#### 1

# 19.1 US HEALTH SPENDING APPEARS TO PROVIDE GOOD VALUE FOR THE MONEY\*

### Christopher Conover

This work is produced by Medical Industry Leadership Institute Open Education Hub and licensed under the Attribution  $3.0^{\dagger}$ 

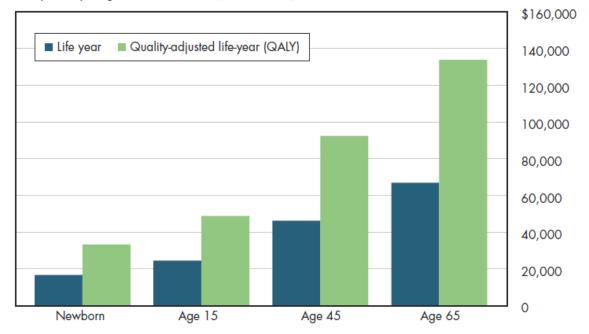
#### Abstract

Health spending in recent decades appears to have been "worth it" on average, but this likely masks much wasted spending.

The United States appears to have attained good value for the money from the trillions of dollars spent on health care since 1987 (figure 19.1a). The average cost-effectiveness of this sizable expenditure is only approximate because certainty about how much of the gain in life expectancy over this period can be attributed to medical care is not achievable.

## 19.1a Even after accounting for the resources spent to add a year of healthy life, U.S. health spending appears to provide good value for the money

Cost per life-year gained, 1987-2000 (2000 dollars)



<sup>\*</sup>Version 1.1: Sep 24, 2013 3:19 pm -0500

 $<sup>^\</sup>dagger$ http://creativecommons.org/licenses/by/3.0/

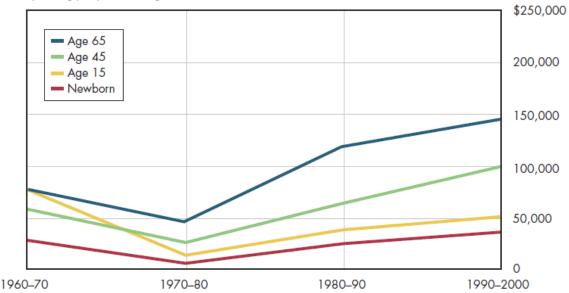
Studies of individual factors (for example, infant mortality and mortality due to heart problems) suggest that medical care improvements have been responsible for at least half of the observed mortality reductions during this time. Thus, the numbers in figure 19.1a result from an assumption that half of life expectancy gains are from expenditures on medical care, as opposed to investments in highway safety, changes in drunk driving laws, speed limits, and other non-medical factors that surely also made a contribution.

Even precisely specifying the exact contribution of health spending to better health, some might disagree about what threshold to use to distinguish spending that was cost-effective from that which was not. Medicare spends approximately \$75,000 a year on kidney dialysis for each patient who has end-stage renal disease. Without it, such patients would die. Thus, a minimum estimate of the value of life in the United States (implied by our willingness to pay for it) is \$75,000 per year. As figure 19.1a shows, spending for all age categories was less than this threshold. Thus, on average, we apparently received good value for the money from health spending.

However, not all added years of life are lived in good health (for example, added years for someone who is bedridden). A quality-adjusted life-year (QALY) is one in good health, that is, two years in bed might be viewed as one QALY. For the elderly, spending per added QALY was more than \$130,000. Reasonable people can disagree about whether such spending was worthwhile.

A somewhat less-detailed analysis has examined health spending since 1960. This too shows mixed results. Spending per added year of life generally was less than the \$75,000 threshold for most ages and times (figure 19.1b). Again, this suggests that health spending provided good value for the money on average, but the cost to achieve an added year of life appears to be increasing. Even being cost-effective on average does not mean that there is no waste or inefficiency in how we spend health dollars.

19.1b On average, increases in U.S. health spending appear to have provided reasonable value for the money



Spending per year of life gained (2002 dollars)

Note: Spending per year of life gained is defined by the change in spending over each decade divided by the change over the decade in expected years of life at the ages shown.

#### 1 Downloads

Download PowerPoint versions of both figures.

- Figure 19.1a Image Slide (as it appears above)<sup>1</sup>
- Figure 19.1a Editable Slide (can be formatted as desired)<sup>2</sup>
- Figure 19.1b Image Slide (as it appears above)<sup>3</sup>
- Figure 19.1b Editable Slide (can be formatted as desired)<sup>4</sup>

#### 2 References

- A. Cutler DM. A Health Report Card for the Nation. ASHE Presentation. June 6, 2006. http://healtheconomics.us/conferent madison.ppt (accessed August 18, 2010).
- B. Cutler DM, A Rosen and S Vijan. The Value of Medical Spending in the United States, 1960-2000. The New England Journal of Medicine 2006; 355(9):920-28.

 $<sup>{^1}</sup>http://https://hub.mili.csom.umn.edu/content/m10060/latest/19.1aIMG.ppt$ 

<sup>&</sup>lt;sup>2</sup>http://https://hub.mili.csom.umn.edu/content/m10060/latest/19.1aDATA.ppt

<sup>&</sup>lt;sup>3</sup>http://https://hub.mili.csom.umn.edu/content/m10060/latest/19.1bIMG.ppt

<sup>&</sup>lt;sup>4</sup>http://https://hub.mili.csom.umn.edu/content/m10060/latest/19.1bDATA.ppt