## special article

## Cost and effectiveness in American Health Care

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## ABSTRACT

The debate on health care reform in the United States needs to focus on four numbers reported in *OECD in Figures 2006* (a pamphlet published by the Organization of European Development and Cooperation with data comparing its 30 industrialized member states):

- a) U.S. health care costs per capita each year (\$45,500) are 40% greater than the average annual costs of the 30 industrialized nations in the OECD (\$34,100).
- b) Life expectancy in the U.S. (77.8 years) is 1.1 years less than the average for the OECD's 30 members (78.9 years).
- c) Infant mortality in the U.S. (6.9 per 100,000 live births) is one-third greater than the OECD average (5.2 per 100,000).
- d) Obesity, measured as the percentage of adults with a body-mass index over 30 kg/m<sup>3</sup>, is observed in 34.3% of Americans - which is more than twice the frequency of obesity throughout the OECD (15.4%).

Despite paying almost twice the cost of health care in other contemporary industrialized nations, Americans have lower life expectancy, higher infant mortality, and higher obesity than comparable populations. Obviously these numbers are relevant to the current debate about how to pay America's bill for healthcare: the evidence suggests that increasing the publically financed share of health cost would be desirable. Given political opposition to "socialized medicine" in the U.S., however, is there an immediate action that could lower costs and improve outcomes pending what seems an inevitable change in health care financing? Paradoxically, the best way to make an immediate contribution to lower cost and better outcomes would be to focus on the health effects of environmental pollution. To lower cost, we need to lower rates of disease. And virtually no one in the debate seems to realize that exposures to several toxic chemicals which contribute to many diseases would be - to a degree - absurdly easy to reduce. One step that's possible - at virtually no cost - is to stop treating our public water supplies with two silicofluoride compounds that have never been studied for safety by the CDC (even after this was recommended by the National Toxicology Program). These chemicals increase the blood levels of lead and manganese as well as directly damaging normal brain chemistry (see <http://www.dartmouth.edu/

**Corresponding author:** Roger D. Masters, Research Professor and Nelson A. Rockefeller Professor Emeritus, Department of Government, Dartmouth College, Hanover,NH 03755,USA. e-mail: Roger.D.Masters@Dartmouth.edu ~rmasters/>). Since silicofluorides aren't used in other countries and are associated with a significant increase in the frequency of seven different diseases, stopping their use should be combined with screening and treating children for high body burdens of other toxins. As this suggestion indicates, Americans urgently need to focus on national health policy: we can improve health at virtually no cost by ending silicofluoride use, and - as soon as possible - we should consider ways to increase public financing of medical care.

Keywords: Health care costs, outcome assessment (Health Care), public financing, silicon fluoride, United States.

## INTRODUCTION

Debates over how to pay for Health Care in America are bound to continue through the Congressional recess this summer. Conventional political arguments generate more heat than light. To determine whether it's important to take action and if so how - every Congressman and all informed citizens should focus on factual information about the cost and effectiveness of U.S. health care as compared to other industrialized countries. For this, we can consider statistics from 30 industrial countries, which provide a reasonable basis for comparison (Table 1). These numbers come from pages 8-11 of the booklet "OECD IN FIGURES 2008" (Paris: OECD Publications, 2008), which is accessible online at <http://www.oecd.org/infigures>. Since these statistics were compiled by an international organization before the American health care debate started, there's every reason to treat them as an unbiased look at the facts of health care.

Most Americans seem afraid of statistics. The problem is that, used appropriately, numbers have an advantage over words. It's easy to figure out that TWO (the number "2') is bigger than ONE (the number "1"). More important, it's not hard to see that the difference between 50 and 10 (which amounts to 40) is twice as big as the difference between 40 and 20 (which amounts to 20). Imagine, however, if you and a friend are choosing between two art books on sale at the local museum shop, and the first of each pair of numbers (\$50 or \$40) represents the **value** of a book while the second of each pair (\$10 or \$20) is the corresponding **price**. Would you think you were getting the best choice if you paid \$20 (anticipating the \$40 benefit is a good deal) while your friend bought the book on sale for \$10? Reread the sentence beginning the word "Imagine": it means you'd be paying more and getting less than if you chose the \$10 book and took home an art book worth five times as much (for a net benefit of \$40). So, if you studied the numbers for a couple of minutes, you'd see that paying less you could gain twice as much.