



AHIP

*Center for Policy
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Technical Memo: Estimates of the Potential Reduction in Health Care Costs from AHIP's Affordability Proposals

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OVERVIEW AND METHODOLOGY

AHIP's affordability proposals¹ could yield substantial savings for the U.S. health care system, provided that a large-scale and coordinated set of public and private initiatives is launched in the coming years. Taken together, AHIP's proposals have the potential to trim national health expenditures (NHE) by as much as 9 percent by the year 2025, compared with current baseline trends.

AHIP compiled these estimates in collaboration with Tom Wildsmith, FSA, of the Hay Group, Jim Capretta of CivicEnterprises, LLC, and a team of researchers from PricewaterhouseCoopers (PwC) led by economist Jack Rodgers and actuary Michael Thompson, FSA, MAAA. PwC also contributed original estimates of the potential savings from improvements in medical liability systems, as well as the potential savings from expanded disease management, chronic disease prevention, and wellness activities.

Achieving these results would require a substantial national commitment, with sustained effort in both the public and private sectors. To activate the potential savings, sufficient incentives would have to be in place to give health care providers, patients, and insurers (public and private) a powerful reason to develop and use these tools. Likewise, additional legislation would be needed to realize the potential savings in the Medicare and Medicaid programs.

AHIP's affordability proposals would substantially strengthen our nation's efforts in five main areas:

1. Comparative Effectiveness Research and Information
2. Health Information Technology (HIT)
3. Medical Liability Reform and Reductions in Defensive Medicine
4. Value-Based Reimbursement (sometimes called "pay-for-performance")
5. Disease Management, Chronic Disease Prevention, and Wellness Activities

The additional savings from AHIP's proposals are measured against current efforts that are already underway on these issues, in both the public and private sectors. The estimates in the first four areas — comparative effectiveness, HIT, liability reform, and value-based reimbursement — stem at least in part from well-known health economics studies and from Congressional cost estimates and Medicare reports; that research is further explained in the sections below. The savings from improvements in disease management, chronic disease prevention, and wellness activities are based on actuarial observations and guidance from PwC, which are corroborated by new research from the Milken Institute.²

¹America's Health Insurance Plans, "A Shared Responsibility: Advancing Toward a More Accessible, Safe, and Affordable Health Care System for America" (May 2008), Appendix A: PricewaterhouseCoopers "PricewaterhouseCoopers Review of AHIP Savings Estimates" (May 2008).

²DeVol, R, et al, "An Unhealthy America: The Economic Burden of Chronic Disease — Charting a New Course to Save Lives and Increase Productivity and Economic Growth." Milken Institute, October 2007.

The savings estimates are compiled from detailed 10-year projections of NHE from the Office of the Actuary at CMS, extended for an additional 10 years by AHIP and our collaborators.³ The extended projections include details on health spending by source of funds (Medicare, Medicaid, private insurance, and out-of-pocket) and type of spending (hospital, physician, prescription drugs, other health care spending, and administrative expenses).

Table 1 shows the potential savings at five-year intervals between 2010 and 2025 as a percentage of NHE.

Importantly, these potential savings are based on national health expenditures, and are not equivalent to the federal cost estimates crafted by the Congressional Budget Office (CBO),

which are based on federal spending alone. Likewise, the savings are net of health insurers' and health care providers' administrative and other costs that would be required to bring the policies into effect.

Finally, the savings estimates include a small reduction to account for possible "overlap" or interacting effects within the five major categories of savings. This factor — 0.3 percent of NHE — was applied within the estimate of HIT savings and is explained in the accompanying PwC report.

The following sections explain the potential savings in each category. Tables 7 and 8 provide a summary of the potential savings estimates by source of funds and type of spending.

TABLE 1. POTENTIAL SAVINGS: AHIP AFFORDABILITY PROPOSALS, SELECTED YEARS				
	2010	2015	2020	2025
	Percent of National Health Expenditures (NHE)			
Comparative Effectiveness Research	-0.0%	-0.1%	-0.3%	-0.6%
Health Information Technology	0.7%	-1.0%	-2.9%	-3.6%
Medical Liability Reform	-0.3%	-1.2%	-1.6%	-1.6%
Value-Based Reimbursement	-0.0%	-0.3%	-0.5%	-0.5%
Disease Management, Chronic Disease Prevention, and Wellness Activities	-0.2%	-1.2%	-1.9%	-2.7%
Total, National Health Expenditures	0.1%	-3.7%	-7.3%	-9.0%
Source: America's Health Insurance Plans and PricewaterhouseCoopers. Notes: The savings estimates are net of insurers' and health care providers' administrative costs, and include a small reduction to account for "overlap" in the savings estimates. The estimates do not include the costs of administering comparative effectiveness programs or the potential costs or savings from the proposed federal program for experimental treatments. Components may not sum to totals due to rounding.				

³See Poisal et al, "Health Spending Projections Through 2016: Modest Changes Obscure Part D's Impact," *Health Affairs*, Web Exclusive (February 21, 2007); detailed projections data are available at <http://www.cms.hhs.gov/NationalHealthExpendData/>.

COMPARATIVE EFFECTIVENESS RESEARCH AND INFORMATION

Information on the effectiveness of alternative treatments — coupled with benefit designs that encourage use of cost-effective products and services, such as multi-tiered prescription drug benefits — has the potential to spark dramatic improvements in the efficiency of health care.

However, information on the effectiveness of health care treatments is a “public good” which will require a public-private partnership and a powerful national commitment to achieve.

We estimate that a national comparative effectiveness initiative would yield substantial net savings in health care costs, in both public and private insurance programs. The estimated savings were allocated mostly to hospital, physician, and prescription drug spending, and totaled 0.3 percent of NHE in 2020 and 0.6 percent of NHE in 2025 (see Table 2).

These estimates followed the general trajectory of a preliminary CBO estimate. However, CBO estimates for only 10 years, and their estimated savings were based on a narrower cost-effectiveness research effort.⁴ We believe that a coordinated national effort of comparative effectiveness research — combined with appropriate incentives for patients and health care providers — has the potential to reduce health costs by growing amounts over time, especially after 2020.

The estimates presented here do not directly account for administrative or other costs related to conducting the comparative effectiveness research. These efforts could be funded either within or outside the NHE accounting system, and, in either case, are not expected to be large relative to national health spending.

TABLE 2. POTENTIAL SAVINGS: COMPARATIVE EFFECTIVENESS RESEARCH AND INFORMATION, SELECTED YEARS

	2010	2015	2020	2025
Hospital Savings (Billions)	0	-2	-9	-23
Percent of Hospital Spending	0.0%	-0.2%	-0.5%	-1.0%
Physician Savings (Billions)	0	-1	-4	-10
Percent of Physician Spending	0.0%	-0.1%	-0.4%	-0.7%
Prescription Drug Savings (Billions)	0	-1	-4	-11
Percent of Prescription Drug Spending	0.0%	-0.2%	-0.5%	-1.0%
National Health Expenditures (Billions)	0	-5	-17	-46
Percent of National Health Expenditures	0.0%	-0.1%	-0.3%	-0.6%

Source: America’s Health Insurance Plans and PricewaterhouseCoopers.

Note: Items may not sum to national health spending totals due to rounding and a small amount of estimated savings in categories of health spending not shown.

⁴Congressional Budget Office, “Research on the Comparative Effectiveness of Medical Treatments: Issues and Options for an Expanded Federal Role,” (December 2007).

HEALTH INFORMATION TECHNOLOGY

A secure, privacy-protected system for capturing and exchanging basic health care information is a precondition for more efficient and higher quality care. The potential to increase productivity, reduce errors, and promote effective decision-making by consumers and health care providers is substantial.

In 2005, the RAND Corporation performed a careful analysis of the potential cost savings from widespread implementation of an operational health information technology (HIT) program.⁵ By the fifteenth year, RAND’s estimated annual savings and costs were divided as follows (in 2003 dollars):

Operational Savings for Hospitals: \$ -57 billion
 Operational Savings for Physicians: \$ -20 billion
 Administrative Costs: \$ 8 billion

Drawing from the RAND research, Table 3 shows the estimated savings from improvements in HIT resulting from AHIP’s proposals, converted to current dollars and

percentages of NHE, and based on the following additional assumptions. First, the savings in hospital and physician operating costs were assumed to pass through to both public and private payers. Second, based on the RAND estimate, administrative costs were assumed to rise sharply in 2009 for both public and private payers to reflect widespread investments in HIT made by insurers. In addition, we assumed a substantial “start up” investment by hospitals and physicians’ offices — over and above the administrative costs estimated by RAND. We estimated that these additional costs would be phased down after the first ten years. Although these additional start-up costs were allocated to hospital and physician spending in the estimates, it is possible that some of these expenses could be borne alternatively by insurers (public or private) or governments.

Finally, the overall HIT savings estimated here were reduced to account for an offsetting “overlap” or interaction factor of 0.3 percent of NHE, based on a methodology suggested by PwC.

TABLE 3. POTENTIAL SAVINGS: HEALTH INFORMATION TECHNOLOGY, SELECTED YEARS

	2010	2015	2020	2025
Hospital Savings (Billions)	-1	-50	-145	-239
Percent of Hospital Spending	-0.1%	-4.2%	-8.7%	-10.3%
Physician Savings (Billions)	9	-4	-36	-66
Percent of Physician Spending	1.6%	-0.5%	-3.5%	-4.8%
Administrative and Implementation Costs (Billions)	13	17	22	29
Percent of Administrative Costs	6.2%	6.2%	6.2%	6.2%
National Health Expenditures (Billions)	20	-37	-159	-277
Percent of National Health Expenditures	0.7%	-1.0%	-2.9%	-3.6%

Source: America’s Health Insurance Plans and PricewaterhouseCoopers.
 Note: Components may not sum to totals due to rounding.

⁵Hillestad et al, “Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, And Costs,” *Health Affairs*, vol. 24, no.5 (September/October 2005). A recent CBO report, “Evidence on the Costs and Benefits of Health Information Technology” (May 2008), questions the RAND estimates in several respects. However, the main issue with CBO’s critique is not whether RAND had properly estimated the *potential* impact on national health spending of a coordinated, large-scale HIT program, but whether legislation considered by Congress actually would achieve those results, and also would reduce federal outlays. AHIP and PwC believe that RAND’s work is appropriate to the goals of this report; that is, to explain the potential for reducing health costs under AHIP’s affordability proposals.

MEDICAL LIABILITY REFORM AND REDUCTIONS IN DEFENSIVE MEDICINE

Several studies have documented the costs associated with an unreformed medical liability system. The impulse for defensive medicine in the use of certain procedures can be measured. Health system researchers Daniel Kessler and Mark McClellan compared the costs of unreformed medical liability laws across low-reform and high-reform states in terms of higher Medicare hospitalization costs associated with treating patients with serious heart conditions.⁶ They found that certain medical liability reforms reduced such spending by 5 to 9 percent. In addition, PricewaterhouseCoopers has estimated that direct savings in liability costs would be as much as 1 to 2 percent of hospital and physician costs.

We built upon this research and extrapolated these findings to the health care system as a whole. Because some states have undertaken at least partial reforms, the full potential savings estimated for states with no liability reforms is not available to the nation as a whole.

On balance, we assume that potential savings of over 3 percent of hospital and physician expenditures are possible, and that these savings would be phased in over 10 years (see Table 4) if full liability reforms were enacted in all states. The potential savings were applied to hospital and physician spending across payers (private, Medicare, and Medicaid, as well as out-of-pocket spending).

TABLE 4. POTENTIAL SAVINGS: MEDICAL LIABILITY REFORM AND REDUCTIONS IN DEFENSIVE MEDICINE, SELECTED YEARS				
	2010	2015	2020	2025
Hospital Savings (Billions)	-6	-28	-55	-77
Percent of Hospital Spending	-0.6%	-2.3%	-3.3%	-3.3%
Physician Savings (Billions)	-4	-18	-34	-45
Percent of Physician Spending	-0.7%	-2.3%	-3.3%	-3.3%
National Health Expenditures (Billions)	-9	-45	-89	-122
Percent of National Health Expenditures	-0.3%	-1.2%	-1.6%	-1.6%

Source: America's Health Insurance Plans and PricewaterhouseCoopers.
 Note: Components may not sum to totals due to rounding.

⁶Kessler, D. and McClellan, M., "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics*, 111(2): 353-390, 1996.

VALUE-BASED REIMBURSEMENT

Medicare researchers are beginning to report positive results from tests of restructured payment systems for physicians. The new reimbursement systems reward physicians for evidence-based care strategies that prevent complications among patients with chronic diseases.

In one early test, the data show a reduction in costs of about \$14 million for a covered population of more than 200,000 Medicare beneficiaries,⁷ and Medicare administrators expect larger savings as the research proceeds. Other researchers believe that a well-structured payment system has the potential to remove a quarter or more of low-value spending from Medicare's costs.⁸

Given this range of views and estimates, we chose to incorporate the conservative assumption that these sorts of value-based reimbursement systems in Medicare have the potential to reduce hospital and physician costs by

approximately 1 percent, which is roughly consistent with the early returns on Medicare's test of the concept (see Table 5).

We further assumed that these savings would spur additional savings in private insurance costs, both directly through Medigap coverage, and indirectly because the new Medicare value-purchasing efforts would help validate current private sector efforts in this area and would encourage receptiveness to the new payment systems among health care providers. Thus the additional savings potential in the private sector was assumed to be equivalent to that assumed in Medicare (1 percent), but would take effect with a 5-year lag.

We assumed that the savings would spill over to out-of-pocket costs at the same rate as they affect private insurance and Medicaid. The sectors affected by this potential savings were physician, hospital, and other professional health services.

TABLE 5. POTENTIAL SAVINGS: VALUE-BASED REIMBURSEMENT, SELECTED YEARS

	2010	2015	2020	2025
Hospital Savings (Billions)	-1	-6	-15	-21
Percent of Hospital Spending	-0.1%	-0.5%	-0.9%	-0.9%
Physician Savings (Billions)	0	-4	-9	-12
Percent of Physician Spending	0.0%	-0.5%	-0.9%	-0.9%
National Health Expenditures (Billions)	-1	-11	-25	-34
Percent of National Health Expenditures	-0.0	-0.3%	-0.5%	-0.5%

Source: America's Health Insurance Plans and PricewaterhouseCoopers.

Note: Items may not sum to national health spending totals due to rounding and a small amount of estimated savings in categories of health spending not shown.

⁷See, for example, *New York Times*, "Shift in Health-Cost Focus is Said to Show Promise," July 12, 2007. More information about the Medicare Care Management Performance Demonstration is available at <http://www.cms.hhs.gov/DemoProjectsEvalRpts/MD/itemdetail.asp?itemID=CMS1198950>.

⁸See, for example, Wennberg et al, "Geography and the Debate Over Medicare Reform," *Health Affairs*, Web Exclusive (February 13, 2002).

DISEASE MANAGEMENT, CHRONIC DISEASE PREVENTION, AND WELLNESS ACTIVITIES

In recent years, the burden of chronic disease has come more clearly into focus. Much of the expected growth in health care spending will come from treating the substantial increase in the number of Americans with cancer, heart disease, diabetes, and other chronic illnesses. New research shows that this need not be the case. A major nationwide emphasis on healthier living could dramatically cut these costs.

For example, a new Milken Institute study carefully analyzed the potential reduction in health care spending from a concerted prevention and wellness effort.⁹ According to the study, direct health care spending would be \$217 billion lower in 2023 if the nation embarked on an ambitious plan to encourage proper nutrition and exercise.

For this report, PricewaterhouseCoopers has estimated that net achievable savings from improved disease management, chronic disease prevention, and wellness activities could total

over \$200 billion by 2025, or 2.7 percent of NHE (see Table 6). To achieve these savings, a substantial investment in prevention, disease management, and chronic care improvements would be necessary. For example, PwC estimates that potential savings in insured and out-of-pocket costs would be 4.3 percent of NHE, but that administrative costs would have to be raised by 1.6 percent of NHE to achieve those savings. Moreover, to be effective, these new administrative costs would have to be backed up with innovative policies that could include rewards for compliance and penalties for non-compliance.

These estimates are more uncertain than others in part because they rely on widespread behavioral changes that may prove particularly difficult to bring about. However, the potential savings estimated by PwC and Milken signal that the results would be well worth the effort.

TABLE 6. POTENTIAL SAVINGS: DISEASE MANAGEMENT, CHRONIC DISEASE PREVENTION, AND WELLNESS ACTIVITIES, SELECTED YEARS

	2010	2015	2020	2025
Hospital Savings (Billions)	-6	-40	-85	-162
Percent of Hospital Spending	-0.6%	-3.3%	-5.1%	-7.0%
Physician Savings (Billions)	-3	-20	-42	-81
Percent of Physician Spending	-0.5%	-2.6%	-4.1%	-5.9%
Prescription Drug Savings (Billions)	-2	-16	-34	-65
Percent of Prescription Drug Spending	-0.8%	-3.5%	-4.7%	-5.6%
Administrative and Implementation Costs (Billions)	5	33	66	122
Percent of Administrative Costs	2.2%	11.9%	18.4%	26.1%
National Health Expenditures (Billions)	-7	-47	-103	-202
Percent of National Health Expenditures	-0.2%	-1.2%	-1.9%	-2.7%

Source: America's Health Insurance Plans and PricewaterhouseCoopers.

Note: Items may not sum to national health spending totals due to rounding and a small amount of estimated savings in categories of spending not shown.

⁹DeVol, R. et al, "An Unhealthy America: The Economic Burden of Chronic Disease — Charting a New Course to Save Lives and Increase Productivity and Economic Growth." Milken Institute, October 2007.

TABLE 7. SAVINGS FROM ALL AHIP AFFORDABILITY PROPOSALS, BY SOURCE OF FUNDS

	Selected Years			
	2010	2015	2020	2025
National Health Expenditures (NHE) Baseline Projections and Extrapolation by AHIP (Billions of Current Dollars)				
Private Health Insurance Benefits	816	1,120	1,508	2,035
Medicare	529	760	1,121	1,668
Medicaid	389	578	862	1,294
Out-of-Pocket and Other Government (Net)	836	1,135	1,543	2,119
Administration	206	282	361	467
National Health Expenditures	2,776	3,875	5,395	7,582
Potential Savings from AHIP Affordability Proposals (Billions of Current Dollars)				
Private Health Insurance Benefits	-5	-79	-193	-323
Medicare	-5	-58	-141	-252
Medicaid	-3	-29	-74	-130
Out-of-Pocket and Other Government (Net)	-1	-30	-74	-127
Administration	17	51	89	151
National Health Expenditures	3	-145	-393	-681
Potential Savings as a Percent of Baseline Spending				
Private Health Insurance Benefits	-0.6%	-7.0%	-12.8%	-15.9%
Medicare	-1.0%	-7.6%	-12.6%	-15.1%
Medicaid	-0.7%	-5.1%	-8.6%	-10.0%
Out-of-Pocket and Other Government (Net)	-0.1%	-2.6%	-4.8%	-6.0%
Administration	8.4%	18.1%	24.6%	32.3%
National Health Expenditures	0.1%	-3.7%	-7.3%	-9.0%

Source: America's Health Insurance Plans and PricewaterhouseCoopers.

Notes: The potential savings from AHIP's affordability proposals are due to improvements in five areas: (1) comparative effectiveness research and information; (2) health information technology (HIT); (3) medical liability reform and reductions in defensive medicine; (4) value-based reimbursement; and (5) disease management, chronic disease prevention, and wellness activities. The savings estimates are net of insurers' and health care providers' administrative costs, and they include a small reduction to account for "overlap" in savings estimates among the five areas. The estimates do not include the costs of administering comparative effectiveness programs or the potential costs or savings from the proposed program for experimental treatments. Components may not sum to totals due to rounding.

TABLE 8. SAVINGS FROM ALL AHIP AFFORDABILITY PROPOSALS, BY TYPE OF SPENDING

	Selected Years			
	2010	2015	2020	2025
National Health Expenditures (NHE) Baseline and Extrapolation by AHIP (Billions of Current Dollars)				
Hospital Spending	861	1,207	1,672	2,323
Physician	577	775	1,028	1,363
Prescription Drugs	291	454	722	1,156
Other Health Care and Investment	841	1,158	1,613	2,273
Administration	206	282	361	467
National Health Expenditures	2,776	3,875	5,395	7,582
Potential Savings from AHIP Affordability Proposals (Billions of Current Dollars)				
Hospital Spending	-13	-126	-308	-521
Physician	2	-47	-125	-214
Prescription Drugs	-2	-17	-38	-76
Other Health Care and Investment	-1	-5	-10	-20
Administration	17	51	89	151
National Health Expenditures	3	-145	-393	-681
Potential Savings as a Percent of Baseline Spending				
Hospital Spending	-1.5%	-10.5%	-18.4%	-22.4%
Physician	0.3%	-6.1%	-12.2%	-15.7%
Prescription Drugs	-0.8%	-3.7%	-5.2%	-6.6%
Other Health Care and Investment	-0.1%	-0.4%	-0.6%	-0.9%
Administration	8.4%	18.1%	24.6%	32.3%
National Health Expenditures	0.1%	-3.7%	-7.3%	-9.0%

Source: America's Health Insurance Plans and PricewaterhouseCoopers.

Notes: The potential savings from AHIP's affordability proposals are due to improvements in five areas: (1) comparative effectiveness research and information; (2) health information technology (HIT); (3) medical liability reform and reductions in defensive medicine; (4) value-based reimbursement; and (5) disease management, chronic disease prevention, and wellness activities. The savings estimates are net of insurers' and health care providers' administrative costs, and they include a small reduction to account for "overlap" in savings estimates among the five areas. The estimates do not include the costs of administering comparative effectiveness programs or the potential costs or savings from the proposed program for experimental treatments. Components may not sum to totals due to rounding.



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