

**F**or many years, it was widely believed that the U.S. had the best health care system in the world. Although this assumption had been questioned from time to time, it wasn't until the World Health Organization (WHO) report of 2000 that this belief was seriously challenged.

In this discussion, “best health care in the world” will be defined as having the highest quality of care available anywhere in the world, and the “best health care *system* in the world” will be defined as including not only the highest quality of care in the world but also *access* to this care as well as having the underlying infrastructure of education and research.

Unfortunately, there are no agreed upon or established criteria for measuring the quality of

national health care systems. National health care systems are extremely complex and involved. Perhaps looking at a somewhat simpler and unrelated question such as, “What country had the best Olympic record in 2008?” might help illustrate some of the problems in measuring complex systems. Is it the country that won the most Olympic medals? This would be the U.S., followed by China. Is it the country that won the most gold Olympic medals? In which case, China would be the best, followed by the U.S. Or, is it the country that won the most Olympic medals per person? In which case, the winner would be the Bahamas, followed by Jamaica. Or, would it be the country that won the most medals per square mile? In which case, the winner would be Bahrain, followed by Singapore.<sup>1</sup>

## Does the U.S. have the best health care system in the world?

by Ronald D. Wenger, MD, FACS

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Why do many people believe that the U.S. has the best health care system in the world? First of all, the U.S. spends a higher percentage of its gross domestic product (GDP) and more per capita on health care than any other country in the world. Secondly, the best health care institutions in the world are in the U.S.; these include Johns Hopkins, Mayo Clinic, and Massachusetts General Hospital. Thirdly, physicians from all over the world come to the U.S. for advanced training. Finally, patients from all over the world come to the U.S. for quality care.

### Evaluating national health care systems

In reviewing the health economics literature, there are three measures that have been frequently applied to national health care systems:

- The WHO's *World Health Report of 2000*<sup>2</sup>
- National life expectancy data
- National infant mortality data

On close examination, however, all three of these measures have significant flaws.

The WHO is a division of the United Nations (UN). In 2000, the WHO published its first report comparing the health care systems of 191 countries. These rankings have been widely cited in the public debate over the quality of health care in the U.S. Although these rankings are typically presented as objective measures of the relative performance of national health care systems, the WHO rankings depend on underlying assumptions which actually predetermine the ranking of the health care systems being measured. These assumptions are thoroughly vetted in the recent article, "WHO's fooling who?" by G. Whitman.<sup>3</sup>

What is not commonly known is that there is more than one WHO ranking. In the *World Health Report of 2000*, two rankings were actually reported.<sup>2</sup> The first ranking was called Overall Attainment (OA), and in this ranking the U.S. was internationally ranked as 15th. The second ranking was called Overall Performance (OP) in which the U.S. was ranked 37th. Interestingly, in an extensive review of the English language literature on this subject, the first ranking (OA) is rarely, if ever, quoted. Both of these rankings are based on the same underlying data, but the OP index is adjusted to reflect a country's per-

formance relative to how well it theoretically could have performed. Essentially a country's ranking was raised or lowered by the UN officials depending on whether it was believed that, based on the country's resources, the country actually performed better than anticipated or worse than anticipated. By any measure this action unto itself was highly subjective.

Table 1 on page 10 shows the OA ranking from the WHO study. Note that Japan is ranked as number 1 and that France is number 6, Italy is 11, Germany is 14, and the U.S. is number 15. Table 2 on page 10 shows the OP ranking, in which France and Italy are promoted to number 1 and number 2 because UN experts believed that they performed better than anticipated; Japan, Germany, and the U.S. are demoted to numbers 10, 25, and 37 respectively, because they performed less well than UN experts believed that they should have.

The WHO in their report of 2000 used five criteria for measuring the quality of health care:<sup>3</sup>

- Health level: 25 percent
- Health distribution: 25 percent
- Health responsiveness: 12.5 percent
- Responsiveness distribution: 12.5 percent
- Financial fairness: 25 percent

Only criteria 1 and 3 are clinical measures of health care systems. The remaining criteria (accounting for 62.5 percent of the health systems grade) are nonmedical, socioeconomic criteria, which are pseudo-objective measures that look at inequality of the *distribution* of health care services within a country. It would have been more valuable to have examined the quality of care received by each country's poorest citizens.

### Other measures comparing systems

There are two other measures of health care systems that have been used: life expectancy and infant mortality.

For each of these statistics to be meaningful, there needs to be an actual relationship between the health care system and the item being measured. Changes in the health care system must be reflected in changes in the measure. Furthermore, it is very important that the measure be uniformly used by all nations involved.<sup>4</sup>

## Life expectancy

Review of recent literature suggests that life expectancy is a poor statistic for determining the quality of a health care system because many people actually die with minimal interaction with the health care system (in auto accidents, homicide, and sudden death). Recent research shows that the health care systems have minimal impact on longevity in the industrialized world. Studies from multiple countries have found that there is *no* relationship between: life expectancy and the number of physicians in the country, life expectancy and the number of hospital beds per 100,000 people in a country, and life expectancy and health care expenditures as a percent of national GDP.<sup>4,5</sup>

According to a 2007 article in the *New England Journal of Medicine*, only 10 percent of premature deaths in the U.S. are related to the health care system. The great majority (85 percent) of premature deaths are related to human behavior, genetic predisposition, and social circumstance.<sup>6</sup>

Table 3 on page 11 shows recent life expectancy data in different countries, along with health care expenditures per capita in the respective countries.<sup>4</sup> It is noted that the Japanese have the longest life expectancy at 80.6 years, but do not spend the most money on their health care. The U.S. has shorter life expectancy and spends more on health care.

It is interesting, however, to note that Japanese-Americans living in the U.S. have an average life expectancy similar to Japanese living in Japan. This again confirms recent studies that show that life expectancy in the industrial world is for the

most part independent of a nation's health care system.<sup>4</sup> It is also noted that the U.S. spends a significant percentage of its health care dollars on screening and treating cancer, which is certainly a laudable endeavor. But it has been calculated that even if all cancer deaths were eliminated in the U.S., the life expectancy of the average American citizen would only increase by 2.4–3.0 years and this would still be short of the Japanese life expectancy.<sup>7,8</sup>

**Table 1:**  
Overall health system attainment in all member states, WHO index estimates for 1997 (rank top 40)

1	Japan	15	United States	29	Slovenia
2	Switzerland	16	Iceland	30	Czech Republic
3	Norway	17	Andorra	31	Malta
4	Sweden	18	Monaco	32	Portugal
5	Luxembourg	19	Spain	33	Chile
6	France	20	Denmark	34	Poland
7	Canada	21	San Marino	35	Republic of Korea
8	Netherlands	22	Finland	36	Croatia
9	United Kingdom	23	Greece	37	Brunei Darussalam
10	Austria	24	Israel	38	Barbados
11	Italy	25	Ireland	39	Slovakia
12	Australia	26	New Zealand	40	Cuba
13	Belgium	27	Singapore		
14	Germany	28	Cyprus		

**Table 2:**  
Overall performance (rank top 40)

1	France	15	Iceland	29	Morocco
2	Italy	16	Luxembourg	30	Canada
3	San Marino	17	Netherlands	31	Finland
4	Andorra	18	United Kingdom	32	Australia
5	Malta	19	Ireland	33	Chile
6	Singapore	20	Switzerland	34	Denmark
7	Spain	21	Belgium	35	Dominica
8	Oman	22	Colombia	36	Costa Rica
9	Austria	23	Sweden	37	United States
10	Japan	24	Cyprus	38	Slovenia
11	Norway	25	Germany	39	Cuba
12	Portugal	26	Saudi Arabia	40	Brunei Darussalam
13	Monaco	27	United Arab Emirates		
14	Greece	28	Israel		

**Table 3:**  
**Life expectancy and health expenditures**

	<b>Life expectancy at birth</b>	<b>Per capita health expenditure</b>
Australia	79.0	\$2,513
Austria	78.1	2,191
Belgium	77.6	2,490
Canada	79.0	2,792
Denmark	76.6	2,503
Finland	77.4	1,841
France	78.8	2,561
Germany	77.7	2,808
Greece	78.1	1,511
Iceland	79.6	2,643
Italy	79.0	2,212
Japan	80.6	2,131
Netherlands	77.9	2,626
New Zealand	78.3	1,710
Norway	78.4	2,920
Spain	78.6	1,600
Sweden	79.5	2,270
United Kingdom	77.4	1,992
Non-U.S. average	78.4	2,295
United States	76.7	4,887

## Infant mortality

Theoretically, infant mortality should be a good measure of a health care system. But in spite of strict UN definitions of what a live birth is, many countries do not follow them. Switzerland, Finland, France, Norway, Belgium, and Canada all have idiosyncrasies in their reporting techniques about live births that significantly affect their infant mortality rate.<sup>4</sup> It is not known, for instance, how many countries report babies born at 25 weeks gestation or babies weighing 1.5 pounds as live births.

Table 4 on page 12 shows a recent international report of infant mortality rates.<sup>4</sup> Again, note that the U.S. does not have an outstanding record when compared with other industrialized coun-

tries. Japan and Sweden have the lowest infant mortality rate. It should be noted, however, that overall the industrialized world does far better in this category than the developing world.

In a number of outcome studies in which the U.S. trails the industrialized world, the U.S. data for whites is similar to that of Western Europe, suggesting perhaps the problem in the U.S. may not be quality of health care but distribution of health care. It is also noted that countries in the industrialized world that frequently have the best outcomes are for the most part quite ethnically homogeneous. Sweden, Norway, Iceland, France, Italy, and Japan generally rank very well but all are much more homogeneous than the U.S., which is quite ethnically and culturally diverse. Currently, whites constitute 66 percent of the U.S. population. This number is projected to drop below 50 percent in the next several decades.<sup>9</sup>

Also of significance is the fact that the high school dropout rate in the U.S. is well above 20 percent, which is one of the highest dropout rates in the industrialized world. Students who drop out are more likely to be unemployed, unable to obtain health insurance, skip prenatal care when pregnant, and have poor personal health habits (for example, diet and exercise). Although this is an extremely important problem, it is not a problem created by the U.S. health care system, but nevertheless places tremendous stress on the health care system.

In essence, many observers do not believe that the modest ranking of the U.S. in life expectancy and infant mortality statistics is attributable to the performance of the U.S. health care system but to a variety of other factors.

## Uninsured

According to the recently published *U.S. Census Report 2007*, there are 45.7 million uninsured Americans.<sup>9</sup> Interestingly, this number has been stable at 14 to 15 percent of the population under age 65 over the last 20 years. Many of the uninsured are only uninsured for a few months as they change jobs, 9.7 million of the uninsured are illegal immigrants, and 14 million of the uninsured are poor people who are actually eligible for Medicaid but for one reason or another have not

applied for it. Of the uninsured, 18 million have a household income of more than \$50,000/year and 9 million have household incomes of more than \$75,000/year. Of the uninsured, 11 million have been offered insurance through their employer but have declined. These individuals are typically healthy young people who choose to spend their money on things they want rather than on insurance they believe they will never need. All in all, 70 percent of the uninsured actually have access to health insurance but have not taken advantage of it.<sup>10</sup>

What happens to the uninsured in America? Most of them—when they get sick enough—go to emergency rooms, where by law they must be appropriately evaluated and treated. In 2001, \$98.9 billion were spent from public and private sources in providing health care to the uninsured.<sup>10</sup>

### Who has the best health care system?

In many ways the U.S. health care system is the best in the world. Cardiac deaths have fallen by two-thirds over the past 50 years. Polio has been virtually eradicated from the U.S. Childhood leukemia has a high cure rate. Eight of the top 10 medical advances of the past 20 years were developed in or had roots in the U.S. The Nobel Prizes in Medicine and Physiology have been awarded to more Americans than to researchers in all other countries combined. Eight of the 10 top-selling drugs in the world are made by U.S. companies. The U.S. has some of the highest breast, colon, and prostate cancer survival rates in the world.<sup>11-12</sup>

The Figure on page 13 shows that, among a select group of top economic powers in the world, the U.S. is responsible for more than 53 percent of drug research dollars.<sup>13</sup>

The U.S. ranks first or second in the world in kidney transplants, liver transplants, heart transplants, total knee replacements, coronary artery bypass, and percutaneous coronary interventions per capita. In addition, the U.S. ranks third in bone marrow transplants per capita.<sup>14</sup> According to a Commonwealth Fund report from 2002, the U.S. has the shortest waiting time for nonemergency surgery among a select group of industrialized countries, with England having the longest waiting time.<sup>15</sup> A report this past year showed that in a recent period of time there were 750,000 English

**Table 4:  
Infant mortality rates**

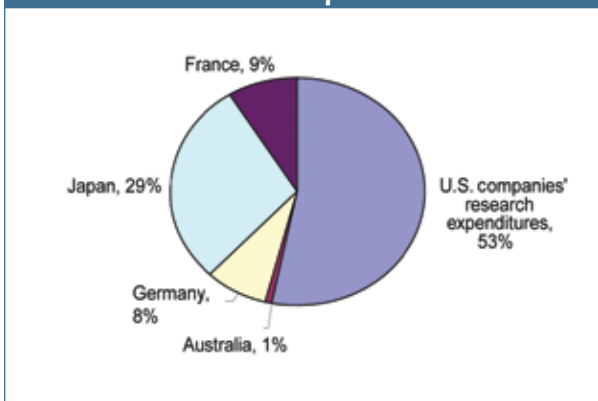
	Infant mortality per 1,000 births
Australia	5.0
Austria	4.9
Belgium	6.0
Canada	5.5
Denmark	4.7
Finland	4.2
France	4.7
Germany	4.7
Japan	3.6
Netherlands	5.2
New Zealand	6.8
Norway	4.0
Spain	5.0
Sweden	3.6
United Kingdom	5.7
United States	6.8

citizens for whom hospital admission had been requested but for whom no beds were available.<sup>12</sup>

As widely reported, the U.S. spends more per capita for health care and a higher percentage of its GDP for health care than any other country. Currently, 15.2 percent of America's GDP goes to health care. Although this is widely criticized, some researchers feel this expenditure is simply a reflection of the high value American citizens place on their health care.

Interestingly, if one looks at health care expenditures as a percentage of GDP in a select group of nations, in the year 1980 the U.S. spent 8.7 percent of its GDP on health care, which was the same percentage as Germany. Twenty-two years later, however, the U.S. health care expenditure as a percent of GDP went from 8.7 percent to 14.6 percent, whereas Germany went from 8.7 percent to 10.9 percent. Other industrialized countries showed increases as well, but to a lesser extent.<sup>16</sup> One possible explanation for the more rapid increase in health care expenditures in the U.S.

**Figure: American pharmaceutical research companies lead the world in research and development**



versus other industrialized countries is that in the U.S., health care is funded through both private as well as public avenues and for the most part does not need to compete with national defense, education, roads, and many other social programs for tax dollars.

### Where does the money go?

People often ask the question, “Where does the money go that the U.S. spends on health care that other countries don’t?” A small percentage may go for inefficiencies and to insurance company profits and executive salaries, but the majority of the excess money pays for a long list of things that American citizens seem to have come to expect:

- Easy access to sophisticated diagnostic tests, including MRIs and CT scans
- Shortest waiting time for elective surgery in the world<sup>17</sup>
- Widest choice of physicians and hospitals<sup>2</sup>
- Easy accessibility to joint replacement
- High access to renal dialysis, particularly in older patients and in patients with co-morbidities
- Easy access to cancer screening and treatment (although a 50 percent reduction in all cancer cases would only increase life expectancy in the average American by 1.4 years)<sup>7</sup>
- Greater access to health care provided to elderly Americans and Americans at the end of their lives who may have poor prognoses

Furthermore, the U.S. by custom and law has permitted a litigious climate to develop that has significantly increased the cost of medical care due to the practice of defensive medicine by physicians and the payment of high malpractice premiums.

Many health experts believe that health care in the U.S. is expensive because most Americans are isolated from the direct purchase of health care and even the knowledge of many health care costs. Because of this, most Americans seem to consume health care as if it were free. Many health experts believe Americans would have a more realistic approach to health care spending if they were actually aware of how expensive specific health care services were, or if they were responsible for paying a greater portion of their own health care.

### International role models for the U.S.?

In reviewing the health care systems of a number of nations, what can one learn? First, the wide variety of systems is surprising. It seems no two systems are alike. Each of the major industrialized countries’ national health care systems is truly unique, with major differences from country to country reflecting the history, conditions, politics, and national character of each country. Careful evaluation of health care systems of the industrialized world reveals that there may in fact be no perfect system. All the major health care systems seem to have their own problems.<sup>12,16</sup>

In exploring the wide variety of health care systems on the international scene, the only system one cannot seem to find is the type described by Michael Moore in his 2007 movie, *Sicko*—a system that provides unlimited care with no premiums, no deductibles, no co-pays, no waiting lists, no rationing, and from the physician of one’s choice. This system does not exist.

### Lessons learned from other systems

In reviewing multiple national health care systems, it becomes apparent that universal health insurance does not mean universal health care. In most countries with universal health insurance, 1 to 2 percent of the population falls through the cracks. Furthermore, because of evolving technology and increasing demand for services, most countries do not have enough money to truly

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provide universal care. Most countries in the industrialized world are having problems providing enough money to pay for the national health care demands of their populations. Most countries are beginning to face problems with de facto rationing, waiting lines, and lack of enough hospital beds and CT and MRI scanners.<sup>12</sup>

As one might suspect, rising health care costs and spending is not uniquely an American phenomena. In 2004, the average annual per capita increase in health care spending was 6.2 percent in the U.S., followed closely behind by 5.55 percent in Europe.

Single-payor national health care systems (such as England, Canada, and Norway) are systems in which the government essentially pays all the health care bills. Multiple-payor national systems (such as France, The Netherlands, and Switzerland) are systems in which employers, insurance companies, and government pay the health care bills. Review of recent literature shows that patients in a single-payor system seem more likely to face waiting lists and rationing than in multiple-payor national health care systems that have incorporated market reforms, such as co-pays and deductibles. Surveys of the industrialized world show widespread dissatisfaction and discontent with both single and multiple payor systems.

Although no country with universal health care is contemplating abandoning their universal health care system, the growing trend in countries with national health care systems is to move away from central government control and to introduce market-oriented features. Thus, even as Americans debate adopting a government-run system, countries with those systems are now debating how to make their systems look more like that of the U.S.<sup>11</sup>

### **U.S. system very good, but could be better**

In reviewing the pertinent literature on the topic, it becomes apparent that many authors critical of the U.S. health care system have carefully chosen to use only data that support their point of view. If, however, one looks at the literature as a whole, one cannot avoid the impression that the U.S. has one of the finest (if not the best) health care systems in the world. The U.S. system

certainly does have its problems (such as access, cost control, and patient safety), but so does every other health care system in the world.

### **Observations**

The unintended consequences of a handful of public policies (both legislative and regulatory) are partly responsible for many of our problems today.

Although employers can deduct health care insurance cost, workers cannot deduct the cost of the same insurance if they purchase it individually, and they cannot deduct out-of-pocket expenses such as co-pays and deductibles. This tax policy encourages consumers to seek out low co-pay, low deductible insurance that is the most expensive.<sup>11</sup>

State health insurance regulations increase the cost of basic health care insurance by requiring insurance companies to cover certain types of care (chiropractic, autism, psychiatric, acupuncture, and so on). This means that in most states it is not possible to buy a basic catastrophic policy. Many state governments have mandated that basic policies not only include basic insurance but a long list of other services. Although one cannot question the value of any one of these add-ons individually, the end result is that the cost of buying basic health care insurance in many states has become prohibitive for the average American.<sup>11</sup>

There are both federal and state laws that prohibit selling the same health care insurance policy across state lines. Such governmental restrictions tend to inhibit competition and result in more expensive health care insurance policies.

Many health care reformers favor a government-run system, but it is not at all clear that the problems of centralized control are any less significant than the problems of our current system. Competition does spur innovation and lower cost.

### **Suggestions for reform**

- Health care tax reform should be passed allowing total deductibility of all health care expenses. Tax credit or vouchers should be provided for low-income individuals and families.<sup>11</sup>
- Health insurance reform needs to be passed to reduce the cost of health insurance by creating

a national market. The laws that limit the sale of health care insurance between states should be eliminated. Health insurance should be *individual* and *portable*. The government should subsidize private insurance for the chronically ill and for those individuals who are uninsurable or have pre-existing conditions.<sup>15</sup>

- Tort reform should become a high priority, establishing a reasonable national cap on non-economic damages in medical malpractice suits. This action would lower the cost of malpractice insurance and decrease the expensive practice of defensive medicine. One researcher estimates such change would reduce the total cost of medical expenditure in the U.S. by 5 to 9 percent annually.<sup>15</sup>

It should be noted that health care reform cannot occur in a vacuum. It must occur in concert with the addressing of social and economic issues. The problem of 10 million illegal immigrants without health care insurance cannot be ignored. The U.S. high school dropout rate is unacceptable and must be dealt with. Unhealthy behaviors such as smoking and obesity must be addressed.

## Final thoughts

We must be careful that coverage for all does not come at the price of substandard quality, rationing of care, a demoralized health care workforce, and inadequate investment in research, education, public health, and health promotion. The U.S. has a high-quality health care system. We should do all we can to protect it as well as improve it. [Q]

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**Dr. Wenger** is clinical professor of surgery, University of Wisconsin, and past-chief of surgery, Dean—St. Mary's, Madison, WI, where he is in the full-time practice of general surgery.

