# Health Spending In The United States And The Rest Of The Industrialized World

Examining the impact of waiting lists and litigation reveals no significant effects on the U.S. health spending differential.

**by Gerard F. Anderson, Peter S. Hussey, Bianca K. Frogner, and Hugh R. Waters**

**PROLOGUE:** A cycle of unsustainable spending growth followed by fervent cost containment initiatives has been a regular feature of the health care landscape for the past half-century. In such a closely studied field, it is inevitable that a cascade of theory and analysis follows every turn of the cycle; currently, though, there seems to be much less agreement about what is driving growth and how to control it than there was during the 1990s, when managed care and managed competition were all but smothered in a gushing, bipartisan embrace. Observers and analysts are divided about whether prices, technology, aging, waste, inefficiency, the legal system, new disease patterns, corporate consolidation, or profligate providers and consumers are chiefly to blame for the rate of climb. Nor is there much sign of consensus about how to slow the trend. The system has turned decisively toward increased cost sharing, but without any assurance that this strategy will abate growth or merely relocate the burden. Magic-bullet solutions like consumer choice, disease management, evidence-based practice, and information technology pique policymakers' interest but inevitably fall short of slaying the dragon.

Under these confusing circumstances, *Health Affairs* is once again publishing its annual analysis of spending trends in thirty member countries of the Organization for Economic Cooperation and Development (OECD). These comparative analyses can't explain everything. But as this year's exercise demonstrates, they can be very helpful in putting the conventional wisdom in perspective. Jerry Anderson and his colleagues offer compelling evidence in the following paper that the hoped-for savings from tort reform may be overblown, as are some common preconceptions about the lavish endowments of the U.S. system.

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**ABSTRACT:** U.S. citizens spent $5,267 per capita for health care in 2002—53 percent more than any other country. Two possible reasons for the differential are supply constraints that create waiting lists in other countries and the level of malpractice litigation and defensive medicine in the United States. Services that typically have queues in other countries account for only 3 percent of U.S. health spending. The cost of defending U.S. malpractice claims is estimated at $6.5 billion in 2001, only 0.46 percent of total health spending. The two most important reasons for higher U.S. spending appear to be higher incomes and higher medical care prices.

ONCE AGAIN, THE LATEST DATA from the Organization for Economic Cooperation and Development (OECD) show that the United States spends much more on health care than any other country. In 2002 the United States spent $5,267 per capita—$1,821 more than Switzerland, which had the second-highest per capita spending, and $3,074 more than the median OECD country.[1] The magnitude of this spending differential leads to the logical question: Why is U.S. health spending so much greater than that of other countries?

In previous papers we have argued that the primary reason is that "it's the prices, stupid." We have shown that the United States pays much higher prices than other countries for pharmaceuticals, hospital stays, and physician visits.[2] This price differential continued in 2002. For example, the average cost of a hospital day in the United States in 2002 was $2,434, compared with $870 in Canada and even less in other OECD countries.[3] The United States also pays much higher prices for physician services and pharmaceuticals.[4]

Part of the difference can be explained by higher U.S. incomes and cost of living. However, even after adjusting for each country's per capita gross domestic product (GDP), U.S. health spending is still $2,037 higher than the predicted value.[5] In past papers we have also examined other possible causes, including population aging and administrative complexity. Neither of these factors explains a sizable portion of the higher levels of U.S. health spending.

In this paper we examine two commonly proposed explanations. One is that other countries have constrained the supply of health care resources, particularly for elective services, which has led to waiting lists and lower spending. A second is the threat of malpractice litigation and the resulting defensive medicine in the United States. A common assumption is that malpractice litigation is much more common in the United States, adding to malpractice premiums and, more importantly, the practice of defensive medicine.

We begin by presenting the latest OECD health spending data. We then examine the roles of supply constraints and of malpractice litigation and defensive medicine in explaining the variation in health spending. We conclude that supply constraints and waiting lists do not appear to translate into significant savings in other countries and that malpractice and defensive medicine are responsible for only a small portion of the U.S. spending differential.

## Total Health Spending

Per capita health spending in the United States in 2002 was 53 percent above that of Switzerland, the next-highest-spending country, and 140 percent above the OECD median (Exhibit 1).[6] Health spending equaled 14.6 percent of U.S. GDP in 2002. Only two other countries, Switzerland and Germany, spent more than 10 percent of their GDP on health care.

**EXHIBIT 1**
**Per Capita Health Spending In Organization For Economic Cooperation And Development (OECD) Countries, 2002**

| | Total health spending | | | |
|---|---|---|---|---|
| Country | Per capita ($PPP) | Percent of GDP | Absolute difference as percent of GDP, 1992–2002 | Average real annual growth per capita, 1992–2002 (%) |
| Australia[a] | 2,504 | 9.1 | 1.0[b] | 4.1 |
| Austria | 2,220 | 7.7 | 0.2 | 2.0 |
| Belgium | 2,515 | 9.1 | 1.1 | 3.0 |
| Canada | 2,931 | 9.6 | −0.4 | 2.2 |
| Czech Republic | 1,118 | 7.4 | 2.0 | 5.3 |
| Denmark | 2,583 | 8.8 | 0.3 | 2.5 |
| Finland | 1,943 | 7.3 | −1.8 | 0.7 |
| France | 2,736 | 9.7 | 0.7 | 2.3 |
| Germany | 2,817 | 10.9 | 1.0 | 2.0 |
| Greece | 1,814 | 9.5 | 1.6 | 4.4 |
| Hungary | 1,079 | 7.8 | 0.1 | 3.5 |
| Iceland | 2,807 | 9.9 | 1.6 | 4.0 |
| Ireland | 2,367 | 7.3 | 0.2 | 7.3 |
| Italy | 2,166 | 8.5 | 0.1 | 1.5 |
| Japan[a] | 2,077 | 7.8 | 1.6[b] | 3.6 |
| Korea | 996 | 5.1 | 0.7 | 6.7 |
| Luxembourg | 3,065 | 6.2 | 0.0 | 3.5 |
| Mexico | 553 | 6.1 | 0.5 | 2.2 |
| Netherlands | 2,643 | 9.1 | 0.7 | 2.9 |
| New Zealand | 1,857 | 8.5 | 1.0 | 3.8 |
| Norway | 3,083 | 9.6 | 1.4 | 4.4 |
| Poland | 654 | 6.1 | −0.1 | 4.1 |
| Portugal | 1,702 | 9.3 | 2.3 | 5.0 |
| Slovak Republic | 698 | 5.7 | –[c] | –[c] |
| Spain | 1,646 | 7.6 | 0.4 | 2.6 |
| Sweden | 2,517 | 9.2 | 0.9 | 3.3 |
| Switzerland | 3,446 | 11.2 | 1.9 | 2.5 |
| Turkey[d] | 446 | 6.6 | 2.8[e] | 9.2 |
| United Kingdom | 2,160 | 7.7 | 0.8 | 3.8 |
| United States | 5,267 | 14.6 | 1.6 | 3.3 |
| OECD median | 2,193 | 8.5 | 0.8 | 3.4 |

**SOURCE:** Organization for Economic Cooperation and Development, *OECD Health Data 2004* (Paris: OECD, 2005).
**NOTES:** PPP is purchasing power parity. GDP is gross domestic product.
[a] 2001.
[b] 1992–2001.
[c] Not available.
[d] 2000.
[e] 1992–2000.

In most countries, health spending increased more rapidly than GDP. U.S. health spending as a percentage of GDP increased by 1.6 percentage points from 1992 to 2002 (from 13.0 percent to 14.6 percent)—twice the OECD median increase of 0.8 percentage points. This was during a period when managed care and greater cost sharing were credited for holding down U.S. health spending.[7]

In every OECD country, growth in health spending outpaced overall inflation during the period 1992–2002. In the United States, real annual growth averaged 3.3 percent, similar to the OECD median of 3.4 percent.[8]

## Role Of Supply Constraints

During 1970–2002 many OECD countries relied on supply constraints to control health spending. In contrast, the United States relied more on demand-side policies. Supply constraints included limiting the number of hospital beds that could be built; controls on the diffusion of medical technology; limits on the number of physicians; limits on what specialties physicians could enter; and drug formularies.[9] The difference in U.S. health spending may be attributable to the lack of U.S. supply constraints, the better access to new expensive technologies, and the lack of waiting lists. Here we examine three questions: How does the supply of health care resources in OECD countries compare with that in the United States? To what extent do OECD countries have waiting lists for services, and how are they attempting to reduce them? And how much in potential savings do these waiting lists represent?

■ **Do Americans have access to a greater supply of health care resources?** Surprisingly, Americans have access to fewer health care resources than people in most other OECD countries, measured in three major categories: hospital beds per capita, physicians and nurses per capita, and magnetic resonance imaging (MRI) and computed tomography (CT) scanners per capita.

The number of hospital beds per capita in the United States was in the bottom quartile of OECD countries in 2002 (Exhibit 2). Also, the number of U.S. physicians per capita (2.4) was below the OECD median of 3.1 in 2002. However, the growth rate in the number of U.S. physicians per capita between 1992 and 2002 exceeded the growth rate of the OECD median. Despite this growth, the United States still had fewer physicians per capita than the OECD median in 2002.

The supply of nurses was lower in the United States than the OECD median, and it grew at half the rate of the OECD median of 1.3 percent per year between 1992 and 2002. One area where the United States exceeded the OECD median was the nurse staffing level in acute care hospitals. In 2002 there were 1.4 nurses per U.S. hospital bed, compared with the OECD median of 1.0 nurses per bed.

High-technology medical equipment is frequently cited as the main driver of escalating health spending.[10] Although the United States tends to be an early adopter of medical technologies, it does not acquire medical technology at high levels once the technology has diffused widely.[11]

**EXHIBIT 2**
**Supply Of Selected Health Care Resources In Organization For Economic Cooperation And Development (OECD) Countries, 2002**

| | Hospital beds | Physicians | | Nurses | | | Technology | |
|---|---|---|---|---|---|---|---|---|
| Country | Number per 1,000 | Number per 1,000 | Average annual growth, 1992–2002 (%) | Number per 1,000 | Average annual growth, 1992–2002 (%) | Number per acute care bed | MRI units per million | CT scanners per million |
| Australia[a] | 3.7[a] | 2.5 | 0.5 | 10.4 | −1.1 | 1.5 | 4.7[b] | –[c] |
| Austria | 6.1 | 3.3 | 3.2 | 9.3 | 1.6 | 0.8 | 13.4 | 27.3 |
| Belgium | –[c] | 3.9 | 1.4 | 5.6 | –[c] | –[c] | –[c] | –[c] |
| Canada | 3.2[a] | 2.1 | 0.0 | 9.4 | −1.7 | –[c] | 4.2[a] | 9.7[a] |
| Czech Republic | 6.5 | 3.5 | 2.6 | 9.4 | 1.1 | 0.5 | 2.2 | 12.1 |
| Denmark | 3.4[a] | 3.3 | 1.0 | 9.7 | 0.9 | 1.3[a] | 8.6 | 13.8 |
| Finland | 2.3 | 3.1 | 1.8 | 9.0 | 3.6 | –[c] | 12.5 | 13.3 |
| France | 4.0[a] | 3.3 | 0.6 | 7.2 | 2.4 | 0.5[a] | 2.7 | 9.7 |
| Germany | –[c] | 3.3 | 1.7 | 9.9 | –[c] | 0.5[a] | 5.5[a] | 13.3[a] |
| Greece | 4.0[b] | 4.5[a] | 1.9[d] | 4.0[b] | 1.3[e] | 0.9[f] | 2.4 | 17.7 |
| Hungary | 5.9 | 3.2 | 1.0 | 8.5 | 1.0 | 0.8 | 2.5 | 6.8 |
| Iceland | –[c] | 3.6 | 1.8 | 14.0 | 0.6 | –[c] | 17.4 | 20.9 |
| Ireland | 3.0 | 2.4 | 1.8 | 15.3 | 2.1 | 1.5 | –[c] | –[c] |
| Italy | 4.6[a] | 4.4 | 1.6 | 5.4 | –[c] | 1.0[a] | 10.4 | 23.0 |
| Japan | –[c] | 2.0 | 1.6 | 8.2 | 2.7 | –[c] | 35.3 | 92.6 |
| Korea | 5.7 | 1.5 | 4.1 | 1.7 | –[c] | –[c] | 7.9 | 30.9 |
| Luxembourg | 5.8 | 2.6 | 2.2 | 10.8 | –[c] | 0.7 | 4.5 | 24.7 |
| Mexico | 1.0 | 1.5 | 1.4 | 2.2 | 1.0 | 2.1 | 1.1 | 2.6 |
| Netherlands | 3.3[a] | 3.1 | 1.6 | 12.8[a] | –[c] | –[c] | –[c] | –[c] |
| New Zealand | –[c] | 2.1 | 1.0 | 9.4 | 0.7 | –[c] | –[c] | 11.2 |
| Norway | 3.1 | 3.0[a] | 1.6[d] | 10.4[a] | –[c] | 1.6 | –[c] | –[c] |
| Poland | 4.6 | 2.3 | 0.5 | 4.8 | −1.0 | –[c] | –[c] | –[c] |
| Portugal | 3.2[a] | 3.2[a] | 1.1[d] | 3.8[a] | 2.4[d] | 1.2[a] | –[c] | –[c] |
| Slovak Republic | 5.5 | 3.6 | –[c] | 7.1 | –[c] | 0.6 | 2.0 | 10.6 |
| Spain | 2.8[b] | 2.9 | 2.1 | 7.1 | –[c] | 0.9[b] | 6.2 | 12.8 |
| Sweden | 2.4[b] | 3.0 | 1.3 | 8.8[b] | 0.1[e] | –[c] | 7.9[f] | 14.2[f] |
| Switzerland | 3.9 | 3.6 | 1.8 | 10.7[b] | –[c] | 1.2 | 14.1 | 18.0 |
| Turkey | 2.1 | 1.3 | 2.7 | 1.7 | 1.3 | 0.4 | 3.0 | 7.5 |
| United Kingdom | 3.9 | 2.1 | 2.1 | 9.2 | 1.5 | 1.7 | 4.0 | 5.8 |
| United States | 2.9 | 2.4[a] | 2.6[d] | 7.9[a] | 0.7[d] | 1.4 | 8.2[a] | 12.8[a] |
| OECD median | 3.7 | 3.1 | 1.6 | 8.9 | 1.33 | 1.0 | 5.5 | 13.3 |

**SOURCE:** Organization for Economic Cooperation and Development, *OECD Health Data 2004* (Paris: OECD, 2005).
**NOTES:** U.S. data on magnetic resonance imaging (MRI) and computed tomography (CT) scanners may be an underestimate since the numbers in locations with multiple scanners are undercounted.
[a] 2001.
[b] 2000.
[c] Not available.
[d] 1992–2001.
[e] 1992–2000.
[f] 1999.

Although the United States has a relatively low supply of these health care resources, they may be used more efficiently than in other countries. For example, lengths of hospital stay are generally shorter and more intensive, and CT and MRI scanners may be used more frequently than in other countries. The greater inten-

sity of care could explain why the United States has fewer health care resources and pays higher prices for their use.

■ **What is the role of waiting lists?** In many countries, persistent waiting lists occur, especially for elective surgical procedures. U.S. patients seldom have to wait very long to receive elective surgery, although waits are common for physician appointments, in emergency rooms, and in other settings.[12] One possible explanation for the lower costs in other countries is that the waiting lists for elective procedures hold down use and spending. Several international studies by Robert Blendon and colleagues have surveyed the public about waiting lists for elective surgery in the United States, Australia, Canada, and the United Kingdom. In a recent survey about access to care, about a third of the population sampled in Australia, Canada, and the United Kingdom believed waiting times to be one of their two biggest health care problems.[13] In these countries, the average wait for nonemergency surgery was more than one month, with between a quarter and a third of respondents reporting waiting more than four months. In contrast, only 3 percent of the U.S. population believed that long waiting times were an important issue; average waiting times for nonemergency surgery were less than one month, with only 5 percent of respondents waiting more than four months.

Australia, Canada, and the United Kingdom have been investing considerable public resources to reduce waiting times in recent years. Their policies include extra funding of health services, increasing the supply of surgical suites and physicians, improving waiting list management, and shifting services to the private sector.[14]

■ **How much savings are possible through waiting lists?** Waiting lists could explain part of the difference in health spending between the United States and other OECD countries. However, there are several reasons to believe that they explain little of the difference. First, not every OECD country experiences waiting lists, although every country spends much less than the United States on health care. The OECD Waiting Times project identified twelve OECD countries that considered waiting times for elective surgery to be a high priority but also identified seven countries besides the United States that did not perceive that they had a problem with waiting times.[15] Health spending in the twelve countries with waiting lists averaged $2,366 per capita, while in the seven countries without waiting lists, it averaged $2,696—both much less than U.S. spending of $5,267 per capita.

A second reason is that the procedures for which waiting lists exist in some countries represent a small part of total health spending. Using U.S. survey data, we calculated the amount of U.S. health spending accounted for by the fifteen procedures that account for most of the waiting lists in Australia, Canada, and the United Kingdom.[16] Total spending for these procedures in 2001 was $21.9 billion, or only 3 percent of U.S. health spending in that year.[17]

As noted above, the United States does not have a lower supply of health care resources than other countries with waiting lists and supply constraints, at least

at the level of hospital beds, physicians, nurses, and high-tech scanning equipment. It is possible that some countries constrain supply at a lower level, such as surgical suites, thereby limiting use and creating waiting lists. However, countries with perceived problems with waiting lists, including Canada, Australia, and the United Kingdom, are beginning to address these issues.

## Role Of Malpractice Litigation

Medical malpractice litigation is another commonly cited reason for higher U.S. health spending. The U.S. Department of Health and Human Services (HHS) reports that "Americans spend far more per person on the costs of litigation than any other country in the world."[18] Is this true, and does the litigious U.S. society contribute to the large spending differential?

We examined data on the number of malpractice claims against physicians and the awards resulting from those claims in the United States, Canada, Australia, and the United Kingdom. All four countries, with legal systems rooted in British law, manage malpractice claims through a British-style tort system. Data on the amount of malpractice awards are not published by the OECD; for this study, we abstracted the data from national reports and databases.[19] To determine the impact of malpractice on health spending, we examine three questions: Do U.S. citizens sue more often? Are U.S. settlements and jury awards to plaintiffs higher? And have total malpractice awards been increasing more rapidly in the United States?

■ **Are more malpractice claims filed in the United States?** The United States had 50 percent more malpractice claims filed per 1,000 population filed than the United Kingdom and Australia, and 350 percent more than Canada (Exhibit 3). Two-thirds of the U.S. claims were dropped, dismissed, or found in favor of the defendant; in one-third, plaintiffs received compensation after a settlement or judg-

**EXHIBIT 3**
**Malpractice Claims And Payments In Four Countries, 2001**

| Country | Claims per 1,000 population | Average payment per settlement or judgment ($PPP) | Average payments per capita ($PPP) | Average annual real growth in total payments, 1997–2001 (%) |
|---|---|---|---|---|
| United States | 0.18 | 265,103 | 16 | 5 |
| Canada | 0.04 | 309,417 | 4 | 20[a] |
| United Kingdom | 0.12 | 411,171 | 12 | 10 |
| Australia | 0.12 | 97,014 | 10 | 28 |

**SOURCES:** Australia: Australian Competition and Consumer Commission. Canada: Canadian Medical Protective Association. United Kingdom: National Health Service Litigation Authority. United States: National Practitioner Data Bank Public Use File (payments) and Physician Insurance Association of America (claims).

**NOTES:** PPP is purchasing power parity. Claims and payments are for cases against physicians only. For further details, see Note 19 in text.

[a] 1998–2001.

ment. The same distribution of claim results occurred in Canada.[20] In the United Kingdom, fewer claims are dropped and dismissed and more are settled; during 1995–2002, 36 percent of claims were dropped, 60 percent were settled, 1 percent were found for the defendant, and 2 percent were found for the plaintiff.[21] No data on the distribution of claim results were available for Australia.

■ **Are claim payments higher in the United States?** Surprisingly, U.S. malpractice payments (including both cases that resulted in a judgment for the plaintiff and cases resulting in a settlement) were lower, on average, than those in Canada and the United Kingdom. In 2001 the average payment in the United States was $265,103, which was higher than in Australia but 14 percent below Canada and 36 percent below the United Kingdom.[22] While U.S. media and public attention have focused on multimillion-dollar awards at the upper end of the range, the average was actually smaller than in Canada and the United Kingdom in 2001.

Possibly the most important and best summary measure of the magnitude of malpractice awards is total payments divided by total population. On this measure, the United States is only slightly higher than the other three countries: $16 per capita in 2001, compared with $12 in the United Kingdom, $10 in Australia, and $4 in Canada. In all four countries, however, malpractice payments represent less than 0.5 percent of health spending.

These figures do not include the legal costs of defending malpractice claims. Legal costs are estimated to average $27,000 per claim in the United States, which adds approximately $1.4 billion in costs to the $4.4 billion paid in settlements and judgments.[23] The costs of underwriting insurance against malpractice claims are estimated at an additional 12 percent, or $700 million.[24] The cost of defending U.S. malpractice claims, including awards, legal costs, and underwriting costs, was an estimated $6.5 billion in 2001—0.46 percent of total health spending.

In Canada, the total amount spent on malpractice payments was $127 million (adjusted for purchasing power parities, or PPPs) in 2001. An additional $76.9 million (PPP) was spent on legal costs, and $32.5 million was spent on underwriting costs.[25] The total cost including awards, legal costs, and underwriting costs was $237 million (PPP) in 2001—0.27 percent of total Canadian health spending. Data on legal and other costs are not available for the other two countries.

Defensive medicine—tests or procedures ordered by physicians to protect against the risk of being sued—could contribute more to health spending than malpractice payments do. Several attempts have been made to quantify the amount spent on defensive medicine, but estimates vary widely. The difficulty lies in determining what services are purely "defensive"—that is, both inappropriate overuse and motivated by fear of litigation. For example, a physician might ask for a second opinion on a difficult diagnosis, mindful of the potential of litigation, but that second opinion could be considered appropriate care. Other services could be considered inappropriate overuse but were motivated by incentives other than the litigation threat, such as payment policy. These gray areas make precise estimates

*"It is difficult to establish how much care is attributable to defensive medicine, in either the United States or other countries."*

of the cost of defensive medicine extremely difficult.

One estimate of this cost has come from HHS, which estimates that $70–126 billion (5–9 percent) in health spending per year would be saved if malpractice tort reform, similar to policies in California, were passed at the national level.[26] This estimate was constructed by extrapolating the findings from a study by Daniel Kessler and Mark McClellan.[27] They found lower hospital spending for Medicare patients hospitalized for two diagnoses (acute myocardial infarction and ischemic heart disease) in states with certain types of tort reform. However, the Congressional Budget Office (CBO) was unable to replicate these results using a broader set of diagnoses.[28] The CBO also found mixed evidence for defensive medicine in the published literature; it thus concluded that "savings from defensive medicine would be small" following tort reform. These two widely divergent conclusions by two government agencies underscore the uncertainty around the contribution of defensive medicine to health spending. If the upper estimate of 9 percent were accurate and for some reason little defensive medicine were practiced in other countries, it could explain some of the differential in per capita health spending between the United States and other OECD countries. Given the number of malpractice claims observed, however, defensive medicine is likely to exist in other countries as well.

■ **Have claim payments been growing more rapidly in the United States?** Between 1996 and 2001, U.S. total malpractice payments grew at an average annual rate of 5 percent over inflation. These increases are commonly blamed for the rapid rise in U.S. malpractice premiums. The growth in malpractice awards was even more rapid in Australia, Canada, and the United Kingdom: 10–28 percent above inflation (Exhibit 3). These rates indicate that malpractice payments are a growing problem in these countries.

Insurance market dynamics and investment return rates also affect malpractice insurance premiums.[29] Insurance markets are organized differently in the four countries. British and Canadian physicians are protected from malpractice litigation risks by a single national organization, with premiums subsidized by the government. Australia has a private insurance system more similar to the U.S. system, but the Australian government subsidizes physicians' malpractice premiums and reinsures high-cost claims. These arrangements may provide more insulation from malpractice insurance market dynamics for physicians in Australia, Canada, and the United Kingdom than for U.S. physicians.[30] Nonetheless, the rapid increases in malpractice costs have stimulated debates over new policies in these countries.

## Discussion

Although malpractice litigation is a growing problem in the United States as well as in Australia, Canada, and the United Kingdom, there is limited evidence that it is responsible for much of the difference in health spending levels between the United States and these countries. In all four countries, malpractice litigation costs for claims against physicians are small compared with total health spending. Some additional costs may be associated with claims against institutional providers or other clinicians. Increased use of services because of defensive medicine probably contributes more to health spending than the actual costs of litigation, however. Unfortunately, it is difficult to establish how much care is attributable to defensive medicine, in either the United States or other countries. Physicians may practice more defensively in the United States because of the greater frequency of claims. Although those claims on average do not result in larger awards or settlements than in other countries, the process of defending a claim is nonetheless adversarial and can result in a tarnished professional reputation. The upper estimate of 9 percent of additional costs attributable to defensive medicine would explain only part of the higher U.S. health spending. This assumes that there is much less defensive medicine practiced in other countries.

Another piece of conventional wisdom about why U.S. health care costs are so much higher than other countries' is also probably overstated. It is common for people to wait for nonemergency medical procedures in some OECD countries, but these procedures do not contribute much to health spending. In the United States, the procedures that necessitate waiting lists in other countries would account for only 3 percent of health spending. Other types of services, which are not included in this estimate, also might involve waiting lists in some countries, such as diagnostic tests and physician visits. However, there is some evidence that Americans wait for some of these services, too. In a recent survey, U.S. respondents reported more difficulty making an appointment with a physician quickly; more difficulty getting care on nights, weekends, and holidays; and more frequent delays of treatments because of their cost than was the case with people in other countries.[31]

THE FINDING THAT LITIGATION AND WAITING LISTS do not explain most of the higher U.S. health spending is perhaps not surprising considering previous research showing that the prices of care, not the amount of care delivered, are the primary difference between the United States and other countries.[32] These higher prices are increasingly making health care unaffordable for many Americans.[33] Equally troubling, the more-costly U.S. health care has not resulted in demonstrably better technical quality of care or better patient satisfaction with care.[34] Future U.S. policies should focus on the prices paid for health services and on improving the quality of those services.

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## NOTES

1. Purchasing power parities (PPPs) were used to adjust for cost-of-living differences between countries.
2. G.F. Anderson et al., "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs* 23, no. 3 (2003): 89–105.
3. G.F. Anderson, P.S. Hussey, and J. Cylus, *Multinational Comparisons of Health Systems Data, 2005,* Commonwealth Fund Chartpack (New York: Commonwealth Fund, forthcoming).
4. G.F. Anderson et al., "Doughnut Holes and Price Controls," *Health Affairs* 21 July 2004, content.healthaffairs.org/cgi/content/abstract/hlthaff.w4.396 (8 April 2005).
5. We calculated predicted U.S. health spending based on a simple regression of health spending per capita on GDP per capita for OECD countries (excluding the United States) in 2002.
6. The OECD definition of *total health spending* is slightly different than that used in the Centers for Medicare and Medicaid Services (CMS) National Health Accounts data.
7. D. Blumenthal, "Controlling Health Care Expenditures," *New England Journal of Medicine* 344, no. 10 (2001): 766–769.
8. The real growth rate was calculated using each country's national currency units adjusted for inflation by the country-specific GDP price index.
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14. J. Hurst and L. Siciliani, "Tackling Excessive Waiting Times for Elective Surgery: A Comparison of Policies in Twelve OECD Countries," OECD Health Working Paper (Paris: Organization for Economic Cooperation and Development, 7 July 2003).
15. Ibid.
16. The procedures are coronary artery bypass graft, cataract extraction, myringoplasty, myringotomy, septoplasty, tonsillectomy and/or adenoidectomy, varicose vein stripping/ligation, hemorrhoidectomy, cholecystectomy, inguinal herniorrhaphy, cystoscopy, prostatectomy, hysterectomy, total hip replacement, and total knee replacement. The procedures were taken from a list compiled by the Australian Institute of Health and Welfare of high-volume procedures with significant waiting times. Australian Institute of Health and Welfare, *Australian Hospital Statistics 2002–2003* (Canberra: AIHW, 2004), 120–122.
17. Authors' calculation using Medical Expenditure Panel Survey (MEPS) 2001 Inpatient, Outpatient, and Office Visit files for the fifteen common elective surgical procedures. Only two-digit *International Classification of Diseases,* Ninth Revision (ICD-9) codes are collected in MEPS. This results in an overestimation of the procedure costs because of the generalized categories of procedures.
18. U.S. Department of Health and Human Services, "Addressing the New Health Care Crisis" (Washington: Office of the Assistant Secretary for Planning and Evaluation, 3 March 2003).
19. The sources for malpractice claims and payments are as follows. Australia: Australian Competition and Consumer Commission; Canada: Canadian Medical Protective Association; United Kingdom: National Health Service Litigation Authority; United States: National Practitioner Data Bank (NPDB) Public Use File (payments) and Physician Insurance Association of America (claims). The number of U.S. claims was estimated by dividing the number of claims for which a payment was reported to the National Provider Data Bank (16,688) by the average proportion of claims resulting in a payment (0.33). The proportion of claims resulting in a payment is based on claims tracked by the Physician Insurance Association of America, which tracks many claims filed in the United States. Australian figures are based on claims opened in

2001 and the payments expected for those claims. U.K. claims figures are for claims opened in 2001. All other figures are based on payments made in 2001.

20. In Canada in 1998–2002, 62 percent of claims were dropped or dismissed, 29 percent were settled, 7 percent were found for the defendant, and 2 percent were found for the plaintiff.
21. U.K. Department of Health, "Making Amends," Report by the Chief Medical Officer (London: Department of Health, June 2003).
22. The comparison of one single year of data across countries obscures changes that are occurring over time. For example, Canadian payments in 2001 included one for a large class-action suit. Excluding that suit, Canadian payments averaged $249,750 (PPP) in 2001. In the United States, malpractice insurance companies are legally required to report all award payments to the NPDB, which is maintained by the Health Resources and Services Administration (HRSA). Some settlements may not be reported if the settlement does not name a specific physician. HRSA also has very little infrastructure for enforcement of the regulation. See J.T. Hallinan, "Attempt to Track Malpractice Cases Is Often Thwarted," *Wall Street Journal*, 27 August 2004. The average reported here does not include installments of multipart payments that are disbursed in years other than 2001. HRSA reports that "most cases" do not include multipart payments. Total payments for 2001 using the NPDB were $4.4 billion. The U.S. Government Accountability Office (GAO) has estimated payments at $5.2 billion. U.S. Government Accountability Office, *Medical Malpractice Insurance: Multiple Factors Have Contributed to Increased Premium Rates*, Pub. no. GAO-02-702 (Washington: GAO, June 2003). The private consulting firm Tillinghast–Towers Perrin has estimated $11.4 billion in payments and the costs associated with settling claims against physicians. Its estimate was based on analysis of a proprietary database. Tillinghast–Towers Perrin, *U.S. Tort Costs: 2003 Update*, February 2003, www.towersperrin.com/tillinghast/publications/reports/2003_Tort_Costs_Update/Tort_Costs_Trends_2003_Update.pdf (8 April 2005). The Physician Insurance Association of America (PIAA), an association of physician-owned insurance companies, estimates that the average payment for claims against its beneficiaries was $310,215.
23. P. Beider and S. Hagen, "Limiting Tort Liability for Medical Malpractice," Congressional Budget Office Issue Brief (Washington: CBO, 8 January 2004). The PIAA estimates expenses at $28,801 per claim filed against its beneficiaries.
24. Tillinghast–Towers Perrin, *U.S. Tort Costs.*
25. Canadian Medical Protective Association, *2002 Annual Report*, 2003, www.cmpa-acpm.ca/portal/cmpa_docs/english/resource_files/admin_docs/common/annual_reports/2002/pdf/print_ar_2002-e.pdf (8 April 2005).
26. DHHS, "Addressing the New Health Care Crisis."
27. D. Kessler and M. McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111, no. 2 (1996): 353–390.
28. Beider and Hagen, "Limiting Tort Liability for Medical Malpractice."
29. GAO, *Medical Malpractice Insurance.*
30. W.M. Sage, "The Forgotten Third: Liability Insurance and the Medical Malpractice Crisis," *Health Affairs* 23, no. 4 (2004): 10–21.
31. Schoen et al., "Primary Care and Health System Performance."
32. Anderson et al., "It's the Prices, Stupid."
33. U.E. Reinhardt, P.S. Hussey, and G.F. Anderson, "U.S. Health Care Spending in an International Context," *Health Affairs* 23, no. 3 (2004): 10–25.
34. P.S. Hussey et al., "How Does the Quality of Care Compare in Five Countries?" *Health Affairs* 23, no. 3 (2004): 89–99; and K. Davis et al., "Mirror, Mirror on the Wall: Looking at the Quality of American Health Care through the Patient's Lens," January 2004, www.cmwf.org/usr_doc/davis_mirrormirror_683.pdf (8 April 2005).