Statement by

Tsung-Mei Cheng, LL.B., M.A.
Health Policy Research Analyst
Woodrow Wilson School of Public and International Affairs
Princeton University
Princeton, New Jersey 08544
E-mail: maycrein@exchange.Princeton.EDU

before the

U.S. Senate Committee on Health, Labor, Education & Pensions
Subcommittee on Primary Health and Aging

Hearing on

“Access and Cost: What the US Health Care System Can Learn from Other Countries”

March 11, 2014
Washington, DC
My name is Tsung-Mei Cheng. I am Health Policy Research Analyst at the Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, New Jersey.

My research has focused on cross-national comparisons of health systems and health policy, mainly in East Asia, including the single payer health system of Taiwan, health reforms in China and Taiwan, health technology assessment and comparativeness effectiveness research, health care quality, financing and payment reform, including the application of evidence-based clinical guidelines and clinical pathways for improving efficiency in emerging market health systems.

My sincere thanks to you, Mr. Chairman, and your colleagues for inviting me to testify before this Committee on what the US health care system can learn from other countries. In health policy, other countries have for years taken lessons from the US in their efforts to reform their health care systems. The DRG payment system by which Medicare pays hospitals for inpatient care, for example, has been copied around the world. So it seems only fair that we Americans also import some lessons from abroad.

Today’s hearing is focused on “international single payer health system models that provide universal coverage of health care.” I will tailor my remarks according to the three sub-themes the Committee wishes to explore, namely:

- Primary care access in single payer systems
- Health care costs in single payer systems, and
- Cross-country comparisons of health outcomes

Before proceeding with the Committee’s agenda in more detail, however, I would like to provide the Committee with a summary of my main points:

1. If equity and social solidarity in access to health care and financing health care were fundamental goals of a health care system, the single payer system provides an ideal platform for achieving these goals.

2. Single-payer systems typically are financed by general- or payroll taxes in a way that tailors the individual’s or family’s contribution to health-care financing to their ability to pay, rather than to their health status, which until this year has long been the practice in the individual health insurance market in the U.S. (Table 1).

3. These systems protect individual households from financial ruin due to medical bills.
4. Single-payer health systems typically afford patients free choice of health-care provider, albeit at the expense of not having a freedom of choice among different health insurers. Remarkably, in the U.S. households have some freedom of choice of health insurers – to the extent their employer offers them choice – but most Americans are confined to networks of providers for their insurance policy. In other words, Americans appear to have traded freedom of choice among providers for the sake of choice among insurers.

5. In single-payer systems “money follows the patient.” Therefore providers of health care must and do compete for patients on the basis of quality and patient satisfaction, but not price.

6. In a single payer health insurance system, health insurance is fully portable from job to job and into unemployment status and retirement. The “job-lock” phenomenon prevalent in the US is unknown in those systems, contributing to labor-market efficiency.

7. Because all funds to providers of health care in a single-payer system flow from one payer, it is relatively easy to control total health spending in such systems (Table 4). Indeed, total national health spending as a percent of GDP in countries with single-payer systems is lower than it tends to be in non-single-payer health systems. This does not mean providers are left without a voice. Provider inputs are part of the formal negotiations over health-care budgets.

8. For the most part, single-payer systems achieve their cost control by virtue of the monopsonistic market power they enjoy vis a vis providers of health care. It is a countervailing power that the highly fragmented U.S. health-insurance system lacks vis a vis providers (see Table 5).

9. As part of their effort to control total health spending, however, and to avoid the waste of excess capacity that easily develops in health care, some single-payer systems (the UK and Canada) put constraints on the physical capacity of their health system (number of inpatients beds, MRI scanners, etc). That approach can lead to rationing by the queue. The alternative to rationing by such administrative devices, of course, is rationing by price and ability to pay, an approach used by design or by default in the United States (see Section C, “Waiting Lines” of my Statement and Table 2). Rationing by price or by non-price mechanism are just alternative forms of rationing.
10. A single-payer system is an ideal platform for a uniform electronic health information system of the sort, for example, used by our Veterans Administration health system (a single-payer system in its own right). There is a common nomenclature which enables 100% electronic billing and claims processing, thus yielding significant savings in administrative costs.

11. Because they conveniently capture information on all health-care transactions, single-payer systems provide a data base that can be used for quality measurement, monitoring and improvement, and also for more basic research on what drives health spending and what clinical treatments works and does not work in health care. It enables evidence based medicine and the tracking of efficacy and safety of new drugs and devices once they are introduced after approval by government based on results of clinical trials.

A. A Taxonomy of Different National Health Systems

There is some uncertainty on what is actually meant by a “single payer” system, so I shall begin my testimony with a brief taxonomy of health systems used around the world. That taxonomy has two dimensions:

(a) Organization of the financing of health care, and

(b) Organization of the production and delivery of health care to patients.

Table 1 provides illustrates these dimensions.

[Table 1 on next page]

---

Table 1 – A Taxonomy of Health Systems

<table>
<thead>
<tr>
<th>OWNERSHIP OF PROVIDERS</th>
<th>FINANCING AND HEALTH INSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SOCIAL INSURANCE</td>
</tr>
<tr>
<td></td>
<td>PRIVATE INSURANCE</td>
</tr>
<tr>
<td></td>
<td>NO HEALTH INSURANCE</td>
</tr>
<tr>
<td></td>
<td>(Ability-to-pay financing)</td>
</tr>
<tr>
<td></td>
<td>(Actuarially fair financing)</td>
</tr>
<tr>
<td></td>
<td>(Out-of-pocket)</td>
</tr>
<tr>
<td>Government</td>
<td>Single Payer</td>
</tr>
<tr>
<td></td>
<td>Multiple Payers</td>
</tr>
<tr>
<td>Private, but non-profit</td>
<td>B</td>
</tr>
<tr>
<td>Private, and commercial</td>
<td>C</td>
</tr>
</tbody>
</table>


**National Health Service (Socialized Medicine):** Cell A in Table 1 represents the purest form of single-payer health systems. In these systems government funds and organizes both the financing of health care and owns and operates the facilities producing health care. Physicians and other professionals in these systems are government employees. One thinks here of the inpatient sector of the British National Health Service (NHS), although outpatient services there are delivered by self-employed general practitioners. The health systems of Italy, Spain and the Nordic countries in Europe also fall into cell A, as does the Hong Kong Hospital Authority (a legacy of British colonialism). Most remarkably, although one commonly finds “socialized medicine” condemned in this country as second rate, Americans have reserved the purest form of socialized medicine for their military veterans, namely, the Veterans Administration health system.

**Single-Payer Social Health Insurance:** Cells A, B and C jointly represent single payer health systems in which government owns and operates a single health-insurance system for all citizens (or a designated group of citizens, such as the elderly), but purchases health care from a mixed delivery system that may include government-owned facilities (e.g., municipal hospitals and neighborhood health clinics), privately owned not-for-profit facilities or privately owned, for-profit facilities.
Canada’s provincial health insurance systems are a clear example of these single-payer systems, as is Taiwan’s National health Insurance (NHI) system. In the U.S., the traditional, fee-for-service Medicare program is a national single-payer system. The state-based traditional Medicaid systems fall into this category as well.

Multiple-Payer Social Health Insurance: Cells D, E and F jointly represent so-called multiple-payer social health insurance systems. In those systems health insurance is financed either at the nexus of the payroll, by premium contributions calculated as a flat percentage of the individual employee’s a gross wages (e.g., Germany, and, in part, the Netherlands) or on per capita premiums (Switzerland and, in part, The Netherlands). The health insurance system itself, however, is in the hands of multiple carriers who compete with one another for patients – for example, the German not-for-profits sickness funds or commercial insurance companies in Switzerland that may, however, not earn profits on individuals insured under the country’s social insurance systems (but can earn profits on covering supplementary services not in the socialized benefit package).

A unique type of multi-payer social insurance is called “all-payer systems”. Germany and Switzerland are examples. In these systems, regional associations of health insurers (e.g., Germany’s sickness funds) formally negotiate with counter-associations of providers common fee schedules that then apply to all insurers and providers in the region – hence the name “all-payer system.” The negotiations are subject to oversight by the relevant governments which may set an overall global budget for the negotiations. If the negotiating parties cannot agree on fees, the government imposes compulsory arbitration. In effect, these systems are close cousins of single payer systems. In the U.S. the state of Maryland has long operated such a system for hospitals.

In the U.S., the Medicare Advantage system and the Medicaid Managed Care system fall into cells D, E and F as well. Here government collects the financing from households via taxation but delegates the process of purchasing health care from providers of care, claims processing and even negotiations over fees to private for-profit or not-for-profit insurance carriers.

Private Health Insurance: Cells G to L jointly represents a broad category of systems that are not social insurance but contains a wide range of alternative arrangements.

The purest form of private insurance until December of 2013 – that is, before the Affordable Care Act (ACA) took effect on January 1, 2014 – have been for-profit or not-for-profit insurers selling health insurance to individuals. They based the premium charged the individual on that individual’s health status, that is, on the expected health spending required by that individual. It is called “actuarially fair pricing” or “medical underwriting.” Effective January 1, 2014, medical underwriting is no longer permitted in the individual market. Premiums there are now “community rated,” that is, independent of the individual’s health status. (Age or smoking habits, however, can still be factored into the premium).
The most widely sold private health insurance in the U.S., however, is employment-based insurance sold as group policies to business firms of all sizes. This approach in effect represents a combination of actuarially fair pricing and social insurance.

The premiums for the group policies sold to an individual firm covering all of that firm’s employees are “experience rated,” that is, they are based on the actuarially expected cost of that firm’s group of employees. Other things being equal, firms with large proportions of older employees will pay a higher premium than a similar firm with more young employees.

Within the firm, however, each employee’s contribution toward the premium for the firm’s group policy is independent of that employee’s health status, that is, it is community rated.

In a sense then, one can think of each firm’s employment-based health insurance system as a form of private social health insurance.

Under the ACA, the group policies sold to small employers also will be community rated over all firms in a market area, to protect individual small firms from the high premiums that can obtain when several of a small group of employees are sick.

**Uninsurance:** Finally, cells M, N O represent health systems without health insurance. The bulk of the population of low-income, developing countries tends to fall into those cells. In the U.S., close to 50 million individuals fall into these cells.

A take-away from this brief survey is that, while most countries’ health systems tend to fall neatly into a few cells of Table 1, one finds Americans in literally all cells in the table. We have purely socialized medicine (the VA health system), single-payer systems with mixed private delivery of care (Medicare, Medicaid), multiple-payer social insurance (Medicare Advantage, Medicaid Managed Care), a whole range of private health insurance arrangements, and millions of uninsured like in a developing nation. It follows that there really is no “United States health system.” What we have is a pastiche of different systems.

**The Exchanges Under the ACA:** Under the ACA, the system of health insurance sold on the state-based health insurance exchanges (some federally run, some organized by the states) represents a highly complex mixture of social insurance and private financing, depending on the income level of the insured. It does not fit neatly into Table 1. For very poor applicants it is basically social insurance purchased from commercial insurers or Medicaid, for applicants with income above 400% of the federal poverty line it is purely privately financed commercial insurance.

## B. The Role of Social Ethics

Different countries in both the developed world and emerging markets use different combinations of the cells in Table 1 to finance and deliver health care. In the chapter co-authored with Princeton economist Uwe Reinhardt, we made the observation that how a
nation decides on what combination of health care financing and delivery to go with for that nation’s health care system depends very much on the social ethic held by that nation’s citizenry.\(^2\)

**Health Care as a Social Good:** As we note in the above cited paper, the political consensus in many countries supports a strict *Principle of Social Solidarity*.

Under that principle, health care is viewed as a social good that – like public elementary and secondary education and, in many countries, even tertiary education -- is to be available to all in need on equal terms and is to be financed strictly on the basis of ability to pay for health insurance and, thus, health care.

These countries usually do not rely heavily on cost sharing by patients at the time health care is delivered, as that might let ability to pay intrude upon the delivery of health care and impair access to care. That view is comfortable only with a strictly egalitarian health system.

Canada and Taiwan espouse this pure form of egalitarianism in their health insurance systems.

**Health Care as a Private Consumption Good:** At the other extreme is the view that health care, like food, shelter and clothing, is just another basic private consumer good of which people with low ability to pay might be granted a bare-bones package through public subsidies, but whose clinical quality and the amenities accompanying the delivery of care can be allowed to vary by ability to pay for superior care. That view is comfortable with a multiple-tiered health care system.

Many Americans, although by no means all, seem to lean toward that view, although it would be rare to find a politician openly espouse the idea that the quality of health care and its amenities (e.g., the speed at which access to care is obtained) should be made to vary by ability to pay.

**Compromises:** In between these two extremes are systems that obey the *Principle of Social Solidarity* for the majority of the population (usually around 90 percent), but do allow a small minority of higher-income people to remain outside the system for the majority and opt for some other, private arrangement. One finds these systems in Europe (e.g., the UK and Germany).

---

C. Access to Primary Health Care under the Single-Payer Approach

**Universal Access and Egalitarian Treatments for Patients:** Single payer systems are an ideal platform of implementing a social ethic according to which all citizens who need health care should have access on equal terms to whatever health-care resources are available.

Because these systems operate with common, uniform fee schedules that apply across the board to all relevant providers, society signals to the providers of health care through these fees that society assigns to the provider’s services the same value, regardless of the socio-economic status of the patients. This is in contrast sharply with the US system, under which the fees or prices paid the providers of health care can vary substantially by the socio-economic or demographic characteristics of the patient. Physicians, for example, receive in many states the economic signal from society that their time and skill are valued less if applied to a patient covered by Medicaid than the time and skill applied to a commercially insured patient. That physicians receive and clearly understand that signal can be inferred from the fact that so many of them refuse to accept Medicaid patients altogether. One must wonder whether lawmakers really wish to imply with the relatively low Medicaid fees that poor people should receive less care, and perhaps lesser quality care.

**Patient Free Choice of Providers:** With the exception of government-run health systems, such as the U.S. VA health system, single-payer systems (e.g., Canada and Taiwan) or all-payer systems (e.g., Germany) with which I am familiar afford citizens completely free choice of provider of health care when illness strikes.

Neither Canada nor Taiwan has the gate-keeper system like in the UK’s NHS where patients must first see their general practitioner (GP) who will refer them to specialists if needed. Canadians have no restrictions on choice of physicians or hospitals, in contrast to neighboring U.S. where Americans are often restricted in their choice of physicians and hospitals which depended on the particular health insurance policies or plans they have.

Patients in Taiwan also have complete freedom to choose (often “shop” for) their providers. Any of Taiwan’s 23.3 million residents enrolled in the NHI (99.9%) may access any of the more than 19,000 health care providers to receive care. The NHI also reimburses medical expenses for treatments received on an emergency basis overseas.

By contrast, a remarkable feature of U.S. health care is that for the sake of choice among health insurance carriers, Americans have bargained away a good deal of their freedom of choice of providers. In general they are limited to the providers in the network of providers

---


that contracts with the particular insurance carrier chosen by the patient, or patients must pay considerable more out of pocket for going outside the networks which, incidentally, are reported becoming narrower over time, especially under policies sold on the exchanges under the ACA, but also now in Medicare Advantage plans. I know from personal experience that citizens of other nations often are puzzled why Americans have been content to make this trade-off.

**Waiting Lists:** Single-payer systems are structured to be able to control the flow of money into health-care systems. On the plus side, it enables these systems to control better the level and growth rates of health-care spending per capita. On the downside is the danger that the system may be underfunded, which means in this context that fewer real health-care resources (health professionals, inpatient capacity, imaging capacity, and so on) is put in place than the citizenry might wish and – and this in crucial – *is also willing to pay for*. There then might develop queues to certain of the available resources, and these queues need to be managed by criteria of medical urgency. Sometimes this process is called “evidence based management of queues.”

Critics of the British and Canadian health systems, for example, commonly take rationing by queues – especially for imaging services and certain high tech procedures -- as their main focus, although the late Barbara Starfield, an American pediatrician and highly distinguished figure in health policy analysis had noted in an article published in 2010 that on average waiting times for high-tech diagnostic services using magnetic resonance imaging (MRI) actually are relatively short in Canada. In Taiwan’s single-payer system, patients enjoy easy access to care. 85% of patients can reach a hospital or clinic in less than 30 minutes, and for 83% of patients wait time is less than 30 minutes before be seen by a doctor. I visited a private ENT clinic in Taipei in 2013 and stayed for two hours and personally observed this to be the case.

Defenders of single-payer systems such as Canada’s point out that elimination of all queuing for health care implies widespread excess capacity and thus is wasteful. They also point out that it might trigger the phenomenon of supplier induced demand, that is, the recommendation by health professionals and delivery of services with little or no medical necessity for the sake of revenue. It can be harmful to patients.

---


The Medicare Prospective Advisory Commission (Medpac) of Congress, for example, has come to the conclusion that MRI scans are excessively used in the United States. As the Medpac noted in its report of June 2011:

A significant proportion of noncardiac imaging studies may also be inappropriate. For example, one study found that nearly 30 percent of Medicare beneficiaries with uncomplicated low back pain received an imaging service within 28 days, even though imaging is rarely indicated for this condition in the absence of specific complications or comorbidities (Pham et al. 2009). According to data on CMS’s Hospital Compare website, one-third of Medicare beneficiaries with low back pain who were given an MRI of the lumbar spine in hospital outpatient departments in 2008 did not receive more conservative therapy first, as is recommended by the American College of Radiology and the Agency for Healthcare Research and Quality (Centers for Medicare & Medicaid Services 2011c). Overuse of MRI scans for low back pain carries the risk of false-positive findings, increased costs for the Medicare program and beneficiaries, and the potential to induce a cascade of additional procedures, such as surgery (Baras and Baker 2009, Centers for Medicare & Medicaid Services 2011c). A recent analysis of orders from primary care physicians for outpatient, nonemergency CT and MRI scans at a large urban hospital found that 26 percent did not meet appropriateness criteria developed by a radiology benefit management program (Lehnert and Bree 2010). Inappropriate orders included CT for chronic headache, spine MRI for acute back pain, and knee and shoulder MRI for osteoarthritis.

The December 2010 issue of Health Affairs also featured a number of articles focused on the problem of overuse of imaging services in the U.S.

---


9 See, for example, Bruce J. Hillman and Jeff Goldsmith, “Imaging: The Self-referral Boom and the Ongoing Search for Effective Policies to Contain it,” Health Affairs, 29(12) December 2010:2231-6.
Rationing of Health Care: There is great confusion in the debate on health policy over the concept of “rationing” of health care.

Some people believe that “rationing” happens only if government is involved in allocating scarce resources. The implication is that rationing can be avoided by letting free markets allocate scarce resources. In a market-based system, however, scarce resources also must somehow be allocated in the face of possible excess demand. It is done in markets through rationing by price and ability to pay.

In other words, an individual may be denied access to a health care resource either by queuing or some other administrative arrangement, or he or she may be denied access to health care for want of ability to pay for it. As Reinhardt puts it in his “Keeping Health Care Afloat: The United States Versus Canada,”

I don’t buy the argument that government-run single-payer health systems are inherently less efficient than market-oriented health systems. In the end, each nation must decide which style of rationing – by the queue or by price and ability to pay – is most compatible with its culture. Mantras about the virtues of markets are no substitute for serious ethical conviction.

This point about styles of rationing health care is illustrated in Table 2 with cross-national survey data collected by the Commonwealth Fund. The Fund annually surveys large samples of patients or providers of health care in a number of different countries, with identical survey instruments.

As is shown in the top three rows of Table 2, individuals in the single-payer Canadian health insurance systems did experience longer wait times to see a specialist than did Americans, although only slightly longer wait times to see a primary-care physician or nurse. 35% of Canadians waited less than a month for elective surgery, versus 68% in the U.S.; and while 25% of Canadian respondents waited 4 months or more for elective surgery, only 7% of American respondents reported waiting that long. Interestingly, access to health care in Germany – a multiple payer social insurance system that is actually a close cousin of a single-payer system – appear to have superior access to health care than the U.S.

On the other hand, as the last four rows of Table 2 show, many more Americans than Canadians or citizens in Germany and the UK are priced out of health care through rationing by price and ability to pay. For example, 58% of uninsured Americans reported not to have seen a physician when sick or did not get recommended care because of cost, contradicting assertions

that the uninsured in the U.S. do not have problems accessing health care. Even insured Americans have such access problems because of cost, most probably because their insurance coverage is shallow, has high deductibles or upper limits on coverage. Thus, 21% of insured Americans reported not to have seen a doctor when sick or gotten recommended care because of cost. By comparison, only 8% of Canadian respondents, 10% of German and 4% of British respondents reported such problems.

The degree to which some Americans are rationed out of health care by price and ability to pay can also be inferred from research published in 2008 by Jack Hadley et al.\textsuperscript{11} Using data on the actual use of health care retrieved from a large sample of Americans in the well-known \textit{Medical Expenditure Survey Panel (MEPS)}, and adjusting statistically for the age, health status and other socio-economic and demographic characteristics of the individuals in the survey, the authors found that relative to individuals who are uninsured partly during the year, similar individuals with private health insurance for the full year used on average 70% more health care than did the uninsured. Relative to individuals who are uninsured for the full year, individuals with full-year private insurance used on average 118% more health care than did the uninsured.

In short, in the face of the available empirical evidence on health-care utilization by the uninsured, the argument that Americans without health insurance or with only shallow health insurance are not rationed out of health care is simply incredible.

TABLE 2 COMPARATIVE DATA ON ACCESS FOR SELECTED OECD COUNTRIES, 2010 AND 2013

<table>
<thead>
<tr>
<th>CANADA</th>
<th>GERMANY</th>
<th>UK</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Insured all year</td>
</tr>
<tr>
<td><strong>PERCENT OF ADULT WHO RESPONDED:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saw a doctor or nurse last time they needed care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- same or next day</td>
<td>41%</td>
<td>76%</td>
<td>52%</td>
</tr>
<tr>
<td>- waited 6 or more days</td>
<td>33%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Waited to see a specialist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- less than 4 weeks</td>
<td>39%</td>
<td>72%</td>
<td>80%</td>
</tr>
<tr>
<td>- 2 months or more</td>
<td>29%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Wait time for needed elective surgery in past 2 years, 2010 survey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- less than 1 month</td>
<td>35%</td>
<td>78%</td>
<td>59%</td>
</tr>
<tr>
<td>- 4 months or more</td>
<td>25%</td>
<td>0%</td>
<td>21%</td>
</tr>
<tr>
<td>In the past year:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not see doctor when sick or did not get recommended care because of cost</td>
<td>8%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Did not fill RX or skipped doses because of cost</td>
<td>8%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Had other cost-related access problems</td>
<td>13%</td>
<td>15%</td>
<td>4%</td>
</tr>
<tr>
<td>Had serious problems paying or was unable to pay medical bills</td>
<td>7%</td>
<td>7%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**SOURCE:** Cathy Schoen, Robin Osborne, David Squires and Michelle M. Doty, "Access, Affordability, and Insurance Complexity are often worse in the United States Compared to 10 other Countries, Health Affairs 32(12):2205-15.

The rationing of health care in the U.S. is troubling in light of the fact that the U.S. spends over twice as much per capita on health care than do most other health systems in the developed world, Canada included (see Table 3 further on). According to OECD data, for example, in 2011 the U.S. spent $8,508 per capita (17.7% of GDP) on health care and
Canada $4,522 (11.2% of GDP), or 53% of the U.S. level, both figures in comparable purchasing power parity (PPP) dollars. 

Asked in an interview with a writer of the Journal of the American Medical Association (JAMA) what he thought of “other countries health plans, such as Canada’s,” Princeton economist Uwe Reinhardt had this to say on the issue of wait times in health care:

Canada has queues some of which are unduly long, although Canadians will tell you that not having any queues requires substantial, wasteful excess capacity. On the other hand, they spend only half as much per capita on health care as we do. What I would tell the Canadians is, how about you spend 65% of what we Americans spend and then you’d have nirvana. You wouldn’t have many queues and you’d have all of the care and resources you’d need, and you could do it with 65% because you don’t blow so much on administration and all of the other ugly things in our health system. 

**Delivery System Capacity:** Table 3 provides data on health systems capacity in selected OECD countries and Taiwan. It is seen that imaging capacity is high in the US relative to other OECD countries as is frequency of use, although Japan has even more imaging capacity in place than does the U.S. Prices per scan in Japan, however, are much lower than those in the US. In purchasing power party dollars, Japan spends only 38% as much per capita on health care ($3,213 or 9.6% of GDP) than does the U.S. ($8,508 or 17.7% of GDP).

It can be seen that both Taiwan and Canada have physician-population ratios comparable to the US (2.48 for Taiwan, 2.4 for Canada, and 2.5 for US per 1,000 population, respectively); but that Taiwan has the lowest nurse-population ratio (5.75 per 1,000 population compared to both Canada and the US (9.3 for Canada and 11.1 for US per 1,000 population, respectively). In terms of beds, Taiwan has almost twice the number of beds as Canada and almost 40% more beds than the US (4.28 for Taiwan, 2.4 for Canada, and 3.1 for US, respectively).

[Table 3 is on next page]

---

12 Based on OECD Health Statistics 2013.


14 OECD Health Statistics 2013.
### TABLE 3 DELIVERY SYSTEM CAPACITY IN SELECT OECD COUNTRIES AND TAIWAN (2011)

<table>
<thead>
<tr>
<th></th>
<th>Canada</th>
<th>United Kingdom</th>
<th>France</th>
<th>Germany</th>
<th>Japan</th>
<th>US</th>
<th>OECD Ave.</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician/1000 population</td>
<td>2.4</td>
<td>2.8</td>
<td>3.3</td>
<td>3.8</td>
<td>2.2</td>
<td>2.5</td>
<td>3.2</td>
<td>2.48</td>
</tr>
<tr>
<td>Nurse/1000 population</td>
<td>9.3</td>
<td>8.6</td>
<td>8.7</td>
<td>11.4</td>
<td>10</td>
<td>11.1</td>
<td>8.7</td>
<td>5.75</td>
</tr>
<tr>
<td>Hospital beds/1000 pop.</td>
<td>2.8</td>
<td>3</td>
<td>6.4</td>
<td>8.3</td>
<td>13.4</td>
<td>3.1</td>
<td>4.8</td>
<td>4.28</td>
</tr>
<tr>
<td>MRI units/1 m. pop</td>
<td>8.5</td>
<td>5.9</td>
<td>10.8</td>
<td>22.6</td>
<td>46.9</td>
<td>31.5</td>
<td>13.2</td>
<td>NA</td>
</tr>
<tr>
<td>CT scanners/1000 pop.</td>
<td>14.6</td>
<td>8.9</td>
<td>12.5</td>
<td>18.3</td>
<td>101.3</td>
<td>40.9</td>
<td>23.2</td>
<td>NA</td>
</tr>
<tr>
<td>Doctor consultation/capita</td>
<td>7.4</td>
<td>5</td>
<td>6.8</td>
<td>9.7</td>
<td>13.1</td>
<td>4.1</td>
<td>6.6</td>
<td>15.3</td>
</tr>
<tr>
<td>MRI exams/1000 pop</td>
<td>49.8</td>
<td>41.4</td>
<td>67.5</td>
<td>95.2</td>
<td>NA</td>
<td>102.7</td>
<td>48.3</td>
<td>39.1</td>
</tr>
<tr>
<td>CT exams/1000 pop</td>
<td>127</td>
<td>77.5</td>
<td>154.5</td>
<td>117.1</td>
<td>NA</td>
<td>273.8</td>
<td>128.2</td>
<td>110 (2013)</td>
</tr>
<tr>
<td>Ave length of stay (days)</td>
<td>7.7</td>
<td>7.4</td>
<td>5.7</td>
<td>9.5</td>
<td>18.2</td>
<td>4.8</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>C-section/1000 live births</td>
<td>261.1</td>
<td>237.5</td>
<td>202.3</td>
<td>308.9</td>
<td>NA</td>
<td>313.6</td>
<td>267.2</td>
<td>360*</td>
</tr>
</tbody>
</table>

Data for Taiwan based on Republic of China Health Statistical Trends 2011.
*Taiwan-C-section rate: average of 380 performed at primary care clinics and 340 performed as inpatient.

### D. Controlling Health-Care Spending

**Spending:** Table 4 presents data on health spending per capita in purchasing power parity dollars for selected OECD countries and Taiwan in 2011. I have already noted earlier the significantly higher spending on health care in the U.S.
TABLE 4  NHE AS PERCENT OF GDP AND PER CAPITA US$ PPP FOR SELECTED OECD COUNTRIES AND TAIWAN (2011 unless otherwise indicated)

<table>
<thead>
<tr>
<th>Canada</th>
<th>United Kingdom</th>
<th>Denmark</th>
<th>France</th>
<th>Germany</th>
<th>Japan</th>
<th>Korea</th>
<th>Australia</th>
<th>Sweden</th>
<th>U.S.</th>
<th>OECD Ave</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>4522</td>
<td>3406</td>
<td>4448</td>
<td>4118</td>
<td>4495</td>
<td>3213</td>
<td>2199</td>
<td>3800</td>
<td>3925</td>
<td>8505</td>
<td>3322</td>
<td>2186</td>
</tr>
</tbody>
</table>


Prices: Although Americans are known to use more of some high-cost, high-tech services than do citizens in other countries – e.g., CT- or MRI scans or some types of heart surgery – overall Americans actually use fewer real health care resources than do citizens in other countries. Americans see physicians less frequently, have fewer hospital admissions and days per admission and generally consume fewer prescription drugs. The main driver of the huge spending variance appears to be the much higher prices Americans pay for health-care products and services. As Anderson, Reinhardt, Hussey and Petrosyan (2003) reported in their much cited paper “It’s the Prices, Stupid: Why the United States Is So Different from Other Countries”, higher health spending but lower use of health services adds up to much higher prices in the United States than in any other OECD country.15

The much higher prices of health care in the U.S. also have been documented by Laugesen and Glied (2011)16 as well as New York Times’ staff reporter Elizabeth Rosenthal in her articles “The $2.7 Trillion Medical Bill,”17 and “American Way of Birth, Costliest in the World.”18

In bargaining with the providers of health care over the prices of health-care products and services – either formally or informally through the political process – single payer systems can act as what economists call “monopsonies,” that is, single buyers. It is well known in economic theory that monopsonists can extract the lowest prices from suppliers of any good or

15 Gerard F. Anderson, Uwe E. Reinhardt, Peter S. Hussey and Varduhi Petrosyan, “It’s the Prices Stupid: Why the United States is So Different from Other Countries,” Health Affairs 22(3) 2003:89-105.

16 Miriam J. Laugesen and Sherry A. Glied, “Higher Fees Paid to U.S. Physicians Drive Higher Health Spending for Physician Services Compared to Other Countries,” Health Affairs 30(9) 2011: 1647-56.


service. Consequently, and other things being equal, one would expect health spending per capita in single-payer systems to be lower than they will be under system in which payers have less market power.

By contrast, in the U.S. the payment side consists of a highly fragmented health insurance system in which each insurer has relatively weak market power vis a vis providers in a given market area. That circumstance shifts market power from the payments side of the health care system to the provider’s side which can explain at least part of the higher prices Americans pay for health care.

Table 5 gives a general impression of the impact of market power on the prices of health care. The data come from an annual survey conducted by the International Federation of Health Plans – this one for 2011. The Canadian data are for the provincial single-payer system of the Province of Nova Scotia only. Several points stand out in the table.

First, average prices in the U.S. are significantly higher than elsewhere for all the procedures shown in the table. It is so also for the many other procedures for which the Federation collected prices.

Second, there is a remarkably wide range of prices for the same procedure in the United States. For example, the total price for physician and hospital care combined for a normal delivery varied in 2011 from $6,993 (75% of the average U.S. price) to $15,239 at the 95th percentile (164% of the U.S. average). For other procedures the price range is even higher. For a CT head scan, for example, the range is from a low of $95 to a high of $1,545.

Third, as Table 4 shows, single-payer Canadian prices are anywhere from 24% to 61% of the average U.S. prices for the same procedures, in spite of the geographic closeness of that system to the U.S.

Fourth, although prescription drugs are sold in a global market, Americans tend to pay substantially higher prices for these products than do patients or their insurers in many other parts of the world. It is probably also so for medical devices.

[Table 5 on next page]
<table>
<thead>
<tr>
<th>Procedure</th>
<th>CANADA</th>
<th>FRANCE</th>
<th>GERMANY</th>
<th>SWITZERLAND</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Average</td>
<td>95th Percentile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT Scan: Head</td>
<td>$122</td>
<td>$141</td>
<td>$272</td>
<td>$319</td>
<td>$95</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>24%</td>
<td>28%</td>
<td>53%</td>
<td>63%</td>
<td>19%</td>
</tr>
<tr>
<td>MRI Scan</td>
<td>N.A.</td>
<td>$281</td>
<td>$599</td>
<td>$903</td>
<td>$503</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>N.A.</td>
<td>26%</td>
<td>55%</td>
<td>84%</td>
<td>47%</td>
</tr>
<tr>
<td>Normal Delivery (a)</td>
<td>$3,195</td>
<td>$2,536</td>
<td>$2,157</td>
<td>$8,495</td>
<td>$6,993</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>34%</td>
<td>27%</td>
<td>23%</td>
<td>92%</td>
<td>75%</td>
</tr>
<tr>
<td>Appendectomy (a)</td>
<td>$5,606</td>
<td>$3,164</td>
<td>$3,093</td>
<td>$5,840</td>
<td>$7,756</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>43%</td>
<td>24%</td>
<td>24%</td>
<td>45%</td>
<td>60%</td>
</tr>
<tr>
<td>Coronary Bypass Surgery (a)</td>
<td>$40,954</td>
<td>$16,140</td>
<td>$16,578</td>
<td>$25,486</td>
<td>$42,951</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>61%</td>
<td>24%</td>
<td>25%</td>
<td>38%</td>
<td>64%</td>
</tr>
<tr>
<td>Angioplasty (a)</td>
<td>$10,060</td>
<td>$5,857</td>
<td>$6,189</td>
<td>$12,212</td>
<td>$15,627</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>38%</td>
<td>22%</td>
<td>24%</td>
<td>47%</td>
<td>60%</td>
</tr>
<tr>
<td>Hip replacement(a)</td>
<td>$16,945</td>
<td>11,353</td>
<td>11,418</td>
<td>17,521</td>
<td>23,535</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>45%</td>
<td>30%</td>
<td>30%</td>
<td>46%</td>
<td>62%</td>
</tr>
<tr>
<td>Nexium</td>
<td>$36</td>
<td>$23</td>
<td>$56</td>
<td>$69</td>
<td>$176</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>19%</td>
<td>12%</td>
<td>29%</td>
<td>36%</td>
<td>91%</td>
</tr>
<tr>
<td>Plavix</td>
<td>$74</td>
<td>$49</td>
<td>$109</td>
<td>$61</td>
<td>$160</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>45%</td>
<td>30%</td>
<td>67%</td>
<td>37%</td>
<td>98%</td>
</tr>
<tr>
<td>Lipitor</td>
<td>$44</td>
<td>$37</td>
<td>$74</td>
<td>$81</td>
<td>$95</td>
</tr>
<tr>
<td>As % of U.S. average</td>
<td>37%</td>
<td>31%</td>
<td>62%</td>
<td>68%</td>
<td>80%</td>
</tr>
</tbody>
</table>

(a) Physician and Hospital fees combined

**SOURCE:** International Federation of Health Plans, 2011 Price Comparisons - Medical and Hospital fees by Country
The issue of relative market power in health care, of course, reminds one of the late Rufus Miles’ famous law: “Where you stand depends on where you sit.”

The prices paid for health care distribute income from payers (ultimately, individuals and families) to the providers of health care. The distribution of income in general – and in health care in particular -- is an intensely ideological issue. My point here is not to explore that contentious issue, but merely to note that by their very structure, single-payer health systems generally can better control health spending per capita for a given set of health care services and products than can any system other than possibly a national health service (cell A in Table 1).

**Administrative Costs:** The relative market power in a health care, however, is not the only factor driving relative prices.

Single payer systems are ideal platforms for the smart application of electronic health information systems. They, along with a common nomenclature and coming fee schedules yield significant savings in the administrative overhead of a health system. Administrative cost in Taiwan’s NHI, for example, is 1.6% of the total NHI expenditure in 2012, although there are, of course, additional administrative expenses on the provider side. Administrative expenses in earlier years had been even lower, ranging from 1.1-1.5% of total NHI spending.

The low administrative costs typically associated with single payer systems stand in sharp contrast to the high administrative costs in the US multi-payer private health insurance market. An Institute of Medicine (IOM) report released in September 2012 put the total waste inherent in the US health care system at $750 billion (close to 31% of total health spending of $2.5 trillion in 2009). Of that total, roughly $190 billion was estimated to be wasted on excess administrative costs in 2009. The IOM report identified six major areas of waste in the US health care system and excess administrative costs is the second highest among the six, after $201 billion annually wasted on unnecessary services.

---


22 Personal communications with officials at Taiwan’s Ministry of Health and Welfare and NHI Administration officials over several years.


In their “Medical Spending Differences in the United States and Canada: The Role of Prices, Procedures, and Administrative Expenses,” Pozen and Cutler examined differences in health spending between the U.S. and Canada. In their words, they “we found that administrative costs accounted for the greatest proportion (39%) of spending differences between the United States and Canada, followed by prices and medical care provision.” That figure, however, does not include the costs patients incur in contending with our complex health insurance system.

In their paper “U.S. Physician Practices Spend Nearly Four Times as Much Money Interacting with Health Plans and Payers Than Do Their Canadian Counterparts,” Morra and Nicholson, et al. report the following results:

![Mean Dollar Value of Hours Spent per Physician per Year on Administrative Costs](image)

In their key findings, the authors note that very little time was spent by medical practices submitting quality data in either the United States or Canada.

Earlier, in 2005, Kahn, Kronick, Kreger and Gans estimated that overall just “billing and insurance related (BIR)” functions represents 20% to 22% of privately insured health spending in California’s acute care settings.

**Other Factors Driving U.S. Prices:** The income aspirations of U.S. physicians are likely to be informed by what ambitious and bright young Americans can earn elsewhere in our

---


economy – especially in finance, law, management consulting and lobbying. The incomes available in these other profession, easily accessible to individuals capable of succeeding in medical school, undoubtedly set a floor to the incomes of U.S. physicians, that is, their fees. Economists view them as the opportunity costs of entering medical practice. American physicians undoubtedly seek to reduce some of these opportunity costs.

Furthermore, U.S. physicians graduate from medical school with debts averaging close to $200,000. The amortization of that debt has to come out of the physicians’ incomes.

Malpractice premiums and settlements in the United States are significantly higher than they are elsewhere. These expenses, too, are recouped through commensurately higher prices.

E. Cross-Country Comparisons of Health Outcomes

In January 2013 the Institute of Medicine (IOM) issued a report entitled *U. S. Health in International Perspectives: Shorter Lives, Poorer Health*. In the summary, the IOM noted

The United States is among the wealthiest nations in the world, but it is far from the healthiest. For many years, Americans have been dying at younger ages than people in almost all other high-income countries. This health disadvantage prevails even though the U.S. spends far more per person on health care than any other nation. To gain a better understanding of this problem, the NIH asked the National Research Council and the IOM to investigate potential reasons for the U.S. health disadvantage and to assess its larger implications.

The IOM was quick to add, however, that

No single factor can fully explain the U.S. health disadvantage. It likely has multiple causes and involves some combination of inadequate health care, unhealthy behaviors, adverse economic and social conditions, and environmental factors, as well as public policies and social values that shape those conditions. Without action to reverse current trends, the health of Americans will probably continue to fall behind that of people in other high-income countries. The tragedy is not that the U.S. is losing a contest with other countries, but that Americans are dying and suffering from illness and injury at rates that are demonstrably unnecessary.

Regular Metrics of Population Health Status: This is an important caveat. An individual’s health status is the product of a highly complex process, including that person’s
experience in utero, nutrition and education in early childhood and health behavior during childhood, adolescence and adulthood. Cross-national research on average population based health statistics – such as age-adjusted mortality rates, infant mortality and maternal death rates and disability and morbidity – health of populations suggest that health-care per se actually is not the dominant factor in driving these statistics. Education and per capita income are more important factors. They in turn are correlated with life style choices and the physical environment in which people live, national and local public health policies, and the personal stress they bear.

To illustrate, the decline in life expectancy of almost six years among Russian males in the period immediately following the collapse of the Soviet Union in December 1991 to 1994 was attributable to a great extent the seismic disruption in the social order and the traumatic impact it visited upon the people of the new Russia, especially Russian men who took to binge drinking on an unprecedented scale, resulting in countless premature deaths. Making things worse was the drastic deterioration of the Russian health care system that accompanied the fall of the Soviet Union, and bad environmental pollution at the same time. According to a paper by a demographer at Canada’s McMaster University, the Russian Federation “experienced a surge in death rates of almost 40% since 1992 ... The fall of the Soviet Union in 1991 brought with it many social, political, and economic changes that continue to affect Russia to this day.”

Another paper in the Journal of the American Medical Association (JAMA) reported a rise in age-adjusted mortality in Russia by almost 33% in the period 1990-1994.

Pulling apart the effect of the deteriorating Soviet health care system from the general demise of its economy would be challenging.

As the PowerPoint slide below, taken from the website of the U.S. Centers for Disease Control (CDC) shows, there has been a growing incidence of obesity and diabetes in the U.S. over time, most heavily pronounced in a number of Southeastern states.

Perhaps some of the growth in obesity and the associated diabetes could have been prevented through better access to primary care. But it is reasonable to argue that much of that growth has been beyond the influence of health care proper.

Unfortunately, most of the health-status data by which different nations are compared tend to be those not significantly driven by health care per se, and there are also methodological issues regarding the definitions and use of metrics. For example, it is known that teenage mothers are more like to have premature birth and low weight babies, who have a higher risk of neonatal deaths and that the U.S. have a large proportion of babies born to young

---


30 Notzon FC, Komarov YM, Ermakov SP, Sempos CT, Marks JS, Sempos EV. “Causes of declining life expectancy in Russia.” *JAMA* 1998 Mar 11;279(10):793-800.
The authors in an article published by the American Enterprise Institute state that “if the United States have the same distribution of gestational ages as Sweden, its recorded infant mortality rate would drop it by 33%,” and argue that lifestyle and socioeconomic factors affect the high rate of infant mortality in the U.S. and that “it is inappropriate, however, to conclude that the root cause is the US health care system rather than societal factors in a dynamic heterogeneous society.”

Mortality Amendable to Medical Intervention: Ideally in cross national comparisons of health outcomes one would like to see studies that measure outcomes from medical interventions directly, with careful statistical control for other confounding variables. But such studies are rare. The only papers of which I am aware are those using what is called “amenable mortality” or “avoidable mortality.”

The concept of “amenable mortality” refers to deaths that are potentially avoidable/preventable if timely and effective health care were available. In is used widely in recent decades as one indicator by which to measure the performance of a health system. According to the 2012 IOM report, Best Care at Lower Cost: The Path to Continuously Learning Health Care

---

in America, 75,000 deaths might have been prevented in the US if states delivered higher quality care.32

In 2011, the OECD published a working paper entitled “Mortality Amenable to Health Care in 31 OECD Countries: Estimates and Methodological Issues” which contained the display below (Figure 1).33

[Figure 1 on next page]

Figure 1 exhibits two estimates of amenable mortality rates, one developed from the list reported by Nolte and McKee34 and the other by Tobias and Yeh.

As the list shows, on this metric the U.S. health system does not fare particularly well (24th among 1 countries and below the OECD average), and worse than Canada (11th among 31 countries and well above the OECD average), Germany (16th among 31 countries) and also above the OECD average and the UK (19th among 31 countries and above the OECD average). According to Nolte and McKee’s study (p. 2120):

A recent comparison of factors underlying differences in mortality rates from the leading amenable causes of death in the United States and the United Kingdom showed that many Americans failed to obtain recommended treatment for common chronic conditions and to secure regular affordable treatment.32 Those Americans who were treated according to best practices achieved outcomes similar to those of their European counterparts. Factors associated with receiving appropriate care in the United States included being treated within the Department of Veterans Affairs and having adequate insurance.


The VA system is, as noted earlier, a government-run single payer system with a widely acclaimed health information system, sophisticated quality measurement tools and integrated
health care. As Elisabeth McGlynn, a leading expert on measuring quality in health care in the U.S. and the quality of health care in the VA health system has noted:

"You're much better off in the VA than in a lot of the rest of the U.S. health-care system," she said. "You've got a fighting chance there's going to be some organized, thoughtful, evidence-based response to dealing effectively with the health problem that somebody brings to them."  

F. Conclusion

Ultimately, the question of what kind of health system would be in the best interest of Americans has to be resolved by them through their political representatives.

Citizens in most nations in the industrialized world have long enjoyed universal, stable and fully portable health insurance that is not lost with the job or in retirement. Not all of them use a single-payer approach to reach that goal. They use a variety of different approaches.

But single payer systems have shown themselves to be effective in achieving universal access to health care without breaking either the nation’s treasury or those of individual households.

In conclusion, I would mention that I have been intrigued by the views of former Secretary of State and Chairman of the Joint Chief of Staff and Four Star General Colin Powell on what he believes America should do about its health-care system going forward.

As told by Alex Lazar of ABC News in his “Colin Powell Pitches Single Payer Health Care in U.S.” (December 9, 2013), Powell told an audience about a woman named Anne, who as his firewood supplier, faced a healthcare scare of her own. Anne had asked Powell to help pay

35 Steven Mr. Asch, Elizabeth A. McGlynn, Mary M. Hogan et al., Comparison of Quality of Care for Patients in the Veterans Health Administration and Patients in a National Sample,” Annals of Internal Medicine 141, 2004: 938-945. Available at http://www.nadcp.org/sites/default/files/nadcp/Asch%20et%20al%20AnnalsIntMedQuality_0.pdf.


for her healthcare bills, as her insurance didn’t cover an MRI she needed as a prerequisite to being treated for a growth in her brain. In addition, Powell’s wife Alma recently suffered from three aneurysms and an artery blockage. As Lazar quotes Powell:

After these two events, of Alma and Anne, I’ve been thinking, why is it like this? …

I am not an expert in health care, or Obamacare, or the Affordable Care Act, or whatever you choose to describe it, but I do know this: I have benefited from that kind of universal health care in my 55 years of public life. …

We are a wealthy enough country with the capacity to make sure that every one of our fellow citizens has access to quality health care.. (Let’s show) the rest of the world what our democratic system is all about and how we take care of all of our citizens. …

I think universal health care is one of the things we should really be focused on, and I hope that will happen,” said Powell. ”Whether it’s Obamacare, or son of Obamacare, I don’t care. As long as we get it done. …

And I don’t see why we can’t do what Europe is doing, what Canada is doing, what Korea is doing, what all these other places are doing.

Canada, South Korea, and numerous countries in Europe, of course, are single payer systems.