

# Exhibit 20

# Covering The Uninsured In 2008: Current Costs, Sources Of Payment, And Incremental Costs

The cost of expanding coverage to the 16 percent of Americans who are uninsured would add 5 percent to national health spending.

by Jack Hadley, John Holahan, Teresa Coughlin, and Dawn Miller

**ABSTRACT:** People uninsured for any part of 2008 spend about \$30 billion out of pocket and receive approximately \$56 billion in uncompensated care while uninsured. Government programs finance about 75 percent of uncompensated care. If all uninsured people were fully covered, their medical spending would increase by \$122.6 billion. The increase represents 5 percent of current national health spending and 0.8 percent of gross domestic product. However, it is neither the cost of a specific plan nor necessarily the same as the government's costs, which could be higher, depending on plans' financing structures and the extent of crowd-out. [*Health Affairs* 27, no. 5 (2008): w399–w415 (published online 25 August 2008; 10.1377/hlthaff.27.5.w399)]

EXPANDING HEALTH INSURANCE COVERAGE is a major issue in the 2008 presidential campaign. This study addresses three sets of questions that are critical to the policy debate. First, how much care do the uninsured receive? Second, how much of their care is “uncompensated,” and who pays for that care? Third, if the uninsured were covered, what would be the cost of the additional medical care they would use? The first two questions set the baseline for the policy debate and identify payment sources that might be tapped to help fund expanded insurance coverage. The third question focuses on the additional resource cost to society. Importantly, this cost is not the cost of a specific plan to expand coverage, nor is it a measure of the cost to government.

■ **Study data and methods.** Following earlier studies, we used two distinct and independent methodologies to develop estimates of the uninsured's current medical

.....  
*Jack Hadley (jhgm@yaho.com) is a professor and senior health services researcher, Health Administration and Policy, at George Mason University in Fairfax, Virginia, and a visiting researcher at the Urban Institute in Washington, D.C. John Holahan is director of the Urban Institute's Health Policy Center. Teresa Coughlin is a principal research associate there; Dawn Miller is a research associate.*

care use and financing.<sup>1</sup> The first analyzes household data on more than 102,000 people interviewed as part of the 2002–2004 Medical Expenditure Panel Surveys (MEPS), a nationally representative survey of the civilian, noninstitutionalized population. The second approach draws on data from government budgets and health care provider surveys, including the 2007 American Hospital Association (AHA) Annual Survey of Hospitals; surveys of office-based private physicians; and budget and program data from Medicare, Medicaid, and other government programs that serve the uninsured.

We adjusted the MEPS data to make 2008 projections that are consistent with spending estimates from the National Health Expenditure Accounts (NHEA). Briefly, we inflated the 2002–2004 MEPS spending data to 2008 dollars using NHEA projections of personal health care spending per capita and projected the numbers of insured and uninsured people, by age, to 2008 from the 2004–2006 Current Population Surveys (CPS).<sup>2</sup> We calibrated the MEPS spending data to the NHEA by source of payment, using a detailed reconciliation of the differences between MEPS and the NHEA.<sup>3</sup>

MEPS does not measure indirect payments to providers, such as Medicare and Medicaid disproportionate-share hospital (DSH) payments, tax appropriations, public and private grant programs, or providers' profits from treating privately insured patients. Since these sources implicitly subsidize some of uninsured people's care, we estimated their contribution to uncompensated care as the difference between the payments providers would expect to receive if the person were covered by private insurance and actual payments received from explicit private sources (out-of-pocket payments from the uninsured and payments from other private sources and other unidentified sources) measured by MEPS.

We added the amount of implicitly subsidized care to the MEPS data on total spending and estimated two-part medical spending models for children and adults on samples of all people uninsured for any portion of the year plus insured people with incomes under 400 percent of poverty.<sup>4</sup> We restricted the insured sample to lower- and lower-middle-income people because their behavior is more likely to reflect the uninsured's medical care use if insured.

■ **Analysis.** The key independent variable measures the percentage of the year the person is insured. Its coefficients indicate how the probability of using any care and the amount of care received increase as insurance status varies from being uninsured all year to being fully insured. Because the insurance coverage variable does not measure individual plans' specific benefits, it reflects the average experience of people with different types of private and public coverage. Consequently, our estimates of the incremental resource cost of full coverage assume that the uninsured person's new benefits would be similar to the distribution of benefits now held by lower- and lower-middle-income people with either private or public coverage.

Other independent variables control for the effects of demographic characteristics (age, sex, and race/ethnicity); socioeconomic characteristics (education, mari-

tal status, family income relative to the federal poverty level, metropolitan residence, and census region); and self-reported health characteristics (general health status, measures of various types of limitations, indicators of the presence of specific health conditions, and an indicator of whether the person died or was institutionalized during the year).<sup>5</sup>

### MEPS Estimates Of Medical Care Received By The Uninsured

Compared to people with full-year private coverage, the full-year uninsured receive less than half as much care but pay a larger share out of pocket (35 percent versus 17 percent). Implicitly subsidized care (the difference between the amount a privately insured person would be expected to pay for the same care and an uninsured person's actual payment) amounts to \$536 per capita for the full-year uninsured, and care provided by other public and private sources adds \$567 per capita (Exhibit 1). The total amount of uncompensated care, defined as all care not paid for out of pocket by the uninsured, comes to \$1,103 per person.

The part-year uninsured receive \$2,983 in care—31 percent less care than the privately insured. However, more than 85 percent of their care is received during

**EXHIBIT 1**  
**Medical Spending Per Capita, By Insurance Status And Source Of Payment, All Nonelderly Americans, Projected, 2008**

	Full-year insured				Part-year insured			Full-year uninsured
	All	Private only	Medicaid only	Other <sup>a</sup>	All	Insured spending	Uninsured spending <sup>b</sup>	
2008 population (est.)	188,186,419	156,230,252	24,220,209	7,735,958	35,757,579	– <sup>c</sup>	– <sup>c</sup>	41,128,621
Total spending per capita	\$4,463	\$3,915	\$4,813	\$14,439	\$2,983	\$2,601	\$382	\$1,686
Source of payment								
Out of pocket	\$ 654	\$ 681	\$ 175	\$1,611	\$ 550	\$ 394	\$156	\$583
Private insurance	2,677	2,976	462	3,573	1,126	1,126	0	0
Medicare	205	17	59	4,463	45	45	0	0
Medicaid	681	25	3,880	3,908	859	859	0	0
Other public <sup>d</sup>	193	183	141	555	161	115	46	233
Other private <sup>e</sup>	53	32	96	328	99	63	36	334
Implicitly subsidized <sup>f</sup>	0	0	0	0	145	0	145	536

**SOURCE:** Authors' tabulations using data from the Medical Expenditure Panel Surveys (MEPS), 2002–2004.

<sup>a</sup> Includes Medicare only, Medicare plus Medicaid, and other combinations of full-year coverage.

<sup>b</sup> Uninsured spending is for care received during months when the person is uninsured.

<sup>c</sup> Not applicable.

<sup>d</sup> Includes Veterans Health Administration, TriCare, other federal, other state and local, other public, and workers' compensation.

<sup>e</sup> Includes other private and other sources.

<sup>f</sup> Implicitly subsidized care is care received by the uninsured that is subsidized by indirect revenue sources not measured by MEPS. For details of the imputation methodology, see J. Hadley et al., *Covering the Uninsured in 2008* (Washington: Henry J. Kaiser Family Foundation, August 2008).

months they report having insurance coverage. Private insurance and Medicaid are the two largest sources of third-party payments, with relatively small amounts paid for by Medicare, other public sources, and other private sources. Care received while uninsured is \$382 per person, with out-of-pocket payments and implicitly subsidized care responsible for very similar amounts (about \$150 per person). In the aggregate, out-of-pocket payments while uninsured by the full- and part-year uninsured total almost \$30 billion.

Among people with full-year insurance coverage, those with private insurance spend the least (\$3,915); Medicaid recipients spend about 23 percent more; and those with Medicare only or various combinations of coverage spend the most for care (Exhibit 1). These differences presumably reflect differences in health conditions across groups, especially for the “other” category, which includes Medicare-covered people with end-stage renal disease (ESRD) or disabilities.

### Uncompensated Care Estimates From MEPS

People uninsured any time during the year receive \$54.3 billion of uncompensated care (care received but not paid for by either the uninsured themselves or by a health insurer), with just over half (\$27.8 billion) paid for by implicit subsidies (Exhibit 2). Payments from explicitly identified public and private sources are \$11.4 billion and \$15.1 billion, respectively. Adults, who constitute more than 80 percent of the uninsured, account for 87 percent of the uncompensated care received. Not surprisingly, the full-year uninsured receive 85 percent of all uncompensated care and 81 percent of all implicitly subsidized care.

**EXHIBIT 2**  
**Total Uncompensated Care Received By The Uninsured, By Sources Of Financing, Projected, Billions Of 2008 Dollars**

Population	Total uncompensated care <sup>a</sup>	By sources of financing		
		Other public <sup>b</sup>	Other private <sup>b</sup>	Implicitly subsidized <sup>c</sup>
All uninsured	54.3	11.4	15.1	27.8
Children	7.2	0.4	3.4	3.3
Adults <sup>d</sup>	47.2	11.0	11.7	24.5
Full-year uninsured	46.1	9.8	13.8	22.6
Part-year uninsured	8.2	1.7	1.4	5.2

**SOURCE:** Authors' tabulations using data from the Medical Expenditure Panel Surveys (MEPS), 2002–2004.

<sup>a</sup> Uncompensated care is defined as care received by the uninsured, but not paid for either out of pocket or by a traditional public or private insurance plan.

<sup>b</sup> Explicitly measured payment sources reported in MEPS.

<sup>c</sup> Implicitly subsidized care is care received by the uninsured that is subsidized by indirect revenue sources not measured by MEPS. For details of the imputation methodology, see J. Hadley et al., *Covering the Uninsured in 2008* (Washington: Henry J. Kaiser Family Foundation, August 2008).

<sup>d</sup> Includes uninsured elderly people.

## Uncompensated Care Estimates From Provider And Government Sources

Using independent data from health care providers and government sources, we estimated that uncompensated care in 2008 is \$57.4 billion: \$35.0 billion provided by hospitals, \$14.6 billion by community-based providers, and \$7.8 billion by private office-based physicians. Given the similarity between these and the MEPS estimates, we conclude that the cost of uncompensated care is between \$54.3 billion and \$57.4 billion, or roughly \$56 billion.

The hospital uncompensated care estimate comes from the AHA's 2007 Annual Survey of Hospitals inflated to 2008.<sup>6</sup> The estimate for community providers and direct care programs includes care provided to the uninsured by the Veterans Health Administration (VHA), the Indian Health Service, community health centers, the Maternal and Child Health Bureau, the HIV/AIDS Bureau, and the National Health Service Corps. In general, we estimated the amount of acute care services (excluding public health and long-term care and inflated to 2008) provided to the uninsured by each of these sources. We also included state and local governments' spending for tax appropriations allocated to hospitals and medical care delivered by public assistance programs.

Physicians' uncompensated care is based on data from the 2005 Community Tracking Study (CTS) Physician Survey, which suggested that little has changed since 2001 in total hours of charity care provided.<sup>7</sup> Therefore, we simply inflated our 2004 estimate of physicians' charity care to 2008. Although a recent study nets out excess payments that physicians sometimes receive from the uninsured, our estimate only accounts for the losses on uninsured patients.<sup>8</sup> We assumed that profits from all patients subsidize these costs.

## Sources Of Funding For Uncompensated Care

Uncompensated care is subsidized by various public programs and private sources (Exhibit 3). Overall, public funds directed to the uninsured could account for as much as \$42.9 billion—approximately 75 percent of total uncompensated care. If some public money is poorly targeted to providers who treat the uninsured—that is, overcompensating some and undercompensating others—then not all of the \$42.9 billion spent in the name of the uninsured may actually finance uncompensated care. Consequently, private funding could be somewhat higher than \$14.5 billion. Although impossible to develop exact estimates, it seems clear that public sources underwrite the dominant share of uncompensated care costs.

■ **Medicaid.** Medicaid has two major programs that help fund the cost of hospital uncompensated care: DSH payments and supplemental payment programs. These programs also offset low Medicaid reimbursement rates in hospitals that receive DSH payments.

Medicaid DSH payments support both hospitals and long-term care facilities

**EXHIBIT 3**  
**Sources Of Funding Available For Uncompensated Care To The Uninsured, Projected,**  
**Billions Of 2008 Dollars**

Provider	Funding source (\$)				Total, all sources <sup>a</sup>
	Federal	State/ local	Total gov.	Private	
Hospitals (total)	16.8	11.9	28.7	6.3	35.0
Medicare					
DSH payments	5.1	0.0	5.1	0.0	5.1
IME payments	2.1	0.0	2.1	0.0	2.1
Total Medicare	7.2	0.0	7.2	0.0	7.2
Medicaid					
DSH payments	8.6	2.0	10.6	0.0	10.6
Supplemental provider payments	12.2	0.9	13.1	0.0	13.1
Less Medicaid underpayments	-11.2	-1.6	-12.8	0.0	12.8
Total Medicaid	9.6	1.3	10.9	0.0	10.9
State and local governments					
Tax appropriations	0.0	8.6	8.6	0.0	8.6
Public assistance programs	0.0	2.0	2.0	0.0	2.0
Total state and local	0.0	10.6	10.6	0.0	10.6
Private philanthropy and financial surplus	0.0	0.0	0.0	6.3	6.3
Community providers and direct care programs (total)	8.8	5.3	14.2	0.4	14.6
Veterans Health Administration	5.4	0.0	5.4	0.0	5.4
Indian Health Service	1.6	0.0	1.6	0.0	1.6
Ryan White CARE Act Health	0.8	0.2	1.0	0.2	1.2
Maternal and Child Health	0.03	0.1	0.2	0.0	0.2
Community health centers	0.9	0.5	1.4	0.2	1.6
National Health Service Corps	0.1	0.0	0.1	0.0	0.1
Other state and local	0.0	4.5	4.5	0.0	4.5
Physicians	0.0	0.0	0.0	7.8	7.8
<b>Total</b>	<b>25.6</b>	<b>17.2</b>	<b>42.9</b>	<b>14.5</b>	<b>57.4</b>

**SOURCE:** Based on American Hospital Association (AHA) Annual Survey of Hospitals and various sources of federal budget and agency data. For details, see J. Hadley et al., *Covering the Uninsured in 2008* (Washington: Henry J. Kaiser Family Foundation, August 2008).

**NOTES:** DSH is disproportionate-share hospital. IME is indirect medical education. CARE is Comprehensive AIDS Research and Education.

<sup>a</sup> Row and column totals might not match because of rounding.

that treat large numbers of poor patients. To estimate the amount available for acute care hospitals' uncompensated care, it is necessary to subtract DSH payments that go to mental hospitals, nursing homes, and other providers and then adjust for the share of the state contribution that represents intergovernmental transfers and other financial transactions whose purpose is to increase federal matching dollars. These types of state funds are generally transferred back to state treasuries without actually being spent on care. Starting with data on total federal Medicaid DSH allotments and associated state matching funds and making the adjustments needed to identify new funding for hospitals, we estimated federal DSH spending to be \$8.6 billion in 2008, with another \$2.0 billion paid to acute care hospitals from state matching funds.<sup>9</sup>

States also use supplemental provider payment or other similar mechanisms to channel money to selected classes of hospitals by raising their rates above Medicaid payment rates, but no higher than Medicare levels. As with Medicaid DSH, it is necessary to estimate the amount of supplemental payments that go to hospitals (excluding nursing homes) and the amount of state dollars that truly come from general revenues (as opposed to intergovernmental transfers).<sup>10</sup> With these adjustments, we estimated that Medicaid payments to hospitals are \$13.1 billion (\$12.2 billion federal and \$0.9 billion state) in 2008.

Finally, to estimate the amount potentially available to subsidize uncompensated care, we subtracted a portion of Medicaid DSH and supplemental provider payments that implicitly compensates some hospitals for low Medicaid payment rates. Inflating AHA data on medical underpayments to 2008 produced an estimate of \$12.8 billion (\$11.2 billion from federal payments and \$1.6 billion from state payments).<sup>11</sup> Subtracting these amounts from the estimates reported above resulted in a final estimate of \$10.9 billion (\$9.6 billion federal and \$1.3 billion state) in Medicaid hospital payments available for uncompensated care in 2008.

■ **Medicare.** Medicare subsidizes uncompensated care through its Medicare DSH payments and indirect medical education (IME) hospital payments. Medicare's DSH adjustment is applied to the payment rate for hospitals that treat a large number of poor patients. Although this is justified on the grounds that low-income patients are more costly than others to treat, Medicare Payment Advisory Commission (MedPAC) studies show that a hospital's low-income patient share is only loosely tied to higher Medicare cost per case and that DSH payments are distributed across a large number of hospitals, while hospital uncompensated care is concentrated in relatively few hospitals.<sup>12</sup> Given this apparent misallocation of Medicare DSH payments, we assumed that only half of Medicare DSH payments (\$5.1 billion in 2008) actually support uncompensated care.

Medicare's IME adjustment recognizes higher costs in hospitals with graduate medical education (GME) programs, in part because these hospitals provide a large amount of care to the poor. MedPAC finds similar asymmetries in the distribution of these funds: the 10 percent of hospitals with the highest uncompensated care levels provided more than 40 percent of all uncompensated care but received just 15 percent of IME payments.<sup>13</sup> Because the IME adjustment, unlike Medicare DSH payments, is only indirectly intended to support uncompensated care, we assumed that one-third of IME payments (\$2.1 billion in 2008) can be attributed to care for the uninsured.

■ **Other federal, state, and local government spending.** State and local governments also provide tax appropriations to support uncompensated care and operate indigent care or public assistance programs. Based on data from the Centers for Medicare and Medicaid Services (CMS), we estimated that state and local tax appropriations that support uncompensated care (as opposed to other hospital functions) are \$8.6 billion in 2008.<sup>14</sup> CMS data also report that state and local public as-



sistance programs spent \$5.5 billion on medical care in 2005, or \$6.5 billion in 2008 dollars (\$2 billion through public assistance programs and \$4.5 billion to other state and local community providers).

Federal dollars constitute the largest share (\$8.8 billion) of the \$14.6 billion in uncompensated care spending by direct care programs (Exhibit 3). State and local spending (\$5.3 billion) accounts for most of the remainder. When these sources are combined with the estimates of spending on uncompensated care by Medicaid and Medicare, and funding through state and local tax appropriations and public assistance programs, total government spending on uncompensated care is an estimated \$42.9 billion, which covers roughly 75 percent of the total cost of uncompensated care. Federal programs pay \$25.6 billion, mainly through Medicaid (\$9.6 billion), Medicare (\$7.2 billion), and the VHA (\$5.4 billion). State and local governments spend \$17.2 billion on care for the uninsured.

### **Private Sources Of Funding For Uncompensated Care**

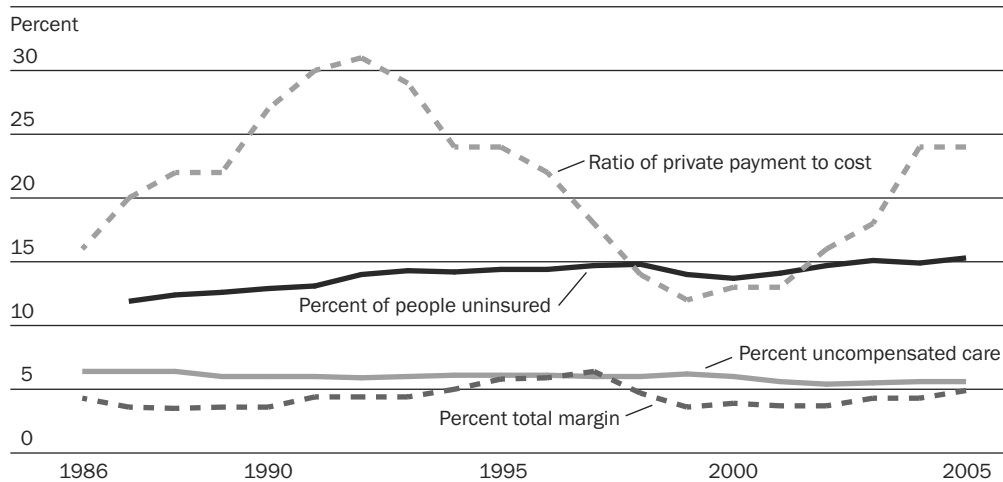
Various private sources help subsidize uncompensated care. Physicians' donated time and forgone profits amount to \$7.8 billion. After government payments to hospitals are subtracted, private philanthropy and profit margins are responsible for at least an additional \$6.3 billion.<sup>15</sup> The amount of private funding could be higher if government payments are more poorly targeted than we assumed—that is, if Medicare/Medicaid dollars overpay some hospitals for uncompensated care while underpaying others. Thus, the total amount of government (\$42.9 billion) and private (at least \$14.5 billion) funding potentially available to pay for care received by the uninsured apparently exceeds the \$54.3 billion in uncompensated care estimated from the household survey data.

### **Cost Shifting And Premiums For Private Insurance**

It is commonly argued that the privately insured pay for uncompensated care through cost shifting—that is, health care providers offset uncompensated care “losses” by charging higher prices to privately insured patients.<sup>16</sup> However, data presented in Exhibit 4 suggest that cost shifting as a result of uncompensated care probably has only a very small impact on private insurance premiums. We estimated that approximately \$14.1 billion (Exhibit 3, excluding community providers) could be financed by cost shifting. (Our estimate is much lower than the Families USA estimate because we included several government sources omitted by its analysis, and we assumed that some providers absorb the cost of uncompensated care in the form of lower profits because they are unable to shift uncompensated costs to private payers.)<sup>17</sup> Given that total private health insurance expenditures in 2008 are estimated to be \$829.9 billion (from NHEA projections), the amount potentially associated with cost shifting represents at most 1.7 percent of private health insurance costs.

Focusing on hospitals, where most cost shifting occurs, all generally agree that

**EXHIBIT 4**  
**Hospitals' Percentage Markup Of Private Payments Above Costs, Percentage Of Expenses For Uncompensated Care, Uninsurance Rate, And Hospitals' Total Margin, 1986–2005**



**SOURCES:** American Hospital Association, "Uncompensated Hospital Care Fact Sheet" (Chicago: AHA, October 2007); Medicare Payment Advisory Commission, *Healthcare Spending and the Medicare Program* (Washington: MedPAC, June 2007), 92 (1995–2005); MedPAC, *Report to the Congress* (Washington: MedPAC, March 1999), 66 (1986–1989); MedPAC, *Report to the Congress* (Washington: MedPAC, March 2002), 157 (1990–1994); and C. DeNavas-Walt, B.D. Proctor, and C.H. Lee, *Income, Poverty, and Health Insurance Coverage in the United States, 2006* (Washington: U.S. Census Bureau, 2006), 58.

**NOTE:** Uninsurance rates for 1987–1998 are adjusted by –1 percent to reflect the change in the Current Population Survey (CPS) instrument implemented in 1999.

hospitals receive higher payments from privately insured than from other patients and that they use profits from privately insured patients to support other missions. However, this does not mean that they raise charges in response to increased demand for care by the uninsured. If this were so, we would expect hospitals' uncompensated care costs to rise with the uninsured's share of the population.

Uncompensated care has been a relatively stable 6 percent of hospital costs for many years, despite a steady increase in the percentage of people uninsured (Exhibit 4). Increases in hospitals' ratio of private payment to cost, the primary mechanism for shifting costs, are unrelated to increases in uncompensated care and the percentage who are uninsured.<sup>18</sup> Rather, private-payer markups have fluctuated probably in response to the rise and fall of aggressive private managed care and perhaps to fluctuations in Medicare and Medicaid payment rates.<sup>19</sup>

Undoubtedly, some hospitals, especially major teaching hospitals, in some geographic areas have sufficient market power to negotiate higher payments from private insurers. (Some large physician groups may have similar negotiating leverage.) However, Exhibit 4 suggests that this is not the dominant pattern. Although the explanations for the fluctuations in markups to private payers remain controversial, it seems reasonably clear that uncompensated care is at most a minor player in the dynamics of hospital cost shifting.<sup>20</sup>

## The Incremental Cost Of Care Used By The Uninsured If They Were Covered

How much more care would the uninsured receive if they were fully covered by insurance? To answer this question, we estimated two-part statistical models of medical spending and simulated how much more care the uninsured would receive if they had full-year insurance coverage. These models allow the effect of insurance coverage to vary with a person's health status while controlling for the effects on spending of demographic, health, and socioeconomic characteristics. Since many of the uninsured are younger and healthier than the insured, they would be expected to have lower medical spending independent of their lack of insurance. These statistical models adjust for the effects of these other factors when we predict how much more the uninsured would spend if insured.

The simulations suggest that people who are uninsured at any time during the year would increase their total spending per person by 70 percent, from \$2,290 to \$3,885 per person (Exhibit 5). The percentage increase in spending is much larger for the full-year insured (118 percent) than for the part-year insured (38 percent). The increase in spending is also much greater for adults (75 percent) than for children (37 percent), presumably reflecting differences in the incidence and costliness of adults' and children's health problems.

In the aggregate, total spending would increase by \$122.6 billion to \$298.7 billion, compared to the uninsured's current total spending of \$176.1 billion (which includes insured spending by people with part-year coverage). Most of the increase in spending goes to the full-year uninsured and to adults, who make up

**EXHIBIT 5**  
**Simulated Increases In Total Spending By The Uninsured If They Were Fully Insured, By Age, Projected, 2008**

	Per capita spending (\$)			Total (\$ billions)		
	Actual	Simulated if fully insured	Change in spending	Actual	Simulated if fully insured	Total change in spending <sup>a</sup>
<b>Total spending</b>						
All uninsured	2,290	3,885	1,595	176.1	298.7	122.6
Full-year uninsured	1,686	3,673	1,987	69.4	151.0	81.6
Part-year uninsured	2,983	4,129	1,146	106.7	147.7	41.0
Children	1,363	1,868	505	25.9	35.5	9.6
Full-year uninsured	1,076	1,857	781	8.2	14.2	6.0
Part-year uninsured	1,556	1,874	318	17.7	21.3	3.6
Adults <sup>a</sup>	2,595	4,543	1,948	150.5	263.4	13.0
Full-year uninsured	1,823	4,083	2,260	61.2	137.0	75.8
Part-year uninsured	3,655	5,175	1,520	89.3	126.4	37.2

**SOURCE:** Authors' tabulations using data from the Medical Expenditure Panel Surveys (MEPS), 2002–2004.

<sup>a</sup> Row and column totals might not match because of rounding.

most of the uninsured population and have a much larger increase in per person spending than is the case for children.

### Comparisons With Other Estimates

Prior estimates (using MEPS data) of the incremental resource cost of covering the uninsured ranged from \$34 billion to \$69 billion in 2001 (2.8 to 5.6 percent of total national health spending), depending on whether the expanded coverage was primarily through Medicaid or through private insurance.<sup>21</sup> If we assume that 60 percent of the expansion was through the private insurance system, the weighted average of these 2001 estimates would be about \$55 billion, or 3.7 percent of total national health spending, in 2001. Our current incremental cost estimate of \$122.6 billion represents 5.1 percent of projected total national health spending for 2008, which is toward the higher end of the 2001 range of estimates.

The increase of about \$68 billion in seven years in the cost of covering the uninsured is attributable to several factors: rapid increases in health care costs, continuing growth in the number of uninsured people, and changes in the characteristics of the uninsured population. Between 2001 and 2008, per capita health care spending, which incorporates changes in both price and use, grew by 52.8 percent—more than twice the 22.3 percent increase in the Consumer Price Index (CPI).<sup>22</sup> Inflating the \$55 billion estimate for 2001 to 2008 by the increase in per capita health spending boosts the incremental cost estimate to \$84 billion. Thus, inflation in health care costs and per capita use accounts for more than 42 percent of the difference between the 2001 and 2008 estimates.

The remaining difference between the \$84 billion and our current estimate reflects a combination of an increase in the number of uninsured people and changes in their characteristics. Using the CPS data to illustrate the increase in the number of uninsured Americans, the size of the uninsured population grew by almost 3.4 percent per year between 2001 and 2006, from 39.7 million to 47 million.<sup>23</sup> Extrapolating to 2008 at the same rate results in a projected uninsured population of 50.2 million people—an increase of 26.4 percent over 2001. Applying this increase in the size of the uninsured population raises the incremental cost estimate from \$84 billion to \$106.2 billion, which accounts for another one-third of the difference between our current estimate and the 2001 estimate.

We believe that the remaining difference of about 25 percent (\$16.3 billion) is attributable primarily to changes in the characteristics of the uninsured populations between the two time periods (Exhibit 6). The 2001 estimates were based on MEPS data from 1996–1998, while our current 2008 estimate is based on MEPS data from 2002–2004. First, the full-year uninsured make up a larger share of the total uninsured population—53.4 percent in the 2008 sample, compared to 51.4 percent in the 2001 sample. Since the incremental cost of covering someone who was uninsured all year is \$841 higher than expanding coverage for someone uninsured for part of the year (Exhibit 5), total incremental cost also increases.

**EXHIBIT 6**  
**Selected Characteristics Of Uninsured Samples, 2008 And 2001**

Characteristic	2008 sample (2002–2004 MEPS)	2001 sample (1996–1998 MEPS)
Uninsured all year	53.4% <sup>a</sup>	51.4%
Age distribution (years)		
0–18	24.7 <sup>a</sup>	28.6
19–49	61.8	61.0
50–64	13.5	10.4
Health status distribution		
Excellent or very good	62.3 <sup>a</sup>	64.5
Good, fair, or poor	37.7	35.5

**SOURCE:** Authors' tabulations of data from the Medical Expenditure Panel Survey, 1996–1998 and 2002–2004.

<sup>a</sup> Percentage or distribution is significantly different from 2001 sample ( $p < 0.05$ ).

Second, the 2008 uninsured sample is both older and in poorer health (Exhibit 6). Given that much more is spent on older people than on children at every health status level and that people in fair or poor health spend much more than those in excellent to good health, these changes likely explain the higher level of spending per newly insured person in 2008 (\$3,885) compared to 2001 (\$3,751 in 2008 dollars).<sup>24</sup>

Other substantive factors that may also contribute to the higher incremental cost estimate for 2008 are the decline of tightly managed care, which might have restricted use by the insured in the earlier period, and poorer access to care by the uninsured in the later period. A coverage expansion in a tightly managed care environment would produce a smaller incremental effect of having coverage on spending by the uninsured. Conversely, poorer access to care in the later period would increase the size of the initial spending gap between the uninsured and the insured.

Methodological factors that may influence the 2008 estimate include improved measurement of spending while uninsured by people who are uninsured for only part of the year, the discrepancy between the MEPS data and the CPS data in their estimates of the number of uninsured people, and possible measurement error in reporting insurance status. More accurately assigning a larger share of the part-year uninsured's spending to the months when they are insured in effect increases the estimated effect of having insurance coverage on spending in the statistical models. From a more technical perspective, this result could be thought of as a type of endogeneity bias—that is, uninsured people who expect to incur medical spending have an increased incentive to seek insurance coverage. This behavior would tend to overstate the effect of insurance on spending.

As noted above, the CPS reports fewer uninsured people than MEPS reports. According to the CPS, 47.0 million Americans were uninsured in 2006, which we

*“We estimate that cost shifting to private insurance finances a relatively small amount of uncompensated care.”*

generally regard as a point-in-time or full-year-equivalent estimate. Projecting the 2006 number to 2008 yields 50.2 million uninsured people. The comparable number for MEPS for 2008 is 54.9 billion, or 10 percent higher. Thus, using the CPS estimate of the number of uninsured Americans would reduce our estimate by about \$12 billion.

Finally, Brent Kreider and Steven Hill investigated the effects of reporting errors in measuring insurance coverage.<sup>25</sup> They found that even though there is uncertainty about the number of people lacking insurance, under reasonable non-parametric assumptions, estimates from MEPS of the maximum cost of covering the uninsured are not much affected by this uncertainty.

## **Discussion And Implications For Policy**

People uninsured for all or any part of 2008 receive approximately \$86 billion in care during the time they lack insurance coverage. The uninsured pay for \$30 billion of their care out of pocket and receive about \$56 billion in uncompensated care. Uncompensated care represents 2.2 percent of health spending in 2008.

We estimate that government spends nearly \$43 billion—roughly 75 percent of total uncompensated care costs—through Medicaid DSH and supplemental payment programs, Medicare DSH and IME payments, various direct care programs, and state and local tax appropriations. Given the magnitude of government payments, we estimate that cost shifting to private insurance finances a relatively small amount of uncompensated care. Private insurance premiums are at most 1.7 percent higher because of the shifting of the costs of the uninsured to private insurers in the form of higher charges.<sup>26</sup>

Providing full-year coverage to all Americans currently uninsured for any part of the year would increase their medical spending by \$122.6 billion in 2008, over and above their current spending (while uninsured) of about \$86 billion. The increase in total spending corresponds to 5.1 percent of total health care spending and 0.8 percent of gross domestic product (GDP). For comparison purposes, a recent analysis estimated that the tax subsidy received by privately insured workers with employer-sponsored insurance was more than \$200 billion in 2006.<sup>27</sup> The 5 percent increase is also smaller than the average annual increase in total health spending of 7.6 percent per year since 2000.<sup>28</sup>

The estimate implicitly assumes that the uninsured’s new coverage would reflect the distributions of public and private coverage and benefits held by lower-income and lower-middle-income insured people and that their medical care use would also be similar. The cost estimate would change if the new coverage were either much more generous (very low cost sharing, as in Medicaid) or less gener-

ous (high deductibles) than current coverage. Similarly, it assumes that provider payment rates and administrative costs under various public and private plans would stay largely the same. Various health system reforms, such as competing private health insurance plans within purchasing pools, greater use of public programs' fee schedules, or expanded use of health information technology, could reduce the estimated incremental resource cost of expanding coverage. A recent report from the Commonwealth Fund estimates that a menu of fifteen savings options could reduce health spending by \$1.55 trillion over ten years.<sup>29</sup>

■ **Incremental resource cost versus transfer or crowd-out costs.** Most important for the policy debate, however, it is essential to differentiate the incremental resource cost of insurance expansion from transfer or crowd-out costs, and from the more thorny issue of the financing of insurance expansion. Incremental resource cost is a key number for assessing the cost-effectiveness of expanding insurance coverage—that is, comparing the value of improved health associated with expanded coverage to its resource cost.<sup>30</sup>

However, the additional cost of care used by the uninsured is not the same as the cost to the government of a coverage expansion, since out-of-pocket spending and income-related premium payments by the newly insured are likely to pay some of these extra costs. Further, the cost attributed to any broad health care financing reform could be much higher, depending on the extent to which people drop their prior coverage in favor of coverage under the new plan or retain their current coverage but receive new public subsidies to help pay their premiums.

These costs are not new national resources being devoted to health care but, rather, represent a transfer of spending from one type of coverage to another: although government spends more, many individuals, families, and businesses spend less. The savings to businesses and families in private insurance premiums and out-of-pocket spending can be large and are often overlooked in health reform cost calculations that focus on increased government spending. How the cost of the subsidies is distributed among different classes of people and geographic areas is at least as major a political issue as the amount of the subsidies.

■ **Federal cost implications.** Undoubtedly, covering all of the uninsured could have major cost implications for the federal government, regardless of how the reform is designed. Adding the cost of the additional care to current spending by or for the uninsured, total medical care costs for newly insured people will be about \$208.6 billion (roughly \$3,800 per full-year-equivalent newly insured person), consisting of \$122.6 billion in new spending on top of the \$86 billion already in the system. Although this is substantial, not all of this money necessarily represents new government spending. Of the \$86 billion, the uninsured now pay \$30 billion themselves. Much of this, and perhaps more, could be captured by premiums, since the MEPS data show that 71 percent of the uninsured have incomes above 125 percent of poverty and will therefore likely be responsible for some or all of the premium cost themselves. Whether this will be greater than the \$30 billion that is already being

*“A source of savings might accrue from the improved health of the uninsured, were they to gain coverage.”*

.....  
 spent depends on the subsidy structure.

Some of the total costs of covering the uninsured could be offset by redirecting the nearly \$43 billion that we estimate government programs now spend on the uninsured. Once the nation achieves universal coverage, there would be little need for much of this funding. Indirect payments to hospitals through Medicare and Medicaid would seem to be the most fungible. There is also an additional \$5.1 billion of Medicare DSH spending (not included in the \$43 billion) that appears to be misallocated to hospitals that provide little care to the uninsured. However, hospitals are likely to argue that these dollars should not be diverted until universal coverage is attained and that even then, some might still be needed if there are extra costs of caring for large numbers of poor people or undocumented immigrants, who might not be eligible for coverage. Direct service providers who treat special populations, such as veterans, Native Americans, non-English-speaking immigrants, and low-income children and pregnant women, may argue that their funding is needed to preserve the infrastructure that serves those populations.

■ **Savings through efficiency and improved health.** Recognizing the political difficulties of eliminating existing subsidies, most actual reform plans look to savings or increased efficiencies in other parts of the system (greater use of information technology, better care management, and increased use of medical effectiveness research) to fund increased coverage. Another source of savings might accrue from the improved health of the uninsured, were they to gain coverage. Numerous studies have shown that the uninsured delay seeking care for treatable conditions that often require more costly care when they progress to an advanced state.<sup>31</sup> More recent research suggests that Medicare would spend less on new beneficiaries who were previously uninsured if they had coverage in later middle age.<sup>32</sup> These sources of financing are less visible and more difficult to measure than the funding for existing programs, but they are no less real and should be taken into account in the policy debate over expanding coverage.

.....  
*This study was commissioned by the Henry J. Kaiser Family Foundation. Joel Ruhter provided excellent computational assistance. The authors are very grateful to Bowen Garrett, Cathy Hoffman, Donald Metz, and three anonymous reviewers for their helpful comments on preliminary versions of the manuscript.*



## NOTES

1. J. Hadley and J. Holahan, "How Much Medical Care Do the Uninsured Use, and Who Pays for It?" *Health Affairs* 22 (2003): w66–w81 (published online 12 February 2003; 10.1377/hlthaff.w3.66); J. Hadley and J. Holahan, "Covering the Uninsured: How Much Would It Cost?" *Health Affairs* 22 (2003): w250–w265 (published online 4 June 2003; 10.1377/hlthaff.w3.250); and J. Hadley and J. Holahan, "The Cost of Care for the Uninsured: What Do We Spend, Who Pays, and What Would Full Coverage Add to Medical Spending?" (Washington: Henry J. Kaiser Family Foundation, 10 May 2004). For methodological details and additional tables, see J. Hadley et al., *Covering the Uninsured in 2008*, August 2008, <http://www.kff.org/uninsured/7809.cfm> (accessed 25 August 2008).
2. Although the CPS is the most commonly used source for the number of uninsured people, this analysis relies primarily on MEPS because of its detailed data on use and spending in addition to insurance coverage. However, the MEPS estimate of the number of uninsured people is consistently larger than the CPS estimate. State Health Access Data Assistance Center and Robert Wood Johnson Foundation, "Comparing Federal Government Surveys that Count Uninsured People in America," August 2007, <http://covertheuninsured.org/pdf/comparison0807.pdf> (accessed 30 May 2008). Using the CPS number of uninsured people would lower our estimates of current spending and incremental costs by about 10 percent.
3. M. Sing et al., "Reconciling Medical Expenditure Estimates from the MEPS and NHEA, 2002," *Health Care Financing Review* 28, no. 1 (2006): 25–40.
4. The conditional model is estimated by a gamma function with a log-link. See W. Manning and J. Mullahy, "Estimating Log Models: To Transform or Not to Transform?" *Journal of Health Economics* 20, no. 4 (2001): 461–494.
5. See Hadley et al., *Covering the Uninsured in 2008*, for methodological details and the complete models.
6. American Hospital Association, "Uncompensated Hospital Care Cost Fact Sheet" (Chicago: AHA, October 2007).
7. Hadley and Holahan, "How Much Medical Care Do the Uninsured Use?"; and P. Cunningham and J. May, "A Growing Hole in the Safety Net: Physician Charity Care Declines Again," Tracking Report no. 13 (Washington: Center for Studying Health System Change, March 2006).
8. The recent study is J. Gruber and D. Rodriguez, "How Much Uncompensated Care Do Doctors Provide?" *Journal of Health Economics* 26, no. 6 (2007): 1151–1169. It estimates that physicians' uncompensated care may be much lower than we estimated, roughly \$3.2 billion in 2005, because it counts higher payments from the uninsured as offsets to lower payments.
9. Regarding state matching funds, see Centers for Medicare and Medicaid Services, "Medicaid Program; Fiscal Year Disproportionate Share Hospital Allotments and Disproportionate Share Hospital Institutions for Mental Disease Limits," *Federal Register* 72, no. 248 (2007): 73831–73841, <http://edocket.access.gpo.gov/2007/pdf/E7-24486.pdf> (accessed 22 May 2008). Regarding new funding adjustments, see T. Coughlin, S. Zuckerman, and J. McFeeters, "Restoring Fiscal Integrity to Medicaid Financing?" *Health Affairs* 26, no. 5 (2007): 1469–1480.
10. T.A. Coughlin, B.K. Bruen, and J. King, "States' Use of Medicaid UPL and DSH Financing Mechanisms," *Health Affairs* 23, no. 2 (2004): 245–257; and Coughlin et al., "Restoring Fiscal Integrity to Medicaid."
11. AHA, "Underpayment by Medicare and Medicaid Fact Sheet" (Chicago: AHA, October 2007).
12. Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy* (Washington: MedPAC, March 2007), 77, 72.
13. *Ibid.*, 78–79. Data are from selected states in 2002 and 2003.
14. CMS, Office of the Actuary, National Health Statistics Group, "Table 11: Expenditures for Health Services and Supplies under Public Programs, by Type of Expenditure and Program: Calendar Year 2005," <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf> (accessed 2 June 2008).
15. Hadley and Holahan, "How Much Medical Care Do the Uninsured Use?" estimated that private philanthropy contributed about 5 percent of the cost of hospitals' uncompensated care. If private philanthropy continues to support hospitals' uncompensated care to this extent, it would contribute \$1.8 billion, which would leave \$4.5 billion as supported by hospitals' profits. Since these funds are fungible, it could be argued that all \$6.3 billion is financed from hospital profits.
16. Families USA, "Paying a Premium" (Washington: Families USA, July 2005).
17. For details, see Hadley et al., *Covering the Uninsured in 2008*, chap. 5.
18. The correlation with the uncompensated care percentage is 0.04.

19. MedPAC, *Report to the Congress*, 63; A. Dobson, J. DaVanzo, and N. Sen, "The Cost-Shift Payment 'Hydraulic': Foundation, History, and Implications," *Health Affairs* 25, no. 1 (2006): 22–33; and J. Zwanziger and A. Bamezai, "Evidence of Cost Shifting in California Hospitals," *Health Affairs* 25, no. 1 (2006): 197–203.
20. M.A. Morrisey, "Cost Shifting: New Myths, Old Confusion, and Enduring Reality," *Health Affairs* 22 (2003): w489–w491 (published online 8 October 2003; 10.1377/hlthaff.w3.489); P.B. Ginsburg, "Can Hospitals and Physicians Shift the Effects of Cuts in Medicare Reimbursement to Private Payers?" *Health Affairs* 22 (2003): w472–w479 (published online 8 October 2003; 10.1377/hlthaff.w3.472); and P. Feldstein, "Cost Shifting," chap. 16 in *Health Policy Issues: An Economic Perspective* (Chicago: Health Administration Press, 2003).
21. Institute of Medicine, *Hidden Costs, Value Lost: Uninsurance in America* (Washington: National Academies Press, June 2003), 103.
22. Centers for Medicare and Medicaid Services, Office of the Actuary, "National Health Expenditure Data, Projected," 25 February 2008, [http://www.cms.hhs.gov/NationalHealthExpendData/03\\_NationalHealthAccountsProjected.asp](http://www.cms.hhs.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp) (accessed 24 June 2008).
23. C. DeNavas-Walt, B.D. Proctor, and J. Smith, *Income, Poverty, and Health Insurance Coverage in the United States: 2006*, Pub. no. P60-233 (Washington: U.S. Government Printing Office, 2007), 58.
24. The projected estimate of \$3,751 was computed by taking a weighted average of per capita spending under private and public expansions in 2001 (from Hadley and Holahan, "How Much Medical Care Do the Uninsured Use?") and inflating to 2008 by the change in total national health spending per capita (from the National Health Expenditures Accounts).
25. B. Kreider and S. Hill, "Partially Identifying Treatment Effects with an Application to Covering the Uninsured," *Journal of Human Resources* (forthcoming).
26. Our estimate is lower than the Families USA estimate because we included several government sources omitted by their analysis and we assumed that some providers absorb the cost of uncompensated care in the form of lower profits—that is, that they are unable to pass on uncompensated costs to private payers. Families USA, "Paying a Premium." For details, see Hadley et al., *Covering the Uninsured in 2008*, chap. 5.
27. T.M. Selden and B.M. Gray, "Tax Subsidy for Employment-Related Health Insurance: Estimates for 2006," *Health Affairs* 25, no. 6 (2006): 1568–1579.
28. Calculated from average annual percentage changes reported in CMS, Office of the Actuary, "National Health Statistics Group, Table 2: National Health Expenditures Aggregate Amounts and Average Annual Percent Change, by Type of Expenditure: Selected Calendar Years 1960–2006," <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf> (accessed 9 July 2008).
29. Commonwealth Fund Commission on a High Performing Health System, *Bending the Curve: Options for Achieving Savings and Improving Value in U.S. Health Spending* (New York: Commonwealth Fund, December 2007).
30. W. Miller, E.R. Vigdor, and W.G. Manning, "Covering the Uninsured: What Is It Worth?" *Health Affairs* 23 (2004): w157–w167 (published online 31 March 2004; 10.1377/hlthaff.w4.157).
31. J. Hadley, "Sicker and Poorer: The Consequences of Being Uninsured," *Medical Care Research and Review* 60, no. 2 Supp. (2003): 3S–75S.
32. J. Hadley and T. Waidmann, "Health Insurance and Health at Age Sixty-five: Implications for Medical Care Spending on New Medicare Beneficiaries," *Health Services Research* 41, no. 2 (2006): 429–451.