

ABSTRACT

Many arguments for the superiority of other health care systems have been repeated often: the United States spends more than any other country, but its health outcomes are often worse. Whereas no one is ever denied care because of an inability to pay in countries with universal coverage, as many as 18,000 people in the U.S. die each year because they are uninsured and more than half of all bankruptcies are caused by medical debts. Also, other countries avoid our high administrative costs.

Yet these and other assertions are debatable. Some are demonstrably false.

Health Care Reform: Do Other Countries Have the Answers?

John C. Goodman

National Center for Policy Analysis

Linda Gorman

Independence Institute

Devon Herrick

National Center for Policy Analysis

Robert M. Sade

Department of Surgery and Institute of Human Values in Health Care,

Medical University of South Carolina

The health care systems of all developed countries face three unrelenting problems: rising costs, inadequate quality, and incomplete access to care. Much analysis published in medical journals suggests that other countries have found superior solutions to these problems.¹ This conclusion is at odds with economic research that is published in journals physicians seldom read, using methodologies that are unfamiliar to physicians. In this essay, we attempt to shed light on topics frequently discussed in proposals for health care reform, drawing on the relevant medical and economics literature.

Does the United States Spend Too Much on Health Care?

International statistics show that 2005 United States (US) per capita health care spending was 2.3 times greater than the median Organization for Economic Cooperation and Development (OECD) country (\$6,401 vs. \$2,759, based on purchasing power parity) and 1.5 times larger than Norway, the country that followed Luxembourg in the spending ranking.² However, normal market forces have been so suppressed throughout the developed world that purchasers rarely see a real price for any medical service. As a result, summing over all transactions produces aggregate numbers in which one can have little confidence. In addition, other countries more aggressively disguise costs, especially by suppressing provider incomes.

Economists have long known that international health care spending comparisons are fraught with potential error. Even for uncomplicated dental fillings, reimbursement data underestimate total costs by 50% in nine European countries.³ Countries account for long term care and out-of-pocket spending differently. The accounting treatment of overhead and capital costs also varies.⁴ An OECD project to harmonize national accounting methods began in 2000,

but even when methods are harmonized, the choice of a price adjustment method can alter hospital cost estimates by as much as 400%.⁵

The US compares more favorably when real resources are measured rather than monetary accounts. Per capita, the US uses fewer physicians, nurses, hospital beds, physician visits, and hospital days than the median OECD country.⁶

Even taking the monetary totals at their face value, the US has been neither worse nor better than the rest of the developed world at controlling expenditure growth. The average annual rate of growth of real per capita US health care spending is slightly below OECD average over the last decade (3.7% vs. 3.8%), and over the past four decades (4.4% vs. 4.5%).⁷ Despite common perceptions, a country's financing method—public vs. private financing, general revenue vs. payroll taxes, third-party vs. out-of-pocket spending—is unrelated to its ability to control spending.⁸

For the US, the practical question is, can the adoption of another country's health care system offer a reasonable chance of improving US private sector methods? An answer in the negative is suggested by a comparison of the British National Health Service and California's Kaiser Permanente found that Kaiser provided more comprehensive and convenient primary care and more rapid access to specialists for roughly the same cost.⁹

Finally, international spending comparisons typically ignore costs generated by limits on supply. In 2002-2004, dialysis patients waited 16 days for permanent blood vessel access in the US, 20 days in Europe, and 62 days in Canada.¹⁰ Waiting for care has economic costs in terms of sick pay and lost productivity, as well as negative health consequences. In the late 1990s, an estimated 5 to 10% of English waiting list patients were on sick leave. Norway is trying to reduce waiting times for patients "in order to reduce the cost of sickness benefits." Finland

calculates that the cost of waiting (sickness benefits, medicines, and social welfare expenses) can exceed the cost of treatment.¹¹

Are US Outcomes No Better and in Some Respects Worse Than Those of Other Nations?

Analyses that answer this question in the affirmative are often based on data showing that US life expectancy is similar to that of other developed countries and that its infant mortality rate is among the highest.¹² Yet within the US, life expectancy at birth varies enormously among racial and ethnic groups, from state to state, and across US counties.¹³ These differences often are attributed to such lifestyle choices as diet, exercise and smoking rather than to differences in the quality of health care.¹⁴ Similarly, US infant mortality varies by a factor of two or three to one across racial and ethnic groups, across the largest cities, and across the states for reasons apparently having little to do with health care.¹⁵ The low US international ranking reflects national differences in the definition of a live birth.¹⁶ Eberstat finds that US infants, stratified by birthweight, have a high likelihood of survival, regardless of race or economic circumstances.¹⁷

Health care likely plays a leading role in determining outcomes for diseases such as cancer, diabetes, and hypertension. Comparing cancer outcomes, the largest international study to date found that the five-year survival rate for all types of cancer among both men and women was higher in the US than in Europe.¹⁸ US women have a 63% chance of living at least five years after a cancer diagnosis, compared with 56% for European women. Survival after diagnosis of breast cancer was 90% and 79%, respectively. Men in the US have a five-year survival rate of 66%, compared to only 47% for European men. Survival after diagnosis of prostate cancer was 99% and 78%, respectively.¹⁹

Higher US spending on prescription drugs may explain why there is a steeper increase in blood pressure with advancing age in Europe and a 60% higher prevalence of hypertension.²⁰ While half of all diabetics have high blood pressure, it is controlled in 36% of US cases compared with only 9% in Canada.²¹ The rate of adverse events in US hospitals is only about half that in England, Australia, and New Zealand.²² The aggressive treatment offered US cardiac patients apparently improves survival and functioning compared with Canadian patients.²³ Fewer health and disability related problems occur among US spinal cord injury patients than among Canadian and British patients.²⁴

The US has better relative survival rates than Norway for colorectal and breast cancer, lower rates of vaccine-preventable pertussis, measles, and Hepatitis B, and shorter waiting lists.²⁵ In 2000, Norwegian patients waited an average of 133 days for hip replacement, 63 days for cataract surgery, 160 days for a knee replacement, and 46 days for bypass surgery after being approved for treatment.²⁶ Short waits for cataract surgery produce better outcomes; prompt coronary artery bypass reduces mortality; and rapid hip replacement reduces disability and death.²⁷

Britain has only one-fourth as many CT scanners as the US and one-third as many MRI scanners. The rate at which the British provide coronary bypass surgery or angioplasty to heart patients is only one-fourth of the US rate, and hip replacements are only two-thirds of the US rate. The rate for treating kidney failure (dialysis or transplant) is five times higher in the US for patients age 45 to 84 and nine times higher for patients 85 years of age or older.²⁸ Overall, nearly 1.8 million people are waiting to enter hospitals or for outpatient treatments at any given time.²⁹

Canada is often said to deliver comparable care, produce comparable outcomes, and still spend less than the US.³⁰ However, the proportion of middle-aged Canadian women who have never had a mammogram is twice the US rate, and three times as many Canadian women have never had a pap smear. Fewer than 20% of Canadian men have ever been tested for prostate-specific antigen, compared with about 50% of US men. Only 10% of adult Canadians have ever had a colonoscopy, compared with 30% of US adults. These differences in screening may partly explain why the mortality rate in Canada is 25% higher for breast cancer, 18% higher for prostate cancer, and 13% higher for colorectal cancer.³¹

In view of such differences, it is not clear whether the U.S. spends too much on health care or other countries spend too little.

Is the Large Number of Uninsured in the US a Crisis?

The US is the only developed country in which a substantial subpopulation is nominally uninsured. Although this is said to be a crisis because the uninsured lack access to health care, the number of uninsured, and its consequences, are not clear.

The most widely used estimates of the number of US uninsured are from the US Census Bureau's Current Population Survey (CPS). It estimates that 47 million people were uninsured for the entire year in 2005.³² The Survey of Income and Program Participation (SIPP), another Census Bureau survey, estimates about half that number. The Medical Expenditure Panel Survey (MEPS) and the National Health Interview Survey (NHIS) also generate lower estimates.³³ Many experts believe the CPS estimate is actually an estimate of the number of uninsured at a point-in-time. It is similar to the point-in-time estimates of SIPP (43 million in 2002), MEPS (48 million in 2004) and NHIS (42 million in 2004).³⁴

Like unemployment, uninsurance is often transitory: 75% of uninsured spells last one year or less and 91% last two years or less.³⁵ Although the fraction of the population with health insurance rises and falls with the business cycle, since 1990 the CPS estimate has fluctuated between about 83 and 86% insured, despite an unprecedented influx of immigrants with uninsurance rates 2½ times that of the native-born population.³⁶ Guaranteed issue laws, state high risk pools, and retroactive Medicaid eligibility make it increasingly easy to obtain insurance after becoming ill.³⁷

Of the 46 million nominally uninsured, about 12 million are eligible for such public programs as Medicaid and the State Children's Health Insurance Program (SCHIP).³⁸ They can usually enroll even at the time of treatment, arguably making them *de facto* insured. About 17 million of the uninsured are living in households with at least \$50,000 annual income. More than half of those earn more than \$75,000, suggesting that they are uninsured by choice.³⁹ Although 36% of people in families with incomes under 200% of the poverty level are uninsured, 44% have private coverage, and there are reasons to believe that expansion of private coverage is a better avenue to greater access to care than expansion of public programs.⁴⁰

Does Lack of Health Insurance Cause Premature Death?

A number of studies suggest that the uninsured are more likely to suffer complications of preventable illnesses and more likely to die from them.⁴¹ However, the case is much less solid than most studies in the medical literature have suggested. The consensus among economic studies is that "insurance has a relatively small effect on health."⁴² Moreover, the uncertainties about who is uninsured, for how long, and for what reasons suggest that generalized claims about the nationwide impact of uninsurance should be greeted with skepticism.

An Institute of Medicine report in 2002 claimed that 18,000 deaths a year in the US could be attributable to a lack of health insurance.⁴³ The Urban Institute updated that number to 22,000 in 2006, and Families USA raised it to 26,260 in 2008.⁴⁴ However, these reports arrived at their results by extrapolating from an estimate made in a 15-year-old study, using 37-year-old data, and employing questionable methodology.⁴⁵ In fact, we do not know how much morbidity and mortality is attributable to lack of health insurance.

Once people see a provider, a RAND study suggests that insurance status has little effect on receipt of recommended care.⁴⁶ However, the uninsured and those on Medicaid may be more likely to delay seeking care.⁴⁷ An American Cancer Society study found that, relative to people with private insurance, the uninsured and Medicaid-insured were more likely to present with advanced-stage cancer at diagnosis.⁴⁸

Many proposals for universal health care coverage envision enrolling more people in Medicaid, in SCHIP plans paying Medicaid rates, or in private plans paying Medicaid rates.⁴⁹ Such efforts encourage people to drop their private coverage. Cutler and Gruber estimate that every extra \$1 spent on Medicaid reduces private health insurance by 50-75¢.⁵⁰ For SCHIP, the Congressional Budget Office projects a crowd-out rate of 25% to 50% and Gruber estimates it at 60%.⁵¹ Unfortunately, this substitution may lead to worse health outcomes. Low Medicaid reimbursement is associated with lower quality care.⁵² Perhaps because of nonprice barriers and low reimbursement for some types of care, being enrolled in Medicaid is only marginally better than being uninsured.⁵³

Are Medical Bills Causing Bankruptcy?

A study claiming that more than half of all bankruptcies are caused by medical debt⁵⁴ is often cited, but the claim conflicts with four decades of economic research. The label “medical

bankruptcy” was applied if out-of-pocket medical bills exceeded \$1,000, even though out-of-pocket expenses of the *average* US household were \$2,182 in the year studied.⁵⁵ Recalculating the study’s data, Dranove and Millenson conclude that only 17% of the sample “had medical expenditure bankruptcies.”⁵⁶ Well-designed economic studies have found no statistical link between bankruptcies and health problems.⁵⁷ In fact, household consumption is largely unchanged even in the face of very large medical bills.⁵⁸

Are Administrative Costs Higher for Private Insurance Than Public Insurance?

The Congressional Research Service has estimated the administrative costs of Medicare at 2% of the total program costs, compared to 10% for private insurance and 12% for HMOs. Some single-payer advocates have used this estimate as an argument for a universal Medicare program.⁵⁹ These estimates ignore hidden costs shifted to the providers of care, and the social costs of collecting taxes to fund Medicare. A Milliman & Robertson study estimates that, when these costs are included, Medicare and Medicaid spend two-thirds *more* on administration than private insurance spends on administration: 27 cents, compared to 16 cents, respectively, for every dollar of benefits.⁶⁰

According to Himmelstein and Woolhandler, if the US adopted the Canadian system, the savings on lower administrative costs could pay for insuring the uninsured.⁶¹ Their calculation includes the cost of private insurance premium collection (advertising, agents' fees, etc.), but ignores the cost of tax collection to pay for public insurance. Danzon estimates the deadweight cost of tax finance in Canada to be at least 17% of claims.⁶² Using the most conservative estimate of the social cost of collecting taxes, Zycher calculates that the excess burden of a

universal Medicare program would be twice as high as the administrative costs of universal private coverage.⁶³

Are Low-Income Families More Disadvantaged in the US System?

Aneurin Bevan, father of the British NHS, declared, “the essence of a satisfactory health service is that rich and poor are treated alike, that poverty is not a disability and wealth is not advantaged.”⁶⁴ More than thirty years after the NHS founding an official task force found little evidence that the creation of the NHS had equalized health care access.⁶⁵ Another study fifty years after the NHS founding concluded that access had become more unequal in the years between the two studies.⁶⁶ Other scholarly studies have come to similar conclusions.⁶⁷

In Canada, the wealthy and powerful have significantly greater access to medical specialists than less-well-connected poor.⁶⁸ High-profile patients enjoy more frequent services, shorter waiting times and greater choice of specialists.⁶⁹ Moreover, among the nonelderly white population, low-income Canadians are 22% more likely to be in poor health than their US counterparts.⁷⁰

For OECD countries generally, among people with similar health conditions, “higher income people use the system more intensively and use more costly services than do lower income people.”⁷¹ It seems likely that the same personal characteristics that ensure success in a market economy also enhance success in bureaucratic systems.⁷²

Can the Free Market Work in Health Care?

The US system is often portrayed as more market-based than the systems of other countries, but this portrayal may be more perception than reality. While 13 cents of every dollar is paid out-of-

pocket by US patients, the OECD average is 20 cents.⁷³ Throughout the developed world, third-party payers set fees and pay fees, perversely encouraging patients to overconsume and providers to manipulate reimbursement formulas to increase their incomes.⁷⁴ When third-party payment is not a factor, medical markets more closely resemble markets for other goods and services.⁷⁵

In cosmetic surgery, virtually all payments are out-of-pocket and transparent package prices covering all services are the norm. Even though technological progress is frequently assumed to increase health care costs, the real price of cosmetic surgery has declined over the past 15 years, despite substantial technological progress and a six-fold increase in demand and.⁷⁶ In corrective vision surgery, out-of-pocket payments and package prices are the norm, and the real price has declined by 30% over the past decade.⁷⁷ Price transparency is absent in virtually every other kind of surgery.

Most walk-in clinics in drug stores and shopping malls began outside the third-party payment system. They have already achieved many of the goals included in most reform proposals: they post prices, keep electronic medical records (EMRs) and can prescribe electronically, taking advantage of error-reducing software.⁷⁸ Teladoc, which also developed outside the third-party payment system, offers telephone consultations. It maintains personal and portable EMRs, and its physicians prescribe electronically.⁷⁹

Largely because so many drugs are purchased out-of-pocket, Rx.com began selling prescription drugs online, encouraging price competition in a national marketplace. Wal-Mart, a company in search of profits, has expanded its nationally advertised program of low cost generic drugs. Its efforts have spurred other retailers to engage in price competition as well.⁸⁰

Outside the US borders, a vibrant, competitive international marketplace appears to be developing for all manner of medical services.⁸¹ Package prices are customary, as are EMRs, and

information on quality. Moreover, many health centers abroad are affiliated with high-quality US facilities including the Cleveland Clinic, Mayo Foundation, Harvard Medical International, and Johns Hopkins Medicine International.⁸²

CONCLUSION

Although national health insurance has considerable support within the medical profession, the degree to which patient empowerment, individual choice, competition, and market incentives are being consciously and successfully used to solve health care problems is far more extensive than is commonly realized. More than 10 million US families are managing some of their own health care dollars through Health Savings Accounts (HSAs) and Health Reimbursement Accounts.⁸³ More than half the states have Medicaid Cash & Counseling pilot programs underway, allowing the disabled to manage their own supportive care budgets. The satisfaction rate approaches 100%.⁸⁴ Internationally, Singapore has had a system of compulsory Medisave Accounts since 1984. China has initiated a pilot program based on the Singapore model.⁸⁵ In South Africa, HSA plans have captured more than half the private insurance market.⁸⁶ Switzerland, considered by many to have the most egalitarian health care system in the developed world, relies largely on private (although government-mandated) insurance.⁸⁷

In some respects, support for government regulation of health care financing and delivery has been based on a narrow construal of selected data, while all too often ignoring contrary data. We have attempted to correct the record by discussing some specific gaps, and suggest that the discussion of US health care reform would benefit greatly from a careful examination of the current successes and future potential of market-based reforms.

ACKNOWLEDGEMENTS

Author Contributions:

Conception and design: Goodman, Gorman, Herrick, Sade

Acquisition of data: Goodman, Gorman, Herrick

Analysis and interpretation of data: Goodman, Gorman, Herrick, Sade

Drafting of the manuscript: Goodman, Gorman, Herrick

Critical revision of the manuscript for important intellectual content: Goodman, Gorman, Herrick, Sade

Statistical analysis: Goodman, Gorman, Herrick

Obtaining funding: N/A

Administrative, technical, or material support: Goodman, Gorman, Herrick, Sade

Supervision: Goodman

Financial Disclosures:

None

Funding/Support:

None

REFERENCES

-
- ¹ American College of Physicians, "Achieving a High-Performance Health Care System with Universal Access: What the United States Can Learn From Other Countries," Annals of Internal Medicine 148, no. 1 (2008): 55-75.
- ² "OECD Health Data: Specialists Outnumber GPs in Most OECD Countries," OECD Health Data 2007 (Paris: Organization for Economic Co-operation and Development, 2007) Chart 4: Health expenditure per capita, public and private, OECD countries, 2005. 2007, <http://www.oecd.org/dataoecd/52/34/38976588.pdf> (accessed 19 May 2008).
- ³ S.S. Tan, WK Redekop and FFH Rutten, "Costs and Prices of Single Dental Fillings in Europe: a Micro-Costing Study," Health Economics 17, 1 Supplement (2008): S83-93.
- ⁴ O. Tiemann, "Variations in Hospitalisation Costs for Acute Myocardial Infarction - a Comparison Across Europe," Health Economics 17, 1 Supplement (2008): S33-45.
- ⁵ E. Orosz and D. Morgan, "SHA-based national health accounts in thirteen OECD countries: a comparative analysis," Health Working Papers no. 16 (Paris: Organization for Economic Co-operation and Development, 2004). "Note On General Comparability of Health Expenditure and Finance Data in OECD Health Data 2007," (Paris: Organization for Economic Co-operation and Development, 2007), <http://www.ecosante.fr/OCDEENG/411.html> (accessed 19 May 2008). E. Orosz, "The OECD System of Health Accounts and the US National Health Account: Improving Connections Through Shared Experiences," (2005). Draft paper prepared for the conference on "Adapting National Health Expenditure Accounting to a Changing Health Care Environment" (Washington, D.C.: Centers for Medicare & Medicaid Services), <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/confpaperorosz.pdf> (accessed 19 May 2008); Jonas Schreyogg, et al., "Cross-Country Comparisons of Costs: The Use of Episode-Specific Transitive Purchasing Power Parities with Standardised Cost Categories," Health Economics 17, 1 Supplement (2008): S95-103.
- ⁶ G.F. Anderson, B.K. Frogner and U.E. Reinhardt, "Health Spending in OECD Countries in 2004: an Update," Health Affairs 26, no. 5 (2007):1481-1489.
- ⁷ Anderson, Frogner and Reinhardt, "Health spending in OECD countries in 2004: an Update," Gerard F. Anderson, et al., "Health Spending and Outcomes: Trends in OECD Countries, 1960-1998," Health Affairs 19, no. 3 (2000):150-157.
- ⁸ S.A. Glied, "Health Care Financing, Efficiency, and Equity," NBER Working Paper 13881 (Cambridge, MA: National Bureau of Economic Research, 2008).
- ⁹ R.G. Feachem, H.K. Sekhri and L.K. White, "Getting More for their Dollar: a Comparison of the NHS with California's Kaiser Permanente," BMJ 324, no. 7330 (2002):135-143.
- ¹⁰ D.C. Mendelssohn et al., "Haemodialysis Vascular Access Problems in Canada: Results from the Dialysis Outcomes and Practice Patterns Study (DOPPS II)," Nephrology Dialysis Transplantation 21, no. 3 (2006): 721-728.
- ¹¹ J. Hurst and L. Siciliani, "Tackling Excessive Waiting Times for Elective Surgery: A Comparison of Policies in Twelve OECD Countries," OECD Health Working Paper no. 6 (Paris: Organization for Economic Co-operation and Development, 2003).
- ¹² P.S. Hussey et al. "How Does the Quality of Care Compare in Five Countries?" Health Affairs 23, no. 3 (2004):89-99. C. Schoen and S.K.H How and S.C. Schoenbaum, National Scorecard on U.S. Health System Performance: Technical Report (New York: Commonwealth Fund, 2006). R.L. Lichtenstein, "The United States'

Health Care System: Problems and Solutions,” Survey of Ophthalmology 39, no. 2 (1994):166-167. L. Champlin “Call for health system reform reaching grassroots level,” (Leawood, KS: American Academy of Family Physicians, 8 November 2006), <http://www.aafp.org/online/en/home/publications/news/news-now/health-care-reform/200611008grassroots.html> (accessed 1 October 2008).

¹³ H.C. Kung et al., “Deaths: Final Data for 2005,” National Vital Statistics Report 56_10 (Hyattsville, MD: Centers for Disease Control and Prevention, 2008); Harvard University Initiative for Global Health, cited in M. Hitti, “Top States for Life Expectancy,” WebMD Medical News, 2006, <http://www.webmd.com/news/20060913/top-states-for-life-expectancy> (accessed 1 October 2008); C.J.L. Murray et al., “Eight Americas: Investigating Mortality Disparities across Races, Counties, and Race-Counties in the United States,” PLoS Medicine 3, no. 9 (2006): e260 doi:10.1371/journal.pmed.0030260.

¹⁴ “Growing Disparities in Life Expectancy,” Economic and Budget Issue Brief (Washington, DC: Congressional Budget Office, 2008).

¹⁵ T.J. Mathews and M.F. MacDorman, “Infant Mortality Statistics from the 2004 Period Linked Birth/Infant Death Data Set,” National Vital Statistics Report 55_14 (Hyattsville, MD: Centers for Disease Control and Prevention, 2007); V. Haynatzka et al., “Racial and Ethnic Disparities in Infant Mortality Rates --- 60 Largest U.S. Cities, 1995-1998,” Morbidity and Mortality Weekly Report 51, no. 15 (2002): 329-332,343; T.J. Mathews and M.F. MacDorman, “Infant Mortality Statistics from the 2004 Period Linked Birth/Infant Death Data Set,” National Vital Statistics Report 55_14 (Hyattsville, MD: Centers for Disease Control and Prevention 2007).

¹⁶ E.M. Howell and B. Blondel, “International Infant Mortality Rates: Bias from Reporting Differences,” American Journal of Public Health 84, no. 5 (1994):850-852; S. Sepkowitz “International Rankings of Infant Mortality and the United States Vital Statistics Natality Data Collecting System - Failure and Success,” International Journal of Epidemiology 24, no. 3 (1995):583-588; M. Muller et al., “Liveborn and Stillborn Very Low Birthweight Infants in Switzerland: Comparison between Hospital Based Birth Registers And The National Birth Register,” Swiss Medical Weekly 135, no. 29 (2005):433-439.

¹⁷ N. Eberstadt, The Tyranny of Numbers: Mismeasurement and Misrule (Washington, DC: The AEI Press, 1995) 43-73.

¹⁸ A. Verdecchia et al., “Recent Cancer Survival in Europe: a 2000–02 Period Analysis of EURO CARE-4 Data,” Lancet Oncology 8, no. 9 (2007):784-796.

¹⁹ Verdecchia et al., “Recent Cancer Survival in Europe: a 2000–02 Period Analysis of EURO CARE-4 Data.”

²⁰ J.A. Staessen, T. Kuznetsova and K. Stolarz, “Hypertension Prevalence and Stroke Mortality Across Populations,” Journal of the American Medical Association 289, no. 18 (2003):2420-2422. (Online edition, accessed 10 March 2006). K. Wolf-Maier et al., “Hypertension Prevalence and Blood Pressure Levels in 6 European Countries, Canada and the United States,” Journal of the American Medical Association 289, no. 18 (2003):2420-2422.

²¹ M.R. Joffres et al., “Distribution of Blood Pressure and Hypertension in Canada and the United States,” American Journal of Hypertension 14, no. 1 (2001):1099-1105.

²²G.R. Baker et al., “The Canadian Adverse Events Study: The Incidence of Adverse Events among Hospital Patients in Canada,” Canadian Medical Association Journal 170, no. 11 (2004):1678-1686.

²³ P. Kaul et al., “Long-Term Mortality of Patients with Acute Myocardial Infarction in the United States and Canada: Comparison of Patients Enrolled in Global Utilization of Streptokinase and t-PA for Occluded Coronary Arteries (GUSTO)-I,” Circulation 110, no. 13 (2004):1754-1760, <http://circ.ahajournals.org/cgi/content/full>

/110/13/1754 (accessed 27 January 2006); J.L. Roleau et al., "A Comparison of Management Patterns After Acute Myocardial Infarction in Canada and the United States. The SAVE Investigators," New England Journal Medicine 328, no. 11 (1993): 779-784.

²⁴ M.A. McColl et al., "International Differences in Ageing and Spinal Cord Injury," Spinal Cord 40, no. 3 (2002):128-136.

²⁵ E. Kelley and J. Hurst, "Health Care Quality Indicators Project Initial Indicators Report," OECD Health Working Papers no. 22 (Paris: Organisation for Economic Co-operation and Development, 2006).

²⁶ L. Siciliani and J. Hurst, "Explaining Waiting Times Variations for Elective Surgery Across OECD Countries," OECD Health Working Papers no. 72003 (Paris: Organisation for Economic Co-operation and Development, 7 October 2003).

²⁷ W. Hodge et al., "The Consequences of Waiting for Cataract Surgery: A Systematic Review," Canadian Medical Association Journal 176, no. 9 (2007):1285-1290; B.G. Sobolev et al., "The Risk of Death Associated with Delayed Coronary Artery Bypass Surgery," BMC Health Services Research 6, no. 85 (2006), <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1574305&blobtype=pdf> (accessed 30 September 2008); E.M. Koomen et al., "Morbidity and Mortality in Patients Waiting for Coronary Artery Bypass Surgery," European Journal of Cardio-Thoracic Surgery 19, no. 3(2001):260-265; D.S. Garbuz et al., "Delays Worsen Quality of Life Outcome of Primary Total Hip Arthroplasty," Clinical Orthopaedics and Related Research 447 (2006):79-84. A.M. Davis et al., "Waiting for Hip Revision Surgery: the Impact on Patient Disability," Canadian Journal of Surgery 51, no. 2 (2008):92-96. V. Novack et al., "Does Delay in Surgery after Hip Fracture Lead to Worse Outcomes? A Multicenter Surgery," International Journal for Quality in Health Care 19, no. 3 (2007):170-176.

²⁸ H.J Aaron, Can We Say No? The Challenge of Rationing Health Care (Washington DC: Brookings Institution Press, 2005).

²⁹ NHS Wales Waiting Times: At End March 2008. Stats Wales 2008. SDR 58/2008. Patients Waiting (Edinburgh: National Services Scotland, 2008). NHS Inpatient and Outpatient Waiting Times Figures, 29 February 2008 and Revised Data for April 2006 – January 2008 (London: Department of Health, 2008).

³⁰ Physicians for a National Health program, "Proposal of the Physicians' Working Group for Single-Payer National Health Insurance," Journal of the American Medical Association 290, no. 3 (2003):798-805.

³¹ J.E. O'Neill and D.M. O'Neill, "Health Status, Health Care and Inequality: Canada vs. the U.S." NBER Working Paper 13429 (Cambridge, MA: National Bureau of Economic Research, 2007).

³² C. DeNavas-Walt, B.D. Proctor and J. Smith, "Income, Poverty, and Health Insurance Coverage in the United States: 2006," Current Population Reports no. 60-233 (Washington DC: U.S. Census Bureau, 2007).

³³ N. Chockley, H. Pirani and K. Kushner, "A Primer on the CPS Estimate of America's Uninsured," NIHCM Brief (Washington DC: National Institute for Health Care Management, 2006).

³⁴ Chockley, Pirani and Kushner, "A Primer on the CPS Estimate of America's Uninsured."

³⁵ R.J. Mills and S. Bhandari, "Health Insurance Coverage in the United States: 2002," Current Population Reports no. P60-223 (Washington DC: U.S. Census Bureau, 2003).

³⁶ C.H. Lee and S.M Stern, "Health Insurance Estimates from the U.S. Census Bureau: Background for a New Historical Series," (Washington DC: U.S. Census Bureau, 2007), http://www.census.gov/hhes/www/hlthins/usernote/revhlth_paper.pdf (accessed 23 May 2008). "National Health Interview Survey. Early release,"

(Hyattsville, MD: Centers for Disease Control and Prevention, March 2007) Figure 1.1 Percentage of persons of all ages without health insurance coverage at the time of interview: United States, 1997-September 2006, http://www.cdc.gov/nchs/data/nhis/earlyrelease/200703_01.pdf (accessed 23 May 2008); C. DeNavas-Walt, B.D. Proctor and J. Smith, "Income Poverty, and Health Insurance Coverage in the United States: 2006," Current Population Reports no. P60-233 (Washington D.C: U.S. Census Bureau), p. 19.

³⁷ L. Wachenheim and H. Leida, The Impact of Guaranteed Issue and Community Rating Reforms on Individual Insurance Markets (Brookline, WI: Milliman, 2007).

³⁸ "The Uninsured in America," R30-03-014 (Chicago: BlueCross BlueShield Association, 2003).

³⁹ C. DeNavas-Walt, B.D. Proctor and J. Smith, "Income, Poverty, and Health Insurance Coverage in the United States: 2007," Current Population Reports no. 60-235 (Washington DC: U.S. Census Bureau, 2008); H. Kuttner and M.S. Rutledge, "Higher Income And Uninsured: Common or Rare?" Health Affairs 26, no. 6 (2007): 1745–1752 (published online November 2007; 10.1377/hlthaff.26.6.1745).

⁴⁰ M.K. Bundorf and M.V. Pauly, "Is Health Insurance Affordable for the Uninsured?" Working Paper no. 9281 (Cambridge, MA: National Bureau of Economic Research, 2002); J.C. Goodman et al. Handbook on State Health Care Reform (Dallas: National Center for Policy Analysis, 2007).

⁴¹ J. Hadley and J. Holahan, "How Much Medical Care do the Uninsured Use, and Who Pays for it?" Health Affairs 22 (2003):w3250-w3265. (published online 12 February 2003; 10.1377/hlthaff.w3.66). J. Hadley, "Sicker and Poorer—The Consequences of Being Uninsured: A Review of the Research on the Relationship Between Health Insurance, Medical Care Use, Health, Work, and Income," Medical Care Research and Review 60, no. 2 supplement (2003):3S-75S.

⁴² R. Kronick, "Commentary—Sophisticated Methods but Implausible Results: How Much Does Health Insurance Improve Health?" Health Services Research 41, no. 2 (2006):452–460.

⁴³ Institute of Medicine, Care without Coverage: Too Little, Too Late (Washington, DC: National Academy Press, 2002).

⁴⁴ S. Dorn, Uninsured and Dying Because of It: Updating the Institute of Medicine Analysis on the Impact of Uninsurance on Mortality (Washington, DC: Urban Institute, 2008); "Dying for Coverage," (Washington, DC: Families USA, 2008), <http://familiesusa.org/issues/uninsured/publications/dying-for-coverage.html> (accessed 1 October 2008).

⁴⁵ P. Franks, C.M. Clancy and M.R. Gold, "Health Insurance and Mortality. Evidence from a National Cohort," Journal of the American Medical Association 270, no. 6 (1993):737-741; L. Gorman, "Dying for (Media) Coverage," Health Alert (Dallas: National Center for Policy Analysis, 2 May 2008), <http://www.john-goodman-blog.com/dying-for-media-coverage/> (accessed 1 October 2008).

⁴⁶ S.M. Asch et al., "Who is at Greatest Risk for Receiving Poor-Quality Health Care?" New England Journal of Medicine 354, no. 11 (2007):1147-1156.

⁴⁷ J.S. Weissman et al., "Delayed Access to Health Care: Risk Factors, Reasons, and Consequences," Annals of Internal Medicine 114, no. 4 (1991):325-331.

⁴⁸ M.T. Halpern, E.M. Ward and A.L. Pavluck, "Association of Insurance Status And Ethnicity With Cancer Stage At Diagnosis For 12 Cancer Sites: A Retrospective Analysis," Lancet Oncology 9, no. 3 (2008):222-231.

-
- ⁴⁹ L. Dubay, C. Moylan and T.R. Oliver, “Advancing Toward Universal Coverage: Are States Able to take the Lead?” Journal of Health Care Law and Policy 7, no. 1 (2004):1-41. M.G. Bloche, “Health Care for All? New England Journal of Medicine 357, no. 12 (2007):1173-1175.
- ⁵⁰ D.M. Cutler and J. Gruber, “Does Public Insurance Crowd Out Private Insurance?” The Quarterly Journal of Economics 111, no. 2 (1996):391–430.
- ⁵¹ N. Duchovny and L. Nelson, “The State Children’s Health Insurance Program,” CBO Pub no. 2970 (Washington, DC: Congressional Budget Office, 2007); J. Gruber and K. Simon, “Crowd-Out Ten Years Later: Have Recent Public Insurance Expansions Crowded Out Private Health Insurance?” Working Paper no. 12858 (Cambridge: National Bureau of Economic Research, 2007).
- ⁵² J.D. Reschovsky and A.S. O’Malley, “Do Primary Care Physicians Treating Minority Patients Report Problems Delivering High-Quality Care?” Health Affairs 27, no. 3 (2008):w221-w231 (published online 22 April 2008; 10.1377/hlthaff.27.3.w222); J.E. Calvin et al., “Insurance Coverage and Care of Patients with non-ST Segment Elevation Acute Coronary Syndrome,” Annals of Internal Medicine 145, no. 10 (2006):739-748.
- ⁵³ M.T. Halpern, E.M. Ward and A.L. Pavluck, “Association of Insurance Status And Ethnicity With Cancer Stage At Diagnosis For 12 Cancer Sites: A Retrospective Analysis,” Lancet Oncology 9, no. 3 (2008):222-231. B.R. Asplin et al., “Insurance Status and Access to Urgent Ambulatory Care Follow-Up Appointments,” Journal of the American Medical Association 294, no. 10 (2005):1248-1254.
- ⁵⁴ D.U. Himmelstein, et al., “MarketWatch: Illness and Injury as Contributors to Bankruptcy,” Health Affairs 24 (2005): w63-w73 (published online 2 February 2005; 10.1377/hlthaff.w5.63).
- ⁵⁵ T.J. Zywicki, “An Economic Analysis of the Consumer Bankruptcy Crisis,” Norwest University Law Review 99, no. 4 (2005):1463-1542.
- ⁵⁶ D. Dranove and M.L. Millenson, “Medical Bankruptcy: Myth Versus Fact,” Health Affairs 25, no. 2 (2005):w74-w83 (published online 28 February 2006; 10.1377/hlthaff.25.w74).
- ⁵⁷ S. Fay, E. Hurst and M. White, “The Household Bankruptcy Decision,” American Economic Review 92, no. 3 (2002):706–718.
- ⁵⁸ H. Levy, “The Economic Consequences of Being Uninsured,” ERIU Working Paper no. 12 (Ann Arbor, MI: University of Michigan, 2002), <http://www.umich.edu/~eriu/pdf/wp12.pdf> (accessed 1 October 2008).
- ⁵⁹ S. Woolhandler, T. Campbell and D.U. Himmelstein, “Costs of Health Care Administration in the United States and Canada,” New England Journal of Medicine 349, no. 8 (2003):768-775.
- ⁶⁰ M. Litow et al. “Rhetoric vs. Reality: Comparing Public and Private Administrative Costs,” (Washington DC: Council for Affordable Health Insurance, 1994).
- ⁶¹ S. Woolhandler and D.U. Himmelstein, “Paying for National Health Insurance—and not Getting It,” Health Affairs 21, no. 4 (2002):88-98.
- ⁶² P.M. Danzon, “Hidden Overhead Costs: Is Canada’s System Really Less Expensive?” Health Affairs 11, no. 1 (1992):21-43.
- ⁶³ B. Zycher, “Comparing Public and Private Health Insurance: Would a Single-Payer System Save Enough to Cover the Uninsured?” Medical Progress Report no. 5 (New York: Manhattan Institute for Policy Research, 2007).
- ⁶⁴ Economic Models Ltd. The British Health Care System (Chicago: American Medical Association, 1976).
- ⁶⁵ P. Townsend and N. Davidson, Inequities in Health Care, Black Report (Harmondsworth: Penguin, 1982).

-
- ⁶⁶ Independent Inquiries into Inequity and Health: The Acheson Report (London: Stationary Office, 1998).
- ⁶⁷ R. Mitchell and M. Shaw, Reducing Health Inequities in Britain (York, North Yorkshire: Joseph Roundtree Foundation, 2000).
- ⁶⁸ D.A. Alter et al., "Effects of Socioeconomic Status on Access to Invasive Cardiac Procedures and on Mortality after Acute Myocardial Infarction," New England Journal of Medicine 341, no. 18 (1999):1359-1367.
- ⁶⁹ S. Dunlop, P.C. Coyte and W. McIsaac, "Socio-Economic Status and the Utilisation of Physicians' Services: Results from the Canadian National Population Health Survey," Social Science & Medicine 51, no. 1 (2000):123-133.
- ⁷⁰ J.E. O'Neill and D.M. O'Neill, "Health Status, Health Care and Inequality: Canada Vs. The U.S.," NBER Working Paper no. 13429 (Cambridge, MA: National Bureau of Economic Research, 2007).
- ⁷¹ S.A. Glied, "Health Care Financing, Efficiency, and Equity," NBER Working Paper no. 13881 (Cambridge, MA: National Bureau of Economic Research, 2008).
- ⁷² J.C. Goodman, G.L. Musgrave and D.M. Herrick, Lives at Risk: Single-Payer National Health Insurance around the World (Lanham, MD: Rowman & Littlefield, 2004), Chapter 21.
- ⁷³ C.L. Peterson and R. Burton, "U.S. Health Care Spending: Comparison with Other OECD Countries," (Washington DC: Congressional Research Service, 2007).
- ⁷⁴ J.C. Goodman, G.L. Musgrave and D.M. Herrick, Lives at Risk: Single-Payer National Health Insurance around the World (Lanham, MD: Rowman & Littlefield, 2004),
- ⁷⁵ J.C. Goodman and G.L. Musgrave, Patient Power: Solving America's Health Care Crisis, (Washington, D.C.: Cato Institute, 1992).
- ⁷⁶ D.M. Herrick, "Update 2006: Why Are Health Costs Rising?" Brief Analysis no. 572 (Dallas: National Center for Policy Analysis, 2006).
- ⁷⁷ H.T. Tu and J.H. May, "Self-Pay Markets in Health Care: Consumer: Nirvana or Caveat Emptor?" Health Affairs 26, no. 2 (2007):w217-w226 (published online 6 February 2007; 10.1377/hlthaff.26.2.w217).
- ⁷⁸ K.J. Alexander, "Health Plans Embrace Retail Clinics," Managed Care 17, no.3 (2008):32-4, 43.
- ⁷⁹ D.M. Herrick, "Convenient Care and Telemedicine," Policy Report no. 305 (Dallas: National Center for Policy Analysis, 2007).
- ⁸⁰ "Use of Generic Prescription Drugs Prompts Decrease in Inflation," Kaiser Daily Health Policy Report (Menlo Park, CA: Henry J. Kaiser Family Foundation, 26 September 2007).
- ⁸¹ M.D. Horowitz, J.A. Rosensweig and C.A. Jones, "Medical Tourism: Globalization of the Healthcare Marketplace," Medscape General Medicine 9, no. 4 (2007):33.
- ⁸² D.M. Herrick, "Medical Tourism: Global Competition in Health Care," Policy Report no. 304 (Dallas: National Center for Policy Analysis, 2007).
- ⁸³ "January 2008 Census Shows 6.1 Million People Covered By HSA/High-Deductible Health Plans," (Washington DC: Americans Health Insurance Plans, 2006).
- ⁸⁴ B.C. Spillman, K.J. Black and B.A. Ormond, "Beyond Cash and Counseling: An Inventory of Individual Budget-based Community Long Term Care Programs for the Elderly," Issue Paper no. 7485 (Washington DC: Kaiser

Family Foundation, 2006). Also see Robert Wood Johnson Foundation, "Cash & Counseling," <http://www.cashandcounseling.org/> (accessed 1 October 2008).

⁸⁵ N.C. Chia and A.K.C. Tsui, "Medical Savings Accounts in Singapore: How Much is Adequate?" Journal of Health Economics 24, no. 5 (2005): 855-875; "Health Care Trends. International Comparisons: Impact of HSAs on Costs and Utilization in Three Countries," Annual Report on Health Care (Milwaukee: Health Care Trends, 2005).

⁸⁶ "Health Care Trends. International Comparisons: Impact of HSAs on Costs and Utilization in Three Countries;" S. Matisonn, "Medical Savings Accounts in South Africa," Policy Report no. 234 (Dallas: National Center for Policy Analysis, June 2000).

⁸⁷ R.E. Leu and M. Schellhorn, "The Evolution of Income-Related Inequalities in Health Care Utilization in Switzerland over Time," IZA Discussion Paper no. 1316 (Bonn: Institute for the Study of Labor, 2004), <http://ssrn.com/abstract=596941> (accessed 1 October 2008).