

Assessing the Value of Health Care in Tennessee

Are We Getting Our Money's Worth?

More Medicine Can't Fix Everything

Access to Additional Medical Care Does Not Necessarily Equal Better Health

Americans want access to the best medical care available, and certainly, spending on health care in the United States reflects this desire. The U.S. currently spends more than any other nation on health care as a percentage of Gross Domestic Product. Money alone, however, cannot always provide all the answers for health care needs. In fact, to a certain degree, overspending may actually be harming the nation's overall health.

Could it be that overspending tends to be more a result of capacity, rather than need? In an earlier white paper in this series,¹ BlueCross BlueShield of Tennessee noted that Roemer's Law indicates that this may, indeed, be the case. The law states that, "The capacity to provide health care drives the demand for health care." Simply stated, Roemer's Law maintains that health care capacity is usually used, regardless of need. This premise has been easily demonstrated by a Dartmouth study which found that where hospital bed capacity was highest, cost was also high.²

Many people seem to think that if there is even a remote possibility that a medical service may help someone, it should be used, despite mounting evidence that medical services can also be harmful.³

The Law of Diminishing Returns

The Surprising Outcome of Too Much Health Care

A continuous relationship exists between health status and the level of investment in health care. The higher the level of investment, the lower the level of return. In particular, once health care spending has reached a set amount of investment (\$1,760 per capita—according to information from the World Health Organization), the statistics suggest that disability-adjusted life expectancy actually begins to decrease.⁴ What this means is that, on average, at the health care spending levels that exist in the United States, the return in life expectancy is either zero or, actually, negative.

Tennessee's per capita health expenditures are higher than the United States average and, as might be expected from the WHO findings, the state also has a lower disability adjusted life expectancy.

For example, there is a significant association between increasing mortality rates when it comes to unintended injury* and increased access to physicians in Tennessee.^{5,6} At access levels greater than 200 physicians per 100,000, an increase of 10 physicians per 100,000 is associated with an increase of 0.14 deaths per 100,000.⁷

Where to Focus Efforts

Education and Emphasis on Personal Behaviors

The four most influential elements for affecting health care seem to be access to care, environment, genetics and health behaviors. Access to health care represents a potential influence of only about 10 percent on health status; yet, this is an area where 88 percent of our national health expenditures are allocated.

Additional investments in education and more emphasis on personal health behaviors both have the potential to make meaningful changes in health status. Health behaviors have been shown to have the potential to influence health status by 50 percent.⁸ In addition, there is also a strong association between changes in mortality and per-pupil spending for elementary and secondary education,^{9, 10} which is of particular importance in Tennessee, where the state ranks last in education spending per capita among the states.^{11, 12}

*Unintended injury does not include homicide or suicide.

Answers and Issues

What BlueCross BlueShield of Tennessee is Doing to Help

Educating consumers, working with physicians, and studying the health and habits of Tennesseans are all ways that BlueCross BlueShield of Tennessee is working to curb the rising cost of health care and maintain affordability of health plans for Tennesseans. Ideas and options are presented in an ongoing series of special white paper reports, including:

- Assessing the Value of Health Care in Tennessee
- Health Plan Affordability in Tennessee
- Rx for Pharmacy Costs in Tennessee

These reports are intended to help inform and educate health care consumers, plan purchasers and key decision makers statewide on health care trends, pricing and practices that affect the cost of health plan coverage.

The full reports are available on the BlueCross BlueShield of Tennessee Web site at www.bcbst.com. Additional information also is located at www.TennesseeHealth.com.

¹ *Health Plan Affordability in Tennessee*. BlueCross BlueShield of Tennessee. 2002.

² Wennberg, J.E., *The Dartmouth Atlas of Health Care*. The Trustees of Dartmouth College. 1996.

³ The following studies, which are discussed in the full text of *Assessing the Value of Health Care in Tennessee*, all support this claim in various circumstances:

— Leape, LL. “Can We Make Health Care Safe?” *Reducing Medical Errors and Improving Patient Safety: Success Stories from the Front Line of Medicine*. Findlay, S., Keefe, A., Eds. Washington, D.C. The National Coalition on Health Care and the Institute for Healthcare Improvement, 2000. pp. 2-3.

— Boose, M.J., et al. “An Analysis of Outcome of Reconstruction or Amputation of Leg-Threatening Injuries.” *N Engl J Med* 2002. 347:1924-31.

— Newhouse, J.P. *Free for All: Lessons from the RAND Health Insurance Experiment*. Cambridge, Mass: Harvard University Press. 1993.

— Dyson, D.C., Danbe, K.H., Bamber, J.A., et al. “Monitoring Women at High Risk for Preterm Labor.” *N Engl J Med*. 1998. 338(1):15-19.

— “The Cardiac Arrhythmia Suppression Trial (CAST) Investigators. Preliminary Report: Effect of Encainide and Flecainide on Mortality in a Randomized Trial of Arrhythmia Suppression After Myocardial Infarction.” *N Engl J Med*. 1989. 321:406-12.

— Fisher, E.S., Wenberg, D.E., et. al. “The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care.” *Annals of Internal Medicine*. 18 Feb. 2003. 138(4): 273-87.

— Fisher, E.S., Wenberg, D.E., et. al. “The Implications of Regional Variations in Medicare Spending. Part 2: Health Outcomes and Satisfaction with Care.” *Annals of Internal Medicine*. 18 Feb. 2003. 138(4): 288-99.

⁴ “World Health Organization Assesses the World’s Health Systems.” World Health Organization Press Release, WHO/44, June 21, 2000. Geneva, Switzerland. Available at <http://www.who.int/inf-pr-2000/en/pr2000-44.html>.

⁵ Tennessee Department of Health. 1999 Licensed Physicians per County. 2000.

⁶ The Community Health Status Indicators Project. Health Resources and Services Administration.

⁷ Ibid. Tennessee Department of Health and The Community Health Status Indicators Project.

⁸ “Cost of Obesity, Drinking, Smoking and Growing Older. National Center for Policy Analysis.” *Daily Policy Digest. Health Issues/Preventative Medicine*. April 19, 2002.

⁹ National Center for Education Statistics.

¹⁰ National Center for Health Statistics.

¹¹ Total expenditures for public elementary and secondary education by function and state. U.S. Department of Education, Office of Educational Research and Improvement, National Library of Education.

¹² Current expenditures per pupil in fall enrollment in public elementary and secondary schools. U.S. Department of Education, Office of Educational Research and Improvement, National Library of Education.