market in our denominator. We estimated the average premium for individual insurance by taking the MEPS-HC-reported percentage of individual policies that are single or family, splitting the family percentage into family and single-plus-one, using the portions seen in the employer-sponsored market, and applying the same three-tier premiums we used for employer-sponsored estimates.<sup>29, 30</sup> We trended this aggregate premium estimate to 2008 using the 2008 *Milliman Medical Index*.<sup>31</sup>

We assumed that the per-member claim costs of the individual (nongroup) market are the same as those in the employer-sponsored market. Insurance carriers usually use the same network reimbursement levels for the nongroup and employer-sponsored markets. However, state regulatory differences can result in significantly higher or lower medical costs.

As a final step, we multiplied the per-enrollee amount by the number of MEPS-HC-reported individual policies to produce the total estimated 2008 individual market medical costs.

## The Privately Insured Population

The MEPS-IC summaries of privately insured enrollees and associated average premiums are for 2006, so they do not account for shifts in the number of insured enrollees between 2006 and 2008. We separately adjusted the individually insured and the employer-sponsored insured populations.

We assume that numbers of both the unemployed and employed have increased. While the data on the uninsured and insured populations are not yet complete for 2008, the Bureau of Labor Statistics shows both the labor force and unemployment rates increasing from 2006 to 2008. We assume the rate at which employees receive health benefits is constant from 2006 to 2008, which produces increases in numbers of both the uninsured and privately insured.

**Nongroup:** MEPS-HC Table 6 includes the number of 2006 individual insurance policies.<sup>32</sup> We took the Bureau of Labor Statistics' estimated increase in unemployment from 2006 to 2008 and multiplied the increase by the portion of employed who receive health benefits according to MEPS-IC to estimate the newly uninsured due to loss of employment.<sup>33, 34</sup> We applied an average rate of individual conversion based on COBRA conversion rates to estimate the resulting increase in individual policies.<sup>35</sup>

**Employer-Sponsored Insured:** We multiplied the increase in employment from 2006 to 2008 by the portion of employed who receive health benefits to estimate the increase in number of employees enrolled in employer-sponsored benefits.<sup>36, 37</sup> We assumed the percentage of employees with access to and enrollment in employer-sponsored health benefits remained constant from 2006 to 2008, as indicated in recent Kaiser Family Foundation employer benefit surveys.<sup>38, 39</sup>

## ESTIMATES

Using the methodology, sources, and assumptions described in the sections above, we estimated important information about the insured and uninsured populations' medical costs and who pays for the costs of care for the uninsured. This section summarizes our estimates and some of the important intermediate figures.

Key Assumptions and Estimates for 2008	
a. Family policy annual medical cost (premium or premium equivalent)	\$13,275
b. Total private insured spending (non-Medicare, non-Medicaid)	\$557 billion
c. Total value of services provided to the uninsured, at average insured reimbursement rates	\$116 billion
d. Portion of total value (c.) paid out of pocket by the uninsured	37%
e. Medicaid DSH used directly to finance uninsured costs	\$9.5 billion
f. Net uncompensated cost for the uninsured	\$42.7 billion
g. Net uncompensated cost as a percent of private insurance costs. ( $g = f / b$ )	7.7%
h. Net uncompensated cost allocated to family medical cost ( $h = g \times a$ )	\$1,017

In the table above, we consider “Total private insured spending” to be the benefits paid by an insurance policy or health benefits program, which does not include copayments, deductibles, or other cost-sharing that is paid by the covered person. We follow the approach of our major data sources, the Medicare Expenditure Population Survey, and consider only comprehensive coverage, not limited-benefit policies such as the so-called “mini-med” benefits.

We show “Net uncompensated cost allocated to family medical cost,” which assumes that all net uncompensated care is, on average, passed on to people with comprehensive coverage. Not all people have family coverage, and we performed a similar calculation to arrive at the allocated amount for single coverage. For simplicity, we assume that all policies cover either single or family units. The same approach could be applied to other types of policies, such as single-parent families or two-person families.

We note that the data available for the costs of insured people are much more robust than for uninsured people, and this uncertainty should be kept in mind by the reader considering the above estimates. In the body of this report, we have identified key uncertainties and assumptions that could affect our results.

## DIFFERENCES FROM EARLIER FAMILIES USA ESTIMATES

In 2005, Families USA released *Paying a Premium: The Added Cost of Care for the Uninsured*. That report presented estimates of the impact of the cost of uncompensated care received by the uninsured on individual and family private health insurance premiums. The 2005 estimate was developed for Families USA by Dr. Kenneth Thorpe, Robert W. Woodruff Professor and Chair of the Department of Health Policy and Management, Rollins School of Public Health, Emory University.<sup>40</sup> Although our work is broadly similar to Dr. Thorpe's, we note the following perceived differences in methodology and data sources:

- Broadly, our work uses actuarial and insurance industry rate setting techniques, while Dr. Thorpe's approach is more typical of academic research.
- A number of source databases have been refreshed or updated since 2005.
- We appear to have attributed a greater portion of funding sources identified in MEPS as available for individuals.
- We examined certain components of DSH funding in detail and attributed some of them to the uninsured.
- We included people covered through individual insurance, as well as employer-sponsored insurance, in our denominator of covered lives.
- Our adjustment of MEPS data to National Health Expenditures was based on recent work by AHRQ.
- We include state, local, and federal employees in the employer-sponsored insurance costs.



## IMPORTANT NOTICES & LIMITATIONS

This is a Technical Appendix to Families USA's *Hidden Health Tax* report. The research was commissioned by Families USA. Our goal was to estimate the 2008 cost of uncompensated care that is incurred by uninsured people and to present that cost in relation to private insurance costs. The Families USA report itself was not produced by the authors of this Technical Appendix.

We relied on the information and sources as described above. The data available to estimate the medical costs of uninsured people and uncompensated care costs are significantly less detailed, less refined, and less timely than the data for insured populations. This means that updated information or new sources may become available that could alter our analysis and results. It also means that, in some cases, we used assumptions that cannot be narrowly derived from data sources. The most important of these are as follows:

- Uncompensated cost is passed on to private payers: It is possible that uncompensated cost is absorbed by providers in the form of lower profits or margins, or that uncompensated cost should be considered a marginal cost of doing business.
- Our allocation of MEPS payment sources: As described above, we assumed that a small portion of the patient-level uninsured funding reported by MEPS is really an allocation of aggregate funds and not attributable to specific patients.
- Our allocation of DSH payments: The lack of detail on how DSH and hospital funds are used led to our use of assumed allocations.

This report contains our nationwide estimates; results by state or payer will vary with difference in reimbursement, state programs, private insurance and uninsured characteristics, cost patterns, and other factors. Private programs vary greatly in their network contracts, insured populations, and medical management, and these factors will affect the results for any particular payer. Similarly, how uncompensated costs affect providers varies dramatically—some providers supply almost no uncompensated care, while others supply a significant amount.

Our report should not be interpreted as estimating the amounts by which private coverage costs will automatically decrease if the uninsured were covered. In considering how universal coverage may affect the costs of others, it is useful to distinguish between self-insured programs, such as those operated by most large employers, and insured programs, which apply to small employers and individuals. In order for self-insured benefit programs' costs to decrease, providers would need to reduce the reimbursement they accept from private payers. For fully insured benefit programs' costs to decrease, in addition to reduced provider reimbursement, insurers would also need to pass on any reduced costs in the form of lower premiums. Furthermore, taxes or charges that are used to fund uninsured programs would need to be considered.

## REFERENCES

- <sup>1</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2005-2006 Medical Expenditure Panel Survey-Household Component Data Set, available online at [http://www.meps.ahrq.gov/mepsweb/data\\_stats/download\\_data\\_files.jsp](http://www.meps.ahrq.gov/mepsweb/data_stats/download_data_files.jsp), last accessed on March 30, 2009.
- <sup>2</sup> See explanation by K. Thorpe in Kathleen Stoll, *Paying a Premium: The Added Cost of Care for the Uninsured* (Washington: Families USA, 2005).
- <sup>3</sup> J. Hadley, J. Holahan, T. Coughlin, et al., *Covering the Uninsured in 2008: A Detailed Examination of Current Costs and Sources of Payment, and Incremental Costs of Expanding Coverage* (Washington: Kaiser Commission on Medicaid and the Uninsured, August 2008).
- <sup>4</sup> C. Ledue, "Study: 31 Percent of Patient Bad Debt Misclassified, Should Be Charity," *Healthcare Finance News*, March 26, 2009, available online at <http://www.healthcarefinancenews.com/news/study-31-percent-patient-bad-debt-misclassified-should-be-charity>.
- <sup>5</sup> American Hospital Association, *Hospital Facts to Know, March 2008*, available online at [www.aha.org/aha/content/2008/pdf/08-issue-facts-to-know-.pdf](http://www.aha.org/aha/content/2008/pdf/08-issue-facts-to-know-.pdf).
- <sup>6</sup> Milliman, analysis of uninsured demographics using 2008 Milliman's *Health Cost Guidelines*. For more information, see <http://www.milliman.com/expertise/healthcare/products-tools/health-cost-guidelines/>.
- <sup>7</sup> M. Sing, T. Selden, et al., "Reconciling Medical Expenditure Estimates from the MEPS and NHEA, 2002," *Health Care Financing Review* 28, no. 1 (2006): 25-40.
- <sup>8</sup> 2008 *Milliman Medical Index*, available online at <http://www.milliman.com/expertise/healthcare/products-tools/mmi/>.
- <sup>9</sup> Bureau of Labor Statistics, national unemployment rates, available online at <ftp://ftp.bls.gov/pub/special.requests/lfaat1.txt>, accessed on May 5, 2009.
- <sup>10</sup> D. Rowland, "Health Care and Medicaid – Weathering the Recession," *New England Journal of Medicine* 360, no. 13 (March 26, 2009).
- <sup>11</sup> M. E. Martinez and R. A. Cohen, *Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey January-September 2008* (National Center for Health Statistics, March 2009), available online at [www.cdc.gov/nchs/nhis.html](http://www.cdc.gov/nchs/nhis.html).
- <sup>12</sup> U.S. Census Bureau, *Current Population Survey, Annual Social and Economic Supplement, 2008*, available online at [http://www.census.gov/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html), accessed on May 1, 2009.
- <sup>13</sup> *Federal Register* 72, no. 248 (December 28, 2007): 73,831-73,841, available online at <http://edocket.access.gpo.gov/2007/pdf/E7-24486.pdf>.
- <sup>14</sup> *Federal Register* 73, no. 245 (December 19, 2008): 77,704-77,714, available online at [edocket.access.gpo.gov/2008/pdf/E8-30267.pdf](http://edocket.access.gpo.gov/2008/pdf/E8-30267.pdf).
- <sup>15</sup> *Federal Register* 74, no. 15 (January 26, 2009): 4,439-4,441, available online at [edocket.access.gpo.gov/2009/pdf/E9-1535.pdf](http://edocket.access.gpo.gov/2009/pdf/E9-1535.pdf).
- <sup>16</sup> *American Recovery and Reinvestment Act of 2009*, available online at <http://www.hhs.gov/recovery/cms/dshstates.html>.
- <sup>17</sup> *Federal Register* 74, no. 15, op. cit.
- <sup>18</sup> *Federal Register* 72, no. 248, op. cit.
- <sup>19</sup> *Federal Register* 73, no. 245, op. cit.
- <sup>20</sup> *Federal Register* 74, no. 15, op. cit.
- <sup>21</sup> T. A. Coughlin, S. Zuckerman, and J. McFeeters, "Restoring Fiscal Integrity to Medicaid Financing," *Health Affairs* 26, no. 5 (2007): 1,469-1,480.
- <sup>22</sup> American Hospital Association, *Uncompensated Hospital Care Cost Fact Sheet*, November 2008, available online at [www.aha.org/aha/content/2008/pdf/08-uncompensated-care.pdf](http://www.aha.org/aha/content/2008/pdf/08-uncompensated-care.pdf).
- <sup>23</sup> American Hospital Association, *Underpayment by Medicare and Medicaid Fact Sheet*, November 2008, available online at [www.ihatoday.org/issues/payment/charity/underpymt.pdf](http://www.ihatoday.org/issues/payment/charity/underpymt.pdf).
- <sup>24</sup> 2009 edition of *AHA Hospital Statistics*, xiii, Health Forum LLC, 2008.
- <sup>25</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2006 Medical Expenditure Panel Survey-Insurance Component, available online at [http://www.meps.ahrq.gov/mepsweb/data\\_stats/quick\\_tables.jsp](http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp), last accessed on May 1, 2009.

<sup>26</sup> 2008 Milliman's *Health Cost Guidelines*, for more information, see <http://www.milliman.com/expertise/healthcare/products-tools/health-cost-guidelines/>; 2008 Milliman's *Group Health Insurance Survey*, available online at <http://www.milliman.com/expertise/healthcare/products-tools/group-health-insurance-survey/>.

<sup>27</sup> 2008 *Milliman Medical Index*, available online at <http://www.milliman.com/expertise/healthcare/products-tools/mmi/>.

<sup>28</sup> Federal civilian workforce statistics, *The Fact Book, 2007*, Office of Personnel Management.

<sup>29</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2006 Medical Expenditure Panel Survey-Insurance Component, op. cit..

<sup>30</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends. 2004-2006 Medical Expenditure Panel Survey-Household Component Summary Tables, available online at [http://www.meps.ahrq.gov/mepsweb/data\\_stats/quick\\_tables.jsp](http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp), last accessed on May 1, 2009.

<sup>31</sup> 2008 *Milliman Medical Index*, op. cit.

<sup>32</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2004-2006 Medical Expenditure Panel Survey-Household Component Summary Tables, op. cit.

<sup>33</sup> Bureau of Labor Statistics, national unemployment rates, op. cit.

<sup>34</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2006 Medical Expenditure Panel Survey-Insurance Component, op. cit.

<sup>35</sup> K. Schwartz, *The COBRA Subsidy and Health Insurance for the Unemployed* (Washington: Kaiser Commission on Medicaid and the Uninsured, March 2009).

<sup>36</sup> Bureau of Labor Statistics, national unemployment rates, op. cit.

<sup>37</sup> Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, 2006 Medical Expenditure Panel Survey-Insurance Component, op. cit.

<sup>38</sup> Kaiser Family Foundation, *Employer Health Benefits 2008 Summary of Findings* (Washington: Kaiser Family Foundation, May 2009).

<sup>39</sup> Ibid.

<sup>40</sup> Kathleen Stoll, *Paying a Premium: The Added Cost of Care for the Uninsured* (Washington: Families USA, 2005).

## CREDITS

### **This report was written by:**

*Kathleen Stoll,  
Deputy Executive Director and  
Director of Health Policy,  
Families USA*

**and**

*Kim Bailey,  
Senior Health Policy Analyst,  
Families USA*

### **Data Analysis by:**

**Milliman, Inc.**

*Bruce Pyenson, FSA, MAAA  
Principal and Consulting Actuary*

**and**

*Sara Goldberg, FSA, MAAA  
Consulting Actuary*

### **The following Families USA staff contributed to the preparation of this report:**

*Ron Pollack, Executive Director*

*Claire McAndrew, Health Policy Analyst*

*Christine Sebastian, Health Policy Intern*

*Peggy Denker, Director of Publications*

*Ingrid VanTuinen, Senior Editor*

*Nancy Magill, Senior Graphic Designer*



Families USA is a national nonprofit organization dedicated to the achievement of high-quality, affordable health care for all Americans. You can help promote our goals by joining our grassroots advocacy network or by contributing to Families USA today.

Yes, I want to add my voice in support of affordable, high-quality health care for all.  
 \_\_\_\_\_ \$25    \_\_\_\_\_ \$50    \_\_\_\_\_ \$100    \_\_\_\_\_ \$250    \_\_\_\_\_ Other

Please send me information about Families USA's grassroots advocacy network.

Please send me the publications listed below.

Title	Quantity	Price
_____		
_____		
_____		
_____		

Name: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City, State, Zip Code: \_\_\_\_\_  
 Phone (day): \_\_\_\_\_ Phone (eve): \_\_\_\_\_  
 Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

\* DC residents/organizations, add 5.75% sales tax or provide sales tax exemption certificate.

Total Amount Enclosed : \_\_\_\_\_

Contributions to Families USA are tax-deductible. Please make your check payable to Families USA.

*Families USA receives no financing from the health or insurance industries.  
 We rely on funding from individuals and private foundations.*

---

## PUBLICATIONS AVAILABLE FROM FAMILIES USA\*

Title	Price
<i>Too Great a Burden</i> (5/09)	\$15.00
<i>Americans at Risk: One in Three Uninsured</i> (3/09) State-specific reports are also available.	\$15.00 \$2.00
<i>CHIPRA 101: Overview of the CHIP Reauthorization Legislation</i> (3/09)	\$2.00
<i>Health Care Reform: Critical to Closing the Gap for Communities of Color</i> (3/09)	Free
<i>Getting Covered: Finding Health Insurance When You Lose Your Job</i> (2/09)	\$2.00
<i>Unemployed and Uninsured in America</i> (2/09)	\$2.00
<i>Critical Care: The Economic Recovery Package and Medicaid</i> (1/09)	\$5.00
<i>Protecting Unemployed Workers' Health Coverage: What States Can Do</i> (1/09)	Free
<i>Yes We Can . . . Cover More than 4 Million Uninsured Children</i> (1/09)	\$5.00
<i>A Shot in the Arm for West Virginia: Increasing Health Coverage for Working Families</i> (1/09)	\$5.00
<i>Squeezed! Caught between Unemployment Benefits and Health Care Costs</i> (1/09)	\$10.00
<i>The Hidden Link: Health Costs and Family Economic Insecurity</i> (1/09)	\$2.00
<i>The World Can't Wait: More Funding Needed for Research on Neglected Infectious Diseases</i> (12/08)	\$15.00
<i>A Painful Recession: States Cut Health Care Safety Net Programs</i> (12/08)	\$10.00
<i>Left Behind: America's Uninsured Children. National Report</i> (11/08) State-specific reports are also available.	\$10.00 \$2.00
<i>Medicare Improvements for Patients and Providers Act of 2008: Addressing Racial and Ethnic Health Disparities</i> (11/08)	\$2.00
<i>Why Does Global Health Matter to Your State?</i> State-specific fact sheets (11/08)	\$2.00
<i>Limited-Benefit Plans: Expanding Coverage or Holding Your State Back?</i> (10/08)	\$2.00
<i>Congress Delivers Help to People with Medicare: An Overview of the Medicare Improvements for Patients and Providers Act of 2008</i> (10/08)	\$2.00
<i>An Unequal Burden: The True Cost of High-Deductible Health Plans for Communities of Color</i> (10/08)	\$2.00

\* For a complete list of Families USA publications,  
visit our Web site at [www.familiesusa.org/resources/publications/](http://www.familiesusa.org/resources/publications/).

---



1201 New York Avenue NW, Suite 1100  
Washington, DC 20005  
202-628-3030 • [www.familiesusa.org](http://www.familiesusa.org)