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# Investments in Education Are Investments in Health: *The Federal Perspective*

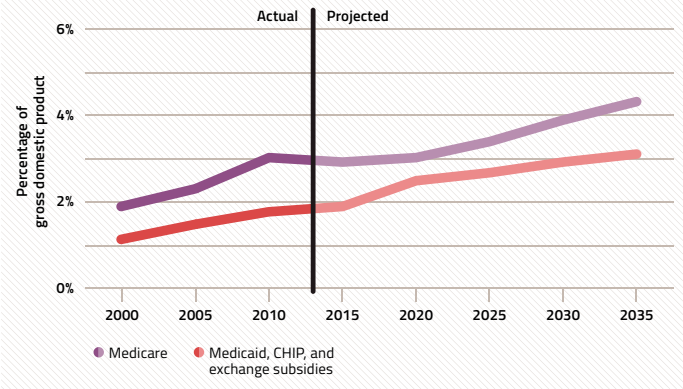
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## Can we spend less on health care by investing in education?

The nation spends about \$2.7 trillion on health care, nearly 18 percent of the nation's gross domestic product (GDP). Entitlement programs for health—such as Medicare and Medicaid—account for 23 percent of all federal outlays<sup>1</sup> and spending on these programs is expected to increase nearly 6 percent per year over the next decade (see Figure 1).<sup>2</sup> These increases put pressure on federal discretionary spending, including education. **What many fail to realize, however, is that education and health are intrinsically linked. Investments in education are investments in health—and can potentially lower health care spending.**

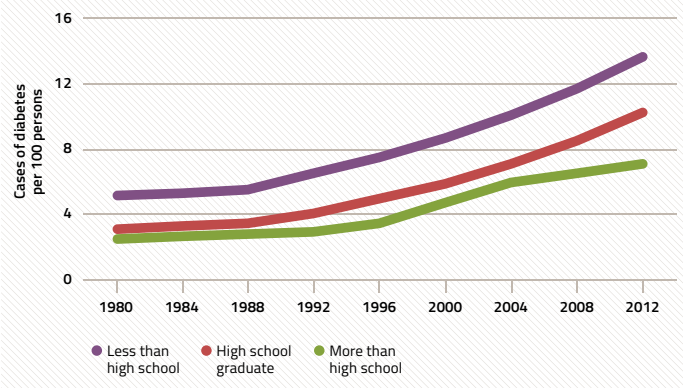
**Federal outlays for health care go disproportionately to the care of people with limited education, who tend to be sicker and require more intensive care.** Two thirds of Medicare beneficiaries have multiple chronic diseases, which account for 93 percent of spending.<sup>3</sup> These chronic conditions, like diabetes and cardiovascular diseases, occur at much higher rates for people with a high school education or less.<sup>4-6</sup> Diabetes alone, which costs Medicare and Medicaid nearly \$110 billion annually,<sup>7</sup> occurs in 12.2 percent of adults with less than a high school education (see Figure 2),<sup>8</sup> compared to 3.4 percent for those with a Bachelor’s degree.<sup>5</sup>

Figure 1. Entitlement spending on health care is claiming a larger share of the gross domestic product



Source: Congressional Budget Office, *The 2014 Long-Term Budget Outlook*. [www.cbo.gov/publication/45471](http://www.cbo.gov/publication/45471)

Figure 2. The prevalence of diabetes is increasing, especially among people with less educational attainment



Source: Geiss et al. *JAMA* 2014;312:1218-26.

**Education can improve health and help control the costs of health care** (see Figure 3). Every additional year of education is associated with a host of improved health outcomes.<sup>9-12</sup> Education may decrease the frequency of chronic diseases.<sup>5,13</sup> Increasing educational attainment is associated with healthier behaviors related to exercise, smoking, and alcohol use.<sup>12,14,15</sup> And education is important for obtaining jobs that include health benefits, such as health insurance coverage, and the income to not only live a healthier lifestyle but also live in neighborhoods that promote good health.<sup>15,16</sup> (See additional information [HERE](#)).

According to one study, if the health status of less-educated Americans were the same as that of their college-educated peers, the related improvements in health would save more than **a trillion dollars annually**.<sup>17</sup> For example, among African American men, each additional high school graduate could save more than \$30,000 per graduate in lifetime health costs.<sup>18</sup> With an estimated 200,000 African American young men who do not complete high school,<sup>19</sup> this could mean savings of more than \$6 billion in total health costs each year.

**THE LARGER RETURN ON INVESTMENT FROM EDUCATION**

The economic implications of a healthier, more educated population—and thus the return on investment—go beyond spending on health care and could result in a more productive workforce, lower unemployment rates, improved earnings and tax revenue, and a stronger economy (see Figure 4). The collective return on investment could spill out to other areas of federal spending. For example, halving the number of 20-year-olds who do not complete high school could save up to \$45 billion across multiple sectors, including health, criminal justice, and welfare.<sup>20</sup> Improving education, as well as reducing unemployment and improving housing, may be more important to improving health than spending in the health sector alone.<sup>21</sup>

Figure 3. More funding for education may work as a counterweight to rising health care costs by improving health

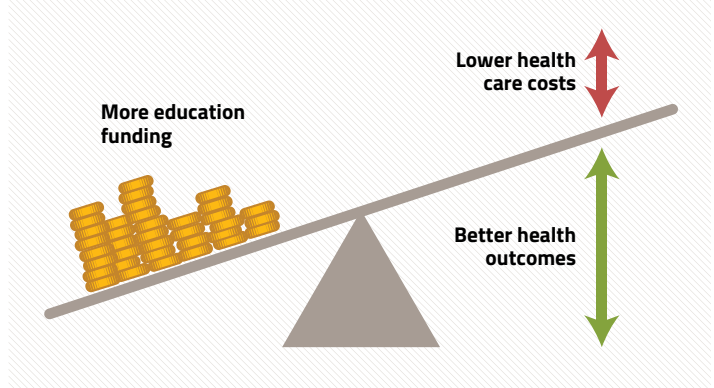


Figure 4. Beyond improving health, education brings broader economic returns



### SHORT-TERM AND LONG-TERM BENEFITS

Investments in education have the potential to curb health entitlement spending in both the short- and long-run. For example, extending the length of the preschool day improves the physical health of children,<sup>22</sup> and Head Start programs are associated with reductions in childhood<sup>23,24</sup> and adolescent<sup>25</sup> obesity. Nearly 17 percent of children and adolescents are obese,<sup>26</sup> making them more likely to require health care<sup>27</sup> and to miss school.<sup>28</sup>

In the longer term, investments in education can save Medicaid and Medicare entitlement dollars by reducing the number of beneficiaries with costly chronic diseases, such as diabetes, obesity, and cardiovascular disease. In fact, treating diabetes costs approximately \$85,000 over the lifetime of a diabetic patient<sup>29</sup> and \$1.77 trillion to the U.S. economy.<sup>29,30,i</sup> Overweight and obese Americans cost the country more than \$110 billion annually, accounting for 5–10 percent of national health care costs.<sup>31</sup> The U.S. spends nearly 17 percent of its health care dollars on cardiovascular diseases, representing \$149 billion per year.<sup>32</sup> Among Medicare beneficiaries, four of the five most common chronic conditions are preventable and could occur at lower rates with increased educational attainment.<sup>3</sup> Among adult Medicaid enrollees, at least 3 in 10 have a preventable chronic condition that could also occur at lower rates with increased educational investments.<sup>33</sup>

### INVESTING IN EDUCATION IS INVESTING IN OPPORTUNITY FOR AMERICA

Education is key to creating economic opportunity. We know that education can improve health and healthier workers are more productive. In today's knowledge economy, young people need education for better jobs, and American businesses need an educated workforce to compete in the global marketplace.

The bottom line: strategic investment in education is important for the economic wellbeing of the country—but the return on these investments also includes enormous health benefits and their impact on soaring health care costs. Cutting spending on education to pay for health care could be counterproductive.

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i \$85,000<sup>29</sup> x 20.8 million Americans living with diabetes<sup>30</sup> = \$1.77 trillion.

## Other issue briefs from the Education and Health Initiative

### HOW BIG OF AN ISSUE IS THIS?

#### ISSUE BRIEF 1: The Growing

**Importance of Education:** Education matters more to health now than it ever has before. Today, people with less education live shorter lives with worse health and greater disability than their more educated peers. Education is important not only for higher paying jobs and economic productivity, but also for saving lives and saving dollars. Policies that address early child care, housing, transportation, food security, unemployment, and economic development are important to improving the deteriorating health of Americans with fewer years of education.

### WHAT'S CAUSING THIS?

#### ISSUE BRIEF 2: Exploring the

**Causes:** The full “back story” on the links between education and health are complex. This issue brief expands upon the interconnections between education and health alongside the perspectives of residents of a disadvantaged urban community in Richmond, Virginia.

### WILL HEALTH CARE REFORM SOLVE THE PROBLEM?

#### ISSUE BRIEF 3: Health Care:

**Necessary but Not Sufficient:** Efforts to achieve improved access to health care and health insurance are vital, but they cannot erase the health gaps related to education. Evidence from integrated health systems where all members have access to care still show that college-educated patients have better outcomes than those with less education.

### THE EDUCATION AND HEALTH INITIATIVE

This issue brief is a product of the Education and Health Initiative (EHI), a program of the Virginia Commonwealth University Center on Society and Health, supported by the Robert Wood Johnson Foundation.

- Launched in September 2012, the aim of the EHI is to raise awareness about the important connections between education and health.
- We “connect the dots” between distinct education and health policy spaces.
- We meet with leaders in government and the private sector—at the national, state, and local level—to explore the ties between education and better health.
- We produce online media and issue briefs to explore specific themes and stimulate discussion.

### THE CENTER ON SOCIETY AND HEALTH

The VCU Center on Society and Health is an academic research center that studies the health implications of social factors—such as education, income, neighborhood and community environmental conditions, and public policy. Its mission is to answer relevant questions that can “move the needle” to improve the health of Americans. We present our work in formats and venues that are useful to decision-makers and change agents. The Center pursues these goals through collaboration with scholars in different disciplines at VCU and other institutions, and by nurturing partnerships with community, government, and private-sector stakeholders.

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