

# Life Expectancy Is Better Than Age as a General Predictor of Health Care Expenditures

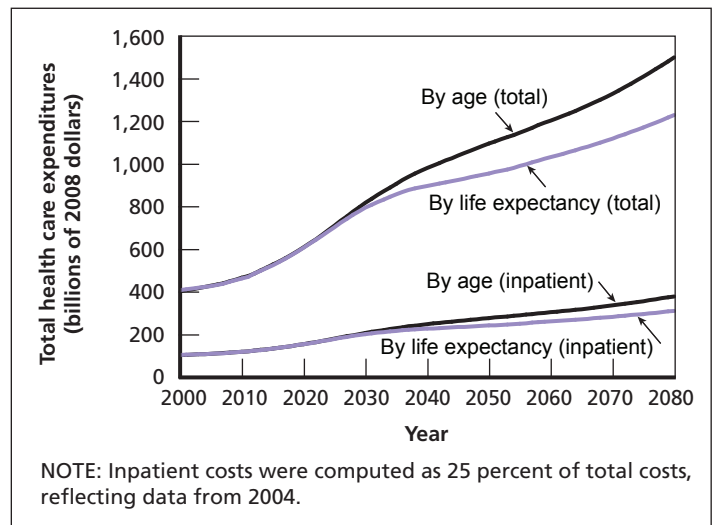
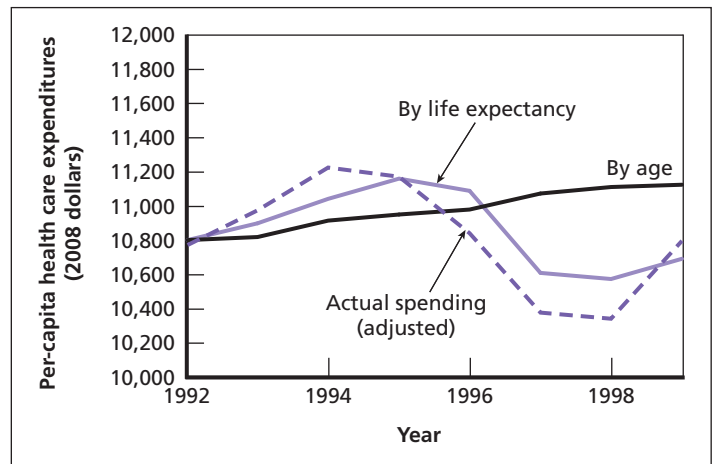
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Increasing longevity, coupled with declining fertility rates, will substantially increase the number of U.S. octogenarians. Given the link between age and health care costs, some researchers have predicted that, as a result, health care costs will rise sharply.

A RAND Health team used the 1992–1999 Medicare Current Beneficiary Survey to investigate whether age directly affects health care costs, or whether life expectancy would produce more accurate estimates of future expenditures. The analysts also examined whether including information about health status affected the predictive power of age or life expectancy. The study came to the following conclusions:

- Life expectancy is a better predictor of health care expenditures than age. Expenditure estimates based on life expectancy match actual expenditures more closely than age-based estimates (see the top figure).
- Neither age nor life expectancy has strong predictive power if health status is included in the model.
- Expenditure projections based on life expectancy are lower than age-based projections (see the bottom figure). The gap between estimates increases as life expectancy increases (life expectancy at birth is projected to increase from 77.5 in 2008 to 79.7 in 2040 and to 82.0 in 2080). For example, in 2040, age-based projections of total expenditures are 9 percent higher than projections based on life expectancy; in 2080, age-based estimates are 22 percent higher.

If people are living longer because medical technology, high-quality health care, healthy individual behaviors, and decreased environmental hazards (among other factors) improve health, then future Medicare beneficiaries will be healthier than current beneficiaries and projections based on age will overestimate future health care expenditures. If technology is keeping people alive longer, but in poor health, then projections based on life expectancy will underestimate future health care expenditures. The study found evidence supporting the former.



NOTE: Inpatient costs were computed as 25 percent of total costs, reflecting data from 2004.

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**Headquarters Campus**  
 1776 Main Street  
 P.O. Box 2138  
 Santa Monica, California  
 90407-2138  
 TEL 310.393.0411  
 FAX 310.393.4818

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