ALLIANCE FOR EXCELLENT EDUCATION

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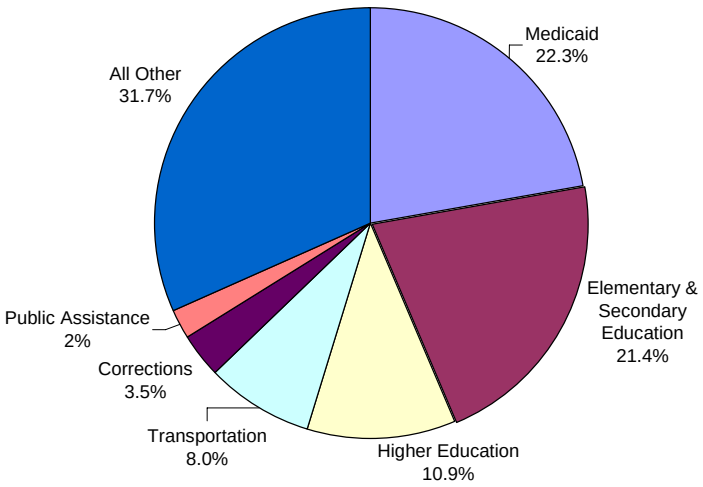
Healthier and Wealthier: Decreasing Health Care Costs by Increasing Educational Attainment

In the past, states spent more on K–12 education than on any other budget item. However, in recent years, rising medical costs have changed this pattern; in 2003, health care expenses surpassed education as the largest item in states' budgets. In fiscal year 2006, Medicaid alone is estimated to account for approximately 22 percent of total state spending, while all health care costs will account for about 32 percent of states' expenditures (National Governors Association & National Association of State Budget Officers, 2006). These costs keep going up, and absent some drastic change, there is every indication that they will continue to outpace most states' economic growth (Pew Research Center, 2006).

State Expenditures for Fiscal Year 2004



Source: National Governor Association & National Association of State Budget Officers, 2006

In general, individuals with lower income, less education, and lower-status occupations and employment have poorer health (National Institutes of Health, 2003). Therefore, it would seem that raising educational levels would reduce health-related expenditures for the public sector, as well as for individuals. Specifically, research has shown that each student who graduates from high school, instead of dropping out before getting a diploma, will save states an average of $13,706 (in 2005 dollars) in Medicaid and expenditures for uninsured care over the course of his lifetime (Muennig, 2006). Savings like that add up quickly. **If the approximately 1.2 million young people who are estimated to drop out of school in the United States this year earn diplomas, states could save more than $17 billion over the course of those young people's lifetimes.** Furthermore, similar savings could accrue for every class of high school students who graduate rather than drop out, producing an annual repetition of the boon to our nation's coffers. These savings would also translate into better health and improved life prospects for the nation's citizens.

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Education Improves Health

Health care costs incurred by states could be greatly reduced if high schools around the country better prepared more students for the challenges of postsecondary education and the workforce. Higher educational attainment increases a student's future income, occupational status, and social prestige, all of which contribute to improved health. The United States spends more than any other country on health care, and many Americans have access to the finest physicians and facilities in the world. However, Americans do not benefit equally from the care that is available. The disparities do reflect socioeconomic patterns but are actually most closely correlated with educational attainment (Anderson et al., 2005). A variety of interrelated factors explain this relationship.

People with lower educational attainment have less insurance coverage. Nationwide, 45.8 million people, or 15.7 percent of the population, have no health insurance at all (U. S. Census Bureau, 2006). Individuals with low levels of education are considerably less likely to have health insurance; they are also more likely to have only limited or erratic coverage, or to be uninsured for long periods of time (Kaiser Commission on Medicaid and the Uninsured, 2006). In many states, few adults (ages eighteen to sixty-four) are eligible for Medicaid coverage.

Individuals who lack health insurance receive less medical care and have poorer health outcomes. Uninsured adults with chronic illnesses are far less likely to receive care and necessary prescriptions than insured adults (Davidoff & Kenney, 2005). These individuals are generally in poorer health when first diagnosed with an illness, and the combination of late diagnosis and less consistent care leads to poorer outcomes (Hadley, 2003). Poor health means that those without insurance often have more difficulty finding employment, particularly higher paying jobs with good health benefits. Because they either lack employment or earn less due to poor health, they have more difficulty affording health care. As a result, their illnesses are often more severe and they tend to die younger than do insured people (Gladwell, 2005).

Education leads to healthier lives. It's not just access to health insurance that yields better outcomes for better educated people. Education has other important effects on people's lives: it improves earning power and social status, and it also affects cognitive ability (Goesling, 2005). These factors influence lifestyle choices, knowledge and understanding of health issues, and the health-related decisions that people make. Better educated people are more able to follow doctors' instructions successfully and to navigate medical bureaucracy. In addition, the occupations of people with lower educational attainment are generally more dangerous and expose workers to greater health hazards, from heavy machinery and chemicals to shifts that disrupt sleep cycles (Muennig, 2005; Winkleby et al., 1992).

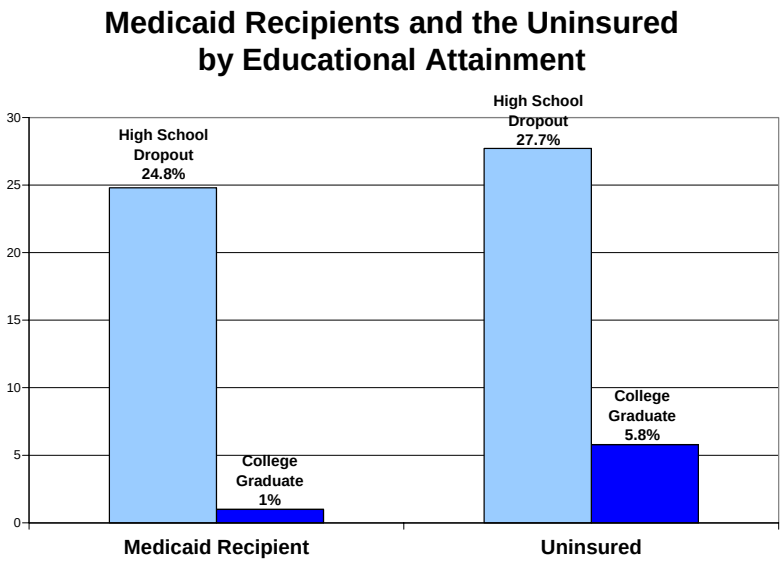
The consequences of educational disparities are striking: adults with low educational attainment are more likely to die precipitately from cardiovascular disease, cancer, infection, lung disease, and diabetes, for example (Muennig, 2005). On average, a high school graduate lives six to nine years longer than a dropout (Wong et al., 2002).

Saving on Health Care by Improving Educational Attainment

In an analysis commissioned by the Alliance for Excellent Education, Dr. Peter Muennig, assistant professor at Columbia University's Mailman School of Public Health, estimated how much states could save on health care by improving educational attainment. Specifically, Muennig examined the ways in which costs for Medicaid and uninsured care vary depending on the education of individuals.

Because educated people are less likely to receive Medicaid assistance and more likely to be insured, Muennig found that costs decrease with each level of educational attainment—that is, college graduates have better health and lower medical costs than high school graduates, while high school graduates have better health and lower medical costs than high school dropouts.

Muennig estimated how many people enroll in Medicaid or are uninsured for some or all of their adult lives at each level of educational attainment. Using data from the 2003 Medical Expenditure Panel Survey, Muennig found, for example, that college graduates are far less likely to be enrolled in Medicaid or to be uninsured than are high school dropouts, as shown in the graph below (Agency for Healthcare Research and Quality, 2003).



While Medicaid enrollment requirements and the federal contribution differ in each state, the annual cost to states of Medicaid per enrollee, on average, is $8,045 (in 2005 dollars). To calculate how much could be saved by each state in Medicaid costs if high school dropouts became high school graduates, Muennig considered the diminishing chance that an individual will enroll as he advances in educational attainment, as well as variations such as the level of each state's contribution to Medicaid (Centers for Medicare and Medicaid Services, 2004). Muennig used this state-specific data to estimate the amount that would be saved for each additional young person in each state who graduates from high school. Stated another way, Muennig estimated what a dropout between the ages of twenty and sixty-five would likely have cost each state in Medicaid expenditures.[1] Differences in each state's contribution to Medicaid cause the lifetime savings per graduate to vary considerably by state—from a low of $7,026 in Mississippi to a high of $15,143 for Colorado, Connecticut, Delaware, Illinois, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, and New York.[2]

Estimating the potential savings in costs for uninsured care is a more complex process because adult individuals may be uninsured for varying lengths of time, and may have more than one period of being uninsured over their lifetimes. In addition, the care they receive while uninsured may be paid for in a variety of ways, including through federal, state, and local programs; charities; or by the uninsured individual and/or his family. A variety of options for calculating these costs is available, and Muennig used a state-by-state analysis of annual uninsured costs conducted by Kenneth Thorpe in 2005. He estimated a per high school graduate cost savings over a lifetime for uninsured care, matching the criteria used above for Medicaid cost estimates. Again, the results vary from state to state, from a low of $724 in California to a high of $1,179 in West Virginia.

Potential state savings across the lifetime of a single individual are significant—California, for example, could save $14,637 in Medicaid, and $724 in uninsured costs, for a total of $15,361 per additional graduate. According to this analysis, California's total lifetime health savings, if all students in the Class of 2005–2006 graduated from high school—as opposed to that state's current 71 percent—would be over $2.3 billion. The specific findings for each state and the District of Columbia are presented in the chart on page 5.

As this analysis shows, states could save over $17 billion nationally, a savings that could be earned for each class of students who graduate high school rather than drop out. This potential public benefit is just one among a multitude of positive results that would accrue to society if America's educational system successfully educated *all* of its students—instead of allowing over a million youth to drop out without a diploma each year. A citizenry that is not only healthier, but also wealthier and wiser, is an asset that every state, and the country as a whole, needs.

For more information about the state of America's high schools and to find out what individuals and organizations can do to support effective reform at the local, state, and federal levels, visit the Alliance for Excellent Education's website at www.all4ed.org.

MetLife Foundation

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[1] While many senior citizens are dually eligible for Medicare and Medicaid, costs occurring beyond the age of sixty-five were not considered. The average twenty-year-old high school graduate in 2006 will reach the age of sixty-five in 2051. Therefore, discounting renders any cost savings beyond the age of sixty-five small and uncertain.

[2] This analysis accounts for state-by-state variation in the proportion of Medicaid paid for by the state government and the proportion paid for by the federal government. However, it does not account for state-by-state differences in eligibility for Medicaid enrollment, which can result in some variations to these calculations.

Lifetime Savings for Medicaid and Uninsured Medical Coverage Costs if All Students in the Class of 2005–2006 Graduated from High School*

State	State Medicaid Savings per Additional Graduate	State Uninsured Savings per Additional Graduate	Total Health Savings per Additional Graduate	Total Lifetime Health Savings if All Students in the Class of 2005–2006 Graduated
Alabama	$9,216	$896	$10,112	$244,976,155
Alaska	$12,175	$1,058	$13,233	$57,227,676
Arizona	$10,321	$767	$11,088	$265,371,426
Arkansas	$8,222	$908	$9,131	$93,711,844
California	$14,637	$724	$15,361	$2,325,813,659
Colorado	$15,143	$981	$16,124	$279,681,701
Connecticut	$15,143	$882	$16,025	$155,376,012
Delaware	$15,143	$809	$15,951	$65,253,148
District of Columbia	$9,086	$873	$9,959	$19,936,815
Florida	$13,077	$843	$13,920	$1,478,297,933
Georgia	$12,150	$834	$12,985	$746,414,155
Hawaii	$14,837	$988	$15,825	$92,725,623
Idaho	$9,040	$937	$9,977	$45,299,607
Illinois	$15,143	$1,001	$16,143	$647,038,335
Indiana	$11,587	$1,140	$12,727	$283,844,559
Iowa	$11,187	$1,038	$12,226	$84,369,080
Kansas	$12,105	$834	$12,939	$125,849,103
Kentucky	$8,919	$1,056	$9,975	$161,809,671
Louisiana	$8,989	$964	$9,953	$226,748,320
Maine	$10,230	$749	$10,980	$48,612,191
Maryland	$15,143	$901	$16,044	$307,090,433
Massachusetts	$15,143	$731	$15,873	$363,462,657
Michigan	$13,595	$957	$14,552	$750,225,999
Minnesota	$14,694	$750	$15,444	$224,361,106
Mississippi	$7,026	$872	$7,899	$121,181,083
Missouri	$11,960	$840	$12,799	$245,082,419
Montana	$8,389	$1,109	$9,498	$29,816,152
Nebraska	$11,848	$1,009	$12,857	$68,591,505
Nevada	$15,143	$866	$16,009	$230,138,920
New Hampshire	$15,143	$894	$16,036	$63,611,493
New Jersey	$15,143	$850	$15,993	$258,570,959
New Mexico	$8,080	$842	$8,922	$111,497,630
New York	$15,143	$810	$15,953	$1,503,489,117
North Carolina	$11,360	$995	$12,355	$491,596,702
North Dakota	$8,958	$935	$9,893	$15,199,403
Ohio	$12,517	$1,019	$13,535	$502,149,154
Oklahoma	$8,755	$951	$9,706	$137,600,879
Oregon	$12,126	$1,002	$13,128	$185,189,904
Pennsylvania	$13,986	$1,054	$15,040	$505,489,593
Rhode Island	$14,001	$828	$14,829	$56,942,990
South Carolina	$9,101	$873	$9,973	$320,071,956
South Dakota	$9,473	$975	$10,448	$27,919,252
Tennessee	$11,175	$1,007	$12,182	$350,253,748
Texas	$11,702	$831	$12,533	$1,560,947,102
Utah	$8,616	$809	$9,425	$79,164,588
Vermont	$11,436	$727	$12,163	$19,404,276
Virginia	$14,637	$886	$15,523	$396,903,408
Washington	$14,588	$1,043	$15,632	$436,119,866
West Virginia	$7,638	$1,179	$8,817	$55,280,830
Wisconsin	$12,484	$979	$13,462	$202,425,026
Wyoming	$10,891	$917	$11,808	$22,752,102
United States			**$13,706**	**$17,090,887,263**

* Health-related savings were calculated by Dr. Peter Muennig, who estimated the difference in the percentage of people receiving Medicaid and the percentage of people who are uninsured by educational attainment. Muennig also estimated the average cost of a Medicaid recipient and the average cost of an uninsured person to state governments and determined lifetime costs for high school dropouts, high school graduates, those who attended some college, and college graduates. State Medicaid savings and uninsured savings over the lifetime of an additional high school graduate combine to the total lifetime health savings per additional graduate. The total savings per additional graduate was multiplied by the estimated number of additional students who would earn a diploma if high school graduation rates were increased from the current state rate to 100 percent in the 2005–2006 school year (Editorial Projects in Education, 2006; U. S. Department of Education, National Center for Education Statistics, 2003) to calculate the total health savings if all students in the Class of 2005–2006 graduated on time.

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