

American Health Care in Crisis: Fundamentals of Health Care Reform

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Abstract

The American Health Care system costs too much and is unsustainable. In 2008 the United States Gross Domestic Product (GDP) was \$14.29 trillion and health expenditure was \$2.38 trillion or 16.2%.² From 1965 to 2007, health spending as a percent of GDP has steadily increased from 5.9% to the current 16.2%. It is inequitably distributed, leaving a significant portion of the population inadequately covered. When looked at in totality, the United States Health care system still lags by a wide measure on key population-level outcome measures in comparison to other developed countries. Proposals for reform include universal health care coverage, universal coverage, cost control measures, insurance market reform, quality improvement measures, and promotion of fitness and wellness.

Cost of American Health Care System

The American Health Care system is bloated, wasteful, and inefficient, and in dire need of immediate resuscitation because of the following problems:

- costs too much and is unsustainable
- provides a poor investment return for the outlays
- is inequitably distributed leaving a significant portion of the population inadequately covered
- is based on an anachronistic business model that is geared to treat disease rather than promote wellness

In 2008 the United States Gross Domestic Product (GDP) was \$14.29 trillion and health expenditure was \$2.38 trillion or 16.2%.^{1,2} From 1965 to 2007, health spending as a percent of GDP has steadily increased from 5.9% to the current 16.2%. Since 1960, GDP growth has exceeded health care spending growth in only seven years (Figure 1). Entitlement programs such as Medicare, Medicaid, and Social Security over the long term are the main drivers of the Federal deficit with Medicare being the

Figure 1:

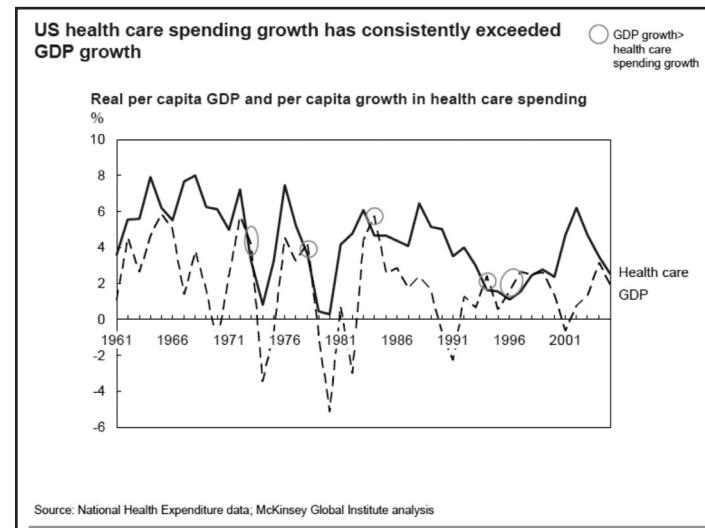
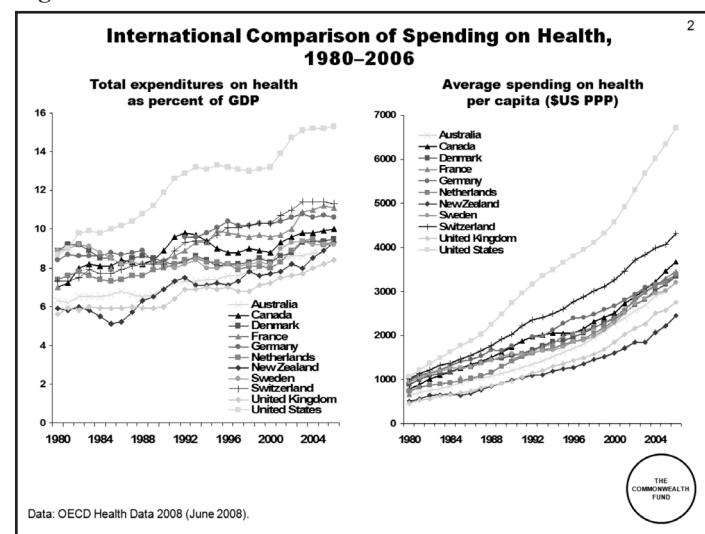


Figure 2:



largest by a significant margin. Last year (2008) the annual report of the Social Security and Medicare trustees projected that The Medicare Hospital Insurance (HI) Trust Fund (Medicare Part A) was projected to start running deficits in 2010. (Actually in 2008 the Trust Fund, for the first time, paid out more in benefits than it collected in taxes). Current income and trust fund reserves would be sufficient to pay all hospital insurance benefits until 2019, at which time the reserves are projected to be depleted. Unless changes are made, scheduled HI income would only cover 78% of estimated expenditures at that time.^{3,4}

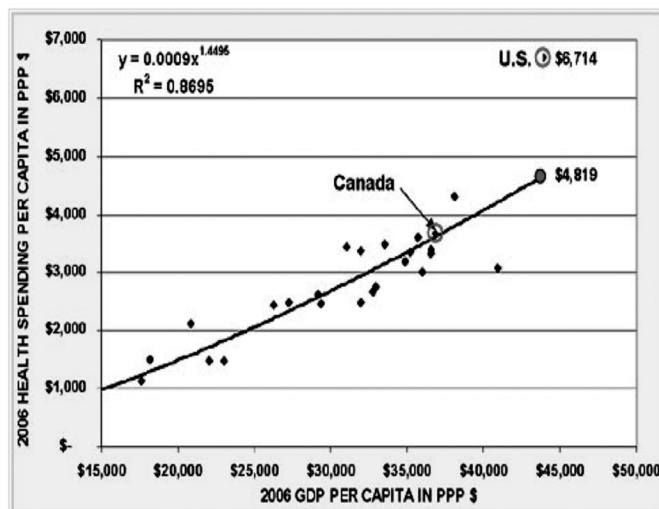
In order to adjust for cross-national differences in the purchasing power of national currencies relative to the real goods and services, an economic metric, **Purchasing Power Parity** (PPP) has been designed.² This, therefore, helps us to compare health care costs among nations. We can now compare the cost of US health care with two dozen developed countries that are members of the Organization for Economic Cooperation and Development (OECD). The graph in Figure 3 shows this comparison in PPP \$. The horizontal axis shows the gross domestic product per capita in 2006. The vertical axis represents 2006 health spending per capita. The plot of the graph (dark line in the center) is a regression equation (whose precise mathematical form is shown in the upper left corner). While there is enormous variation in health spending per capita in different countries within the OECD, the graph indicates a very strong relationship between the GDP per capita of these countries and per-capita health spending.

In 2006 Canada spent PPP \$3,678 on health care per person, which is about 55% of what the United States paid per capita. However, it should be noted that in 2006 Canada's GDP per capita was only 84% that of the United States. From the graph we can estimate that about \$1,141 of the \$3,036 difference between Canadian and American health spending per capita (38%) can be explained by the underlying difference in GDP per capita alone.

Another additional deduction from the graph, however, is that even after adjustment for differences in GDP per capita, the United States in 2006 spent \$1,895 more on health care than would have been predicted after such an adjustment. If GDP per capita were the only factor driving the difference between United States health spending and that of other nations, the United States would be expected to have spent an average of only \$4,819 per capita on health care rather than the \$6,714 it actually spent. In health-services research this difference between these numbers, here \$1,895, is called "excess spending."⁶

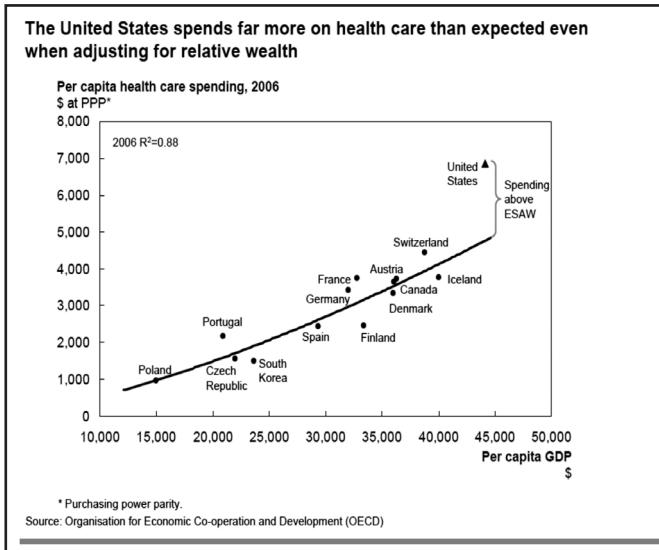
The McKinsey Global Institute (MGI), the economics research arm of the McKinsey management consulting firm, has gone a step further. Assuming that richer countries are more willing to spend money on health care, they computed a metric, the Estimated Spending According to Wealth (ESAW), a prediction of how much a given country would spend if it were like the OECD average, adjusted for per capita GDP.⁷ With this new information, Figure 3 can now be transformed into Figure 4. Therefore, it is now obvious that the United States spends far

Figure 3:



Source: Uwe Reinhardt⁴

Figure 4:



more on health care than might be predicted when compared to other countries of similar means.⁷⁻¹⁶ So, why does the United States spend so much money on health care and where is the money going?

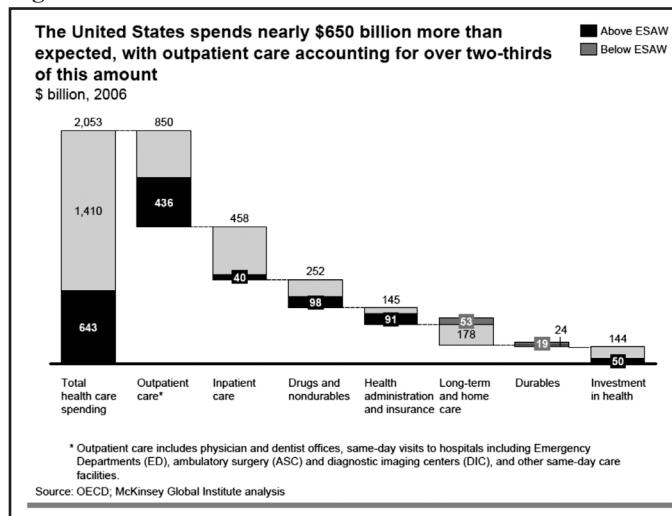
An analysis of the 2006 figures by MGI estimated that the United States spent \$643 billion more on health care than would have been expected for its wealth.⁷ In order to identify the sources of this higher-than-expected spending MGI categorized the health care costs into their basic components (Table 1 and Figure 5). Outpatient care turns out to be the largest and fastest-growing part of this excess spending, accounting for \$436 billion, or two-thirds of the \$643 billion figure. Prescription drugs and the cost of health care administration and insurance (all non-medical costs incurred by health care payers) account for an additional \$98 billion and \$91 billion of extra spending respectively. Expenditures on long-term and home care as well as on durable medical equipment (such as eyeglasses, wheelchairs, and hearing aids) by contrast were actually less than would be expected given the country's wealth.

Table 1:

Purpose of Expenditures	U.S. Expenditures \$ billion	Difference between Actual and Expected Expenditures \$ billion
Total health care spending	2,053	643
Outpatient care	850	436
Inpatient care	458	40
Drugs and nondurables	252	98
Health administration and insurance	145	91
Long-term and home care	178	-53
Durables	24	-19
Investment in health	144	-50

*Outpatient care includes physician and dentist offices, same-day visits to hospitals including emergency departments (ED), ambulatory surgery (ASC) and diagnostic imaging centers (DIC), and other same-day care facilities. A negative amount denotes an amount below the expected total for a given purpose.

Source: OECD; McKinsey Global Institute analysis⁷

Figure 5:

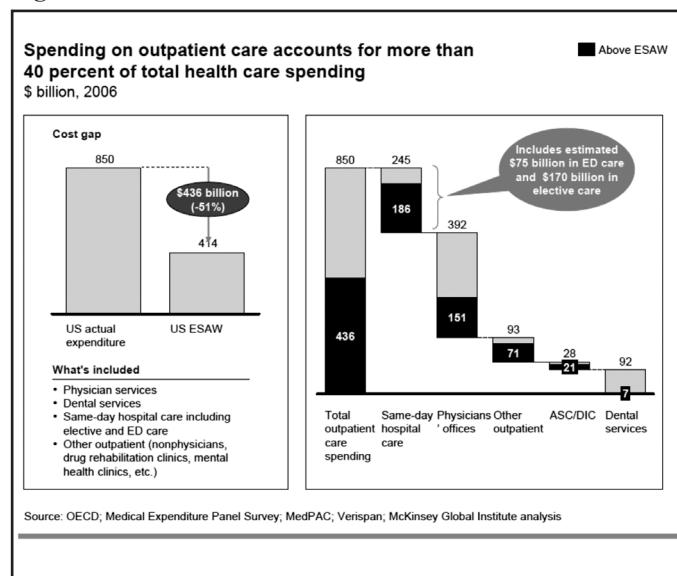
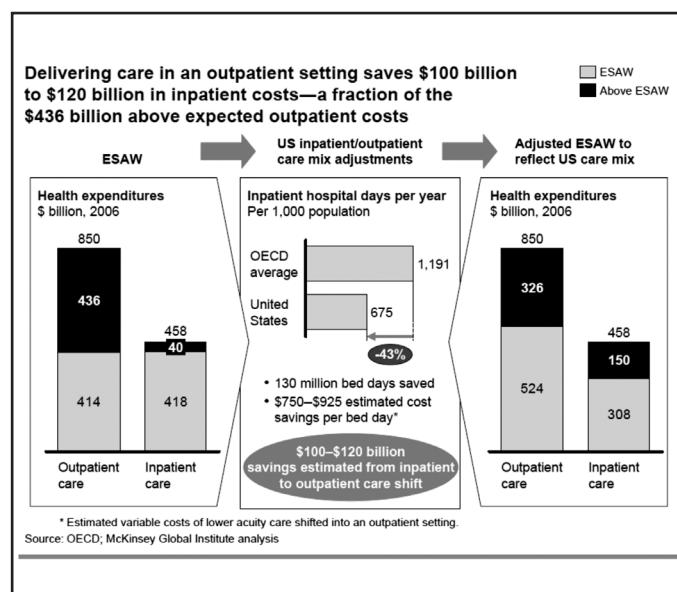
Outpatient Care

In the past few decades there has been a deliberate fundamental and progressive structural shift towards providing care in outpatient settings and away from inpatient overnight hospital stays, reflecting this fast growing cost of care in the United States. Currently, the US health care system delivers 65% of all care in outpatient settings, well above the comparative average of 52% in OECD countries. Theoretically, such a shift would be expected to save money, since fixed costs in outpatient settings tend to be lower than in-hospital stays. Indeed, it is estimated that the United States saves \$100 billion to \$120 billion a year on inpatient care thanks to shorter hospital stays and fewer hospital admissions (Figure 6 and 7). Unfortunately, however, this shift to outpatient care has resulted in much higher utilization, adding additional cost to the total system.

According to the McKinsey researchers, the two largest and fastest growing drivers of outpatient spending are same-day hospital care and visits to physicians' offices. It appears that from 2003 to 2006, the total costs due to these two categories increased by 9.3% and 7.9% a year, respectively. However, it is

not the number of outpatient visits per se but a surge in the average cost per visit that is contributing to this rise in cost. This is fuelled by factors such as the additional care delivered during these visits with a shift toward more expensive diagnostic procedures, for example, CT and MRI scans, and the increasing role played by specialists rather than general practitioners (primary care physicians) in the delivery of care.

Interestingly, this shift towards outpatient care delivery appears to have grown extensively during the 1980s. Coincidentally, Medicare in 1983 changed the basis for reimbursement for hospital inpatient care from hospital-specific costs to diagnosis-related groups (DRGs) by adopting the prospective payment system (PPS). In response to PPS, hospitals strategized by allocating relatively greater costs to outpatient departments, since outpatient visits are still reimbursed by Medicare on the basis of reasonable cost.

Figure 6:**Figure 7:**

The Cost of Drugs

In 2006, prescription drugs cost the US health care system \$252 billion, accounting for 12% of total spending and \$98 billion (15%) above ESAW. In the past three years, spending on drugs has increased at 6.9% a year, making this category together with outpatient care the only components of the system in which costs grew more quickly than GDP during this time.

Drug usage rates are lower while prices are higher

The United States actually uses 10% fewer drugs per capita than do other OECD countries. Rather, they cost 50% more than equivalent products in other OECD countries. Furthermore, the United States uses a more expensive mix of drugs. In addition, prices are higher in the United States because new drugs are widely prescribed one to two years earlier than in Europe. The other reasons cited for this exorbitant cost of prescriptions drugs are illustrated in Figure 8.

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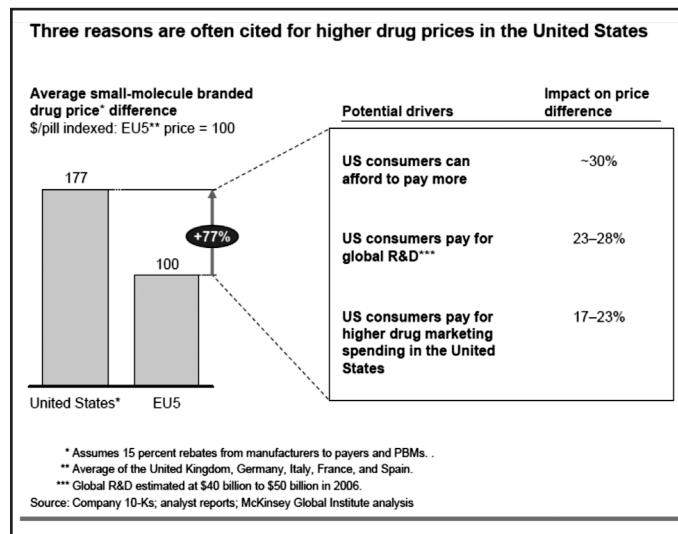


Figure 9:

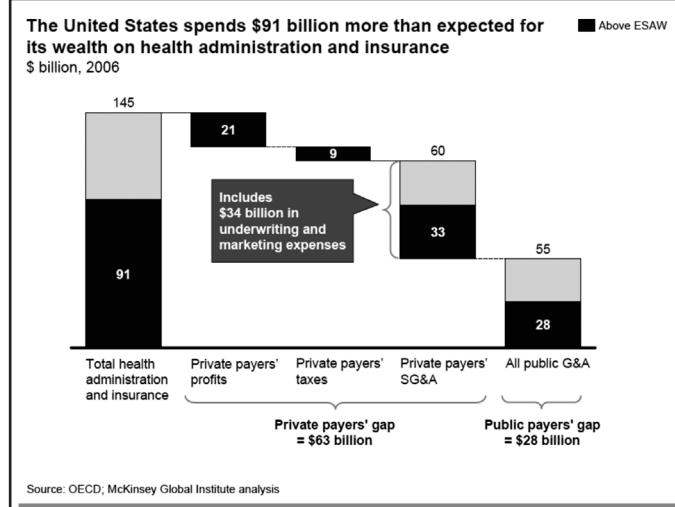
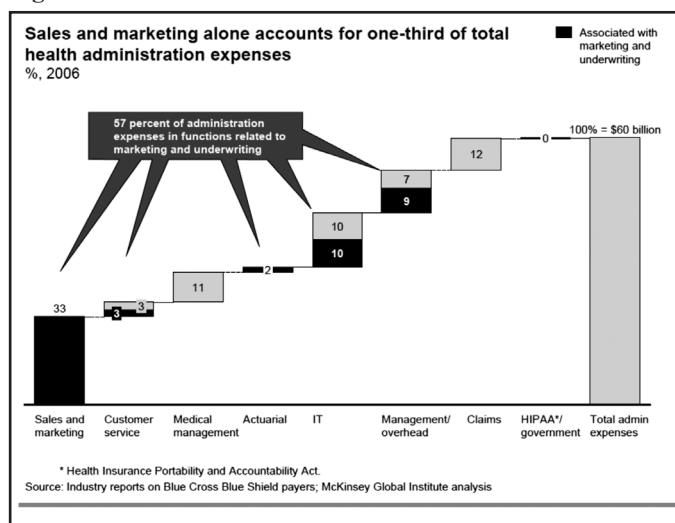


Figure 10:



Health Administration, Overhead, Insurance and Profits

The unique financing structure of the US health care delivery system has a direct bearing on the cost. Health administration and insurance, including public administration of Medicare, Medicaid, and other programs, in addition to private payer administration, profits, taxes, and marketing expenses totaled \$145 billion in 2006, accounting for some 7% of total spending (Figure 9). Adjusting for wealth differences, the United States spent \$91 billion (14% above ESAW) of total costs above expected in the system.

For 2006 the United States spent \$486 per capita on this cost category. That was almost double the per capita outlay of the next highest spender, France (\$248), and nearly five times the OECD average (\$103). Private insurers, who cover 64% of those with insurance in the United States, account for \$63 billion of the \$91 billion of cost above ESAW. In addition to profit

and taxes (which are negligible in comparison countries), \$33 billion of above-expected spending was attributable to private payer selling, general, and administrative (SG&A). Of the \$60 billion spent on private expenses in the United States, it is estimated that 57%, or \$34 billion, is attributable to underwriting and marketing, costs that the OECD countries with single-payer systems incur to a lesser extent (Figure 10). The remaining \$28 billion in US spending above ESAW is accounted for by the cost of public administration. The United States spends roughly six times the OECD average on public spending on administration and insurance per public life covered.¹⁷ The average administrative costs account for an estimated 6% of public health spending in the United States compared with an average of 4% for the OECD countries.

Tort Liability and Medical Malpractice

Albeit it appears intuitive to most physicians that malpractice lawsuits are a menace and potential driver of exorbitant health care costs, the direct cost of liability insurance and the indirect

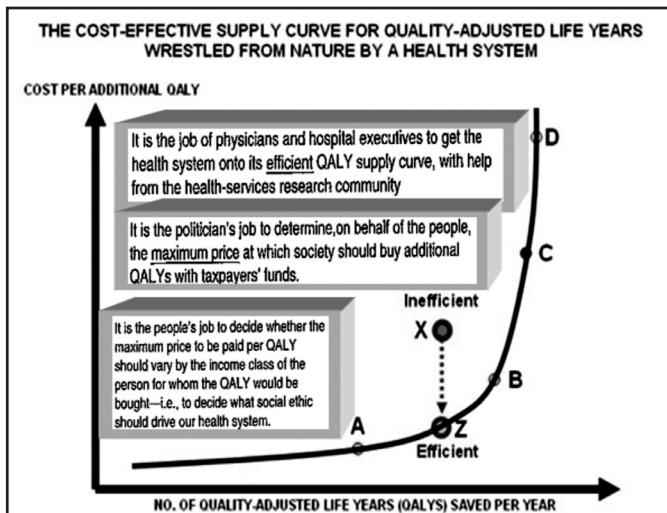
cost from defensive medicine (unnecessary medical tests and procedures) and its impact on health care cost are unknown! This cost has been variously estimated anywhere from \$30 billion to over \$100 billion.¹⁸ The “leading study” and oft-quoted paper is that of Stanford economists Daniel P. Kessler and Mark McClellan. McClellan – who is both an economist and a physician – served more recently as President Bush’s senior White House policy director for health care and is now the head of the Food and Drug Administration. The Kessler-McClellan study¹⁹ is one of the few academic studies that has ever attempted to measure the cost of “defensive medicine” attributable to lawsuits. It did so by examining the cost of treating hospitalized heart patients in states that have caps on damage awards and other restrictions on malpractice suits, and comparing them with the costs of treating similar patients in states without such limits on lawsuits.

The nonpartisan Congressional Budget Office (CBO) and US General Accounting Office (GAO) have both questioned whether the results Kessler and McClellan observed in hospitalized heart patients can be generalized for all patients and have, therefore, rejected the previous cost extrapolations.^{20,21,22} Unfortunately, these cost extrapolations are still being widely used.²³ Thus far, President Obama has declined to put limits on jury damages in medical malpractice cases.²⁴

The Cost of Technology and End of Life Care

It is becoming increasingly apparent that even in American health care, financial resources are scant and finite. Cost-effectiveness analysis (CEA) should, therefore, become a useful tool for comparing the relative expenditure (costs) and outcomes (effects) of two or more courses of action in situations where resources are limited. Initially developed in the military, CEA was first applied to health care in the mid-1960s and enthusiastically introduced to clinicians in 1977 by Weinstein and Stason.²⁵ The most commonly used metric for assessing outcome in this type of economic analysis is quality-adjusted life years (QALY). The quality-adjusted life year (QALY) can be thought of as a measure of disease burden that includes both the quality and the quantity of life lived; i.e., the extent to which premature deaths and disabilities cause a loss of health status compared to everyone’s living to old age in good health.^{26,27,28,29} A medical intervention that yields additional life-years in *perfect* health makes a greater contribution to human well being than an intervention yielding the same number of life-years in *less-than-perfect* health. QALYs are used to adjust for that difference in a patient’s quality of life. The QALY is based on the number of years of life that would be added by a medical intervention. Each year in perfect health is assigned the value of 1.0 down to a value of 0.0 for death. In between 1.0 and 0.0 would be the loss of self-care, mobility, usual activities, as well as the pain, anxiety/depression caused by the intervention.

Figure 11:



In the graph in Figure 11 the solid, upward-sloping QALY supply curve represents an efficiently operating health system. Any point on the curve represents the least expensive medical treatment capable of producing that additional QALY. Thus, point X in the graph represents an inefficient form of medical intervention, because that QALY could be delivered with an alternative therapy at the lower cost Z. Every intervention falling onto the solid curve, though, is assumed to reflect efficiently produced health care. Point A could represent added QALYs from a low cost preventive care intervention, such as patient education. Point B may represent a routine live-saving procedure. Point C may represent more expensive chronic care, such as renal dialysis. A 1994 study by Hamel et al. showed that aggressive treatment with dialysis is expensive, with an estimated cost of more than \$128,000 (1994 dollars) per quality-adjusted life-year saved. In that study the large group of patients (21%) with the worst prognostic estimates ($\leq 10\%$ probability of surviving for six months), the estimated incremental cost of initiating dialysis and continuing aggressive care, was \$274,100 per quality-adjusted life-year, more than twice the overall cost estimate. However, for the subgroup with the best prognoses (a 41% to 60% probability of surviving for six months), this treatment strategy was more cost-effective, at \$61,900 per quality-adjusted life-year.³⁰ Finally, Point D may represent treatment of patients with very expensive current medications, such as Avastin and Erbitux, entailing a price per added QALY of \$250,000. Cetuximab (Erbitux, Merck Pharmaceuticals) is a chimaeric monoclonal antibody (MAB) that is specific for the epidermal growth factor receptor (EGFR). Erbitux is an approved treatment for metastatic colorectal cancer and locally advanced squamous cell carcinoma of the head and neck. Bevacizumab (Avastin) is a recombinant human monoclonal IgG1 antibody made by Genentech that acts as an angiogenesis inhibitor. It carries a price tag that can reach \$100,000 a year per patient and is approved for patients with advanced stage metastatic lung, colon, or breast cancer. Despite its price, Avastin has become one of the most popular cancer drugs in the world, with sales last year of about \$3.5 billion, \$2.3 billion of that in the United States. About 100,000 Americans take Avastin, according to

Genentech's data. The drug is being formally tested in as many as 450 clinical trials for about 30 types of cancer.

What is revealing is that in 2004, the FDA approved Avastin for patients with advanced colon cancer, based on studies that suggested that Avastin extended life for four months. Subsequent larger studies, however, suggested that, although the drug slowed tumor growth, it did not extend life in a statistically significant way. Moreover, in contrast to the FDA, the National Institute for Health and Clinical Excellence (NICE) in the UK concluded that Avastin "would not be a cost-effective use of NHS resources."³¹

In the United Kingdom NICE is politically empowered to make decisions on cost-effective medical interventions. There is no equivalent bureaucracy in the United States. Rather, there are entrenched interest groups in opposition to cost-effectiveness analysis in health care. The Health Care Industrial Complex (manufacturers of pharmaceutical and biotechnology products and medical devices) have a vested interest in perpetuating the status quo. In addition, the *fee for service* remuneration structure tempts physicians to reap enormous profits from highly resource-intensive medical treatments, even if, in some cases, some of those components are of marginal or dubious clinical benefit.

Another group opposed to cost-effectiveness analysis is comprised of those individuals who on philosophical grounds adamantly believe that health care is a moral right and life is "priceless." For them, cost should never be a factor in clinical decisions.

Performance and Shortcomings of the American Healthcare System

Without a doubt, the United States is a world leader in medical technology, innovation, and health care research. It also possesses the world's top notch research institutions and hospitals. From 1950 to 2006 the United States has received 60% of the Nobel prizes awarded in medicine and physiology. The next best country is Great Britain at 15%.³² As illustrated in Figure 12, the top five US hospitals alone conduct many more clinical trials than any single OECD country.³³ United States' top tier teaching hospitals deliver quality care with superior outcomes.³⁴⁻³⁷ Unfortunately, when viewed in totality, the United States health care system still lags by a wide measure on key population-level outcome measures in comparison to other developed countries.

On June 20, 2000, the World Health Organization (WHO) issued figures that ranked health care systems around the world for the first time. These rankings were contained in the World Health Report 2000.³⁸ Prior to this report the argument over how well health care systems and policies were working had been based on anecdotes, conjecture, and prejudiced hearsay. In addition to the overall spending on health, the report also measured how health care was distributed among different groups in each of the 191 nations that were members of the World Health Organization. The health care systems in these

Figure 12:

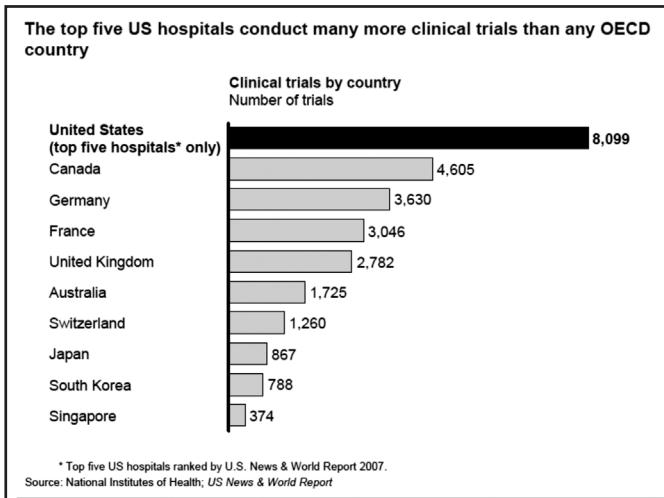


Table 2:

WHO 2000 HEALTH CARE RANKINGS	
Rank	Country
1	France
2	Italy
3	San Marino
4	Andorra
5	Malta
6	Singapore
7	Spain
8	Oman
9	Austria
10	Japan
37	United States

countries were judged according to five health-care categories that WHO surveys found to be most important to the people in the various nations.

The five measures used were: overall level of health or life expectancy; health fairness or life expectancy as measured across various populations within a country, responsiveness or how well people rated performance of their health care system, fairness in responsiveness among different groups in the same country, and fairness in financing among different groups, which looked at what proportion of income was devoted to health care. Surprisingly, the United States did not fare that well, placing at a not-so-prestigious rank of 37 (Table 2), wedged in between Costa Rica and Slovenia respectively. As was to be expected within the United States, there was a lot of attack on the rankings as well as the methodology used. However, the shortcomings of the American health care system compared to other countries are now universally recognized.^{7,12,39-43}

The most basic measure of health care quality and outcomes is life expectancy. Life expectancy at birth can be a measure of overall quality of life in a country and can also be thought of as indicator of the potential return on investment in human capital. The United States compares unfavorably with the OECD countries. In 2005, US life expectancy at birth was 77.9 years, compared with an OECD average of 78.6 (Figure 13). The figure also points out that the life expectancy gap between the

Figure 13:

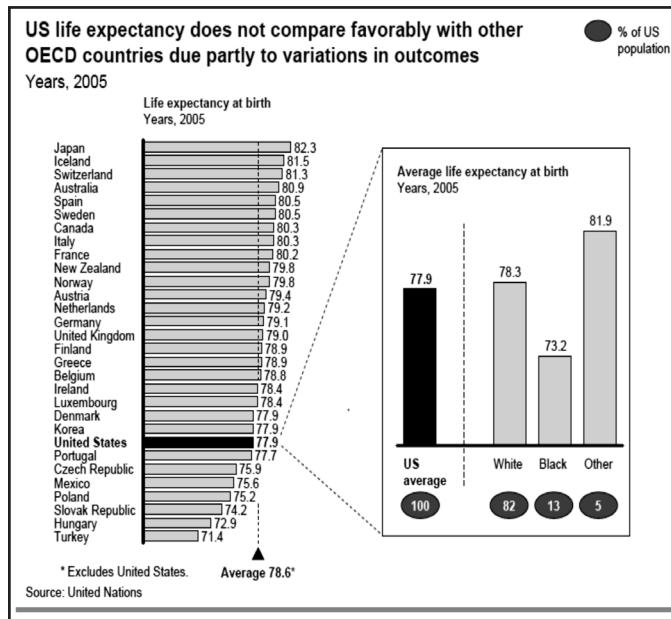
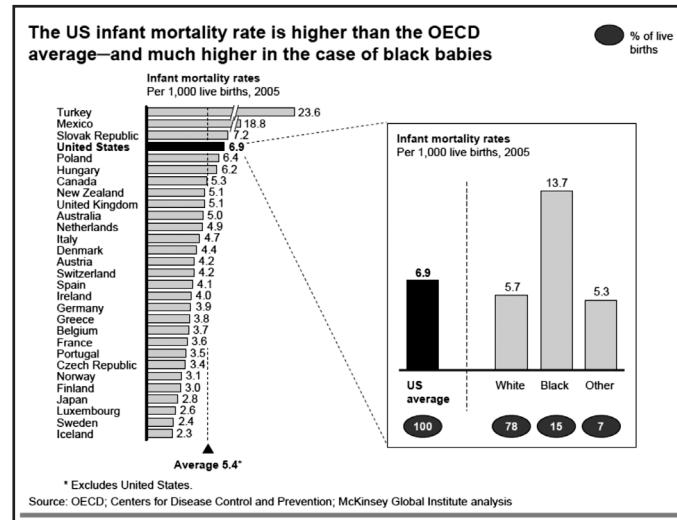


Figure 14:



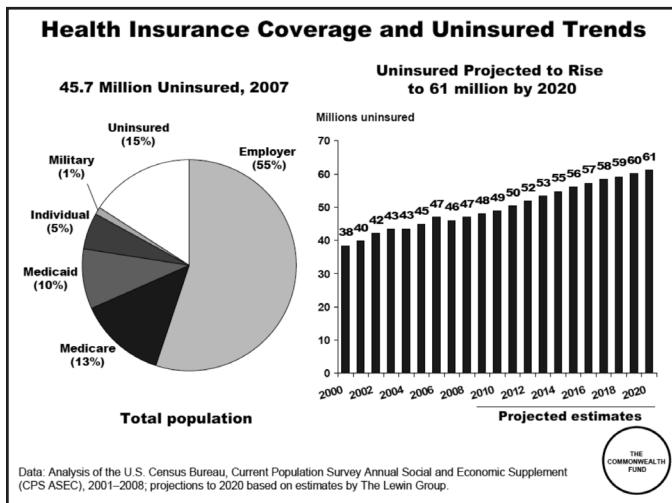
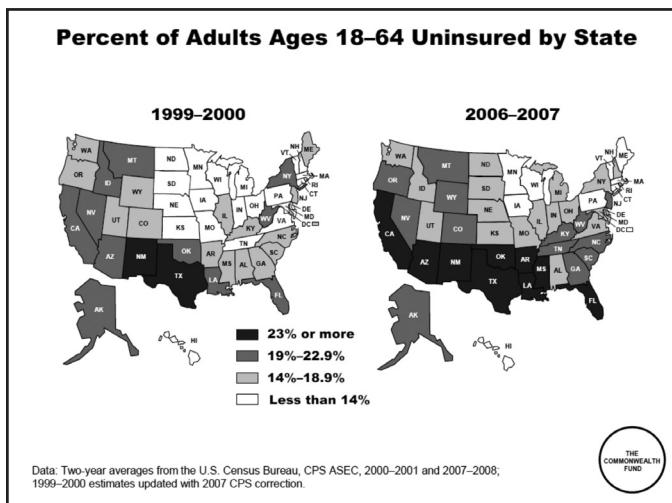
Figure 15:



United States and OECD is primarily due to the racial disparity of five years in the United States; otherwise, the life expectancy of the US white subset is about the same as the OECD average. Possible explanations for this racial disparity in life expectancy have been suggested, including physician discrimination and access to health care;^{44,45} differences in socioeconomic status,^{46,47} stress and overt or perceived racial discrimination.^{48a,48b,49}

Another measure suggesting that the US health system is underperforming is infant mortality. In 1960, the US infant mortality rate was ranked 12th in the world, but it has been falling steadily to 23rd in 1990, 27th in 2000 and 29th in 2004.^{50,51} This is illustrated in Figure 14, which shows the US infant mortality rate tied with Slovakia and Poland but falling below that of Cuba. In 2004 the United States had an overall infant mortality rate of 6.9 per 1,000 live births. This rate compared unfavorably with an OECD average of 5.4 (Figure 15). Again, as we have seen in life expectancy rates, there appears to be a large disparity in these rates among different population demographic groups in the United States. In the black population the infant mortality is 13.7 per 1,000 live births, a rate 2.4 times that of white women. In fact, among all the OECD countries, only Turkey and Mexico have rates worse than the US black infant mortality. Moreover, the US infant mortality rate of 6.9 is about 50% higher than the stated national goal of 4.5 infant deaths per 1,000 births set by the CDC. From the CDC figures it becomes apparent that one of the reasons accounting for about two-thirds of infant deaths in the United States is premature birth. The preterm birth rate in the US went up from 11.6 % in 2000 to 12.7 % in 2005. Infant mortality is an indicator of the health in the country and in the US. Countries that seem to be performing well in this category are Singapore in first place with a mortality rate of 2.0, followed by Hong Kong at 2.5, and Japan in third place at 2.8.

Access to the US health care system is uneven and far more problematic compared to OECD countries. In 2007 15.3% of the US population (45.7 million adults) had no medical insurance.⁵² It is noteworthy that from 2000 to 2007, a time of relatively low unemployment before the current economic depression, the percentage of uninsured Americans increased by 2.5 million.

Figure 16:**Figure 17:**

sion, the number of uninsured increased by 7 million (Figure 17). Assuming complete recovery from the current recession, the Lewin group⁵³ projects this number of uninsured to reach 61 million in the next decade (Figure 16). In addition, these estimates do not include the underinsured and all of those who lose coverage for at least part of the year. From 2003 to 2007, the number of adults who were insured all year, but were underinsured increased by 60%. Based on those who incur high out-of-pocket costs relative to their income, not counting premiums despite having coverage all year, an estimated 25 million adults under age 65 were underinsured in 2007 (Figures 18 & 19).

As a result of this and other factors, the United States comes in 54th on the World Health Organization's international "fairness and equality" ranking.³⁸ Discrepancies in access clearly lead to differences in outcomes. A 1992 study by Weissman et al.⁵⁴ found that for 10 out of 12 avoidable hospital conditions, people who lack insurance were far more likely to be admitted compared to those who were privately insured. It was reported that, moreover, once admitted to the hospital, as reported by Bursin et al. in that same issue of JAMA, uninsured individuals were 2.3 times as likely to suffer adverse events as their

insured counterparts.⁵⁵ Data from the Commonwealth Fund Biennial Health Insurance Survey (2007) has yielded some further insights into specific problems related to the problem of uninsured and underinsured.

Compared to adults with more adequate coverage, underinsured and uninsured adults were far more likely to have problems with access to health care.⁵⁶ Specifically, they did not fill a prescription, did not see a specialist when needed, skipped recommended medical test, treatment, or follow-up, had a medical problem but did not visit doctor or clinic.⁵⁷ Both groups faced financial stress, including medical debt. They had problems paying medical bills, changed their way of life to pay medical bills, or were contacted by a collection agency for inability to pay medical bills (Figure 19).

Recently released data from the Nationwide Emergency Department Sample, the largest all-payer emergency department (ED) database in the country, shows that a disproportionate number of visits were made by uninsured or low-income patients. There were just over 120 million ED visits in 2006, according to the US Department of Health and Human Services

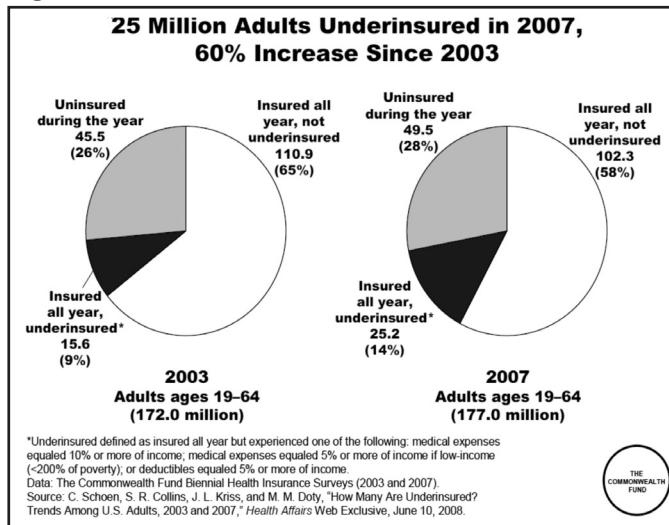
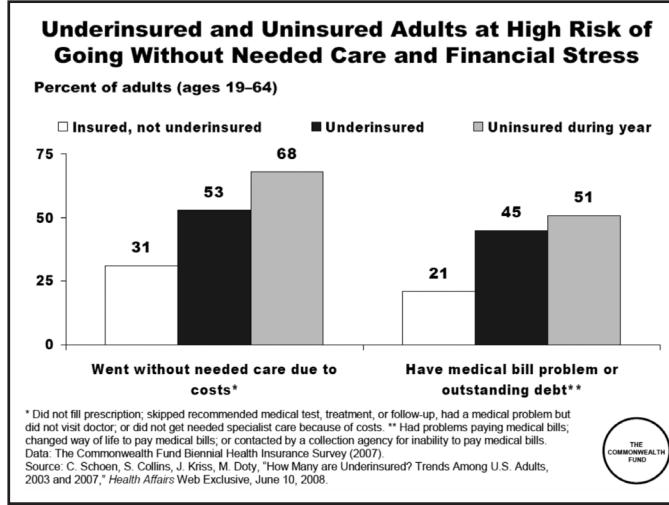
Figure 18:**Figure 19:**

Table 3: Patient and hospital characteristics for All ED Discharges. Payer (insurance status) 2006 National statistics.

	All ED visits (those that resulted in admission to the hospital and those that did not)	Only hospital visits that originated in the ED	Standard errors		
			All ED Visits	Admitted to the hospital from the ED	Discharged from the ED
All discharges	120,033,750 (100.00%)	18,474,258 (100.00%)	101,559,492 (100.00%)	2,477,212	445,398
Payer					
Medicare	24,263,284 (20.21%)	9,296,206 (50.32%)	14,967,078 (14.74%)	512,111	244,074
Medicaid	25,897,442 (21.58%)	2,452,224 (13.27%)	23,445,218 (23.09%)	785,138	112,043
Private insurance	41,518,908 (34.59%)	4,658,474 (25.22%)	36,860,434 (36.29%)	1,000,598	135,894
Uninsured	21,247,186 (17.70%)	1,445,205 (7.82%)	19,801,981 (19.50%)	703,480	61,746
Other	6,563,378 (5.47%)	598,754 (3.24%)	5,964,624 (5.87%)	425,606	41,669
Missing	*	*	*	*	*

Weighted national estimates from HCUP Nationwide Emergency Department Sample (NEDS), 2006, Agency for Healthcare Research and Quality (AHRQ), based on data collected by individual states and provided to AHRQ by the states. Total number of weighted visits in the U.S. based on HCUP NEDS = 120,033,750. Statistics based on estimates with a relative standard error (standard error / weighted estimate) greater than 0.30 or with standard error = 0 in the nationwide statistics NIS, NEDS, and KID are not reliable. These statistics are suppressed and are designated with an asterisk (*). The estimates of standard errors in HCUPnet were calculated using SUDAAN software. These estimates may differ slightly if other software packages are used to calculate variances.

Data from the HCUP Nationwide Emergency Department Sample (NEDS)

(HHS) Agency for Healthcare Research and Quality (AHRQ). Nearly one-fifth (17.7%) were made by patients without health insurance (Table 3). One-third of ED visits were made by low-income patients, while one-fifth of these ED visits were made by residents of rural areas.⁵⁸ It would appear that the American healthcare system has forced too many uninsured, rural, and low-income Americans to depend on the emergency room for primary health care.

The Emergency Medical Treatment and Active Labor Act (EMTALA) was created out of concern that some hospitals were denying emergency medical treatment to some patients because of their inability to pay. In 1986 EMTALA was signed into law as part of the Consolidated Omnibus Budget Reconciliation Act (COBRA). While the Act applies to all Medicare participating hospitals, it protects anyone coming to a hospital seeking emergency medical services, not just Medicare beneficiaries. EMTALA imposes strict penalties, including fines and exclusion from the Medicare program, for violations of the Act. The Centers for Medicare and Medicaid (CMS) issued revisions to EMTALA in 2003, which can be found in the *Federal Register* on September 9, 2003.⁵⁹ Unfortunately, EMTALA became an unfunded mandate. As a result of this statute, albeit one with excellent intentions, emergency departments and hospitals are losing money, and some have been forced to close. The total uncompensated care, which does not include Medicaid or Medicare underpayment costs, or other contractual allowances, has gone up from \$3.9 billion (5,828 hospitals) in 1980 to \$34.0 billion (4,897 hospitals) in 2007.⁶⁰

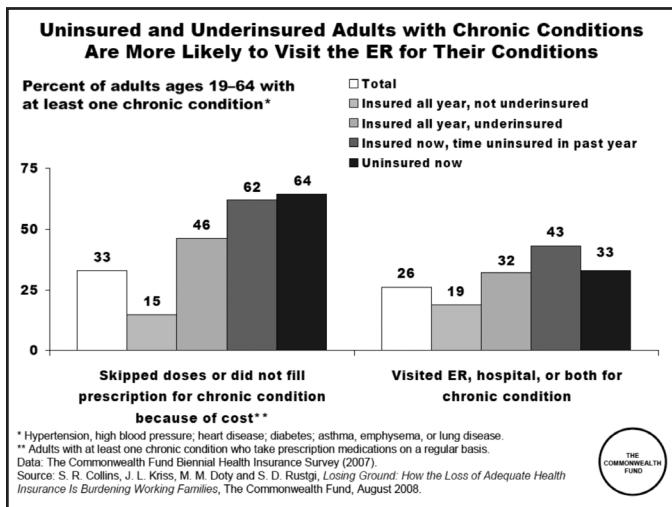
Sometimes having no insurance can still be hazardous to your health, even if you are seen in the emergency room. A study published in *The Review of Economics and Statistics*, May 2005, by Joseph J. Doyle, Jr., an economics professor at MIT, found that the uninsured were estimated to receive 20% less treatment than the privately insured following serious accidents. In addition, the uninsured status appeared to have a surprising effect on mortality. The uninsured were found to have a 1.5 percentage point higher mortality rate, compared with a mean mortality rate of 3.8%.⁶¹ In 2004 the Institute of Medicine estimated that roughly 18,000 unnecessary deaths occur every year in the United States due to lack of health insurance.⁶²

Historically, employer-based health insurance has been the bedrock for financing health care services since 1940. According to the US Census Bureau (2008), the percentage of people covered by private health insurance in 2007 was 67.5%, down from 67.9% in 2006. The percentage of people covered by employment-based health insurance decreased to 59.3% in 2007 from 59.7% in 2006. The percentage of people covered by government health insurance programs increased to 27.8% in 2007, from 27.0% in 2006. The percentage and number of people covered by Medicaid increased to 13.2% and 39.6 million in 2007, up from 12.9% and 38.3 million in 2006.⁶³ Because of increasing health care costs, premiums rose 8.3% in 2000 and 11.0% in 2001, in contrast to the low rates of growth from 1994 to 1998.^{64,65,66} However, employers are always trying to rein in costs of health premiums to the lowest common denominator. They try to achieve this by shifting costs to those who use the services, by increasing co-payments and deductibles, and changing the pharmacy benefits.⁶⁶ Insurance companies are also redesigning their benefit packages in ways that greatly impact workers who seek medical care. These new products feature fewer benefits but larger cost-sharing requirements at the point of service.⁶⁸

Unfortunately, co-payments deter some insured people from obtaining needed care.⁶⁹ Moreover, high health insurance costs also deter employers who do not provide health insurance from purchasing coverage for their employees. As a result, this makes it difficult if not impossible for most uninsured people to buy more expensive individual policies on their own.⁷⁰ Over thirty years ago the RAND Health Insurance Experiment showed that insured persons are apt to seek medical attention less often if they have to pay a portion of that cost out of pocket.⁷¹

Proponents of the current American health system oft repeat the mantra that there is great dissatisfaction with health care (read Universal care or “socialized medicine”) in other countries, particularly Canada and Britain, to such an extent that citizens of those countries come to this country to seek care. It is interesting to note that for the past few years Gallup polls have looked at the rating of both access and quality of care in these three countries.

In Great Britain, satisfaction with access to affordable healthcare (43%) was consistent with satisfaction with quality (42%). In Canada, satisfaction with access to affordable healthcare (57%) was slightly higher than satisfaction with quality (52%). However, the most dramatic variation in satisfaction with these two facets of the healthcare system occurred in the United States, where only 25% were satisfied with the availability of affordable healthcare, but 48% were satisfied with quality. Perhaps these polls indicate a perception or reality that private healthcare encourages high-quality standards, but may be a barrier to access and affordability. However, in terms of quality composite results of three recent Gallup Polls show that more than half of residents in the United States (53%), Canada (52%), and Britain (55%) describe their respective healthcare systems as “excellent” or “good.”^{72,73}

Figure 20:

In terms of reverse medical tourism a 2009 Gallup found that 29% of respondents would consider traveling to non-U.S. destinations for a major problem or procedure, 24% would seek cancer diagnosis and treatment overseas, 15% would travel for orthopedic procedures, 14% would go abroad for heart treatment, and 10% would travel to get plastic surgery. Those without medical insurance are the most interested in medical tourism ventures, with 37% of uninsured respondents willing to consider care abroad. Only 22% of those with health insurance dared to consider such an option.⁷⁴ These surveys are a testament to the increasing cost of medical care in the United States, and correspondingly large numbers of the uninsured are making medical tourism a viable option.

The Path towards Health Care Reform

Providing universal, affordable, and quality health care to all Americans is a formidable undertaking. This is further complicated by multiple entrenched special interest groups and competing political ideologies that characterize the American medical landscape and experience. Moreover, the required legislation for such a gargantuan task would be a herculean and very complicated process. The fundamental rubric of a real health care reform should include:

- universal coverage
- cost control measures
- insurance market reform
- quality improvement measures
- promotion of fitness and wellness

However, though unfortunate, if any legislation is to be voted upon by Congress and make it to the President's desk for the requisite signature this calendar year, it would be a watered down version of the above rudiments because of political expediency and compromise.

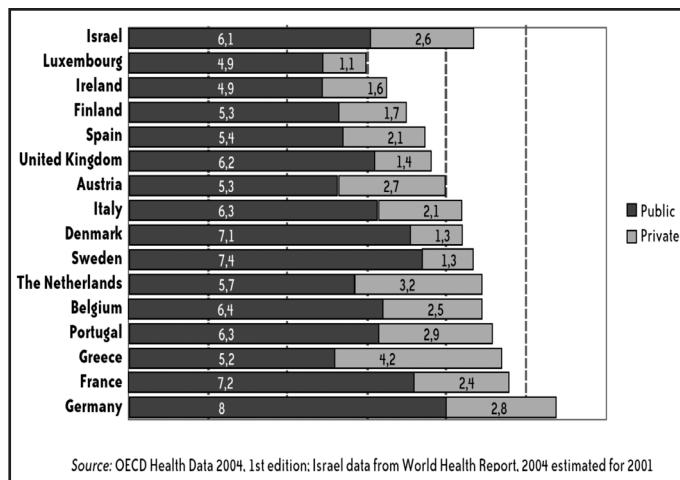
Universal Health Care

All industrialized countries and many developing countries have implemented universal health care. The one glaring exception is the United States. By definition universal health care would cover all residents of a given region or country. Typically, though not exclusively, the costs of universal health care are mostly borne by a single payer, usually the government through legislation, regulation, and taxation. Most health systems in OECD countries are financed through a mix of public and private contributions⁷⁵ (see Figure 21). It should be noted, however, that recently the Netherlands has gone to a system which combines mandatory universal coverage with competing private health plans. According to WHO statistics, the health care system in the Netherlands was 62% government funded and 38% privately funded as of 2004.⁷⁶

A single payer system would be the most efficient and cheap way of delivering health care with better outcomes. The concept of "American exceptionalism" – the belief that the United States is unique among developed nations because of its historical credo, its evolution as a nation, and its unique institutions⁷⁷ is a myth and should be rejected. It should be noted that, despite conservative sloganeering with cries of "socialized medicine, government takeover and individual rights, and freedom of choice," the United States government already directly covers a significant portion of the population.⁷⁸ This is achieved through health care programs for the elderly, disabled, military service families and veterans, children, and some of the poor, through Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), and TRICARE.⁷⁹

Although it is the most logical way to go, a single payer system as an option has not been having much traction in Congressional discussion in the current debate of health care reform. The United States National Health Care Act, H.R. 676, otherwise known as the Conyers-Kucinich bill or expanded Medicare for all, has been languishing in the House of Representatives. This bill attempts to create a publicly financed, privately delivered

Figure 21: Public and private expenditure on health as percentage of the GDP in the prior to May 2004 – 15 European Union Member States (EU-15) and Israel.



healthcare system that uses the already existing Medicare program by expanding and improving it to all U.S. residents and all residents living in US territories.⁸⁰ There is no such equivalent discussion in the Senate. As noted before, a single payer system would be able to lower costs by cutting down on administrative costs, underwriting, marketing, and profits. Also there would be a guaranteed health access to all citizens.

Politically, a single payer system would be difficult to bring about because of the power of the insurance lobby that contributes significant amounts of money to political campaigns. In addition, there is the fear of the unknown by the general population. It should be noted that a lesson from the current recession is the fact that any employee in this country is just a lay off away from losing insurance coverage.

An alternative plan being circulated is the “public option.” The idea calls for a government-backed insurance plan to be offered alongside and in competition with the private options. It is hoped that such a government-backed plan would compel private insurance companies to play fair by keeping coverage comprehensive, denials to a minimum, and, thereby, lowering costs. Since such an entity would not have to advertise or report to shareholders, it is hoped to run cheaper than the private counterparts. However, critics counter that the public option would have an inequitable taxpayer-backed advantage over private plans that could eventually be detrimental to private insurers. It, therefore, becomes clear that such rhetorical sophistry has nothing to do with patient care but the cozy relationship between Washington and the health care lobbyists. A good example worth remembering is former Representative Billy Tauzin of Louisiana, one of the Blue Dog Coalition’s founders. Mr. Tauzin, who later switched to the Republican Party, helped push through the 2003 Medicare Modernization Act, a bill that included huge favorable, but expensive bargains to drug and insurance companies that is projected to cost almost \$1 trillion over the next 10 years, without making provisions to cover the costs. After leaving Congress he became the highly compensated president of PhRMA, the pharmaceutical industry lobby.

Insurance Market Reform

Market-oriented pundits like to perpetuate the fallacy that the health care industry and its problems can be taken care of by unfettered free market economics. We have just witnessed what happens when certain private markets are left to their own devices. They work and perform very badly. In a brilliant economics paper in 1963 Kenneth Arrow demonstrated decisively that health care is not a usual commodity to be marketed or, as Arrow put it, “the *laissez-faire* for medicine is intolerable.”⁸¹ As Paul Krugman put it, the consumer is essentially a pawn because there are two distinctive aspects of health care that are utterly out of the buyer’s control.⁸² The first is that the buyer has no knowledge of when or whether the care will be needed or if it is just for a routine primary care visit or major coronary artery bypass. So health care can be very expensive, necessitating insurance. The Insurance Company now has to decide for the

buyer what type of care to cover. Unfortunately, the Insurance Company is not interested in your health. Paying for your care is a loss for them. Their business model is predicated on trying to deny as many claims as possible. And in an effort to avoid “medical losses,” the industry term for paying medical bills, insurers spend much of the premiums not on medical treatment, but on “underwriting” — screening out people likely to make insurance claims, those unfortunate ones who are actually likely to need care! Covering both of these strategies utilizes a lot of resources, thereby causing private insurance to have much higher administrative costs compared to single-payer systems.

The second thing about health care is that it’s complicated. A buyer with a headache does not know if it’s just an annoying migraine or a major bleed. One has to rely on the fact that their physician is ethical and will give them the appropriate treatment and not one that is good for the physician’s pocketbook. Hopefully, as a society, we should all be in agreement that one should not have to mortgage their house to stay alive or lose their life prematurely because they are poor. Therefore, if the insurance industry is allowed to function in society, it needs to be heavily regulated. Other countries have done precisely that and are progressing very nicely. It is about time this country learned something useful from those other countries.

Cost Controls

Generally, the skyrocketing cost of health care and specifically Medicare is driving up federal deficits, forcing employers to curtail or drop benefits, and leaving workers and their families with unaffordable bills. It has been estimated that even modest attempts to *bend the cost curve* by a relatively small reduction in the average annual growth rate over the next decade — from, say, 6.2% to 4.7% — could save more than \$2 trillion for the health care system. There is much potential fiscal liposuction that can be done in the current health care system. It is precisely because of this ballooning deficit that health care reform needs to be done, even though it might appear to be the wrong time because of the economic depression.

President Obama and his administration are calling for a health care overhaul that would be deficit-neutral after 10 years. The Congressional Budget Office (CBO) and the staff of the Joint Committee on Taxation (JCT) conducted a preliminary cost estimate of H.R. 3200, the America’s Affordable Health Choices Act of 2009, as introduced by several House committees on July 14. That estimate projected a cost of just over a trillion dollars (\$1,042 billion) over a 10-year period and resulting in a net increase in the deficit of an estimated \$65 billion.^{83,84} Two weeks later Democratic leaders in the US House of Representatives reached a deal with a group of fiscal conservatives in their own party, the so-called “Blue Dog” conservative coalition, trimming the cost of the bill to about \$900 billion. The Senate version of the bill still being worked on by Senator Max Baucus and colleagues would cover 95% of all Americans for a cost below \$900 billion, and would actually start reducing the deficit in 2019. The CBO projects that the US GDP in 2018

would equal \$22.6 trillion. So the health care reform at that time would amount to about 4% of GDP. If there is no health care reform by 2018, national health spending is expected to reach \$4.4 trillion and comprise just over one-fifth (20.3 percent) of Gross Domestic Product (GDP). Concomitant with reform of the insurance industry should be reform on a Federal level on tort and medical liability with caps on both malpractice awards and malpractice insurance.

Quality Improvement

Some other measures important to health care reform, although of marginal short-term benefit but may help in quality improvement and curb cost overruns in the long run, were already embedded in the economic stimulus package. Just four

weeks after his inauguration, on February 17, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act of 2009, otherwise known as the \$787 billion economic stimulus package.^{85,86} This package injected \$150 billion of new funds into health care (see Table 4). It directed specific funds for biomedical and comparative effectiveness research, the adoption of health information technology, and the protection of the privacy and security of medical records. The spending also included \$87 billion for Medicaid, \$24.7 billion to subsidize private health insurance for people who lost their jobs, \$19.2 billion for health information technology, and \$10 billion for the National Institutes of Health (NIH).

The stimulus package also provided \$650 million to support prevention and wellness activities targeting obesity, smoking,

Table 4:

Health Care Spending Provisions of the American Recovery and Reinvestment Act of 2009.	
Program or Investment Area	Amount and Purpose of Funding
Comparative effectiveness research	\$1.1 billion, of which \$300 million will be administered by the Agency for Healthcare Research and Quality, \$400 million by the NIH, and \$400 million by the secretary of health and human services.
Continuation of health insurance coverage for unemployed workers	\$24.7 billion to provide a 65% federal subsidy for up to 9 months of premiums under the Consolidated Omnibus Budget Reconciliation Act. The subsidy will help workers who lose their jobs to continue coverage for themselves and their families.
Departments of Defense and Veterans Affairs	More than \$1.4 billion for the construction and renovation of health care facilities.
Health information technology	\$19.2 billion, including \$17.2 billion for financial incentives to physicians and hospitals through Medicare and Medicaid to promote the use of electronic health records and other health information technology and \$2 billion for affiliated grants and loans to be administered by the Office of the National Coordinator for Health Information Technology. Physicians may be eligible for grants of \$40,000 to \$65,000 over multiple years, and hospitals for up to \$11 million.
Health Resources and Services Administration	\$2.5 billion, including \$1.5 billion for construction, equipment, and health information technology at community health centers; \$500 million for services at these centers; \$300 million for the NHSC; and \$200 million for other health professions training programs.
Medicare	\$338 million for payments to teaching hospitals, hospice programs, and long-term care hospitals.
Medicaid and other state health programs	\$87 billion for additional federal matching payments for state Medicaid programs for a 27-month period that began October 1, 2008, and \$3.2 billion for additional state fiscal relief related to Medicaid and other health programs.
National Institutes of Health	\$10 billion, including \$8.2 billion for new grants and related activities and \$1.8 billion for construction and renovation of NIH buildings and facilities, extramural research facilities, and research equipment.
Prevention and wellness	\$1 billion, including \$650 million for clinical and community-based prevention activities that will address rates of chronic diseases, as determined by the secretary of health and human services; \$300 million to the Centers for Disease Control and Prevention for immunizations for low-income children and adults; and \$50 million to states to reduce health care-associated infections.
Public Health and Social Services Emergency Fund	\$50 million to the DHHS to improve the security of information technology.

and other risk factors for chronic diseases and \$500 million for health professions training programs, including \$300 million to revitalize the National Health Service Corps (NHSC).

A proposal has been made to create an independent commission of experts, responsible for quality of care and advocating treatment modalities based on comparative effectiveness research. This commission would report directly to either the president or Congress, to avoid distorting influences of political lobbying. Rather than start from scratch it has been suggested that an already existing Medicare Payment Advisory Commission (MedPAC) be strengthened with broader powers and be anointed for such a task. Originally established by the Balanced Budget Act of 1997 this independent Congressional agency was set up as to advise the US Congress on issues affecting the Medicare program. The Commission consists of 17 members who are supported by an executive director and a staff of analysts, who typically have backgrounds in economics, health policy, public health, or medicine. MedPAC already has quite a broad statutory mandate. In addition to advising the Congress on payments to private health plans participating in Medicare and providers in Medicare's traditional fee-for-service program, MedPAC is tasked with analyzing access to care, quality of care, and other issues affecting Medicare.

Manpower Issues

It is quite evident that to successfully effect these changes it would require a lot of primary physicians that the system does not already have. Fewer and fewer medical students are going into primary care medicine – family medicine doctors, internists and pediatricians.⁸⁷ Three major factors cited for this decrease are: primary care physicians earning far lower incomes than procedural specialists, thereby reducing career attractiveness for medical students with high debt burdens; work-related stresses felt by primary care physicians mark primary care as more work for less pay.⁸⁸ Finally, medical education appears to favor training in non-primary care fields. Given their enormous debts after medical school, most are opting out for higher paying procedure-oriented specialties. As a result, at present the Emergency Department is acting as the de facto primary care physician for the nation. Primary care physicians who do not have the time or energy to carry out complicated outpatient investigations often send their patients to emergency departments for further work-ups. Moreover, as the only facility open 24/7, with no appointments needed, and federally mandated to see all patients regardless of severity of illness or ability to pay, it is, in fact, the only place that has been practicing the dreaded “socialized medicine” in the United States for quite a while. An analysis of data from the 2006 Nationwide Emergency Department Sample, which contains records of emergency department visits from about 1,000 community hospitals nationwide and accounting for 20% of all US hospital emergency departments, reveals supporting evidence.⁸⁸ Nearly one in five (17.7%) patients visiting the emergency department is uninsured. Uninsured patients were the most frequent users of hospital emergency departments. Their rate of 452 visits

per 1,000 people was 1.2 times greater than the rate of 367 per 1,000 people among patients with public or private insurance. The “treat-and-release” rate for uninsured patients was 421 visits per 1,000 people, compared with 301 visits per 1,000 for those with insurance. This is, therefore, an obvious indication that people without insurance are using the emergency departments as their primary source of care.

Therefore, the government should incentivize medical students to go into primary care by subsidizing their medical education and adopting payment incentives that encourage better care, not just more care, and provide more coordinated care than the fee-for-service system does. In the meantime, more money and resources need to be put into the struggling and overburdened emergency departments, which are in fact the gateway into our health care system.

This is the best chance we have had in this country since the sixties, when Lyndon Johnson introduced Medicare, to actually enact legislation that could usher in an era of meaningful health care reform. It is also quite encouraging to note that several major stakeholders, including the American Hospital Association, America's Health Insurance Plans, Pharmaceutical Research and Manufacturers of America, Service Employees International Union, and the American Medical Association have all pledged to contribute to slowing the growth of health care spending.^{89,90}

I have tried to give the fundamentals underlying the need for reform as well as encapsulate the basics of the actual discussions going on in Congress. My hope is not only to educate and update but to inspire all physicians to be advocates in this process. This is not primarily about us and our pocketbooks. This is about the welfare of our patients and the future of our country. I would, therefore, urge all physicians to adopt and embrace the so-called triple aim: better experience of care (safe, effective, patient-centered, timely, efficient, and equitable), better health for the population, and lower total per capita costs.⁹¹ If all our patients are to get quality care and this country is to remain competitive in the global economy and be fiscally sound, we need health care reform and we need it now.

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