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ACCESS AND COST: WHAT THE U.S. HEALTH CARE SYSTEM CAN LEARN FROM OTHER COUNTRIES

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BEFORE THE

SUBCOMMITTEE ON PRIMARY HEALTH AND AGING OF THE

COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS

UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

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ON

EXAMINING WHAT THE U.S. HEALTH CARE SYSTEM CAN LEARN FROM OTHER COUNTRIES

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ACCESS AND COST: WHAT THE U.S. HEALTH CARE SYSTEM CAN LEARN FROM OTHER COUNTRIES

TUESDAY, MARCH 11, 2014

U.S. SENATE, SUBCOMMITTEE ON PRIMARY HEALTH AND AGING, COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS, Washington, DC.

The subcommittee met, pursuant to notice, at 10:02 a.m. in room SD-430, Dirksen Senate Office Building, Hon. Bernie Sanders, chairman of the subcommittee, presiding.
Present: Senators Sanders, Murphy, Enzi, Burr, and Roberts.

OPENING STATEMENT OF SENATOR SANDERS

Senator SANDERS. Let us get to work and thank you all very much for being here. We want to thank C-SPAN for covering this important hearing. And I especially want to thank our witnesses, some of whom have traveled from very long distances from around the world to be with us today, and we very much appreciate your being here.

The United States has, I think, a very effective form of Government in the sense that we are a Federalist system, which means that we have 50 separate States, and it is very common that one State learns from what another State is doing. So every day in California, or in North Carolina, or Vermont somebody is coming up with an idea or a program. It works, other people steal those ideas, learn from those ideas and that is, I think, a pretty effective way of going forward.

I do not believe that we utilize that practice as much as we should internationally. The United States is not the only country on earth. There are other countries that are doing very positive, interesting things, and we should be learning from them. And, in a sense, that is what this hearing is about. It is to see what we can learn from other countries around the world in terms of healthcare.

In my view, in fact, we have a whole lot to learn because at the end of the day, the United States spends far more per capita on healthcare. We spend almost twice as much per person on healthcare, and yet, we have many millions of people who are uninsured and our healthcare outcomes, compared to many other countries, are not particularly good, and that is my starting premise. Why is that? And what can we learn from other countries who, in many ways, are doing better than we can?

Let me start off with just a couple of basic facts about the American healthcare system. While it is absolutely true that some Americans, often those with a lot of money, receive some of the best cutting-edge healthcare in the world, it is also true that for millions of low- and moderate-income Americans, they have little or no access to even the most basic healthcare services.

Later on, I think maybe as part of the questions or answers, we are going to show a photograph that many of you have seen, in Virginia, or California, people lining up in fields to get basic healthcare or to get their teeth, rotted teeth extracted; a photograph that would remind you of a Third World country.

The reality is that today, the United States is the only major country on earth that does not guarantee healthcare as a right. And that is a basic, philosophical debate that we have to have. Should all Americans, regardless of their income, have access to healthcare as a right or not? The United States is the only Nation in the industrialized world that says, "No, you are not entitled to healthcare as a right.'

In 2012, more than 15 percent of our population, nearly 48 million Americans, were uninsured, but that is only half the story. Because many people who had insurance also had high deductibles and high copayments, and those payments created situations where people hesitated to go to the doctor when they should. Not to mention other people leaving the hospital deeply in debt and going

bankrupt. Is that something that we are proud of?

Here is another important point to be made. We talk about rationing and so forth. Of course, in the United States, healthcare is rationed, but it is rationed by ability to pay, by income. According to a Harvard study published in the American Journal of Public Health in 2009 and "Health Affairs" in 2014, some 45,000 Americans die every year because of a lack of access to healthcare.

I have talked to doctors—I do not know if my colleagues in their States have talked to doctors—I have talked to doctors who say, "Yes, people walk in the door and they are now terminally ill." And the doctor said, "Why did you not come in here 6 months ago? Why did you not come here a year ago?" And people say, "Well, I did not have any health insurance. I did not want any charity. I thought I would get better." So, we are losing some 45,000 people a year because they do not get to a doctor when they should.

There are, furthermore, communities around this country. I know Senator Roberts of Kansas mentioned this in a hearing we had a while back, where there are no doctors, there are towns in Kansas, no doctors in the area at all. People do not have access to basic pri-

mary care.

Now, despite all of that, the United States, as I mentioned a moment ago, spends almost twice as much per capita on healthcare as does any other country. We are spending about 18 percent of our gross domestic product on healthcare compared to 11 to 12 percent in France, Germany, Denmark, and Canada; 9 percent in the UK, Australia, and Norway; and less than 8 percent in Taiwan and Israel. We are going to hear a representative from Taiwan in a few minutes.

In terms of efficiency, are we an efficient system? Compared to the huge amount of money that we are spending, are we getting good value? In August 2013, Bloomberg, a respected business source, ranked the U.S. healthcare system 46th of 48 countries based on efficiency.

Now, what about outcomes? If I am spending \$100,000 on a car and somebody is spending \$20,000 on a car, we would assume that my car runs better. I am getting better value; I am getting value for what I pay for. Well, the United States pays almost twice as much per person for healthcare, but in terms of our healthcare outcomes, we do not do particularly well compared to other countries around the world.

Among OECD countries, the United States ranks 26th in terms of life expectancy. Residents of Italy, Spain, France, Australia, Israel, Norway, and the list goes on, will live 2 to 3 years longer than Americans. So in terms of our outcomes, they are not particu-

larly good

What about prescription drugs? Clearly, when we go to the doctors, very often the therapy is medicine. I recall talking to a doctor in northern Vermont who told me that about 25 percent of the patients that she sees, and whom she writes prescriptions for, are unable to fill those prescriptions because they are just too expensive. The fact of the matter is, the pharmaceutical industry in this country earns huge profits and charges our people the highest prices in the world for prescription drugs.

There is a lot more to be said, but let me end my remarks with those comments, and I look forward to hearing the testimony of our esteemed panelists.

Senator Burr.

OPENING STATEMENT OF SENATOR BURR

Senator Burr. Thank you, Mr. Chairman and thank you for calling this hearing.

I truly thank our witnesses today for their knowledge and for their willingness to be here to share with us their information.

In about 2 weeks, our Nation will mark the fourth anniversary of the enactment of the Affordable Care Act, better known to most as Obamacare. Today's hearing will inform what direction we will next take healthcare in America by examining access to care and costs associated with healthcare systems overseas.

As we examine single-payer systems in other countries and what we can learn from their experiences, it seems fitting that we also take stock of where things stand in the American healthcare system today. At the time Obamacare was being debated in this very committee, I warned that it was the wrong direction for our country. Healthcare was broken before Obamacare, but 4 years later, the American people are experiencing firsthand how the new law has made things worse. That is why Americans view the law unfavorably, and that is why they are understandably wary of still more Government involvement in healthcare.

The President promised that if you like your plan, you get to keep it under Obamacare. The Federal Government mandates that Americans buy healthcare coverage, and not just any coverage, but the coverage the Federal Government says is good enough. Sadly, millions of Americans have lost their healthcare plans, health

plans they liked and wanted to keep, despite the promises and continued delays of the Administration.

Obamacare expanded Medicaid, an unsustainable health entitlement program in which 40 percent of physicians, on average, do not even agree to see Medicaid patients. I believe the experiences of other countries will reinforce what many Medicaid patients already know: their coverage does not always translate into timely access to care.

Today's hearing will also examine cost. While the President promised that Obamacare would bring down premiums by \$2,500, premiums have actually gone up by an average of 41 percent in the individual market due to the law's mandates.

So how does Obamacare attempt to control cost? For starters, it established the Independent Payment Advisory Board, or IPAB, an unelected, unaccountable board of 15 bureaucrats empowered to make cuts to the Medicare program most likely in the form of cuts to doctors, which will impact, again, seniors' access to care.

Today's hearing will be informative as to the direction we take healthcare in this country. Will we repeal Obamacare and replace it with reforms that lower healthcare cost, put our Nation's entitlement programs on a sustainable path, and empower patients in their healthcare purchasing and decisionmaking to find the plans that best meet their individual needs? Or, will we continue on the current course of unprecedented Government involvement in healthcare and unsustainable costs?

What do we have to learn from a single-payer system overseas and what have other countries' reforms meant for their patients? What would such a course mean for our Nation standing as a global leader in medical innovation and for American patients seeking access to quality, and affordable coverage, and care that meets their individual healthcare needs?

I do want to thank Chairman Sanders for holding this hearing, because it will inform many of us on these important questions. I think today's hearing represents an important admission that Obamacare is not working, that such an admission takes place within the very committee that the Act was written and is a huge step, and I commend the committee for taking it.

I look forward to hearing from our witnesses today and continuing to work with my colleagues to advance patient-centered reforms that will actually lower healthcare costs and increase access to quality, affordable healthcare.

I thank the Chair.

Senator Sanders. Thank you, Senator Burr.

Senator Enzi, did you want to make a statement. OK. Thank you.

We have seven very knowledgeable panelists and we look forward to their testimony. We are going to ask you to keep your remarks to 5 minutes, and then we will followup with some questions.

Our first witness is Mei Cheng, a Health Policy Research Analyst at the Woodrow Wilson School of Public and International Affairs at Princeton University. Ms. Cheng is an advisor to the China National Health Development Research Center, and we very much ap-

preciate her being with us today. Please speak right into that microphone so everyone can hear you.

STATEMENT OF TSUNG-MEI CHENG, LL.B., M.A., HEALTH POLICY RESEARCH ANALYST, WOODROW WILSON SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS, PRINCETON UNIVERSITY, PRINCETON, NJ

Ms. CHENG. Good morning, Mr. Chairman, Senator Sanders, Ranking Member Burr, and Senator Enzi.

My name is Tsung-Mei Cheng. I am the Health Policy Research Analyst at the Woodrow Wilson School of Public and International Affairs, Princeton University. Thank you for inviting me to testify.

I have been asked to give an overview of single-payer systems, and I here distill my written testimony into a few salient points.

An overarching point made in my testimony is that single-payer systems are not the same as socialized medicine or socialism, as is so often assumed in this country. In socialized medicine, Government owns and operates the healthcare delivery system and finances it. The health system Americans reserve for their military veterans, for example, the VA System is purely socialized medicine.

Single-payer systems typically are just social insurance like the Social Security System. Under social health insurance, the Government merely organizes the financing of healthcare, but the healthcare delivery system typically is private and can include forprofit entities. Medicare, for example, is social insurance, but not socialized medicine.

The main characteristics of single-payer systems are the following. They are ideal platforms for equity in access to healthcare because everyone has the same insurance coverage, and providers are paid the same fees regardless of the social economic status of the patient.

Single-payer systems typically are financed on the basis of ability to pay rather than on the basis of health status of the insured. Single-payer systems typically give patients free choice of doctors and hospitals. In single-payer systems, providers of care do not compete on price, but they must compete on quality of care including patient satisfaction.

In a single-payer health insurance system, health insurance is not tied to a job. Instead, it is fully portable from job to job. When people lose their job and enter retirement, that does not go away, therefore, there is no job lock in these systems over health insurance.

Because all funds to providers of healthcare in a single-payer system flow from one payer, it is relatively easy to control total health spending in such systems. The international data I cite in my written testimony makes that clear.

Now, some single-payer systems, like UK and Canada, may put constraints on the physical capacity of their health system like the number of hospitals and MRI scanners as part of their effort to control total health spending including waste created by excess capacity. This constraint may lead to rationing by the queue.

The alternative to rationing by such administrative measures is rationing by price and ability to pay, something that we see in the U.S. healthcare system. To assume that healthcare is not rationed

in the United States is not supported by the data.

A single-payer system is an ideal platform for modern IT with common nomenclature, all billing can be done electronically, and it yields enormous savings in administrative costs. And because such an IT system conveniently captures data and information on all healthcare conventions, these systems provide a data base that can know spending in real time, as in the case of Taiwan, and it is a base for use for quality measurement, monitoring, and improvement.

Public satisfaction about single-payer systems is generally high. Denmark, for example, is ranked the No. 2 highest in the European Union in consumer satisfaction. In Taiwan, public satisfaction is also very high with a National Health Insurance program ranging in the 70 to 80 percent. In Canada, a 2013 international survey of 11 countries found that 42 percent of Canadians surveyed said that their healthcare system works well and need only minor changes compared to just 25 percent of Americans who said that. Seventyfive percent of Americans said the American healthcare system needs fundamental changes or completely rebuilt. And last, survey research has shown that single-payer Medicare is very popular in the United States.

A final point is that every health system has its flaws, which can be highlighted with anecdotes. Therefore, there is now a risk of medical tourism worldwide. For example, Canadians come to the United States for healthcare, but it also is true that Americans go to Canada, Mexico, Thailand, and Taiwan for lower cost healthcare.

Thank you very much.

[The prepared statement of Ms. Cheng follows:]

PREPARED STATEMENT OF TSUNG-MEI CHENG, LL.B., M.A.

My name is Tsung-Mei Cheng. I am Health Policy Research Analyst at the Woodrow Wilson School of Public and International Affairs, Princeton University, Prince-

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 U.S. health care system can learn from other countries. In health policy, other countries have for years taken lessons from the United States 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 United States. (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 United States 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 percent 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 database 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 $^{\mathrm{1}}$

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 illustrates these dimensions.

¹Tsung-Mei Cheng and Uwe Reinhardt, "Perspective on the Role of the Private Sector In Meeting Health Care Needs," in Benedict Clements, David Cody and Sanjeev Gupta, eds. The Economics of Public Health Care Reform in Advanced and Emerging Economies. International Monetary Fund. Washington, DC. (2012): 69–98.

Table 1.—A Taxonomy of Health Systems

	Financing and health insurance					
Ownership of providers	Social insurance (Ability-to-pay financing)		Private insurance (Actuarially fair financing)		No Health Insurance	
	Single	Multiple	Non-	For-	(Out-of-	
	payer	payers	profit	profit	pocket)	
Government Private, but non-profit Private, and commercial	A	D	G	J	M	
	B	E	H	K	N	
	C	F	I	L	O	

Source: Tsung-Mei Cheng and Uwe Reinhardt, "Perspective on the Role of the Private Sector In Meeting Health Care Needs," in Benedict Clements, David Cody and Sanjeev Gupta, eds. The Economics of Public Health Care Reform in Advanced and Emerging Economies. International Monetary Fund. Washington, DC. (2012): 69–98.

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 singlepayer systems, as is Taiwan's National health Insurance (NHI) system. In the United States, the traditional, fee-for-service Medicare program is a national singlepayer 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 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 United States the State of Maryland has long operated such a system for hospitals.

In the United States, 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 2013—that is, before the Affordable Care Act (ACA) took effect on January 1, 2014—have been for-profit or notfor-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 United States, 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 so-

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

Uninsurance: Finally, cells M, N, and O represents health systems without health insurance. The bulk of the population of low-income, developing countries tends to fall into those cells. In the United States, 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 insur-

ance 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 percent of the Federal poverty line it is purely privately financed commercial insur-

ance.

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.

²Tsung-Mei Cheng and Uwe Reinhardt, "Perspective on the Role of the Private Sector In Meeting Health Care Needs," in Benedict Clements, David Cody and Sanjeev Gupta, eds. The Economics of Public Health Care Reform in Advanced and Emerging Economies. International Monetary Fund. Washington, DC. (2012): 69–98.

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 in-

surance 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 bareconsumer good of which people with low ability to pay might be granted a barebones 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 at 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 periods).

coin solutions in between these two externess are systems that oney 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 U.S. 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 service. nal 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.³ 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 United States. VA health systems, single-payer systems of the control of

(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 United States where Americans are often re-stricted in their choice of physicians and hospitals which depended on the particular health insurance policies or plans they have.⁴
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 percent) 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 out-side the networks which, incidentally, are reported becoming narrower over time,

³Sandra L. Decker, "In 2011 Nearly One-Third of Physicians Said They Would Not Accept New Medicaid Patients, But Rising Fees May Help," *Health Affairs* 31(6) August 2012: 1673–

<sup>79.
&</sup>lt;sup>4</sup>Barbara Starfield, "Reinventing Primary Care: Lessons From Canada for The United States." Health Affairs, 29(5) (2010): 1032

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 tradeoff.

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 andand this is 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.⁵ In Taiwan's single-payer system, patients enjoy easy access to care. Eightyfive percent of patients can reach a hospital or clinic in less than 30 minutes, and for 83 percent of patients wait time is less than 30 minutes before being seen by a doctor.⁶ I visited a private ENT clinic in Taipei in 2013 and stayed for 2 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 co-morbidities (Pham et al. 2009). According to data on CMS's Hospital Compare Web site, 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.8

⁵ Barbara Starfield, "Reinventing Primary Care: Lessons From Canada for The United States."

Health Affairs, 29(5) (2010): 1032.

⁶Tsung-Mei Cheng, "Lessons From Taiwan's National Health Insurance: A Conversation with Taiwan's Health Minister Ching-Chuan Yeh," Health Affairs (28)4: July/August 2009:1035–44.

⁷Marilyn Weber Serafini and Mary Agnes Carey, "Medicare panel urges crackdown on excessive MRIs." (2011) Available at http://www.mcclatchydc.com/2011/06/15/115864/Medicare-

panel-urges-crackdown.html (Viewed March 5, 2014).

8 Medicare Payment Advisory Commission, Report to the Congress: Medicare and the Health Care Delivery System (June 2011), Chapter 2: 36. Available at http://www.medpac.gov/docu- ments/jun11 entirereport.pdf (Viewed March 5, 2011).

The December 2010 issue of Health Affairs also featured a number of articles focused on the problem of overuse of imaging services in the United States.⁹
Rationing of Health Care: There is great confusion in the debate on health pol-

Some people believe that "rationing" of health care.

Some people believe that "rationing" happens only if government is involved in allocating scare 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," 10

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. Thirty-five percent of Canadians waited less than a month for elective surgery, versus 68 percent in the United States; and while 25 percent of Canadian respondents waited 4 months or more for elective surgery, only 7 percent 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 United States.

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 percent 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 United States 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 percent of insured Americans reported not to have seen a doctor when sick or gotten recommended care because of cost. By comparison, only 8 percent of Canadian respondents, 10 percent of German and 4 percent 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. 11 Using data on the actual use of health care retrieved from a large sample of Americans in the well known M. Jind E. and Jing S. 1. (ACEPS) of Americans in the well-known 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 percent 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 percent 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

⁹See, 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

and the Ongoing Search for Effective Folicies w Contain 16, Heath 19,1000, 2010:2231–6.

10 Uwe E. Reinhardt, "Keeping Health Care Afloat: The United States versus Canada," The Milken Institute Review, Second Quarter 2007: 43. Available at http://www.pnhp.org/sites/default/files/MILKEN-REVIEW-CANADA-vs-US.pdf (Viewed March 5, 2014).

11 Jack Hadley, John Holahan, Teresa Toughlin and Dawn Miller, "Covering the Uninsured in 2008: Current Costs, Sources of Payment, And Incremental Costs," Health Affairs 27(5) August 2008: w399-w415. Available at http://content.healthaffairs.org/content/27/5/w399.full.pdf+html?sid=7874cbba-4463-4e2b-837e-028fd6519cbc.

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

	Percent of adults who responded						
	United				United States		
	Canada	Germany	Kingdom	Insured all year	Uninsured		
Saw a doctor or nurse last time they needed care:							
same or next day	41	76	52	53	36		
waited 6 or more days	33	15	16	21	40		
Waited to see a specialist:							
less than 4 weeks	39	72	80	77	70		
2 months or more	29	10	7	5	10		
Wait time for needed elective surgery in past 2 years, 2010							
survey:							
less than 1 month	35	78	59	68	68		
4 months or more	25	0	21	7	7		
In the past year:							
Did not see doctor when sick or did not get recommended care							
because of cost	8	10	4	21	58		
Did not fill RX or skipped doses because of cost	8	9	2	15	36		
Had other cost-related access problems	13	15	4	27	63		
Had serious problems paying or was unable to pay medical							
bills	7	7	1	15	42		

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 United States is troubling in light of the fact that the United States 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). According to OECD data, for example, in 2011 the United States spent \$8,508 per capita (17.7 percent of GDP) on health care and Canada \$4,522 (11.2 percent of GDP), or 53 percent of the U.S. level, both figures in comparable purchasing power parity (PPP) dollars. 12

Asked in an interview with a swriter of the Levince of the L

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 percent 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 percent because you don't blow so much on administration and all of the other ugly things in our health system.¹³

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 United States 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 United States. In purchasing power party dollars, Japan spends only 38 percent as much per capita on health care (\$3,213 or 9.6 percent of GDP) than does the United States (\$8,508 or 17.7 powers of CDP). or 17.7 percent of GDP).14

It can be seen that both Taiwan and Canada have physician-population ratios comparable to the United States (2.48 for Taiwan, 2.4 for Canada, and 2.5 for United States 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 United States (9.3 for Canada and 11.1 for United States per 1,000 population, re-

¹² Based on OECD Health Statistics 2013.
13 Tracy Hampton, "Uwe Reinhardt, Ph.D., Assessing U.S. Health Insurance Coverage," Journal of the American Medical Association (JAMA) 297(10) March 14, 2007: 1049.
14 OECD Health Statistics 2013.

spectively). In terms of beds, Taiwan has almost twice the number of beds as Canada and almost 40 percent more beds than the United States (4.28 for Taiwan, 2.4 for Canada, and 3.1 for United States, respectively).

Table 3.—Delivery System Capacity In Select OECD Countries and Taiwan (2011)

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

Source: OECD Health Data 2013. http://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_REAC.

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 United

Table 4.—NHE As Percent of GDP and Per Capita US\$ PPP For Selected OECD Countries and Taiwan (2011 Unless Otherwise Indicated)

Canada	United Kingdom	Denmark	France	Germany	Japan	Korea	Australia	Sweden	United States	OECD Ave	Taiwan
11.2	9.4	10.9	11.6	11.0	9.6 (2010)	7.5 (2012)	8.9 (2010)	9.5	17.7	9.3	6.5
4522	3406	4448	4118	4495	3213	2199	3800	3925	8505	3322	2186

Source: OECD Health Statistics-2013. Data for Taiwan from Tsung-Mei Cheng, "Taiwan Province of China's Experience with Universal Health Care Coverage," in Benedict Clements, David Cody and Sanjeev Gupta, eds. The Economics of Public Health Care Reform in Advanced and Emerging Economies. International Monetary Fund. Washington, DC. (2012): 255.

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 United States also have been docu-

mented by Laugesen and Glied (2011) 16 as well as New York Times' staff reporter

Data for Taiwan based on Republic of China Health Statistical Trends 2011. Ministry of Health and Welfare, The Executive Yuan, R.O.C. (in Chinese).

^{*}Taiwan-C-section rate: average of 380 performed at primary care clinics and 340 performed as inpatient.

¹⁵Gerard 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

<sup>22(3) 2003:89–105.

16</sup> 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)

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 monosponists can extract the low-est prices from suppliers of any good or 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 a system in which payers have less market power.

By contrast, in the United States, 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 19 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 United States, are significantly higher than elsewhere for all the procedures shown in the table. It is 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 percent of the average U.S. price) to \$15,239 at the 95th percentile (164 percent 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 percent to 61 percent of the average U.S. prices for the same procedures, in spite of the geographic closeness of that system to the United States.

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.—Cross-National Comparison of Prices Paid by Private Health Plans for Selected Procedures or Products 2011

						United States	
	Canada	Canada France		Switzerland	Low	Average	95th Percentile
CT Scan: Head	\$122	\$141	\$272	\$319	\$95	\$510	\$1,545
As percent of U.S. average	24%	28%	53%	63%	19%	100%	303%
MRI Scan	N.A.	\$281	\$599	\$903	\$503	\$1,080	\$2,758
As percent of U.S. average	N.A.	26%	55%	84%	47%	100%	255%
Normal Delivery (a)	\$3,195	\$2,536	\$2,157	\$8,495	\$6,993	\$9,280	\$15,239
As percent of U.S. average	34%	27%	23%	92%	75%	100%	164%
Appendectomy (a)	\$5,606	\$3,164	\$3,093	\$5,840	\$7,756	\$13,003	\$27,797
As percent of U.S. average	43%	24%	24%	45%	60%	100%	214%
Coronary Bypass Surgery (a)	\$40,954	\$16,140	\$16,578	\$25,486	\$42,951	\$67,583	\$138,050
As percent of U.S. average	61%	24%	25%	38%	64%	100%	204%
Angioplasty (a)	\$10,060	\$5,857	\$6,189	\$12,212	\$15,627	\$26,254	\$57,374
As percent of U.S. average	38%	22%	24%	47%	60%	100%	219%
Hip replacement (a)	\$16,945	11,353	11,418	17,521	23,535	\$38,017	\$80,374
As percent of U.S. average	45%	30%	30%	46%	62%	100%	211%
Nexium	\$36	\$23	\$56	\$69	\$176	\$193	\$357

¹⁷ Elizabeth Rosenthal, "The \$2.7 Trillion Medical Bill," The New York Times. June 1, 2013. Available at http://www.nytimes.com/2013/06/02/health/colonoscopies-explain-why-us-leads-the-world-in-health-expenditures.html (Viewed March 5, 2014).

18 Elizabeth Rosenthal, "American Way of Birth, Costliest in the World," The New York Times. June 30, 2013. Available at http://www.nytimes.com/2013/07/01/health/american-way-of-birth-costliest-in-the-world.html?pagewanted=all& r=0 (Viewed March 5, 2014).

19 In regard to relative market power, see Uwe E. Reinhardt, "Divide et Impera: Protecting the Growth of Health Care Incomes (Expenditures," Health Economics 21 2012:41–54. Published online in Wiley Online Library (wileyonlinelibrary.com).

Table 5.—Cross-National Comparison of Prices Paid by Private Health Plans for Selected Procedures or Products 2011—Continued

					United States			
	Canada	France	Germany	Switzerland	Low	Average	95th Percentile	
As percent of U.S. average	19%	12%	29%	36%	91%	100%	185%	
	\$74	\$49	\$109	\$61	\$160	\$163	\$172	
As percent of U.S. average Lipitor	45%	30%	67%	37%	98%	100%	106%	
	\$44	\$37	\$74	\$81	\$95	\$119	\$138	
	37%	31%	62%	68%	80%	100%	1 6%	

⁽a) Physician and Hospital fees combined.

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." 20

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 percent of the total NHI expenditure in 2012,²¹ 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 percent of total NHI spending.²²

The low administrative costs typically associated with single payer systems stand in sharp contrast to the high administrative costs in the U.S. multi-payer private health insurance market. An Institute of Medicine (IOM) report released in September 2012 put the total waste inherent in the U.S. health care system at \$750 billion (close to 31 percent 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 2009.²³ The IOM report identified six major areas of waste in the U.S. health care system and excess administrative costs is the second highest among the six, after \$201 billion annually wasted on unnecessary services.²⁴

In their "Medical Spending Differences in the United States and Canada: The Role of Prices, Procedures, and Administrative Expenses," 25 Pozen and Cutler examined differences in health spending between the United States and Canada. In their words, they say,

"we found that administrative costs accounted for the greatest proportion (39 percent) 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.

Source: International Federation of Health Plans, 2011 Price Comparisons—Medical and Hospital fees by Country.

²⁰ Rufus E. Miles, "The Origin and Meaning of Miles' Law," Public Administration Review, September/October 1978: 399–403. Available at http://www.jstor.org/stable/pdfplus/975497.pdf? *acceptTC=true&acceptTC=true&ipdConfirm=true (Viewed March 4, 2014). *acceptTC=true&acceptTC=true&ipdConfirm=true (Viewed March 4, 2014). *annual Report, Ministry of Health and Welfare, Executive Yuan, R.O.C. 27. *annual Report, Ministry of Health and Welfare, Executive Yuan, R.O.C. 27. *annual Communications with officials at Taiwan's Ministry of Health and Welfare and *accept Taiwan's Ministry of Health Accept Taiwan's Ministry of Health Acce

NHI Administration officials over several years.

²³ National Research Council. Best Care at Lower Cost: The Path to Continuously Learning Health Care in America. Washington, DC: The National Academies Press, 2013.

²⁵ Alexis Pozen and David Cutler, Medical Spending Differences in the United States and Canada: The Role of Prices, Procedures, and Administrative Expenses," Inquiry 47(2): Summer 2010:

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," ²⁶ Morra and Nicholson, et al. report the following results:

Mean Dollar Value of Hours Spent Per Physician Per Year on Administrative Costs

Personnel	United States	Canada costs with U.S. sal- aries and U.S. specialty mix
Physicians Nurses Clerical Staff Senior Administrators	\$17,775 \$23,478 \$37,010 \$4,712	\$9,616 \$2,302 \$9,603 \$684
Overall Total	\$82,975	\$22,205

D. Morra, S. Nicholson, W. Levinson, et al. "U.S. Physician Practices Spend Nearly Four Times as Much Money Interacting With Health Plans and Payers Than Do Their Canadian Counterparts." *Health Affairs*, Aug. 2011.

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 ²⁷ estimated that overall just "billing and insurance-related (BIR)" functions represents 20 percent to 22 percent

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 professions, 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

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 United States 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 United States is losing a contest with other coun-

²⁶ Dante Morra, Sean Nicholson, Wendy Levinson, et al. "U.S. Physician Practices Spend Nearly Four Times as Much Money Interacting with Health Plans and Payers Than Do Their Canadian Counterparts," *Health Affairs* 30(8) August 2011:1443–50.

²⁷ James G. Kahn, Richard Kronick, Mary Kreger and David N. Gans, "The Cost Of Health Insurance Administration In California: Estimates For Insurers, Physicians, And Hospitals," *Health Affairs* 24(6) 2005: 1629–39.

tries, 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,28 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 6 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 percent 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." ²⁹ Another paper in the Journal of the American Medical Association (JAMA) reported a rise in age-adjusted mortality in Russia by almost 33 percent in the period 1990-94.30 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, taken from the Web site of the U.S. Centers for Disease Control (CDC) shows, there has been a growing incidence of obesity and diabetes in the United States over time, most heavily pronounced in a number of south-

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 likely to have premature birth and low-weight babies, who have a higher risk of neonatal deaths and that the United States have a large proportion of babies born to young single mothers. 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 percent," and argue that lifestyle and socioeconomic factors affect the high rate of infant mor-

tality in the United States and that,

"it is inappropriate, however, to conclude that the root cause is the U.S. health care system rather than societal factors in a dynamic heterogeneous society."31

 $^{^{28}\,\}mathrm{Douglas}$ Almond and Janet Currie, "Killing me softly: The fetal origin hyposthesis," Journal

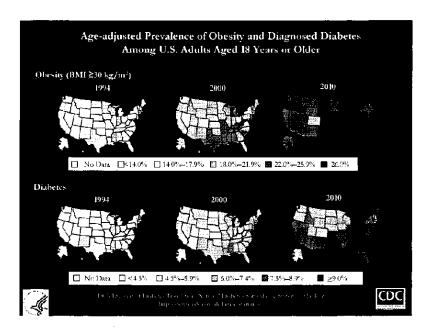
of Economic Perspectives, 25(3) Summer 2011: 153–72.

²⁹Christopher Hoeppler. "Russian Demographics: The Role of the Collapse of the Soviet Union." URJHS Volume 10. McMaster University, Canada. Available at http://www.kon.org/

urc/v10/hoeppler.html.

30 Notzon FC, 1 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.

B1 H.E. Frech, Stephen T. Parente, John Hoff, U.S. health care: A reality check on cross-country comparisons. American Entereprise Institute, July 11, 2012.



SOURCE: U.S. CDC Obesity and diabetes in America.

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. It 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 United States 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

³² National Reserach Council, Best Care at Lower Cost: The Path to Continuously Learning

Health Care in America. Washington, DC: The National Academies Press, 2013.

³³ Gay, J.G., et al. (2011), "Mortality Amenable to Health Care in 31 OECD Countries: Estimates and Methodological Issues", OECD Health Working Papers, No. 55, OECD Publishing. Available at http://dx.doi.org/10.1787/5kgj35f9f8s2-en.

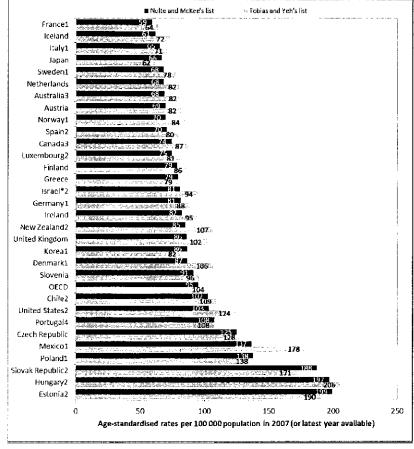


Figure 1 Amenable mortality in 31 OECD countries, 2007 or last year available

Figure 1 exhibits two estimates of amenable mortality rates, one developed from the list reported by Nolte and McKee 34 and the other by Tobias and Yeh. As the list shows, on this metric the U.S. health system does not fare particularly

As the list shows, on this metric the U.S. health system does not fare particularly well (24th among 31 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

 $^{^{34}\,} Ellen$ Nolte and C. Martin McKee, "In Amenable Mortality—Deaths Avoidable Through Health Care—Progress In The US Lags That Of Three European Countries," *Health Affairs* 31(9) September 2012: 2114–22.

tools and integrated health care. As Elisabeth McGlynn, a leading expert on measuring quality in health care in the United States and the quality of health care in the VA health system 35 has noted:

"You're much better off in the VA than in a lot of the rest of the U.S. healthcare 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." 36

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),³⁷ Powell told an audience about a woman named Anne, who was his firewood supplier, faced a healthcare scare of her own. Anne had asked Powell to help pay 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.

Senator Sanders. Thank you Ms. Cheng

We are going to go now to Dr. Rodwin. Victor G. Rodwin is a Professor of Health Policy and Management at New York University's Wagner School of Public Service. He has worked his entire career on studying healthcare systems abroad with a special focus on France. Professor Rodwin held the Fulbright-Tocqueville Distinguished Chair at the University of Paris-Orsay in 2010.

Dr. Rodwin, thanks very much for being with us.

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: 938–45. Available at http://www.nadcp.org/sites/default/files/nadcp/Asch%20et%20al%20al%20AnnalsIntMedQuality_0.pdf. 36 Kristen Gerencher, "For quality, it's hard to top veterans' health care," The Wall Street Journal Market Watch, June 2, 2010. Available at http://www.marketwatch.com/story/its-hard-to-top-veterans-health-care-2010-06-02.

³⁷Alex Lazar, "Colin Powell Pitches Single-Payer Health Care in US," abcNEWS. December, 2013. http://abcnews.go.com/blogs/politics/2013/12/colin-powell-pitches-universal-health 9, 2013. care-in-us/.

STATEMENT OF VICTOR G. RODWIN, Ph.D., MPH, PROFESSOR OF HEALTH POLICY AND MANAGEMENT, ROBERT F. WAGNER SCHOOL OF PUBLIC SERVICE, NEW YORK UNIVERSITY, NEW YORK, NY

Mr. RODWIN. Thank you, Senator Sanders and distinguished members of the committee. Good morning to all of you watching on C—SPAN

My name is Victor Rodwin. I will speak on the French healthcare system. That system is a model of national health insurance that provides healthcare coverage to all legal residents residing in France. It is not, I repeat, it is not an example of socialized medicine like Cuba. It is also not a national health service as in the United Kingdom. It is also not an instance of a government-run health system like our excellent Veterans Health Administration. France's national health insurance, in contrast, is an example of

France's national health insurance, in contrast, is an example of public social security and private healthcare financing combined with a diverse public-private mix in the provision of healthcare

The French healthcare system reflects three political values embraced by Americans. Liberalism in the sense of giving patients free choice of any doctor or any hospital they care to go to, with no networks, no restrictions.

Second, pluralism. Everybody has a diverse choice. They can go to fee for service solo practitioners, they can go to group practices, they can go to outpatient health centers, they can go to emergency rooms, they can go to public hospitals, private hospitals, outpatient consultations with specialists in public hospitals.

A third value is solidarity in the sense of having those with greater wealth and better health finance services for those who are less well-off and in poorer health.

Now, in terms of population health, the French outdo us—and I am embarrassed to say that as an American—hands down. Look at any indicator you like, life expectancy at birth, they do better than we do. Infant mortality, they do better than we do. Female life expectancy at 65, they outlive us. Female life expectancy at 80 or male life expectancy at 80 years of age where medical care matters, they outdo us. Disability-adjusted life expectancy, which takes into account measures of disability, they outdo us. Years of life lost, we have more years of life lost. This is not a Republican or Democratic debate. These are the facts.

But that is not the way to judge a healthcare system entirely. Surely, a healthcare system reflects these indicators, but not just the healthcare system. My colleagues at NYU would still say that we have the best healthcare system in the world in spite of these indicators. They would argue that these indicators reflect other things for which they assume no responsibility: social services, inequality of income, family policies, which are very strong in France, maternal and child health programs, all of which are factors which explain why they have better population health than we do.

So we have to look at other indicators, and one important indicator of health system performance is called avoidable mortality. That is, in a good healthcare system, women should not die in childbirth, people should not die of tuberculosis, people should not die of ischemic heart disease, people should not die of cancers that

can be cured. And when we look at that, I am embarrassed to say, that we come out in the United States as 19, and the French come out as No. 1. I repeat, No. 1.

That is a fact that cannot be ignored. It must be addressed. It was written up in "Health Affairs," a reputable journal. It was confirmed with different measures by the OECD and it has not re-

ceived, in my judgment, sufficient discussion.

Another indicator of how well a system is doing, and a theme of this subcommittee that I know is dear to Chairman Sanders, is access to primary care. You can talk about primary care until you are blue in the face, but let us look at the consequences of whether you receive primary care or not in different healthcare systems.

We have a very established measure of primary care access. It is very direct. If people end up in the hospital for conditions for which you should not have exacerbations, if you have access to primary care, that is called "avoidable hospitalization." And on that criterion, avoidable hospitalization, the rates of avoidable hospitalization are twice as high in the United States as they are in France. That is an unfortunate statistic from the point of view of an American, but that is the way it is.

Lessons that we can draw. I believe that health systems cannot be transplanted from one country to another, but we can talk about some issues and I will just tick them off. I will go over 30 seconds,

if you will allow me, Mr. Chairman.

In France, there is no choice of insurance plan. Everybody is in the same plan for the standardized benefits, but there is a complete choice of hospital or doctor.

In France, all insurers, and there are more than one, pay the same price according to nationally set rates. You do not have a lower price for Medicaid, a higher price for Medicare, an even higher price for commercials.

In France, there are no physician gatekeepers. Everybody can go where they like. No one is telling them what network they can or cannot go in. They do not have to call their insurance company to get authorization.

In France, there is extensive co-insurance, small, but there is a voluntary—

Senator Sanders. We are going to have learn more about France in a few minutes.

[The prepared statement of Mr. Rodwin follows:]

PREPARED STATEMENT OF VICTOR G. RODWIN, Ph.D., MPH

Chairman Sanders, Senator Burr, and distinguished members of the committee, thank you for the invitation to testify on what the United States can learn from France's health care system.

My name is Victor Rodwin. I am a professor at New York University's Wagner School of Public Service. I have worked my whole career on studying health care systems abroad, and have a special interest in France given my family background and bilingualism. I was honored to hold the Fulbright-Tocqueville Distinguished Chair at the University of Paris-Orsay during the spring semester of 2010, and was on sabbatical leave, in Paris, studying French health policy just 2 years ago.

The French health care system is a model of national health insurance (NHI) that provides health care coverage to all legal residents. It is not an example of socialized medicine, e.g., Cuba. It is not an example of a national health service, as in the United Kingdom; nor is it an instance of a government-run health care system like our Veterans Health Administration. French NHI, in contrast, is an example

of public, social security and private health care financing, combined with a public-private mix in the provision of health care services.

The French health care system reflects three political values embraced by Ameri-

1. Liberalism, in the sense of giving patients free choice of doctors and hospitals; 2. Pluralism, in offering diverse health care delivery options ranging from private fee-for-service practice, health centers and outpatient hospital consultations for ambulatory care; and a range of public, non-profit and for-profit hospitals; and

3. Solidarity, in the sense of having those with greater wealth and better health finance services for those who are less well-off and in poorer health.

There are, of course, important differences in the degree to which these values have influenced the financing and organization of our respective health systems. Also, France has a unitary, more centralized parliamentary democracy than our Federal system known for its strong separation of powers and fragmentation of decisionmaking.

Despite these differences, the French health care system is worthy of attention by health policymakers, worldwide, for three reasons. First, France is among those countries that enjoy the highest levels of population health among wealthy nations. Second, France ranks #1 among OECD nations on an important indicator of health system performance—avoidable mortality. Third, the French have easy access to primary health care, as well as specialty services, at half the per capita cost (Table 1) of what we spend in the United States.

POPULATION HEALTH STATUS

Health systems are often compared and ranked, based on their population's health status. Insofar as access to public health services and medical care can significantly improve a population's health, this is a good starting point in evaluating a health

Whether one compares life expectancy at birth, life expectancy at 65 years, infant mortality rates, or disability-adjusted life expectancy at birth, France performs better than the United States (Table 1). France is also noted for having the highest longevity for women, after Japan. These indicators, however, are not sufficient to assess the system's performance because they reflect many other important determinants of health, e.g., poverty rates (Figs. 1–3); other socio-economic disparities; maternal and child health programs; work and family policies; and nutrition. Although the United States spends more on health care, as a share of GDP, than any other nation, France spends a significantly higher share of its GDP on social service programs, particularly family support and employment training programs (Fig. 4). There is good evidence to suggest that France's government spending on these programs contributes to its impressive population health status.

HEALTH SYSTEM PERFORMANCE

France's claim to fame with respect to health system performance is its top ranking among wealthy OECD nations, based on its success in averting deaths from a range of curable cancers, pneumonia, ischemic heart disease, maternal deaths in childbirth, and a host of other causes of mortality considered to be "amenable to health care interventions." Avoidable mortality (AM) attempts to capture the extent to which deaths under the age of 75 years would *not* have occurred had the population benefited from access to effective disease prevention programs, primary care, as well as specialty services.

Based on a comparison of avoidable mortality among 19 OECD nations, France has the lowest rate (ranks #1) and the United States has the highest rate (ranks #19). Moreover, between 1999–2007, the percentage decline in AM in France (27.7) percent) was higher than in the United States (18.5 percent).³ Based on these findings, Nolte and McKee estimate that if the United States were to achieve levels of AM of the three top-performing countries (France, Japan and Australia), about 101,000 deaths could be avoided.

An exclusive focus on AM does not allow one to disentangle the consequences of poor access to disease prevention versus primary or specialty health care services. Thus, it is useful to consider other indicators that capture the consequences of bar-Gusmano (Hastings Center) and Daniel Weisz (International Longevity Center-USA), we have compared France and the United States along two other dimensions of health care access. The first is well-established—hospital discharges for ambulatory care sensitive conditions (ACSC). It measures hospitalizations for exacerbations of conditions (e.g., asthma, diabetes, and hypertension) that are less costly and less painful to treat in community-based medical settings.⁵ The second indicator is less

well known. It concerns access to specialized cardiac care for those patients who re-

quire revascularization—coronary artery bypass surgery or angioplasty.

We have found that the rate of ACSC in the United States is almost twice that of France, whether one examines national-level data or compares New York City and Paris. This demonstrates that access to primary care is significantly worse in the United States than in France, leading to many more hospitalizations that could be avoided if we improve our health care system.⁶ With respect to cardiac services, contrary to conventional views that the United States makes available greater access to life-saving medical technologies than other nations, we found that after adjusting for the fact that the French have less heart disease than Americans, our use of revascularization is not as high—neither for adults (35–64 years) nor for older persons (65+). This supports the claim that the French health care system provides

relatively easy access to specialized health care services.

Along with access to primary and specialty care, there is another important dimension of health system performance that merits attention—satisfaction with the health care system as reported in comparative surveys not only of the adult population, but also by chronically ill patients and physicians. Comparisons across Europe place France among those nations with the highest rates of consumer satisfaction. In June 2008, Harris Interactive, France 24 and the International Tribune collaborated on a survey that placed France at the top with 55 percent of responding or the first of the survey that the su

ents "satisfied" in contrast to the 28 percent in the United States.⁹
Results of the 2008 Commonwealth Fund International Survey of Sicker Adults are consistent with these positive views of the French health system. To For example, with regard to "overall health system" assessments, sicker French patients (41 percent), along with their Dutch counterparts (42 percent), had among the highest rates of those who felt that "only minor changes (were) needed." Comparable rates

for the United States were considerably lower—20 percent).

Beyond measuring satisfaction, a number of other questions in the Commonwealth Fund Survey provide further evidence that the French have far easier access to health care than their American counterparts. For example, on the question of medical homes—"do you have a doctor you usually see"—99 percent of sicker adults, in France, answered "yes" in contrast to 82 percent in the United States. Finally, the percent of sicker adults with out-of-pocket expenses over \$1,000, in the past year, was among the lowest in France (5 percent), compared to 41 percent in the

One can safely conclude that the French are generally more satisfied with the overall structure of their health care system than Americans. Indeed, health care reform campaigns, in France, typically assume that the main goal is to preserve the existing system and avert any changes that would make it resemble that in the United States or the United Kingdom.¹¹ French policymakers assume that their NHI system is a realistic compromise between Britain's national health service, which they believe requires too much rationing and offers insufficient choice, and the mosaic of subsystems in the United States, which they consider socially irresponsible because of the large share of the population that remains uninsured, under-insured or even forced to declare bankruptcy after a serious episode of illness.

LESSONS FROM THE FRENCH HEALTH SYSTEM

Health systems cannot be transplanted from one country to another; nor should they be. Looking abroad, at best, can inform policy debates at home. Beyond France's impressive population health status and health care system performance, there are some distinctive features of the system that raise important questions for health policy, in general. Assuming we really want to provide all of our population with access to quality health services, while also keeping expenditures under better control, I propose to highlight six of these features because they will likely contribute to our discussion about what the U.S. health care system can learn from other countries.

1. There is no choice of insurance plan for the standardized benefits: The French health system differs from most other European health systems in its strong resistance to the most recent wave of reform efforts that have sought to introduce a dose of competition and market forces within a social context that maintains its commitment to national solidarity. In France, American nostrums of unleashing market forces under the banner of "consumer-directed health care," and selective contracting by private health insurers, have gained little traction. French NHI does not allow a choice among health-insurance plans for the essential benefits covered under the program. Nor does it allow local health-insurance funds to engage in selective contracts with "preferred providers." As under our Medicare Program, all French residents covered under NHI are entitled to seek care from the 99 per-

cent of French physicians and hospitals that accept NHI. The competition occurs among health care providers, not among the small number of insurers to which beneficiaries are assigned based on their occupation.

2. All insurers reimburse providers according to nationally set rates: Much like Maryland's all-payer system, in France, all insurers pay the same price for hospital services. Likewise, all physicians receive the same reimbursement under a national fee schedule that is negotiated every year. Approximately one-quarter of all physicians (12 percent of general practitioners) have opted for what is called "sector 2" and are entitled balance bill their patients, i.e., to set fees above the national fee schedule. In these cases, physicians lose their own health insurance benefits and must pay for their own insurance like all others who are self-employed. Health centers and public hospital outpatient departments (where the most prestigious specialists work) may only charge patients the national rates.

3. There are no physician gate-keepers: Like our Medicare Program, French NHI allows patients the freedom to consult general practitioners, specialists and hospitals of their own choosing. There are no restricted networks, no concept of outof-network surcharges. Beginning in 2005, policymakers have imposed a soft gatekeeping system by requiring French residents to sign up with a primary care doctor (médecin traitant). It is still easy, however, conditional on a slightly higher co-insurance payment, to have direct access to a specialist without a referral.¹⁴

4. There is extensive co-insurance and voluntary health insurance coverage: As in the United States, in France, co-insurance (the so-called *ticket modérateur*) remains a component of the reimbursement system. Almost 90 percent of the population have the equivalent of Medigap insurance in the United States, which offers a wide range of insurance products covering portions of co-insurance, extra-billing and supplementary benefits beyond the basic plan (mainly dental and optometry services). Most of the remaining population has free voluntary health insurance provided by the NHI fund or the government.

5. Sicker patients have better insurance coverage: In contrast to Medicare and private insurance in the United States, where severe illness usually results in increasing out-of-pocket costs, in France, when patients become severely ill, their health insurance coverage improves. Although co-insurance and direct payment is symbolically an important part of French NHI, patients are exempted from both when: (1) expenditures exceed approximately \$100 per month; (2) hospital stays exceed \$20 decre (2) patients are for from points abbition of the property of the propert ceed 30 days; (3) patients suffer from serious, debilitating or chronic illness (e.g., cancer, heart disease, diabetes . . .); or (4) patient income is below a minimum ceil-

ing thereby qualifying them for exemption from co-insurance payments.

6. Parliament sets annual health care expenditure targets: All of the features noted above operate within a system in which Parliament approves an annual health care expenditure target for the coming year. This includes spending targets for specific components of health care (hospitals, community-based physician services and other sub-sectors). If hospitals and physicians exceed their targets by billing for higher than the projected volume of services, prices are negotiated downward

the following year.

Table 1.—Basic Indicators: France and the United States (2011–12)

	France	United States
Demographic and economic characteristics: Total population Percent of population > 65 yr of age (2011) Gross domestic product (GDP) per capita (\$)	65,327,700 17.1 39,901.4	313,914,000 13.2 49,685.6
Health care system:		
Heath care expenditures as percent of GDP	11.2	17.0
Per capita health expenditures in \$PPPs	8,175	4,028.7
Public expenditures on health as percent of GDP	8.7	8.3
Practicing physicians per 10,000 population	33.2	26
Physician consultations per capita	6.8	4.11
Acute care bed—days per 1,000 population	9001	700 ⁴
Acute care beds per 1,000 population	3.43	2.562
Health status:		
Infant deaths per 1,000 live births	3.91	6.22
Maternal deaths per 100,000 live births	8.92	12.75
Life expectancy at birth	82.2	78 72
Female life expectancy at 65 yrs	23.83	20.32
Male life expectancy at 65 yrs	19.33	17 72
Female life expectancy at 80 yrs of age		9.72

Table 1.—Basic Indicators: France and the United States (2011-12)—Continued

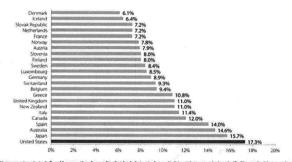
	France	United States
Male life expectancy at 80 yrs of age	9.2	8.22
Disability-adjusted life expectancy at birth	73.13	70.03
Years of life lost per 100,000 population due to death before 70 yrs of age	3,500 ¹	4,6292

¹ Data are for 2009

Note: Table assembled by Christine Lai, based on data from the Organization for Economic Cooperation and Development (OECD).

U.S. Poverty Rates Higher, Safety Net Weaker than in Peer Countries Economic Policy Institute, Issue Brief, 7/24/2012

Relative poverty rate in the United States and selected OECD countries, late 2000s

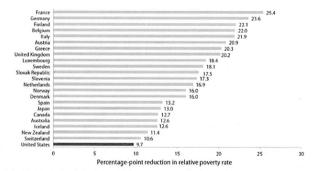


e. Poverty rates are based on income after taxes and transfers

Source: Authors' analysis of Organisation for Economic Co-operation

Fig. 2 U.S. Poverty Rates Higher, Safety Net Weaker than in Peer Countries Economic Policy Institute, Issue Brief, 7/24/2012

Extent to which taxes and transfer programs reduce the relative poverty rate, selected OECD countries, late 2000s



Note: This figure plots the differences between each country's pre- and post-tax and transfer relative p individuals with income below half of household-size-adjusted median income.

Source: Authors' analysis of Organisation for Economic Co-operation and Development Stat Extracts (data group labelled "late 2000s")

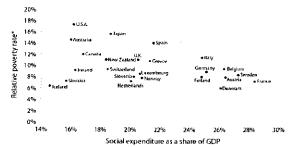
² Data are for 2010. ³ Data are for 1999.

⁴ Data are for 2001

⁵ Data are for 2007

Fig. 3 U.S. Poverty Rates Higher, Safety Net Weaker than in Peer Countries Economic Policy Institute, Issue Brief, 7/24/2012

Social expenditure and relative poverty rates in selected OECD countries, late 2000s



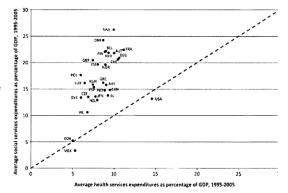
* The relative poverty rate is the share of individuals with income below half of household-size-adjusted median income. Poverty rates are based on income after taxes and transfers.

Note Social expenditure is government expenditure on social proxyrams, such as Social Security and Medicare in the United States. The equation for the trend line is y = -0.2559x + 0.1528 and the $R^2 = 0.1266$.

Source Authors' analysis of Organisation for Economic Co-operation and Development Stat Extracts (data group labelled "late 2000s")

Health and social services expenditures: associations with health outcomes

Figure 2 Average socialservices expenditures versus average health-services expenditures as percentages of gross domestic product (GDP) from 1995 to 2005, by country. 'Social services expenditures Hungary are missing for 1995–1998, and for Portugal for 2005; health-services expenditure data are missing for the Slovak Republic for 1995–1996. Source: OECD Health Data 2009 (accessed June 2009); OECD Social Expenditure Dataset (accessed December 2009); authors' calculations.



Bradley EH, Elkins BR, Herrin J, et al. BMJ Qual Saf (2011). doi:10.1136/bmjqs.2010.048363

In Amenable Mortality - Deaths Avoidable through Health Care -Fig. 5 Progress in U.S. Lags that of 3 European Countries

Nolte, E. and M. McKee. Health Affairs, 2012; 31(9):2114-2122.

Age-Standardized Mortality Rates From Selected Causes In Four Countries, 1999 And 2006/2007

	Mortality ra 2006/2007	tes per 100,0	00 people a	ges 0-74,	Percent change from 1999 to 2006/2007				
Country	Amenable causes	Heart disease (50%)	Other	Ali	Amenable causes	Heart disease (50%)	Other causés	All causes	
MEN									
France	60.97	13.67	326,96	401.60	27.7	30.7	16.9	19.2	
Germany	90,29	30.45	286.32	407.05	24.3	33.2	15.3	19.0	
UK .	91.27	34.47	253.76	379.51	36.9	41.7	8.4	21.1	
us	106.90	37.18	328.20	472.26	18.5	32.6	8.8	13.6	
WOMEH									
France	49.39	2.84	126.88	179.10	23.4	37.9	11.2	15.5	
Germany	65.87	9.23	133.06	208.15	22.7	37.9	11.3	16.8	
UK	74.14	1082	153.81	238.76	31.9	47.8	6.0	18.6	
US	84.50	14.52	191.47	290.49	17.5	35.8	6.1	11.7	

source Authors' calulations hased on data from the World Health Organization mortality database (Note 15 in text) and Centers for Disease Control and Prevention vital statistics data (Note 16 in text) norms botar for Germany for 2007 were not available, we used data for 2006 instead. As explained in the text, we assumed that 50 percent of deaths from heart disease were amenable deaths. Numbers may not sum to the total because of rounding.

References

1. Rodwin, V. and contributors, Universal Health Insurance in France: How Sustainable? Essays on the French Health Care System. Washington, DC: Embassy of France, 2006; Chevreul K, et al., France: Health System Review. Health Systems in Transition, 2010; 12(6): 1–291; Tabuteau, D. and Rodwin, V. A la santé de l'Oncle Sam. Paris: Jacob-Duvernet, 2010.

2. Nolte, E. and M. McKee. Measuring the Health of Nations: Updating an Earlier Analysis. *Health Affairs*. 2008; 27(1):58–70.

3. Nolte, E. and M. McKee. In Amenable Mortality—Deaths Avoidable through Health Care—Progress in U.S. Lags that of 3 European Countries. *Health Affairs*. 2012; 31(9):2114-22

4. Gusmano, M., Rodwin, V. and Weisz, D. Health Care in World Cities. Baltimore. Johns Hopkins U. Press, 2010.
5. Millman, M. (ed.). Access to Health Care in America. Committee on Monitoring Access to Personal Health Care Services, Institute of Medicine. Washington, DC: National Academy Press; 1993; The Agency for Healthcare Research and Quality (AHRQ) currently devotes part of its efforts to tracking access to primary care by examining rates of ACSC. Likewise, the Commonwealth Fund monitors ACSC as a measure of access across States.

6. Gusmano, M. Rodwin, VG and Weisz, D. "Beyond 'US' and 'Them'": Access Dimensions of Health System Performance in the U.S., France, Germany and England." *International Journal of Health Services* (44)3, 2014; Gusmano, M. Rodwin, V. and Weisz, D. Hospitalization for Ambulatory-Care Sensitive Conditions (ACSC) in Ile de France: A view from across the Atlantic. Revue Francaise des Affaires Sociales (3), 2013

7. Gusmano, MK, Das, D., Rodwin, VG and Weisz, D. A New Approach to the Comparative Analysis of Health Systems: Invasive Treatment for Heart Disease in the U.S. France and their two World Cities. Health Economics, Policy and Law. (2): 73-92. 2007.

8. Countries Which Europeans Admire for Their Systems of Government, Quality of Life, Environment, Economies and Health Care Systems, 2007, HI Europe, (Available at: http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/ www/story/06-29-2004/0002202084&EDATE=#).

9. Harris Interactive /France 24/International Herald Tribune survey, June 2, 2008. See Harris Interactive News Room—Western European and U.S. Adults Tear Down this Health Care System!

10. Schoen, C. et al. In Chronic Condition: Experiences of Patients with Complex Needs in Eight Countries. *Health Affairs*. Doi.10.1377, 2008.

11. Rodwin, V. The Health Care System Under French National Health Insurance: Lessons for Health Reform in the United States. American Journal of Public Health, January (93)1; 2003.

12. Oliver, A., Mossialos, E., and Maynard, A., eds. Analysing the Impact of Health System Changes in the EU Member States. Special Issue of Health Economics

13. Le Pen, C. and Rodwin, VG. Health Care Reform in France: The Birth of State-Led Managed Care. New England J. of Medicine. 351(2):2259-62.
14. Dourgnon, P. and Naiditch, M. The preferred doctor scheme: A political reading of a French experiment of gatekeeping. Health Policy 94. 2010: 129-34.

Senator Sanders. Senator Murphy, did you want to make a brief

opening remark? No? OK.

Let us go to Dr. Yeh, if I am pronouncing your name correctly. Forgive me if I am not. Dr. Yeh is a professor at the School of Public Health, Tzu-Chi University in Taiwan, and we very much appreciate your being with us today. Just speak closely into that microphone and tell us a little bit about what goes on in Taiwan.

STATEMENT OF CHING-CHUAN YEH. M.D., MPH, FORMER MIN-ISTER OF HEALTH FOR TAIWAN, PROFESSOR, SCHOOL OF PUBLIC HEALTH, COLLEGE OF MEDICINE, TZU-CHI UNIVER-SITY, HUALIEN CITY, TAIWAN

Dr. YEH. Chairman Sanders, Senators, and distinguished members of the committee.

Thank you for inviting me to testify here. My name is Ching-Chuan Yeh. I am the professor at the Tzu-Chi University, but I was the founding chief of our National Health Insurance Administration in 1995 to 1998. That is 19 years ago, and I was the Minister of Health in Taiwan.

Taiwan established the universal national health insurance in 1995. Currently, 99.6 percent of population enrolls in this program. The other 0.4 percent is they have citizenship, but stay abroad; they are not covered.

Taiwan's NHI program is a single-payer system and has a large single risk pool. Before that, we had 12 different social programs, strong and weak programs, and we merge into one single pool. That enabled us to have cross-subsidization among the rich and poor, the well and the sick.

Studies show that the premium contribution compared to the health resources utilized are favorable to the low and middle-low income.

Having a single-payer system is the main reason for our efficient services, and also how at the low prices of our healthcare we can achieve. We have a private, not-for-profit delivery system and very highly competitive providers enable us to have efficient service.

We contract 100 percent of the hospital in Taiwan, and 93.5 percent of the private practitioner ensure if they have the car, they can go anywhere, any hospital, any private practitioner to seek their advice. And that is a level that is very easy and equal access to the system.

And single insurance administration have the benefit of very low administrative cost, which is only 1.15 percent of the total NHI spending. And people enjoy complete free choice of provider, and providers in Taiwan must be mindful of their patient's demand to stay competitive. Our satisfaction rate after 2 years of the implementation, it is always between 70 to 80 percent.

We have a national fee schedule, uniform fee schedule. So because the hospital and the provider can only compete on quality instead of price competition, and patients who carry their insurance card, can go to any provider if they are not satisfied with their quality of services. Basically, there are no waiting lists at all, except for a few well-known medical institutes or well-known doctors. And rationing is stopped by provider competition and efficiency of our services.

In 2012, our life expectancy, our infant mortality, our maternal mortality, and the sum of initial indicators, were much better than United States. Although we spend only one-sixth of the U.S. dollar, if PPP adjusted, it is one-fourth of the U.S. dollar we spend. But we are doing better than the United States.

The last thing I wish to mention is our IT system, our Health Information System. Everyone has this card and the last six visits are recorded in this card, but actually, all our providers submit their data.

We are on the way to develop a cross-system EMR. And we expect to accomplish a lifelong e-record for everyone in the next few years.

I think my time is up. Thank you.
[The prepared statement of Dr. Yeh follows:]

PREPARED STATEMENT OF CHING-CHUAN YEH, M.D., MPH

UNIVERSAL COVERAGE

Taiwan established universal national health insurance in 1995, bringing nearly 40 percent (about 9 million) uninsured under the umbrella of national health insurance (NHI). Before that, there were 12 different social health insurance and health service programs covering a population of 12 million. Currently, 99.6 percent of the population, about 23 million people, is enrolled in the NHI program. Taiwan is the only country in the last 30 years to reach universal coverage and a single payer system at the same time. Nineteen years of experience with national health insurance have produced important results that other countries might find of interest.

EQUITY

Taiwan has been one of the most egalitarian health systems in the industrialized world. Access to health care is an inalienable right in our constitution. Residents living in remote mountainous areas and offshore islands, and the poor, the disabled, the aged get pretty much the same access and health care as anyone else. A single-payer system has a single risk pool, since everyone is mandated to enroll. This enables cross-subsidization among diverse groups with not only different socioeconomic status but also different health status.

Studies show that the premium contribution compared to the health resources utilized are favorable to the low and middle-low income classes. Of course, this is the nature of a social health insurance program. Also, health care costs are much lower compared to most OECD [Organization for Economic Cooperation and Development] countries. National health spending grew from the pre-NHI 3-year average of 4.87 percent of gross domestic product (GDP) to only 6.62 percent in 2012.

TRANSITION PERIOD

By the end of 1995, 10 months after NHI launched, only 92.3 percent of our population enrolled in the new program, and increased to 96.0 percent in 1996. In 2002, it finally reached 98 percent, the target we set in the planning stage. And now, 99.6 percent of our citizens covered by the NHI.

For the first 2 years, the percentage of health expenditure to GDP increased rapidly from 4.87 percent to 5.36 percent, then stabilized and gradually increased from 5.36 percent in 1996 to 6.62 percent in 2012.

The general public has been very satisfied with the NHI—although in the first half year of inception, satisfaction rates were as low as 25–40 percent, but by the

end of the first year they rose to 60 percent, and after the end of the second year, they have always been between 70 and 80 percent up to the present.

SINGLE-PAYER SYSTEM

Having a single-payer system is the main reason for our efficient services and also the low prices for health care we can achieve. Private delivery and highly competitive providers enable us to have efficient health services. The NHI Administration's contract with all of the hospitals and most of the private practitioners enable the insured to have an easy and equal access to health services. In addition, the single payer wields monopsonistic power in procuring services and products—hence low prices for health care.

A single insurance administration also has the benefit of a very low administrative cost, which was only 1.15 percent of total NHI spending in 2012. Although there is no choice of insurers, people enjoy complete free choice of providers. The latter compels the providers to be competitive and efficient. Doctors and hospitals must achieve very high productivity to survive. Providers in Taiwan must be mindful of patients' demands to stay competitive, and they do compete for patients. The NHI Administration set a uniform national fee schedule for all the providers. Price competition is limited to those services not covered by the NHI program. It is quality competition in nature, not price competition; but it certainly is competition. Furthermore, the administration of the single-payer system is simple, as there is

Furthermore, the administration of the single-payer system is simple, as there is only one set of rules for everyone, whether it is regarding claim forms, clinical protocols, quality indicators, fee schedule, etc. The administration costs of hospitals and other providers are also much lower than those of a multi-insurer system.

NHI BENEFITS

NHI benefits are comprehensive: inpatient and outpatient care, drugs, dental care, traditional Chinese medicine, kidney dialysis, organ transplantation, etc. Dental prosthesis, dentures, cranes, wheelchairs, eyeglasses, cosmetic surgery, special nurses, long-term care, nursing home, etc. are not in the benefits list. Patients have to pay minimum co-payments either in hospitalization or outpatient services. The co-payment rates range from 5–20 percent for different services, and the average actual co-payment rate is 8 percent of the health costs because of the waiver scheme for serious illness, such as cancer, major operations, rare diseases, etc.

Patients stay in a single room and room with two beds must pay an extra room charge. About 60–75 percent of hospital beds are 3 and more beds in one room that are free of any room charge.

On average, hospitals received 80–85 percent of their revenues from the NHI Administration. The other 15–20 percent is from co-payments and other non-benefits health services.

PUBLIC SATISFACTION

The NHI is the most successful public policy in Taiwan. The general public has been very satisfied with the NHI. One reason for the high satisfaction is that premium and co-payment rates are low. The premium rate is 4.91 percent of the payroll income, and total national health spending is only 6.62 percent of GDP, of which the NHI itself is 4 percent of GDP.

Easy accessibility is another reason. NHI Administration contracts with 100 percent of hospitals and 93.5 percent of private practitioners in Taiwan (most of the non-contract practitioners are dentists, doctors of Chinese medicine and aged doctors). Free choice of providers is the key to the easy and equal access of health care.

Patients can carry the equivalent of cash as represented by their insurance cards to any provider of care, not just to a smaller network of providers, as under the U.S. private insurance system. Basically, there are no waiting list at all except for a few well-known medical centers and well-known doctors.

HEALTH PERFORMANCE AND SERVICE QUALITY

Some critics say at such low fees we must beget problems with our service quality. However, our life expectancy is comparable to that of the developed world. In 2012, it was 79.4 years old; for males 76.1, and for females 83.0. Taiwan's infant mortality rate is as low as 3.7 per thousand, maternal mortality was between 5.0 to 8.5 per 100,000 in the years from 2005 to 2012. Both of these rates are comparable to the developed world.

Before NHI, life expectancy increased 1.8 years from 1986 to 1996, and after NHI, it improved 2.9 years from 1996 to 2006. Studies show that life expectancy improved more for low-ranked health classes.

As for the clinical service performance, cervical cancer mortality drop 60 percent since NHI was launched. Stage-specific cancer survival rates are similar to developed countries, but this is not true with regard to the overall 5 years' survival for colon, breast, lung and oral cancer. That is due to the lack of preventive services and screening, not to the fact that our treatment is inferior. Fortunately, since 2009, the Ministry of Health has designated a special sum from the tobacco health tax revenue solely for screening of three major cancers in Taiwan: colon, oral, and breast. Of course, another part of the budget is designated for an antismoking campaign.

As for the survival after organ transplantation, we sometimes do better than the United States. For example, because we do more liver transplantation in Taiwan, we have much better outcomes than does the United States. Heart and kidney transplantation results are also comparable to the United States. But since we rarely do lung or heart-lung transplants, our outcomes are much worse. Survival of the end stage renal failure is also comparable to OECD countries.

PREMIUM INCREASE

In its 19-year history, the NHI Administration only raised the premium rate two times: from 4.25 percent (of the payroll) to 4.55 percent in 2002, and to 4.91 percent in 2012. The Ministry of Health started a tobacco health tax in 2000 that gives NHI an additional 2 percent of the total NHI revenue. In the year 2006 and 2009, the Ministry of Health raised the tobacco health tax again to yield more extra revenue (about 6 percent of total revenue now) for the NHI.

Before 2012, the premium collection was based on payroll income alone. In the year 2013, NHI Administration added another 2 percent of the non-payroll income to the premium base for the NHI as an additional source of funding. That is another 6 percent of the total revenue of NHI.

COLLECTION OF PREMIUMS

The NHI's total premium revenue comes from three sources: government (36 percent), which will not default on premiums; employers (26 percent); and the public (38 percent). The NHI Administration is good at collecting premiums from the public. When people don't pay premiums on time, they send notices to them immediately. Our citizens are quite law-abiding, so the compliance rate is very high. The "bad debt rate" is just around 0.9 percent in 2011.

The government pays 100 percent of the premiums for low-income households—currently 1 percent of the population—and extends interest-free loans to the nearpoor—2 percent of the population. Since 2009, the Ministry of Health has raised the tobacco tax from the NT\$10 per pack to NT\$20 per pack and has used part of the cigarette health tax revenue as a subsidy for the near-poor.

SECTORIAL GLOBAL BUDGETS

Taiwan has used sectorial global budgets to control health spending successfully. Health policy experts generally believe that such an approach can be useful in the short run, to break an upward trend in health spending. But with more than 15 years of practice, Taiwan has confirmed that the global budget approach is not as bad as people imagine. We have five sectorial global budgets under one big overall global budget for the whole system: hospital, primary care, dental, traditional Chinese medicine, and kidney dialysis. Our hospital global budget includes hospital outpatient ambulatory care, and that part is almost 50 percent of the total cost of any hospital. So far this system has worked, even if not perfectly. Shifting patients from inpatient to outpatient care is effortless because both are under the same hospital global budget.

NEW DRUG ADOPTION

Taiwan spends roughly 25 percent of the NHI budget on drugs. However, multinational pharmaceutical companies often allege that prices paid by the NHI are too low. However, the NHI introduces 40 to 50 new drugs every year. So spending for new drugs per total NHI expenditure continues to rise. About 1 percentage of the 3–5 percent annual growth in spending of the NHI is for new drugs. Indeed, there are some delays in coverage for new drugs and new technologies. Adoption of new technology, including drugs, is often delayed by 2 to 5 years after adoption by the United States.

PAY FOR PERFORMANCE

We have five Pay for Performance (P4P) programs using the disease management approach—diabetes, breast cancer, asthma, tuberculosis, and hypertension; other programs are based on fee-for-service or case payment. Diabetes management and tuberculosis control are relatively successful because there are good indicators to measure outcomes. For example, there is HbA1c for diabetes. Breast cancer P4P is considered so-so up to this point. There is no evidence as yet that P4P for asthma has made a big impact. Overall, however, the budget impact of these initiatives is still small. We need to take a much more aggressive approach to disease management. For that we need to overhaul our payment system, which is still largely based on fee-for-service payment to providers.

HEALTH IT

The NHI Administration issues every insured a credit card—size IC card for accessing health care. As all providers in Taiwan submit claims electronically based on the patient records they keep, we can do very detailed profiling of both patients and providers. All the data in our health IT system can be linked, so that we can analyze any data we choose to know about patients, their utilization, providers, and so on. We have complete profiles on utilization by patients' income level, geographic location, number of visits, number of hospitalizations, etc. Thus, we are able to monitor our health system almost in real time.

At present, most hospitals have electronic medical records (EMRs) within their facilities. We are on the way to develop cross-system EMRs, and expect to accomplish this in the next few years. As there is a single insurer, one single standard has already been set up. We can go to a complete life-time e-record system within a few years

An imaging switching center using a Picture Archiving and Communication System [PACS] already functioned for years. All imaging done by the providers is electronically transferable within the entire Taiwan health system. Telemedicine for mountainous aboriginal communities and off-shore islands is a routine practice now.

Our policy decisions usually are based on quantitative evidence generated by our IT system. Taiwan invested heavily up front on health IT, and we have reaped the benefits of our powerful IT system ever since. The savings our IT system has generated have paid for the setup cost of that system many times over.

KEY TO THE SUCCESSFUL IMPLEMENTATION

First, we have a team of competent technocrats and dedicated leaders who can devise sound policy and then implement it. Second, in the initial stage, we had a reasonably stable political system. Third, we have a physical infrastructure capable of delivering on health policy. Fourth, we set up a good health IT system at the very beginning, to have the data capacity as a basis for policymaking.

In addition, our country established NHI during a good economic period. It should

In addition, our country established NHI during a good economic period. It should be noted that there are associated cost increases in the initial few years in establishment of national health insurance. Fortunately, Taiwan had good economic growth for many years prior to and after the NHI was launched; so we were able to absorb the cost increases associated with its establishment.

Senator Sanders. Thank you very much.

Senator Roberts, did you want to make a brief opening remark? Senator ROBERTS. No, sir. In the interest of time, I do have a question of the witnesses, but I will wait.

question of the witnesses, but I will wait.
Senator SANDERS. OK. We will get to that.
Senator ROBERTS. Thank you, Mr. Chairman.

Senator Sanders. Thank you very much.

Senator Burr, I think you have a panelist you want to introduce. Senator Burr. Thank you, Mr. Chairman, and I thank my colleagues.

I have the pleasure of introducing to you today, Ms. Sally Pipes, president, CEO, and Taube Fellow in Health Care Studies at the Pacific Research Institute in San Francisco, CA. Sally, thanks for joining us today, to explore what we might learn from other countries around the world to improve our healthcare system here at home.

As a native Canadian and naturalized American, Ms. Pipes has a unique understanding of how single-payer systems actually operate. Congratulations on becoming an American citizen. We are pleased to welcome you and look forward to hearing about your personal experiences and professional analysis of single-payer systems.

The microphone is yours, Sally.

STATEMENT OF SALLY C. PIPES, PRESIDENT AND CEO, PACIFIC RESEARCH INSTITUTE, SAN FRANCISCO, CA

Ms. PIPES. Thank you, Chairman Sanders and Ranking Member Burr for inviting me to testify today.

I am Sally Pipes, president of the Pacific Research Institute, a think tank based in San Francisco that is dedicated to advancing opportunity for all through market-based solutions.

I am going to focus my remarks today on Canada's single-payer Medicare-for-all system, a system with which I am extremely famil-

iar, as I am, as Senator Burr said, a native of Canada.

Many healthcare reform advocates point to Canada as a shining example of advantages of a State-run single-payer system. Canada is, in fact, one of only a handful of countries with a bona fide single-payer system. Government officials set the budget for what can be spent on healthcare every year. Provinces administer their own insurance programs with additional funding from the Federal Government. Private insurance is outlawed in many Provinces. This is the sort of system that many are calling for here in the United States. They want to abolish private insurance and leave Government as the sole source of health coverage. But the Canadian system is one that would not be suitable for America.

Officials severely restrict patient access to care, and those restrictions saddle patients and their families with massive monetary and nonmonetary costs. Or to frame this in terms of the title of this hearing, if you are looking for lessons from healthcare systems

abroad, Canada shows us exactly what not to do.

Let us start with wait times. In order to keep a lid on healthcare costs, Canadian officials have to ration care. According to Canada's Fraser Institute, the average Canadian has to wait over 18 weeks from seeing a primary care doctor to getting treatment by a specialist. And wait times are only growing. The 18-week delay today plaguing Canadians is 91 percent higher than it was in 1993. At any given time, 17 percent of the Canadian population, 5 million out of 35 million, are on a waiting list to get primary care.

There is also a severe shortage of essential medical equipment. For instance, Canada ranks 14th out of 23 OECD countries in MRI machines per million people with an average wait time at just over

8 weeks.

These lengthy waits have profound consequences not just for patients who are suffering, but the rest of society. When people are not treated in a timely fashion, their conditions worsen and their health deteriorates. Their productivity drops, and they may have to stop work entirely, and they often end up requiring significantly more expensive and extensive treatments, which are costly for the entire system.

One estimate from the Centre for Spatial Economics found that wait times for just four key procedures, MRI scan, and surgeries for joint replacement, cataracts, and coronary artery bypass grafts cost Canadian patients \$14.8 billion every year in excess medical costs and lost productivity.

Once Canadian patients finally receive medical treatment, it is far from free. About 68 cents out of every dollar in Government revenue goes to healthcare spending. But the typical Canadian family spends about \$11,300 in taxes every year just to finance the

public system.

Technically, every Canadian has access to needed healthcare services. In 2005, Madam Chief Justice Beverly McLaughlin of the Canadian Supreme Court ruled in favor of overturning the ban on private health coverage in Quebec. She wrote that, "Access to a waiting list is not access to healthcare."

Those Canadians who can afford to opt out, often come to the United States, about 42,000 Canadians come every year to this country to pay out-of-pocket. Danny Williams, former Premier of Newfoundland in 2010, flew to Florida for heart valve surgery. When questioned by the press about that decision, he said,

"It is my heart. It is my health. It is my choice. I did not sign away the right to get the best possible healthcare for my-self when I entered politics."

Brian Day, an orthopedic surgeon who runs an illegal clinic in Vancouver said, "A person can get a hip replacement for their dog in less than a week. For a Canadian, it is over 2 years."

My own mother died from colon cancer because she had to wait. She could not get a colonoscopy. When she had lost 35 pounds 4 months later, she entered the hospital, had a colonoscopy, died 2 weeks later from metastasized colon cancer. How much longer could we have had my mother if she had had prompt treatment?

There is an example in the United States of a single-payer system. It is the VA, and there is a lot of dissatisfaction with waiting lists. I think this is no way for us to run a healthcare system, a single-payer system. We need a new way to inject genuine market competition and choice into our healthcare system. We need to scale back top-down controls by Government.

Thank you, and I look forward to your questions. [The prepared statement of Ms. Pipes follows:]

PREPARED STATEMENT OF SALLY C. PIPES

Thank you, Chairman Sanders and Ranking Member Burr, for inviting me to testify today. I am Sally C. Pipes, the president, CEO, and Taube Fellow in Health Care Studies at the Pacific Research Institute, a non-profit think tank based in San Francisco that's dedicated to advancing opportunity for all people through free-market policy solutions.

I'm going to focus my remarks on Canada's single-payer, "Medicare-for-All" system—a system with which I am intimately familiar, as a native of Canada.

Many healthcare reform advocates, political pundits, and policymakers point to Canada as a shining example of the advantages of a State-run, single-payer healthcare system.

Canada is, in fact, one of only a handful of countries with a bona fide single-payer system. Government officials set the total budget for what can be spent on health care every year. Provinces and territories administer their own insurance programs,

with additional funding from the Federal Government.1 Private insurance is outlawed in several provinces.²

This is the sort of system that many are calling for here in the United States. They want to abolish private insurance and leave government as the sole source of health coverage.

But the Canadian system is one that would not be suitable for America. Officials severely restrict patient access to care. And those restrictions saddle patients and their families with massive monetary and non-monetary costs. Or, to frame this in the terms of the title of this hearing: If you're looking for lessons from healthcare systems abroad, Canada shows us exactly what not to do.

Let's start with wait times. In order to keep a lid on healthcare costs, Canadian officials have to ration care. And when the government rations any product, includ-

ing health care, the inevitable result is scarcity.

The average Canadian must withstand a lag between his initial request for medical services and his actual treatment that the typical American patient would find totally unacceptable.

According to the Canada-based Fraser Institute, the average Canadian patient has to wait over 18 weeks between referral from a general practitioner—the equivalent of a primary-care doctor here—and elective treatment from a specialist.3

Let me repeat that: Right now, the average Canadian getting an elective medical service has to wait $4^{1/2}$ months between being recommended for treatment by their primary care physician and actually receiving it.
"Elective treatment" doesn't mean Botox or a tummy tuck. We're talking about

the likes of orthopaedic surgery and neurosurgery.

And wait times are only growing longer. The average lag period has been on a steady upward trajectory in recent years. The 18-week delay plaguing Canadians today is 91 percent longer than the average wait time in 1993.4

This problem isn't confined to specialty care. At any given time, about 17 percent of the Canadian population—roughly 5 million people out of a total population of 35.1 million—is waiting to gain access to a primary care doctor.5

There's also a severe shortage of essential medical equipment. For instance, Canada ranks 14th among 22 OECD countries in MRI machines per million people,6 with an average wait time to use one at just over 8 weeks.7 And it ranks a dismal 16th of 23 OECD countries in CT scanners per million people,8 with an average wait time over 3.6 weeks.9

These lengthy waits have profound consequences not just for patients who are suffering but for the rest of society. When people aren't treated in a timely fashion, their conditions worsen and their health deteriorates. Their productivity drops, or they have to stop working entirely. And they often end up requiring significantly more expensive and extensive treatments, which are costly for the overall healthcare system.

One estimate from the Center for Spatial Economics found that wait times for just four key procedures—MRI scans and surgeries for joint replacement, cataracts, and coronary artery bypass grafts—cost Canadian patients \$14.8 billion every year in excess medical costs and lost productivity. 10

Once Canadian patients finally receive medical treatment, it's far from "free." The Canadian government heavily taxes its citizens to pay for their single-payer system. About 68 cents out of every dollar in government revenue goes to covering healthcare costs.11

 $^{^{1}} http://www.commonwealthfund.org/\sim/media/Files/Publications/Fund\%20Report/2013/Nov/1717_Thomson_intl_profiles_hlt_care_sys_2013_v2.pdf.$ $^{2} http://www.theglobeandmail.com/life/health-and-fitness/whos-fighting-for-private-health-interest control of the control of the$

surance-in-canada | article 4568340/.

³ https://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/waiting-your-turn-2013.pdf.
4 https://www.fraserinstitute.org/research-news/news/display.aspx?id=19709.

tolications/waiting-your-turit-2013.pdj.

10 https://www.fraserinstitute.org/research-news/news/display.aspx?id=20470.

11 https://www.fraserinstitute.org/research-news/news/display.aspx?id=19709.

Yes, patients may only have to pay a nominal fee at the time services are rendered. But the typical Canadian family pays about \$11,300 in taxes every year just to finance the public health insurance system. 12

And that price is going up. The Fraser Institute estimates that over the last decade, the healthcare tax burden for the average Canadian family has increased one-and-a-half times faster than the average income. 13

That's unsustainable.

Technically, every Canadian has access to needed healthcare services. But, in reality, long waits and the scarcity of medical technologies leave many untreated. What good is government-provided insurance if you have to wait months to be treated for a severe condition?

In 2005, Madam Chief Justice Beverly McLachlin of the Canadian Supreme Court made precisely that point in a ruling overturning the ban on private health coverage in Quebec. Justice McLachlin wrote that "access to a waiting list is not access to health care." 14

That's exactly right. Her colleague at the time, Madam Justice Marie DesChamps, who retired in 2012, went even further: "The idea of a single payer system without waiting lists is an oxymoron.'

Those Canadians who can afford to do so have simply opted out of their healthcare system. An enormous number jump the queue for care in their native land and travel to the United States to receive medical attention. In 2012, over 42,000 Canadians crossed the border to get treated. 15

Not coincidentally, many of these line-jumpers are part of Canada's political elite. The Canadian healthcare system may be good enough for their constituents, but it's

apparently not good enough for them.

In 2010, the premier of Newfoundland, Danny Williams, flew to Florida for heart valve surgery. When questioned about the decision, he said, "This was my heart, my choice and my health. I did not sign away my right to get the best possible health care for myself when I entered politics." 16

Millions of ordinary Canadians would surely love to have that option.

Canadian Member of Parliament Belinda Stronach spent her career vigorously opposing any privatization of the national health system. But when she was diagnosed with breast cancer in 2007, she flew to Los Angeles for surgery-and paid the bill out-of-pocket.17

And wait times aren't unique to Canada. Other government-dominated healthcare systems suffer from them, too. A recent survey from Britain's Daily Mail shows that one in every three British citizens can't get a same-day appointment with their pri-

mary care doctor. One in five fail to get a consultation within 7 days. ¹⁸
Canadians are getting fed up. They know their system isn't all it's cracked up to be. Indeed, Anne Doig, former head of the Canadian Medical Association, has called the system "sick" and "imploding." ¹⁹ Dr. Brian Day, an orthopedic surgeon in Vancouver who runs the private but illegal Cambie Clinic, pointedly quipped to the New York Times that Canada is a country where a dog can get a hip replacement in less York Times that Canada is a country where a dog can get a hip replacement in less than a week, but his owner would have to wait 2 years.²⁰

I've seen the failures of Canada's system firsthand.

A few years ago, my mother suffered from severe stomach pain and suspected that she might have colon cancer. Her primary-care doctor ruled out that possibility following an X-ray. When she asked about getting a colonoscopy, she was told that she was too old; there were too many younger people with serious symptoms who were already on a 6-month waiting list for the test.

Within 4 months, she had begun hemorrhaging and lost 35 pounds. After 2 days in the emergency room and two in a "transit lounge," she finally got a colonoscopy. Sure enough, she had colon cancer. She died 2 weeks later.

 $^{^{12}} https://www.fraserinstitute.org/research-news/news/display.aspx?id=19709.$

⁻⁻⁻mtps://www.fraserinstitute.org/research-news/news/display.aspx?id=9709. 1³ https://www.faserinstitute.org/research-news/news/display.aspx?id=20232. 1⁴ http://www.globalhealthrights.org/wp-content/uploads/2013/02/SC-2005-Chaoulli-v.-Que-

bec-Attorney-General.pdf.

15 http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/articles/leaving-canada-for-medical-care-2012.pdf.

16 http://voices.washingtonpost.com/checkup/2010/02/canadian_premier_has_heart_sur

[.]html. http://news.nationalpost.com/2012/11/02/healing-with-dignity-belinda-stronach-aims-to-parameter and the control of t highlight-breast-cancer-surgery-option-unavailable-to-canadian-women / . 18 http://www.dailymail.co.uk/news/article-2570597/Three-week-wait-doctor-Millions-pa-

tients-denied-prompt-appointment-GP.html.

19 http://www.youtube.com/watch?v=igI5wFIA3ss.
20 http://www.nytimes.com/2006/08/23/world/americas/23canada.html.

Who knows how much more time we could have had with her, if her doctor had been committed to treating her cancer early on?

Here in the United States, there are some limited, Canada-style single-payer experiments underway. The Veterans Administration's health system is the most nota-

But the VA system suffers from exactly the same costly problems as the Canadian one. Hundreds of thousands of veterans are currently waiting to see a doctor for a disability determination. ²¹ Patients seeking acute mental health services still suffer weeks-long waits. ²² And according to CNN, at least 19 veterans have died because of treatment delays in VA hospitals.23

I urge the committee to resist calls to bring America closer to a single-payer system. Canada shows us what's in store if we follow its lead: rationing, long waits, poor quality of care, dangerous scarcities of vital medical technologies, and

unsustainable costs.

That's no way to run a healthcare system.

Instead, we need a renewed focus on injecting genuine market competition and choice into the health system. We need to scale back top-down controls on treatment. And doctors need to be empowered to customize care to individual patients. Thank you for your time. I look forward to answering your questions.

Senator Sanders. Thank you very much, Ms. Pipes.

It turns out we have another Canadian with us as well. Our fifth witness is Dr. Danielle Martin, a primary care family physician actively involved in practice at Women's College Hospital in Toronto, Canada where she also holds an administrative leadership position as vice president of Medical Affairs and Health System Solutions. Dr. Martin, thank you very much for being with us.

STATEMENT OF DANIELLE MARTIN, M.D., MPP, VICE PRESI-DENT MEDICAL AFFAIRS AND HEALTH SYSTEM SOLUTIONS, WOMEN'S COLLEGE HOSPITAL, TORONTO, CANADA

Dr. Martin. Chairman Sanders, Ranking Member Burr, distinguished committee members.

Thank you for inviting me to address you today.

My name is Danielle Martin. As a practicing physician and vice president, Medical Affairs and Health System Solutions at Women's College Hospital, I have daily, firsthand experience with the Canadian single-payer system. In addition to my clinical training, I also hold a Master's in Public Policy from the University of Toronto where I am currently an assistant professor.

I do not presume to claim today that the Canadian system is perfect or that we do not face significant challenges. The evidence is clear that those challenges do not stem from the single-payer nature of our system; quite the contrary. Working within a public insurance structure helps us to better tackle many of the challenges shared by all developed nations in healthcare, including rising costs, variations in quality, and inequities of access.

I would like to highlight for you today three major benefits of the Canadian single-payer model. The first is equity. Poll after poll has demonstrated a strong consensus among Canadians that access to healthcare should be based on need, not ability to pay. While, of course, we continue to struggle with inequity on other fronts, it is worth emphasizing that at substantially lower cost than in the

493c-ab42-a91274c8e3d0.

 $^{^{21}}http://news.medill.northwestern.edu/chicago/news.aspx?id=228642.$ $^{22}http://www.usatoday.com/story/news/nation/2013/11/04/veterans-mental-health-treat-fields.$

ment/3169763/. ²³ http://www.coburn.senate.gov/public//index.cfm?a=Files.Serve&File id=6b44c3eb-fc40-

United States, all Canadians have insurance that covers doctor and hospital care.

We do not have uninsured residents. We do not have different qualities of insurance depending on a person's employment. We do not have an industry working to try to carve out different niches of the risk pool. This is a very important accomplishment and as we watch the debate unfold in the United States as to how to address the challenges you face, we are reminded daily of its signifi-

One of the big challenges in a multi-payer system is the question of how to achieve policy reform with so many players in the game. In a single-payer framework, if Government and providers identify a significant challenge in the healthcare system, they can work together at the bargaining table to align financial incentives to advance their shared policy objectives.

An example upon which I elaborate in my written submission is the way in which Ontario's Government and physicians have worked together to increase the number of medical students choosing primary care as a career and choosing to work in rural, underserviced communities.

Finally, one cannot speak about single-payer without addressing the issue of administrative costs. It has been estimated that if U.S. administrative costs were curtailed to the level of those in my home Province of Ontario, the total estimated savings here would

be \$27.6 billion per year.

Indeed, overall as you have heard, we spend a much lower proportion of our GDP on healthcare in Canada, 11.2 percent as compared to your 17.9 percent. And importantly, this is not at the expense of quality. Canadians enjoy the same or better health outcomes as Americans, both at the level of life expectancy and infant mortality, as you have heard, and when we look at outcomes for a range of acute and chronic illnesses. In fact, a recent scientific systematic review found that Canada achieved health outcomes that are at least equal to those in the United States at two-thirds of the cost across a very wide range of diagnoses.

The issue of wait times is very widely covered, I note, in the American media. When it comes to urgent and emergent care, Canadians are not waiting substantially longer than our peers in other countries, including the United States. Unfortunately, it is true that that has not been the case for elective medical care such as non-urgent diagnostic imaging and elective surgeries. A great deal of work is underway to address this challenge and, indeed, waits have been decreasing over the last decade for a variety of

elective medical procedures.

It is important to note that moving away from a single-payer model would likely exacerbate our wait time challenge rather than alleviating it by drawing critical health human resources out of the public system. This is borne out by international evidence from other jurisdictions such as Australia.

The Canadian system is proof that public healthcare insurance need not be provided federally in order to achieve the benefits of the single-payer model. In Canada, each Province provides public healthcare insurance to its residents with minimum standards set at the Federal level.

Furthermore, moving to single-payer insurance, as you have heard, does not necessarily mean moving to the direct provision of healthcare services by Government or socialized medicine. Although our provincial health insurance plans in Canada are financed publicly, almost all healthcare services are delivered by private entities. This includes our hospitals, which are mostly independent, not-for-profit entities and also our providers, most notably physicians who are not employees of the State, but rather independent contractors who happen to bill a public insurance plan for their services.

I want to reiterate my thanks to the committee for giving me the opportunity to present to you today. I look forward to your questions and engaging in dialog.

[The prepared statement of Dr. Martin follows:]

PREPARED STATEMENT OF DANIELLE MARTIN, M.D., MPP

Chairman Sanders, Ranking Member Burr, distinguished members of the HELP Committee, and my fellow panelists, I deeply appreciate the opportunity to come before you today to discuss the common challenges faced by the health systems of the United States and Canada, and to shed light on some policy solutions offered by a comparative examination of both.

My name is Dr. Danielle Martin. I am a primary care family physician working in the Family Practice Health Centre at Women's College Hospital, an ambulatory care hospital located in downtown Toronto, Ontario. I have practiced family medicare nospital located in downtown foronto, Ontario. I nave practiced family medicine in Canada for 9 years in a variety of settings, including remote rural communities as well as in the heart of our biggest city. My practice has included office-based comprehensive care family medicine, obstetrics, minor surgical procedures, and rural emergency and inpatient medicine. I also serve in an administrative leadership position at Women's College Hospital as vice president of Medical Affairs and Health System Solutions. Women's College is a unique organization—a hospital without inpatient beds that focuses on advancing the health of women, improving ambulatory care for people living with complex chronic conditions, and health systems. ambulatory care for people living with complex chronic conditions, and health system solutions. Being an outpatient hospital means that we deliver treatments, diagnostic procedures and perform complex surgeries for patients who do not require overnight stays.

In addition to my clinical training I also hold a Masters in Public Policy from the University of Toronto where I am currently an assistant professor in the Department of Family and Community Medicine and in the Institute of Health Policy, Management and Evaluation at the Dalla Lana School of Public Health.

Prior to becoming a physician I worked in health care policy and have held a wide variety of leadership roles throughout my clinical training and practice. From 2005 to 2011 I was privileged to sit on the Health Council of Canada, the national organization responsible for monitoring progress on health care reform across Canada and reporting to the public.

My longstanding interest in promoting a Canadian health system that is equitable, sustainable, and that delivers quality care led me in 2006 to help found Canadian Doctors for Medicare, a national advocacy group dedicated to strengthening our public system. I continue to sit on the board of directors of CDM.

My writings on our health system have appeared in a variety of peer-reviewed publications including the Canadian Medical Association Journal, Canadian Family Physician, and Healthcare Papers. I have also published articles and op-eds on health care in major Canadian newspapers such as the National Post, Globe and Mail, Toronto Star and I am regularly cited as an expert in news reports related to health reform and the Canadian health system. I continue to speak and write about the future of health care in Canada.

Health system thinkers face many of the same health policy challenges and share many of the same goals regardless of the disparate systems in which we work. It is my strongly held belief that we have much to learn from each other. In the brief time available to me this morning, I hope to help you understand how and why we have developed and maintained a single payer health care system in Canada, and what I think American policymakers can learn from our experience.

To that end, I will begin by providing some background on the structural elements of the Canadian single payer system that I think are especially relevant to the American context. I will also outline the advantages the single payer structure affords us as we tackle the significant challenges we face: namely, the ability to ensure equity of access to services; the ability to control administrative costs; and the ability to jointly pursue shared policy goals in a coordinated manner. Finally, I will speak briefly on the issue of access to care in the Canadian system, a topic which I know frequently receives media attention in American markets.

THE CANADIAN SINGLE PAYER SYSTEM: KEY ELEMENTS

I do not presume to claim that the Canadian system is perfect or that we do not face difficult systemic challenges. However I will put forth the argument that our challenges do not stem from the single payer nature of our system, nor are they insurmountable within that essential structure. Quite the contrary, working within a single payer insurance structure helps us to better address and tackle many of the health care challenges shared by all developed nations, including rising costs, variation in quality, and inequities of access.

1. Health insurance is provided at the level of the provinces

Although media coverage on both sides of the border often talks about the "Canadian" health care system as a single monolithic entity, it will be of interest to the committee to learn that in fact the Canadian system is actually 13 separate provincial and territorial systems, each quite independent from the other, in large measure because the Canadian constitution clearly puts most health care matters in provincial jurisdiction. We have learned, as I think you are also experiencing, that different provinces have different appetites and needs when it comes to public health care insurance and what, or more to the point who, it should cover. Our system finds its origin in reform in a single province that gained popularity and caught on over decades across the country.

Prior to the 1940s, access to health care in Canada was based on the ability to pay—and quite often, losing one's health meant losing the farm. In 1947, the Province of Saskatchewan introduced a public insurance plan to pay for hospital services. In 1962, at roughly the same time the United States was beginning to debate the creation of the Medicare and Medicaid programs, Saskatchewan extended public insurance to cover physician services as well. Public insurance became popular very quickly and other Provinces soon followed suit with similar reforms.

As the committee is now aware, the Canadian single payer health system is actually a consortium of 13 systems (one for each province and territory) that together provides coverage for all Canadians. That is, each province mostly controls the provision of health insurance, with minimum standards set at the Federal level. These standards do not speak to the details of health service provision; rather, they dictate that in order to receive Federal funding support, health insurance plans within the provinces must be: (1) Universal, (2) Accessible, (3) Comprehensive, (4) Portable and (5) Publicly administered. Beyond a Federal requirement that insurance plans must provide coverage for medically necessary physician and hospital services, the provinces and territories enjoy quite a lot of flexibility in determining the "basket of services" covered.

2. Insurance is public, but health services delivery is private

When discussing health system structures, it is critical to distinguish between who pays for services and who delivers them. Contrary to what many Americans may believe, Canada does not have "socialized medicine" in the strict sense, since in spite of being paid for through public insurance, almost all services are delivered by private entities. This includes not only our hospitals, which are mostly independent private not-for-profit entities, but also our providers, most notably physicians, who are not employees of the State. In Canada medically necessary physician services are covered by provincial insurance for which all residents are eligible, but physicians are independent contractors. Speaking as a practicing family doctor, this is a key feature of our system well worth highlighting; and given the current structures in American health care I think it is of some salience to your deliberations.

BENEFITS OF THE SINGLE PAYER INSURANCE MODEL IN THE CANADIAN CONTEXT

It is my view that the single payer structure of our provincial health insurance systems, while far from a panacea for all that ails us, is the best possible structure within which to address our challenges. Single payer promotes equity of access to services; it enables coordinated pursuit of shared health policy goals; and it allows us to deliver quality care at far lower costs than those seen in the United States. I will address each of these benefits in turn.

1. Equity

Poll after poll has demonstrated the enduring popularity of the single payer model among Canadians.² When asked what features of our system are most salient, Canadians from all walks of life answer that it is this aspect of our system that gives them particular pride. There is a strong consensus across Canada that access to health care should be based on need rather than the ability to pay.³ This is a fundamental principle of our system, and pooling risk by having everyone in the system makes it possible. While of course we continue to struggle with inequity across other aspects of health care, we do not have significant equity problems with respect to insurance. We do not have uninsured or underinsured residents. We do not have different qualities of insurance depending on a person's employment. We do not have an industry working to try to carve out different niches within the risk pool. At substantially lower cost than in the United States, all Canadians have health insurance and need rather than wealth is what drives access to care. This is a very significant accomplishment and as we watch the debate unfold in the United States as to how to address the challenges you face, we are reminded of its significance daily.

2. Achieving consensus policy goals

One of the big challenges in a multi-payer system is the question of how to achieve policy reform with so many players in the game. In a single payer framework there is a place where the providers and insurers can go to address challenges together, namely the bargaining table. This is as beneficial to providers as it is to insurers since it affords all groups a policy lever beyond legislation or self-regulation that is open and accountable. If government and providers identify a significant challenge in the health system that needs to be addressed, they can work together to try to align financial incentives to advance those shared policy objectives.

For example, across the political spectrum and between countries with disparate health systems, there is a shared consensus among both government and physicians that the provision of quality primary care should be a key policy goal. The evidence on the importance of primary care as a determinant of population health is widespread from the work of Barbara Starfield and others. We all want to see a well-developed primary care system and enough primary care physicians to serve the needs of the population. But it has been difficult over the last several decades to convince medical students to choose primary care when the compensation has lagged behind that of our specialist colleagues and the greatest needs are in remote or underserved urban areas. Single payer allows for a consolidated voice at the bargaining table to have this conversation. Without jeopardizing physician autonomy, Canadian provincial governments have been able to work with the provincial medical associations to negotiate aligning financial incentives to promote primary carefrom higher compensation for primary care doctors to programs that help reduce medical school loans for young doctors who choose to work in underserved areas.

Furthermore, this system affords the patient a voice at the table through their democratically elected representatives. This stands in contrast to a multi-payer private system where private insurance companies are not accountable to their enrollees but rather to their shareholders.

3. Lower administrative costs

On a practical level, having one payer for health services requires a far smaller administrative footprint than that under a multi-payer system. Canadian doctors save time on paperwork and Canada's overall administrative spending is far lower than our neighbor to the south. In fact, a comparative study published in *Health Affairs* found that if U.S. physicians were to curtail administrative costs to the level of those in my home province of Ontario, the total estimated savings would be \$27.6 billion per year. Looking at overall costs, a 2003 study found that after exclusions, administration accounted for 31.0 percent of health care expenditures in the United States and 16.7 percent of health care expenditures in Canada. Even this figure can be deceptive, as the Canadian system includes private supplemental health insurance that often covers services that are not covered by the public plans. Total administrative costs include those for private plans, but when only the public single payer insurance program is considered, the overhead shrinks to just 1.3 percent. The far lower administrative costs in the Canadian system are one factor in expenditures and the constant of the canadian system are one factor in expenditures and the canadian system are one factor in expenditures.

The far lower administrative costs in the Canadian system are one factor in explaining our relatively lower overall costs. Canada's spending on health care as of 2011 is 11.2 percent of GDP placing it roughly within the middle of the pack of similarly developed countries, compared to the United States' 17.9 percent. One key factor in this disparity is the distinction between the mix of multiple private, for-profit insurance companies which work alongside a patchwork of public providers in the United States in contrast to the Canadian system which relies mostly on public fi-

nancing and not-for-profit deliver. It is not the distinctly Canadian system that produces these savings so much as the underlying principle of publicly accountable universal health care, a principle shared by all OECD countries excluding the United States. ¹⁰

ACCESS AND QUALITY IN THE CANADIAN MODEL

A concern has been raised that cost savings, though laudable, are indicative of poorer quality of care, whether in terms of health outcomes or in access to care. On both points, this concern is unfounded. First, Canadians enjoy the same or better outcomes of healthcare as Americans. We see this in terms of overall health outcomes such as life expectancy and infant mortality, 11 though as others have pointed out these outcomes are tied to larger social determinants of health and are not necessarily a proxy for understanding the outputs of a health system.

When we turn to outcomes that are more directly attributable to provision of health care services we see the same pattern of equal or better outcomes for Canadians. ¹² And a recent systematic review of Canada's single payer system found that Canada achieved health outcomes that are at least equal to those in the United States at two-thirds the cost. ¹³ Examples of comparative health outcomes between Canada and the States may be found in the Appendix to this testimony.

ADDRESSING WAIT LISTS

While socio-economic barriers to care regrettably exist in both countries, access to health insurance is unencumbered in Canada regardless of income. But what of wait lists for care? When it comes to urgent, necessary care, Canadians are not waiting substantially longer than our peers in other countries, including the United States. However, unfortunately this has not been the case for elective medical care, particularly diagnostic imaging, non-urgent specialist appointments and elective surgeries such as cataract surgery, and hip and knee replacement. In response to this challenge we have seen governments doing much work to reduce wait times in the past decade. The key to success has been to change the way that we deliver service, for example, through single common wait lists rather multiple queues. It is also important to bear in mind that Americans also face the problem of wait times to see specialists. Of the 40 percent of Americans who report difficulties in seeing a specialist, 40 percent cite long waiting times, 31 percent cite a denied referral, and 17 percent say they cannot afford private insurance. 14 The Canadian system, which allows patients to see specialists on referral as well as directly, and in which private insurance is not tied to the ability to pay, does not burden patients with either of these problems.

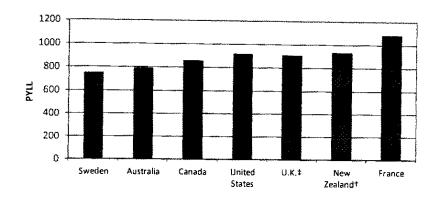
One proposal that absolutely has not shown success has been to move from a public system such as the one in Canada to a two-tiered system where patients with the means are able to jump the queue. A study conducted before and after the move from single-payer to multi-payer insurance in Australia found that median waiting times were inversely related to the proportion of public patients. In other words, in those parts of the country where there was more privately insured care, waits in the public system were longer. Why was this the case? Because our health human resources are not infinite, and the doctors, nurses and others providing care have to come from somewhere. The drain on the public system from doctors exiting to the private sector creates longer waiting lists in public healthcare. Instead, our focus should be on reducing wait times in a way that is equitable for all. That has been the imperative of the reforms in Canada, and while the battle is not yet over, it is in my view an exemplary example of how Canadian health policy thinkers work to improve our system while upholding our values.

CONCLUSION

I want to reiterate my thanks to this committee and to Chairman Sanders and Ranking Member Burr for giving me the opportunity to present this testimony today. It is truly an honor to exchange ideas about health system solutions on both sides of the border. I look forward to answering your questions and engaging in dialog, as well as learning from my fellow presenters.

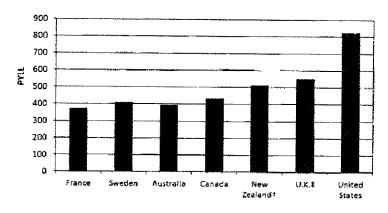
Appendix: Comparative Health Outcomes, Canada and United States

Cancer PYLL Comparison with OECD Countries, 2009



Source: OECD Health Statistics 2013, www.oecd.org/health/health-systems/oecdhealthdata.htm.

Heart Disease PYLL Comparison with OECD Countries, 2009



Source: OECD Health Statistics 2013, www.oecd.org/health/health-systems/oecdhealthdata.htm.

ENDNOTES

1. Canada Health Act (R.S.C., 1985, c. C–6) http://laws-lois.justice.gc.ca/eng/acts/C–6/FullText.html.

2. A November 2012 ACS-Leger Marketing web panel of 2,200 Canadians found that Universal Health Care topped the list when it came to overall importance of sources of Canadian pride, with 95 percent of respondents deeming it important, and with the highest proportion of respondents citing Universal Health Care as "very important" relative to other Canadian institutions or sources of pride: http://www.acs-aec.ca/pdf/polls/Pride%20in%20Canadian%20Symbols%20and%20Institutions.ppt. And in a 2004 national program of the Canadian Broadcast Corporation

(CBC), Canadians chose Tommy Douglas, the father of Medicare, as the Greatest Canadian of All Time, beating out other popular nominees such as Terry Fox: http://www.cbc.ca/archives/categories/arts-entertainment/media/media-general/

and-the-greatest-canadian-of-all-time-is.html.

3. See Canadian Nurses Association. http://www.cna-nurses.ca/CNA/documents/pdf/publications/Social Justice 2010_e.pdf. Ottawa, 2010, and also Commission on the Future of Health Care in Canada's "Building on Values: The Future of Health Care in Canada" 2002 Report by Commissioner Roy Romanow, which states at the outset that "Canadians have been clear that they still strongly support the core values on which our health system is premised—equity, fairness and solidarity. These values are tied to their understanding of citizenship." (p. xvi)

4. See Starfield B, "New Paradigms for Quality in Primary Care." British Journal

of General Practice, April 2001.

5. For examples see http://www.health.gov.on.ca/en/pro/programs/northern health/nrrr.aspx. and http://actionplan.gc.ca/en/news/government-canada-an-nounces-student-loan-forgiveness-family doctors-and-nurses-rural.

6. Morra D, Nicholson S, Levinson W, Gans DN, Hammons T, Casalino LP, "US Physician Practices versus Canadians: Spending Nearly Four Times as Much Money Interacting with Payers." Health Affairs. 2011;30(8):1443–50.

Interacting with Payers." Health Affairs. 2011;30(8):1443–50.

7. Costs of Health Care Administration in the United States and Canada Steffie Woolhandler, M.D., M.P.H., Terry Campbell, M.H.A., and David U. Himmelstein, M.D.N., Engl J Med 2003; 349:768–75 August 21, 2003 DOI: 10.1056/NEJMsa022033 http://www.nejm.org/doi/full/10.1056/NEJMsa022033.

8. Costs of Health Care Administration in the United States and Canada Steffie Woolhandler, M.D., M.P.H., Terry Campbell, M.H.A., and David U. Himmelstein, M.D.N., Engl J Med 2003; 349:768–75 August 21, 2003 DOI: 10.1056/NEJMsa022033 http://www.nejm.org/doi/full/10.1056/NEJMsa022033.

9. See OECD World Bank Health Indicators, http://data.worldbank.org/indicator/SH XPD TOTILZS

- cator / SH.XPD.TOTL.ZS.
- 10. Starfield B. "Reinventing Primary Care: Lessons from Canada for the United States." *Health Affairs.* 29, No. 5 (2010) 1030–36.

 11. See OECD World Bank Health Indicators, http://data.worldbank.org/indi-

cator/SH.XPD.TOTL.ZS

12. Coleman MP, et al. "Cancer Survival in Five Continents: A Worldwide Population-based study (CONCORD). The Lancet Oncology." 2008 Aug; 9(8): 730–56. Canada ranked near the top of the 31 countries studied with an estimated 5-year trailing and only slightly lower than the U.S. rate.

13. Guyatt G, et al., "A Systematic Review of Studies Comparing Health Outcomes in Canada and the United States." Open Medicine, April 18, 2007. Volt. 1 (1),

- 14. Ross JS, Detsky AS. Health care choices and decisions in the United States and Canada. JAMA. 2009;302(16):1803–4 cited in Starfield B. "Reinventing Primary Care: Lessons from Canada for the United States." *Health Affairs*. 29, No. 5 (2010) 1030 - 36.
 - 15. Duckett. (2005). Australian Health Review 29. 87.

Senator SANDERS. Dr. Martin, thank you very much.

Senator Burr, do you want to introduce your other guest?

Senator Burr. Thank you, Mr. Chairman. I would like to introduce my colleague Dr. David Hogberg, who is the Health Care Policy Analyst at the National Center for Public Policy Research here in Washington, DC.

Dr. Hogberg, thank you for joining us today. I look forward to your testimony and thoughts as we examine the lessons learned from other abroad countries in order to strengthen our own healthcare system here at home.

The microphone is yours.

STATEMENT OF DAVID HOGBERG, Ph.D., HEALTH CARE POLICY ANALYST, NATIONAL CENTER FOR PUBLIC POLICY RE-SEARCH, WASHINGTON, DC

Mr. Hogberg. Chairman Sanders, Ranking Member Burr, members of the committee.

Thank you for this opportunity to testify before you. My name is David Hogberg, and I am a Health Care Policy Analyst for the National Center for Public Policy Research.

I think the most important lesson we can learn from other nations is that we should avoid putting more and more of our healthcare system under the control of politicians. Most politicians want to get reelected and that fact will have a substantial impact on healthcare policy.

Groups that have political clout, that can influence a politician's reelection chances, are more likely to get good treatment under Government-run healthcare systems. Groups that lack such clout are more likely to be neglected by politicians and receive inferior care.

People who are very ill usually lack such political clout. First, the very sick are relatively few in number, which means they amount to a very limited number of voters, too limited to have much impact on elections.

Second, they are too sick to engage in the type of political activities such as organizing, protesting, and so forth that can bring about change in healthcare policy. Ultimately, under a Government system, those with the most medical needs are those most likely to have difficulty getting the care they need.

Both Denmark and France provide good examples of this. The healthcare system in Denmark could be best described as single-payer with the Government financing over 85 percent of healthcare expenditures. Healthcare in Denmark is largely free at the point of consumption. This has consequences for how healthcare resources are allocated. If patients pay nothing at the point of consumption, then patients will overuse healthcare, putting strain on Government budgets. Healthcare must be rationed in another manner and like most systems that are single-payer, Denmark rations by using wait times for treatment of serious conditions.

For example, Danes must wait a median of 48 days to get a herniated disc repaired, 57 days for a knee replacement, and 81 days for cataract treatment.

Under the national standard for cancer treatment in Denmark, a patient should not wait more than 28 days between the time he sees a physician for diagnosis to the time of treatment. However, a 2010 study found that less than half of Danish patients diagnosed with head or neck cancer were treated within that national standard. This can have serious consequences for patients. A meta-analysis found that for every month treatment is delayed for head or neck cancer, the probability that the cancer will recur increases by about 3.7 percent.

Now, looking to the French system, the healthcare system in France is financed heavily through the Government, yet also has an extensive market of private insurance that covers copayments and services the Government does not cover. When a patient visits a physician in France, he must pay the cost directly. He is then reimbursed by the Government and the private insurer. The patient must cover any costs that are not reimbursed.

The method of payment and the extensive system of private finance is what allows France to avoid using wait times to ration care. However, the healthcare portion of France's budget has been running a deficit since 1988. As a result, the healthcare system in France has used other methods to ration care.

One rationing method is limiting investment in new medical technology. Among industrialized nations, France has one of the lowest number of CT scanners, PET scanners, and MRI machines

per million population.

Rationing pharmaceuticals is another method. In brief, the French Government often refuses to pay for drugs that are incremental improvements over existing drugs. Such rationing has consequences. According to one study, only about one-quarter to one-third of Alzheimer's patients in France are receiving state-of-the-art medication.

Rationing technology and medication or using waiting times falls hardest on people with serious illnesses. Yet, these methods persist because they are politically tolerable. In general, they do not cause trouble for politicians, since the people affected seldom are a significant political force.

In summary, I think the chief benefit of an examination of other nations' healthcare systems is to discover what policies we should

avoid.

That said, it would be far more productive if we, instead, studied other markets rather than other nations. That would include other markets for insurance, such as life, homeowners, and auto insurance, and other markets for other vital products such as food and clothing. There you will find markets in which Government tax policy has not distorted the purchase of goods, where tax policy and regulation have not resulted in a three-tiered system of insurance, and where consumers are not prohibited from buying goods and services out of State. As a result, these markets reduce the cost of goods and services while also improving quality. It is in these markets that we should look for guidance in reforming the U.S. healthcare system.

Thank you very much.

[The prepared statement of Mr. Hogberg follows:]

PREPARED STATEMENT OF DAVID HOGBERG, Ph.D.

Chairman Sanders, Ranking Member Burr, members of the committee, thank you for this opportunity to testify before you. My name is David Hogberg and I am a health care policy analyst for the National Center for Public Policy Research. The National Center for Public Policy Research, founded in 1982, is a non-partisan, free-market, independent conservative think-tank.

Let me begin by stating that nothing I say today should be construed as a defense of the entire U.S. health care system. While our system has many beneficial aspects, both the system prior to Obamacare and the system we have now are best described as being too encumbered by government interference. Reform should move our

health care system in a free-market direction.

That said, I think the best lessons we can take from other nations is what NOT to do to our health care system. The most important lesson is that we should avoid putting more and more of our health care system under the control of politicians. Politicians, like everyone else, face a system of incentives and constraints. Specifically, most politicians want to get re-elected and that will have a substantial impact on health care policy. Groups that have political clout, that can influence a politician's reelection chances, are more likely to get good treatment under governmentrun health care systems. Groups that lack such clout are more likely to be neglected by politicians and receive inferior care.

Unfortunately, people who are quite sick—those who need an operation or cancer treatment or have a serious chronic condition—usually lack such political clout. First, the very sick are relatively few in number, which means they amount to a very limited number of voters, too limited to have much impact on elections. Second,

they are too sick to engage in the type of political activities such as organizing, protesting, etc., that can bring about change in health care policy. Furthermore, they may be completely unaware of how government health care policy has affected their plight, in which case they will not feel a need to vote or organize to change health care policy. Ultimately, under a government system, those with the most medical need are the most likely to have difficulty getting the care they need.

Both Denmark and France provide good examples of this.

DENMARK

The Danish health care system is changing. What was once best described as a single-payer system is beginning to see private insurance play a much larger role. Every citizen of Denmark is guaranteed access to publicly financed insurance, but Mia Holstein, a senior consultant at the Danish think-tank CEPOS, noted that close to 52 percent of Danes now have some form of private insurance. Until recently, though, over 85 percent of health care expenditures were publicly financed while

less than 15 percent came from private sources.¹
Health care in Denmark is largely "free" at the point of consumption. This has consequences for how health care resources are allocated. If patients pay nothing at the point of consumption—if health care resources aren't rationed by price—then patients will overuse health care, putting strain on government budgets. Health care must be rationed in another manner, and like most systems that are single-

payer, Denmark rations by using wait times for the treatment of serious conditions. For example, Danes must wait an average of 48 days to get a herniated disc repaired, 57 days for a knee replacement and 81 days for cataracts treatment.² Data on cancer treatment shows there is a mean wait time of 3 weeks to receive surgery and just under a 3-week wait to receive radiation treatment from the time a patient is diagnosed. This does not include the time a patient must wait from when he first sees the doctor to when he is referred to an examination—data for that does not appear to exist for Denmark.

Table 1.—Wait Times for Surgery in Denmark, 2012

Procedure	Mean wait in days
Hernia Prostate	55 65
Hip Replacement	49
Knee Replacement	57
Herniated Disc	48
Cataracts	81

The national standard in Denmark for cancer treatment is about 28 days—that The national standard in Denmark for cancer treatment is about 28 days—that is, not more than 4 weeks should elapse between the time a patient presents to the physician for diagnosis to the time of treatment. However, a 2010 study in the European Journal of Cancer found that less than half of Danish patients diagnosed with head or neck cancer were treated within that national standard. This can have serious consequences for patients. A recent meta-analysis found that for every month treatment is delayed for head and neck cancer the probability that the cancer will recur after treatment increases by 3.7 percent. In an attempt, to alleviate wait times, the Danish government in 2002 passed a

In an attempt to alleviate wait times, the Danish government in 2002 passed a waiting time "guarantee" allowing patients who were not given treatment at a public hospital within 2 months of referral to seek treatment at a private hospital in Denmark or at hospitals abroad. In 2007, it was shortened to 1 month. In 2009,

60,000 Danish patients made use of this waiting time guarantee. Wait times have plagued Denmark's system for decades. The reason they persist is that they are politically tolerable. Those who suffer due to wait times each year is relatively small, not enough to have any impact on election day. Making matters worse, according to Mia Holstein of CEPOS, is that most Danes don't connect the wait times to the single-payer system. When forced to wait for treatment, they are more likely to blame the doctor or the hospital, not the single-payer system that is more likely to blame the doctor or the hospital, not the single-payer system that is the root of the problem.

FRANCE

The French health care system is financed heavily through the government, yet also has an extensive market of private insurance. The government funds about 77 percent of health care expenditures while the other 23 percent comes from private

sources.⁷ About 90 percent of the population is enrolled in private insurance.⁸ Private insurance pays for a multitude of costs in France including the copayments the government requires for many services and for health care expenses the government does not cover. It also covers the fees that physicians can charge their patients above the government set rates, something that many physicians do. In Paris, for example, about 80 percent of physicians charge more than the government rate.⁹

When a patient visits a physician, he or she must pay the cost directly. He or

she is then reimbursed by the government and the private insurer. The patients must cover any cost that is not reimbursed. The method of payment and the extensive system of private finance is what allows France to avoid using wait times to ration care.

However, health care costs have long strained government finances—the health care portion of France's budget has been running a deficit since 1988. As a result, the government in France has used other methods to ration care.

One rationing method is limited capital investment. More specifically, the French support of the property of the purpose of CT seepages.

system fails to invest in new medical technology. The number of CT scanners, PET scanners and magnetic resonance imagining machines per million people is one of the lowest among industrialized nations.11

Table 2.—Medical Technology Per Million Population, 2011

	Denmark	France	United States	OECD avg.
CT scanners	29.3	12.5	40.9	28.6
PET scanners MRIs	5.6* 15.4*	1.1 7.5	4.7 31.5**	2.4 16.2

Source: 0ECD. *2009. **2010.

Rationing pharmaceuticals is another method. The government does this in two ways. Under the first the government withholds approval of new drugs that are only an "incremental innovation" over existing drugs. 12 The second is the de-listing of such drugs that are already on the government formulary. 13 Patients who use such drugs will not be reimbursed for their cost.

Incremental innovations come in many forms, such as new drugs to treat depression that have fewer side effects than existing drugs, beta-blockers that reduce blood pressure by more selectively targeting the causes or turning a drug from an injectable form to one that can be taken in pill form such as the cancer drug Glivec. Such rationing has consequences. According to one study, only about one quarter to one-third of Alzheimer's patients in France are receiving state-of-the-art medication. 14

These rationing methods fall hardest on people with serious illnesses since they are the ones most likely to benefit from new technology or incremental improvements in pharmaceuticals. Yet these are also methods that, in general, do not cause trouble for politicians, since the people affected seldom are a significant political

COSTS

There are three lessons that can be learned about costs by examining recent data on health care expenditures as a percentage of gross domestic product. The first is that Denmark, would probably yield few insights into controlling costs. While Denmark spend less on health care than we do, their rate of growth has exceeded ours since 2003.

Table 3.—Health Care Expenditures As Percent of GDP, 2003–11

	Denmark	France	United States	OECD avg.
Total 2003	9.1	10.4	15.0	9.2
2011 Increase	10.5	11.2 7.5%	17.0 13.1%	10.0 10.4%
Government 2003	7.7	8.2	6.7	6.3

Table 3.—Health Care Expenditures As Percent of GDP, 2003-11—Continued

	Denmark	France	United States	OECD avg.
2011 Increase Private	8.9	8.7	8.3	7.3
	15.8%	5.6%	23.2%	13.7%
2003	1.5	2.2	8.3	2.6
2011	1.6	2.6	8.7	2.7
2Increase	8.7%	14.8%	5.0%	5.0%

Source: OECD.

Second, expanding government control over our health care system is not a solution to controlling costs. Since 2003, government expenditures on health care in the United States have grown faster than not only the countries we are examining today but even the average growth rate among major countries in the Organization of Economic Cooperation and Development. 15

Third, while France appears to have a better record of controlling costs than we do, it may be doing so by using methods that the United Sates has already tried and rejected. Since 2005, the French government has embarked on a delivery system dubbed "coordinated care pathways" (CCP). CCP entails using primary-care physicians as "gatekeepers." A patient must first see his or her primary-care physician and get that physician's approval before seeking treatment from a specialist. Patients who do not comply with this system receive lower reimbursements from the government. 16

Private insurance in France is following suit. Insurers have introduced plans known as "responsible contracts" that require patients to seek care within an approved network of physicians and other providers. Insurers will not cover the copayments for patients who do not adhere to the approved network.¹⁷

The United Sates has already been down this road during our great experiment with managed care during the late 1980s and early 1990s. During that time employers switched their coverage to health maintenance organization plans that hold down costs by using restrictive networks and employing primary-care physicians as gatekeepers. In the process, the term "HMO" became a dirty word as Americans chaffed under the restrictions of these plans. Ultimately, employers switched to different types of plans as employees rejected the lack of choice offered by HMOs. At their height in 1996, HMOs covered about 31 percent of employees. By 2013, they covered only 14 percent.18

CONCLUSION

In summary, I think the chief benefit of an examination of other nations' health

care system is to discover what policies we should avoid.

That said, it would be far more productive if we instead studied other markets rather than other nations. That would include other markets for insurance—such as life, homeowners, and auto insurance—and other markets for other vital products and services such as food and clothing. There you will find markets in which government tax policy hasn't distorted the purchase of goods, where tax policy and regulation have not resulted in a three-tiered system of insurance, and where consumers are not prohibited from buying products and services out of State. As a result, these markets reduce the cost of goods and services while also improving quality. It is in these markets that we should look for guidance in reforming the U.S. health care system.

ENDNOTES

- 1. Thompson, Sarah. "International Profiles of Health Care Systems, 2013," The Commonwealth Fund, November 2013.
- 2. "Gennemsnitlig erfaret ventetid til udvalgte operationer," Statens Serm Institut, at http://www.ssi.dk/Sundhedsdataogit/Dataformidling/Sundhedsdata/Ventetid/~/media/Indhold/DK%20%20dansk/Sundhedsdata%20og%20it/NSF/Dataformidling/Sundhedsdata/Ventetid/Erfaret%20ventetid%20til%2017%20 udvalgte%20operationer%20januar%202010juli%202010%20afsluttet.ashx (March 5,
- 2014).

 3. "Waiting Time Policies in the Health Sector: What Works?" Organization for Economic Cooperation and Development, 2012, Figure 6.1 Expected and experienced treatments. Departs 1998–2011 at http://dx.doi.org/ waiting times for various treatments, Denmark, 1998–2011, at http://dx.doi.org/10.1787/888932754065 (March 5, 2014).

4. Lyhne, N.M, Christensen, A., Alanin, M.C., Brunn, M.T., Jung, T.H., Bruhn, M.A., Jespersen, J.B.B., Kristensen, C.A., Anderson, E., Godballe, C., Buchwald, C., Bundgaard, T., Johansen, J., Lambertston, K., Primdahl, H., Toustrup, K., Sorensen, J.A., Overgaard, J., and Grau, C. "Waiting times for diagnosis and treatment of head and neck cancer in Denmark in 2010 compared to 1992 and 2002,'
The European Journal of Cancer, Volt. 49, No. 7, May 2013.

5. Chen, Zheng, King, Will, Pearcey, Robert, Mackillop, William J. "The Relationship between the waiting time for radiotherapy and clinical outcomes: A systematic review of the literature," Radiotherapy and Oncology, Volt. 87, No. 1, December

6. Penderson, K.M., Bech, M., Vrangbaek, K. "The Danish Health Care System: An Analysis of Strengths, Weaknesses, Opportunities, and Threats," *The Consensus Report*, The Copenhagen Consensus Center, 2014, p. 38.

7. Organization for Economic Cooperation and Development, "Health Data 2013," at http://pata.com/doi/10.1007/j.pata.2014.

at http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT (March 5, 2014).
8. Greene, David, Irvine, Benedict, Clarke, Emily, Bidgood, Elliot. "Healthcare

- Systems: France," Civitas. 2013.

 9. Tanner, Michael. "The Grass is Not Always Greener: A Look at National Health Care Systems Around the World," Cato Institute, Policy Analysis, No. 613, March 18, 2008.
- 10. Petkantchin, Valentin. "Economic Note." Institut Economiq Molinari, March 2007.
- 11. Organization for Economic Cooperation and Development, "Health Data 2013."
 12. Petkantchin, Valentin. "The gradual innovation, victim of cost containment of health," Institut Economiq Molinari, May 9, 2012.

- health," Institut Economiq Molinari, May 9, 2012.

 13. Petkantchin, Valentin. "Beaucratic Drug-Delisting: The French Example," Institut Economiq Molinari, February 22, 2007.

 14. Schoffski, Oliver. "Impediments to the Diffusion of Innovative Medicines in Europe," PharmoEconomics, Volt. 22, No. 2, October 2004.

 15. Countries included in OECD average: Australia, Austria, Canada, Denmark, Finland, France, Greece, Iceland, Ireland, Israel, Italy, Japan, Korea, Netherland, New Zealand, Portugal, Spain, Switzerland, Turkey, United Kingdom, United States
- 16. Naldltch, Michel, and Dourgnon, Paul. "The preferred doctor scheme: A political reading of a French Experiment of Gate-keeping." Working Paper, No. 22, Irdes.

17. Greene, David, Irvine, Benedict, Clarke, Emily, Bidgood, Elliot. "Healthcare

Systems: France," Civitas. 2013.

18. Claxton, Gatry, Rae, Matthew, Panchal, Nirmita, Damico, Anthony, Bostick, Nathan, Kenward, Kevin, Whitmore, Heidi. "Employer Health Benefits: 2013 Annual Survey," Kaiser Family Foundation & Health Research and Educational Trust, August 20, 2013, p. 4.

Senator Sanders. Thank you very much, Dr. Hogberg

Our last, but not least, witness is Jakob Kjellberg. Mr. Kjellberg is a professor and program director for Health at KORA, the Danish Institute for Local and Regional Government Research. Mr. Kjellberg, thank you very much for being with us.

STATEMENT OF JAKOB KJELLBERG, M.SC., PROFESSOR, PRO-GRAM DIRECTOR FOR HEALTH, KORA-DANISH INSTITUTE FOR LOCAL AND REGIONAL GOVERNMENT RESEARCH, CO-PENHAGEN, DENMARK

Mr. KJELLBERG. Thank you, Chairman Sanders, Ranking Member Burr and members of the committee.

I would like to thank you for the opportunity to participate in this hearing.

I have been asked to give an overview of the Danish healthcare system. The Danish healthcare system is an example of a health system providing comprehensive and universal coverage for all patients. No patients may be denied services on the basis of income, employment status, age, or health status.

Most patients in Denmark are listed with a GP of their choice. All visits to the GP are free and the use of all specialized health services is free with a referral from the GP. Patients can also choose Group 2 health insurance and access specialist treatment directly, but the Group 2 patient will face a co-payment for visits to GP and specialists practicing outside the hospitals. Only about 1 percent of the population have chosen Group 2 health insurance, and people are generally quite satisfied with the GP system.

If referred to a hospital treatment, patient may choose among all public hospitals offering the relevant treatment. All hospital treatment is free including all hospital drugs. Patients may all choose among private hospitals in Denmark or hospitals abroad if the waiting time exceeds 1 or 2 months, depending on the severity of the condition. Many patients prefer to stay with the local hospital where the median wait cannot be longer than the waiting time guarantee, but it is a choice.

If cancer is suspected, we now offer 2 week waiting time guarantee for examination and treatment. It had previously been a

problem as you mentioned.

To finance the healthcare system, the State collects the necessary revenue through general taxation. The State funds the regions on the basis of objective criteria. This ensures equal opportunities for the regions across the country. The simplicity of the financing structure also keeps the administrative costs low. Only 4.53 percent of the total health spending is used by administration.

The public sector finances about 85 percent of the chosen health expenditure. The 15 percent private expenditure maybe covers out-of-pocket payments for private sector pharmaceuticals, dentistry, and optical services like glasses and contact lenses. About half of the population has supplemental health insurance to cover the out-of-pocket payments.

Now also, other supplements to health insurances where you can access healthcare quicker than the 4-month is 1-month or 2-month waiting time guarantee or free access to physiotherapists, but the supplementary health insurance covers less than 1 percent of the

total healthcare budget, but it is a choice.

The health status in Denmark can generally be characterized as good. Surveys show that 85 percent of the population perceives their own health status as excellent or very good. The life expectancy is, on average, 80.1 years. Historic high smoking rates are typically blamed for the relatively low life expectancy in Denmark compared to the other Nordic countries, not the system or the health system.

The European Consumer Powerhouse ranks all the European health care systems and here, the Danish healthcare system ranked second in Europe. Denmark scores especially high on patient rights, range, and reach of services provided, and information. Denmark scores relatively low in prevention and health outcome

disciplines.

Health expenditure in Denmark is slightly above OECD average when you look at statistics. However, Denmark has a practice of reporting certain expenses for social care as health expenditures. If these costs are reported in line with the practice used in most other countries, the Danish health expenditure is significantly below OECD average.

To sum up, the Danish healthcare system is an example of a transparent healthcare system that provides comprehensive and universal coverage, and high level of patient satisfaction. The simplicity of the system keeps the low cost and makes it easier for the patient to access healthcare.

I would be happy to answer any questions you might have. Thank you for the attention.

[The prepared statement of Mr. Kjellberg follows:]

PREPARED STATEMENT OF JAKOB KJELLBERG, M.Sc.

SUMMARY

The Danish health care system provides easily accessible, comprehensive and universal coverage for all citizens. The system is known as a "single-payer" system, in which funding for medically necessary care is provided by the regional governments through taxes—with guidance and some funding from the State and municipalities. Patients are free to choose among providers, and GPs serve as gatekeepers to specialist care.

The strengths of the Danish single-payer system can be summarized as follows:

- · The system is simple and very easy to use.
- All citizens have access to care; no one may be denied services on the basis of income, age, health or employment status.
- Benefits are the same for all citizens.
- Administrative costs are minimal as providers and insurers have no need to market themselves.
- The regional governments are able to set and enforce overall budgetary limits.
 Physician fee schedules are pegotiated with the nation medical associations and
- Physician fee schedules are negotiated with the nation medical associations and are binding.
- Co-payments are capped for pharmaceuticals and there are no co-payments for generals practice, out-patient care or inpatient care.
- A maximum 30-day waiting time guarantee is enforced for most elective surgery.
- gery.
 Patient satisfaction is very high—Consumer Powerhouse ranks the Danish health care system second in Europe.

THE STRUCTURE OF THE DANISH HEALTH CARE SECTOR

The Danish health care sector has three political and administrative levels: the State, the regions and the municipalities (national, regional and local levels). The health care service is organized in such a way that responsibility for services provided by the health service lies with the lowest possible administrative level. In practice, this means that basic services, such as home nursing or non-specialized physical rehabilitation, are the responsibility of the municipalities, while more specialized care is taken care of by the regional level.

THE MUNICIPALITIES

The 98 municipalities are local administrative bodies run by democratically elected municipal councils. The municipalities have a number of tasks, and health care merely represents one of these. In the health field, the municipalities are responsible for home nursing, public health care, school health service, child dental treatment, prevention and rehabilitation. The municipalities are also responsible for most of the social services, for example nursing homes with care facilities and associated care staff for the elderly.

THE REGIONS

Efficient provision of high-quality hospital services requires a larger population than the average municipality, and this responsibility thus lies with the five regions. The regions run and own most of the hospitals. The regions are also responsible for the practice sector, including contracting with for instance general practitioners and private practice physiotherapists. The regions organize the health service for their citizens according to regional wishes and available facilities. Thus, the

individual regions can adjust services within the financial and national legal limits. The regions are run by regional councils that are democratically elected.

THE STATE

The role of the State in health care provision is first and foremost to initiate, coordinate and advise. One of the main tasks is to establish the goals for a national health policy. The Ministry of Health and Prevention, in its capacity of principal health authority, is responsible for legislation on health care. This includes legislation on health provision, personnel, hospitals and pharmacies, medicinal products, vaccination, pregnancy health care, child health care and patients' rights.

THE HEALTH CARE SYSTEM

The Danish health care system can be divided into two sectors:

- · Primary health care; and
- The hospital sector.

The primary health care sector deals with general health problems and its services are available to all. Long-term nursing care, home care and preventive programs are organized by the municipalities. About 25 percent of the elderly around the age of 65 receive long-term care services at home, and 5 percent receive long-term care in institutions. There is no co-payment for home care but income-dependent co-payment for long-term care in institutions. The hospital sector deals with medical conditions requiring more specialized treatment, equipment and intensive care.

In the health care service, the general practitioners act as "gate-keepers" with regard to hospital and specialist treatment. This means that patients usually start by consulting their general practitioner. It is normally necessary to be referred by a general practitioner to a hospital for medical examination and treatment, except in cases of an accident or acute illness. In such cases, all residents have direct access to all hospitals.

Denmark had 3.5 practising physicians per 1,000 population in 2009, higher than the OECD average of 3.1. Patients contact their general practitioner on average 6,6 times a year. Including other practicing specialist the primary sector handles approximately 90 percent of all patient contacts. The primary sector spends about 25 percent of the total health budget including primary sector pharmaceuticals. The number of hospital beds in Denmark is 3.5 per 1,000 population, significantly lower than the OECD average (4.8 beds). The average length of stay in 2013 was 3.1 days. Table 1 provides an overview of the activity and spending in the regional health sector.

Table 1.—Number of contacts and regional spending (2009 data)²

Regional Health Care	1,000 contacts	Visits Per capita per year	Regional spending 1,000 mil DKK (percent)
GP contacts Practicing Specialists Doctors Other practicing specialists Primary sector pharmaceutical Somatic discharges Somatic outpatient visits Psychiatric discharges Psychiatric outpatient visits	37,105 5,028 21,800 n.a. 1,257 6,600 46 792	6.6 0.9 3.9 n.a. 0.2 1.2 0.01 0.14	8.0 (8.3) 3.0 (3.1) 2.8 (2.9) 6.9 (7.2) }75.5 (78.5)
Total	72,628	12,969	96.3 (100)

FINANCING OF THE DANISH HEALTH CARE SYSTEM

The Danish health care system is based on the principle of free and equal access for all citizens. Thus, the vast majority of health services in Denmark are free of charge for the users. In 2011, total health care expenditure in Denmark constituted 10.9 percent of GDP, which places Denmark above the OECD average of 10.6 percent of GPD. However, a new report questions these figures, since Denmark has a

¹ Source: Prof. Tina Rostgaard.

²Source: Ministry of Health and Prevention. Sundhedsvaesenet i nationalt perspektiv, 2010.

practice of reporting certain expenses for social care (such as nursing homes with care staff) to the $OECD^3$ as health care expenses. If these social care expenses are subtracted in line with the reporting practice used by most other countries, the Danish expenditure on health care drops from No. 7 out of 34 OECD countries to No. 19.4

In 2012, the public expenditure constituted 85 percent of the total health expenditure, and private expenditure the remaining 15 percent.⁵ Private health care expenditure mainly covers out-of-pocket expenditure for pharmaceuticals and den-

The majority of regional and local health care expenditures are financed by tax on income, VAT, etc. collected by the national government.

The regional health care services are financed by three kinds of subsidies: A block grant from the State (78 percent), a State activity-related subsidy (2 percent) and a local activity-related contribution (20 percent). In order to give the regions equal opportunities to provide health care services, the subsidy is distributed by a number of chiesting criteria that reflect expenditure needs (e.g. demography and social). of objective criteria that reflect expenditure needs (e.g., demography and social structure). Furthermore, part of the State financing of the regions is a State activity of the state of t ity-related subsidy. The purpose of this is to encourage the regions to increase the activity level in hospitals.

The municipalities also contribute to financing of the regional health care. The purpose of the local contributions is to encourage the municipalities to initiate effi-

cient preventive measures for their citizens with regard to health issues.

The administrative cost of the Danish health care system constitutes 4.3 percent of the total spending.7

THE HOSPITAL SECTOR

The hospital sector is the responsibility of the five regions. The regions are to provide free hospital treatment for the residents of the region and emergency treatment for persons who are temporarily resident. The obligation to provide citizens with hospital treatment is normally fulfilled by the individual region's own hospitals.

The Ministry of Health and Prevention (through the National Board of Health) contributes to health care planning in the form of guidance and regulation regarding the definitions of basic and specialized treatments and functions in the hospital services. It also regulates how different forms of treatment should be organized, including coordination of the different levels of treatment.

cluding coordination of the different levels of treatment.

The regions are required to make agreements among themselves regarding the use of highly specialized departments, in order to provide patients equal access to necessary specialized treatment irrespective of which region they live in. Furthermore, the regions may, upon authorization from the National Board of Health, refer patients to highly specialized treatment abroad, paid for by the State. The regions can also refer patients to approved hospitals abroad and pay for the services themselves. These options are primarily used for treatment of rare conditions or for highly specialized treatment that cannot be offered in a relatively small country like Denmark.

FREE CHOICE OF HOSPITALS

Since January 1, 1993, citizens in need of hospital treatment have been free to choose, within certain limits, in which hospital they wish to be treated. Citizens may choose among all public hospitals offering basic treatment and a number of smaller, specialist hospitals owned by associations, which have agreements with the regions. If following a medical evaluation a citizen is judged to be in need of specialist treatment, he/she has a further choice between hospital departments in Denmark offering treatment on the same specialized level. Citizens may choose among private hospitals or clinics in Denmark or abroad, if the waiting time for treatment exceeds 1 or 2 months (depending on condition), and if the chosen hospital has an agreement with the region's association regarding treatment.

PRIMARY HEALTH CARE SERVICES

All residents in Denmark are entitled to public health care benefits in kind. Citizens do not pay any special contributions to this scheme, as it is financed through taxes. The Regions administer both the public hospitals and the primary health care

 ³ Source: OECD Health Data 2013.
 ⁴ Source: Magasinet Regio, De Danske Sundhedsudgifter ligger lavt, marts 2014. ⁵ Source: OECD Health Data 2013.

 $^{^6\,\}mathrm{Source}\colon \mathrm{Ministry}$ of health and prevention. $^7\,\mathrm{Source}\colon \mathrm{Danish}$ Regions.

scheme, whereas local administration of the primary health care service lies with

the municipalities.

All general practitioners, specialists, dentists, physiotherapists, chiropractors etc. are licensed by the State. The public health care scheme subsidizes treatment for persons. This treatment is provided by general practices, specialists etc. who have made collective agreements with the public health care scheme. The Regions' Board for Wages and Tariffs enters into collective agreements with the organizations that represent the various professions. The tariffs are binding and are typically renegotiated every second year.

GENERAL PRACTITIONERS

Any person who is entitled to public health care benefits can choose between being covered in Group 1 or Group 2. Persons covered in Group 1 have to register with a specific general practitioner, and persons in Group 2 have the right, but not the obligation, to register with a specific general practitioner of their choice. Persons in Group 2 may visit any specialist without visiting a general practitioner first. All Danes can freely choose their general practitioner, who is obliged to take on all new patients. If too many patients wish to be assigned to the same practitioner, he/she

Persons covered in Group 1 have the right to free medical services from their general practitioner or specialist. Persons insured under Group 2 have to pay part of the cost of medical help from a general practitioner or specialist. The subsidy to persons insured under Group 2 corresponds to the cost of similar medical help from a specialist for persons in Group 1. About 98 percent of the Danish residents belong

to Group 1.

DENTISTS

All residents in Denmark are free to choose their own dentist. There are approximately 4,600 authorized dentists. Around 2,500 dentists are included in the collective agreement with the public health care scheme.⁸ The majority of the costs for dental treatments for adults are paid for by the users themselves as out-of-pocket payments. However, the public health care scheme pays a minor subsidy per visit for preventive and other dentistry treatments. Reference from a general practitioner is not required. Children under the age of 18 receive free dental care. Furthermore, there are special arrangements, with limited user payment, for those who have difficulties using the ordinary public dentistry services due to low mobility or mental or physical disability.

PHYSIOTHERAPISTS

There are approximately 2,100 physiotherapists.9 The public health care scheme pays part of physiotherapy treatment, but persons with serious physical disabilities are entitled to physiotherapy free of charge. The treatment is only subsidized if prescribed by a general practitioner.

HOME NURSING

The municipalities must provide home nursing free of charge, when it is prescribed by a general practitioner. Moreover, the municipalities are obliged to provide all necessary appliances free of charge. Home nursing provides treatment and nursing at home for people who are temporarily, chronically or terminally ill.

MEDICINE

Most medicine is sold by pharmacies which are authorized by the State. The Ministry of Health and Prevention decides the number of pharmacies and where they may be situated. General reimbursement is granted for the costs of medicinal products which have been authorized for reimbursement by the Danish Medicines Agency. In general, reimbursement is granted for medicinal products which have a certain and valuable therapeutic effect when used on a well-defined indication. Furthermore, the price of a given medicinal product must be proportionate to the effect of the product.

The reimbursement will be calculated on the basis of the price of the cheapest medicinal product among the different products with the same effect and the same ac-

⁸ Source: Ministeriet for Sundhed og Forebyggelse, Health Care in Denmark, 2008, ISBN:

⁹Source: Ministeriet for Sundhed og Forebyggelse, Health Care in Denmark, 2008, ISBN: 978–87–7601–237–3.

tive ingredients. The pharmacy is obligated to give patients the cheapest product. Chronically ill patients can be included in a special reimbursement scheme with a yearly ceiling of DKK 3,600 (US\$ 600) by the Danish Medicines Agency. Otherwise the patient pays 15 percent of the cost above the yearly ceiling. All pharmaceuticals prescribed as part of specialized hospital treatment are provided free of charge to the patient.

QUALITY AND PATIENT SAFETY

The Danish Institute for Quality and Accreditation in Healthcare and the National Indicator Project has been established to create Danish standards and indicators and to conduct the accreditation of Danish health care.

Data generated through the Danish Quality Model is made available to health professionals and the general public. The results are available on the integrated web portal for health matters in Denmark www.sundhed.dk, serving both professionals and the general public. On the web portal citizens can view their own medical record (treatment at hospitals) and the prescription medication they have purchased, using their personal digital signature.

Every second year, the Danish Regions and the Ministry of Health and Prevention conduct a survey of patients' experiences in hospitals. The objective of the survey is to compare patient experiences at hospital level and at medical specialties level. The survey includes questions on, for instance, clinical services, patient safety, patient and staff member continuity, co-involvement and communication, information, course of treatment, discharge, inter-sectorial cooperation, physical surroundings, waiting time and free hospital choice.

course of treatment, discharge, inter-sectorial cooperation, physical surroundings, waiting time and free hospital choice.

The surveys generally show that the patients' overall impression of the hospitalization process is positive. They also identify areas in which the patients see a potential for improvement.

A national reporting system for adverse events was established in 2004. The reporting system aims to collect, analyze and communicate knowledge of adverse events, in order to reduce the number of adverse events in the health care system. Patients and relatives can report adverse events, and all health care professionals are required by law to report any adverse events they become aware of in connection with health care services.

Patients can seek compensation for injuries caused by examination or treatment in hospitals or by authorized health care professionals in private practice through the Patient Insurance Scheme. According to the Act on the Right to Complain and Receive Compensation within the Health Service, compensation will be granted in the following situations: If it can be assumed that an experienced specialist would have acted differently in the given circumstances, thereby avoiding the injury; if the injury is due to the malfunction or failure of technical instruments; if the injury might have been avoided using another available and just as effective treatment technique or method; or if the injury occurred as the result of examination or treatment in the form of infections or other complications that were more extensive than the patient should reasonably have to endure. Patients may also receive compensation for injuries caused by medicinal products.

HEALTH OUTCOMES

In an international perspective, health status in Denmark can generally be characterized as good. Surveys show that Danish citizens continue to consider their own health as being good. In a questionnaire survey from 2010, 85 percent of the population perceives their own health status as "excellent" or "very good".

The Danish life expectancy is rising again after a period of stagnation in the 1980s. Since the mid-1990s, the Danish life expectancy has been improving and at an average of 80.1 years is in line with the OECD average. Life expectancy for women is 82.1 years, compared with 78.1 for men. Historically high smoking rates and high alcohol consumption are typically blamed for the relatively low life expectancy.

The proportion of regular smokers among adults has shown a marked decline over the past 25 years in most OECD countries. In Denmark, the percentage of adults who report that they smoke every day has decreased by almost two-thirds, from 46.5 percent in 1985 to 17 percent in 2013. Smoking rates among adults in Denmark is now slightly below the OECD average (20.9 percent in 2011). At the same time, obesity rates have increased in recent decades in all OECD countries. In Denmark, the

¹⁰ Source: Sundhedsprofil2010. 11 Source: OECD Health Data 2013.

obesity rate among adults was 13.4 percent in 2010, up from 9.5 percent in 2000. The average for the OECD countries was 15.0 percent. 12 The Euro Health Consumer Index (EHCI) ranks 35 national European health care systems on 48 indicators, covering six areas that are essential to health consumers: Patients' rights and information, Accessibility of treatment (waiting times), Medical outcomes, Range and reach of services provided, and Pharmaceuticals and Prevention. In 2013 Denmark, was ranked second among the 38 countries. Denmark scores especially high on patient rights, information and range and reach of services provided. Denmark scores relatively low in the prevention and health outcomes subdisciplines. 13

Senator Sanders. Thank you very much, Mr. Kjellberg.

Now, we will begin with questions and comments. Let me begin by asking all of our distinguished panelists a very simple question.

In the United States today, we are the only Nation in the industrialized world that does not guarantee people healthcare as a right. And we still have, although the numbers have gone down since the Affordable Care Act, but we still have many, many millions of people who have no health insurance at all, others have high copayments or deductibles.

So let me ask all of the panelists a very simple question. Should healthcare be a right of all people regardless of income? Yes, no,

maybe.

Ms. Cheng, should healthcare be a right of all people?

Ms. CHENG. I think it should because it is a sign, an expression of a civil society.

Senator Sanders. OK. I am going to ask for brief answers.

Dr. Yeh.

Dr. YEH. Yes, access to healthcare regardless of the job, the income is an inalienable right in our constitution. Senator Sanders. OK. Ms. Pipes.

Ms. PIPES. No, we are entitled to life, liberty, and the pursuit of happiness. How do you determine which right is worth more? Do we have a right to housing, a right to food, a right to healthcare? How do you measure which is the appropriate level? So, no.

Senator Sanders. OK. Thank you.

Dr. Martin.

Dr. MARTIN. Yes, access to healthcare is a human right, and I know that the vast majority of Canadians in poll after poll feel the same way.

Senator Sanders. Mr. Kjellberg.

Mr. KJELLBERG. Yes, I believe that access to healthcare should be a right.

Senator Sanders. Dr. Hogberg.

Mr. HOGBERG. Yes, I think it should be a right in the classical, liberal notion of rights. That Government should not interfere. Congress should make no law and so forth. So yes, everyone should have the right to healthcare in that sense.

Senator Šanders. Dr. Rodwin.

Mr. RODWIN. We have a right for healthcare in the United States for emergency care. I believe that should be extended to primary

Senator Sanders. Let me stay on that point, maybe get to Dr. Hogberg. You indicated that you thought healthcare should be a

 $^{^{12}}$ Source: OECD Health Data 2013 and Sundhedsprofil
2013. 13 Health Consumer Powerhouse, Euro Health Consumer Index 2013, ISBN 978–91–980687–

right, but Government should not be involved in that process. Does that suggest that you would do away with the Government-run Medicare program?

Mr. HOGBERG. It is a moot point. Senator SANDERS. No, it is not.

Mr. HOGBERG. It is a very moot point because seniors vote at a very, very high rate and we are not getting rid of Medicare. It is

an academic question.

Senator Sanders. But I am asking you as an academic. Seniors, do. I think you are right. It is a popular program, but if you say Government should not be involved in healthcare, and Medicare is a Government healthcare program. In your judgment, in the best of all possible worlds, should the Government, should we vote to get rid of Medicare? Some people think we should. What do you think?

Mr. HOGBERG. I think it is a moot point. It is here to stay.

Senator SANDERS. Well, I think you did not answer my question.

Ms. Pipes, I would like to ask you that question.

Ms. PIPES. I believe that we are not going to get rid of Medicare. Medicare is a program for our seniors. I think we do have severe problems. The Medicare trustees have said that Medicare will be bankrupt by 2024 at a cost of over \$1 trillion.

Senator ŠANDERS. I just wanted to ask you a simple question.

Ms. PIPES. It should be——

Senator Sanders. Medicare is a Government-run program.

Ms. Pipes. Right.

Senator Sanders. As Dr. Hogberg indicated, I think it is a popular program. We could disagree. We have disagreements. My question is should, in your judgment, we abolish this Government-run Medicare program?

Ms. PIPES. Not entirely. Medicare should be there for those peo-

ple who truly need it. The problem is—

Senator SANDERS. Truly need it, but not as it is right now.

Ms. PIPES. Because a lot of people are wealthy, can afford care, and they are—

Senator Sanders. Well, not a lot of people are wealthy.

Ms. PIPES. They are putting a lot of cost pressure on the system. Senator Sanders. All right.

Ms. PIPES. Paul Ryan—

Senator Sanders. Let me ask——

Ms. PIPES. I mean, Congressman Ryan, I think, has some very good ideas—

Senator Sanders. Right. And he would transform Medicare into

a voucher program.

Dr. Rodwin, let me ask you a question. Despite the fact that our healthcare outcomes are not particularly good in terms of infant mortality, in terms of life expectancy, the United States ends up spending almost twice as much money per person on healthcare as any other Nation. Why is that? And we will give Senator Burr additional time as well.

Dr. Rodwin, why is that?

Mr. RODWIN. We spend more, Senator Sanders, for several reasons. First, our prices are higher than all other wealthy OECD nations.

Senator SANDERS. All right. If a woman has a birth in this country compared to France, how much more does it cost? Give me some examples.

Mr. RODWIN. It can cost different prices here depending on who insures you. It can range from \$5,000 to \$27,000; the figures are in the excellent paper by Mei Cheng from OECD for all to see. So price is one very, very important phenomenon. Prices of drugs, prices of—

Senator Sanders. How do drugs prices compare in the United States compared to other countries?

Mr. RODWIN. In the aggregate, they are much higher. Much, much higher.

Senator SANDERS. Why is that?

Mr. RODWIN. Why is that?

Senator Sanders. Yes.

Mr. RODWIN. Because we have no price control.

Senator SANDERS. So if I need a cancer drug in the United States, why is it much more expensive here than it is in Canada or in France?

Mr. RODWIN. In Canada and in France, you have regulated prices for these drugs and people have access to them.

Senator SANDERS. But that interferes with the free-market system. Is that a good idea?

Mr. Rodwin. Of course, it is a good idea. The free-market system does not exist anywhere in healthcare. I challenge anyone to give me one example of a free-market system that is operational and works. That is a fine idea in theory, but I challenge anyone to give me one, one concrete example. All the evidence suggests that it does not work.

Senator SANDER. OK. Senator Burr.

Senator Burr. Dr. Martin, in your testimony, you note that Canadian doctors exiting the public system for the private sector has had the effect of increasing waiting lists for patients seeking public healthcare.

Why are doctors exiting the public system in Canada? Dr. MARTIN. Thank you for your question, Senator.

If I did not express myself in a way to make myself understood, I apologize. There are no doctors exiting the public system in Canada. In fact, we see a net influx of physicians from the United States into the Canadian system over the last number of years.

What I did say was that the solution to the wait time challenge that we have in Canada, which we do have a difficult time with waits for elective medical procedures, does not lie in moving away from our single-payer system toward a multi-payer system, and that is borne out by the experience of Australia. Australia used to have a single-payer system and in the 1990s moved to a multiple payer system where private insurance was permitted.

A very well-known study by Duckett, et al., tracked what took place in terms of wait times in Australia as the multi-payer system was put in place. And what they found was in those areas of Australia where private insurance was being taken up and utilized, waits in the public system became longer.

Senator Burr. What do you say to an elected official who goes to Florida, and not the Canadian system, to have a heart valve replaced?

Dr. MARTIN. It is actually interesting because, in fact, the people who are the pioneers of that particular surgery, which Premier Williams had, and had the best outcomes in the world for that surgery are in Toronto at the Peter Munk Cardiac Center just down the street from where I work.

So what I say is that sometimes people have a perception and I believe that, actually, this is fueled in part by media discourse that going to where you pay more for something that that necessarily makes it better. But it is not actually borne out by the evidence on outcomes for that cardiac surgery or any other.

Senator Burr. Well, one would believe the American people prefer their system because they know consciously they pay more. No, I think it is because they judge quality and they judge innovation.

Ms. Pipes, in your testimony you noted that more than 42,000 Canadians come to the United States each year for healthcare.

Why is that?

Ms. PIPES. Because they find that they are on a waiting list in Canada for too long a period, and they feel that their health is at stake. So a lot of people in Canada come to the United States for MRI's, CT scans.

There are many examples in the media of people like Brian McCreith, who came to the United States because he was told by his primary care doctor that he might have a brain tumor, but the wait for an MRI was very long. He spent \$1,000, came to the United States, paid-out-of-pocket.

You will see advertisements in Canadian newspapers for MRI's, for neurosurgery.

Senator Burr. It is a pretty fertile ground to market in.

Ms. Pipes. Right.

Senator Burr. Dr. Martin, in your testimony, you state that the focus should be on reducing waiting times in a way that is equitable for all. What length of time do you consider to be equitable when waiting for care?

Dr. MARTIN. Well, in fact, the Wait Time Alliance in Canada, sir, has established benchmarks across a variety of different diagnoses for what is a reasonable period to wait. And what we have found is that actually working within the single-payer system, we can re-

organize things.

I waited more than 30 minutes at the security line to get into this building today, and when I arrived in the lobby, I noticed across the hall, that there was a second entry point with no lineup whatsoever. Sometimes it is not actually about the amount of resources that you have, but rather, about how you organize people in order to use your queues most effectively. And that is what we are working to do because we believe that when you try to address wait times, you should do it in a way that benefits everyone, not just people who can afford to pay.

Senator BURR. On average, how many Canadian patients on a

waiting list die each year? Do you know?

Dr. MARTIN. I do not, sir, but I know that there are 45,000 in America who die waiting because they do not have insurance at all. Senator Burr. Let me go back to Dr. Rodwin's statement. The American system has access to healthcare for everybody. It is called the emergency room. Now, we do not admit that clearly because we are lobbying for a particular angle, but every American can access healthcare. They can access primary care.

And Dr. Rodwin, I would agree with you that we ought to make sure that there is a medical home for practically everybody we can place. We do not do it in Medicaid. We should. States should adopt it because primary care is an absolute necessity to wellness.

But Mr. Kjellberg, how many Danish citizens have supplemental health insurance policies and why has that number been increasing

in recent years?

Mr. KJELLBERG. About half the population got co-payment insurance, and that have increased dramatically over the last year because the family were included, the children were included and that brought up the numbers quite significantly. But the number for policyholders have not really changed much.

Senator Burr. But half the population has supplemental insur-

ance.

Mr. KJELLBERG. Co-payment insurance, and then many people in the labor market also as part of a benefit package are offered health insurance. So you can have faster access to elective care.

Senator Burr. So they can actually buy their way to faster ac-

Mr. KJELLBERG. Oh, you can buy that. There are private hospitals you can buy any hospital services in Denmark.

Senator Burr. So they have options. They have choices.

Mr. KJELLBERG. They have choice, yes.

Senator Burr. Dr. Rodwin, in your testimony, you note that Parliament sets healthcare expenditure targets each year. If a hospital or a physician exceeds their target expenditure by billing for higher than projected volume of services, prices are negotiated downward for the following year.

Beyond volume or utilization of services, are there quality metrics that the French use to determine reimbursement for physicians or other providers in order to incentivize quality care for patients? For example, measuring health outcomes to ensure patients

are receiving quality care.

Mr. Rodwin. This is a science that is not well-developed, neither in our country nor in France, but they are working on this very question, which is very timely right now. That is, the negotiations focus, certainly on volume, but now there is a program called EFAC which will remunerate physicians. That is actually already in place if they follow certain standards of preventive care.

Senator Burr. But they are penalized if they bill at a higher rate 1 year, they are penalized in the next year by a reduction in reim-

bursement.

Mr. Rodwin. No. Every year, sir, there is a negotiation to set these rates, and if the volume goes up, then the following year the price—that is the practice. It is the volume for health performance standard.

Senator BURR. Thank you, doctor.

Thank you, Mr. Chairman.

Senator Sanders. Senator Enzi.

STATEMENT OF SENATOR ENZI

Senator ENZI. Thank you, Mr. Chairman.

I want to thank the distinguished panel for all of the information that they have provided. It is a little different than a session that

Senator Kennedy and I held several years ago.

But first of all, I want to thank Ms. Pipes for being here. She wrote a book in 2010 that predicted what was going to happen with our healthcare system as it is now. And then more recently, she has written something called "The Cure for Obamacare," and it is not even copyrighted, but it is an outstanding book on what we could do to repair the damage that has been done to our present system. And I thank you for your effort on that and hope I can get a few more people to read them.

I mentioned Senator Kennedy and I. When I was the Chairman and he was the Ranking Member, we went to a system called a roundtable and this is very similar except that at a roundtable, we had, 8 to 10 people and they were all practitioners of some sort in the healthcare area, rather than people who are studying the

healthcare system.

He and I would come up with the questions for the panel as well as total agreement on who should serve on it, as opposed to the way we do panels now, which is the Chairman gets to pick everybody, you know, four-fifths of every panel and the Ranking Member gets to pick another one or two, and then we all come and beat up on the witnesses. So at a roundtable, the Senators really did not speak much.

One of the questions we asked is, will universal single pay healthcare work in America? And the first person was an engineer for hospitals and he was not sure. But the other practitioners all said, "America will not settle for universal single pay healthcare."

At the end of that hearing, that roundtable, Senator Kennedy came to me and he said, "I guess we had better take a look at some of the things you have suggested like small business health plans, and being able to sell across State lines," and things like that.

And I think one of the things that this panel points out, most of you are talking about countries whose population is, and size in some cases, is relative to our States, each State. And in the United States, each State has healthcare plans and they do it differently. And as the chairman mentioned, some of them have good ideas and those spread to others.

But what will work in Canada with a smaller population, or Denmark with a smaller population, or a France with a smaller population might not work in the United States especially under the

form of government that we have.

I am pretty sure that the Affordable Healthcare initiative was designed to fail. That was predicted by Senator Gramm about 15 years ago, and he thought that they would come up with a system that would fail, and then we could go to universal single pay healthcare.

I think that would have worked, except for one thing. The debacle with the design of the exchange reminded people in America what happens when our Federal Government tries to handle everything for this vast United States with one plan. And, of course, we

are working on the Homeland Security committee too, and we are trying to work with another one of those government agencies that is called the Post Office, and that is another example that people use of what might happen if we went to universal single pay healthcare.

I have been to some countries that have a lot of population like India and they are very proud of their system. I asked how that system took care of that vast of a population and they said, "Well, our doctors see 200 patients a day." I do not think our doctors see 200 patients a day, and would not take that quick of action.

The question of Medicare that was asked earlier, if people were given another option, I think they would go with another option. Too many people in America right now that are seniors, at least know somebody that tried to see a doctor, and the doctor said, "I am not seeing any Medicare patients." So Medicare is not the best example of how to get healthcare in America.

And I have almost used up my time without asking a question. I am the accountant on the panel. In fact, I am one of three accountants in the U.S. Senate, so the questions that I have are really kind of technical and get down to some of the costs.

Thank you, Mr. Chairman.

Senator SANDERS. Thank you very much, Senator Enzi. Senator Roberts.

STATEMENT OF SENATOR ROBERTS

Senator ROBERTS. Well, I too, want to thank the panel and thank you, Mr. Chairman, for holding this hearing.

It seems to me that the entire question here has been summed up by the Chairman, does the Government—if we have a Government guarantee of healthcare as a right—he posed that question.

And then with questions, Senator Enzi and Senator Burr have pointed out is it a right to a waiting list? Actually, I think that is the statement by Ms. Pipes. And Ms. Pipes, my deep regrets for the loss of your mother. How long did she have to wait?

Ms. PIPES. She went to her primary care doctor, a general practitioner, we call them, in June and she was admitted to Vancouver General Hospital, which is one of the largest hospitals in Canada in late November.

Senator ROBERTS. Late November, and then you lost her after 2 weeks. Did you say that you could get a hip replacement for a dog in a week, but you could not get a hip replacement for an individual for X-number of weeks?

Ms. PIPES. Yes. The wait for orthopedics is one of the longest waits in Canada, and my friend, Dr. Brian Day, who is an orthopedic surgeon in Vancouver, made that statement to "The New York Times".

Dr. Day, who runs the Cambie Clinic is being sued by the British Columbia Government for operating a clinic which is considered illegal in British Columbia. But the interesting thing is, he told me the other day, the Government keeps postponing the case. And I think it is because his practice is so busy with people getting hip replacements and knee replacements, that they are afraid of the backlash that will happen because of that.

Senator ROBERTS. I have legislation that I call the Four Rationers Repeal bill. I am not going to get into the four rationing boards, IPAB, CER, et cetera, etc., to address some of my concerns about the Government controls and where we are with the Affordable Healthcare Act. I am trying to get ahead of that curve.

By the way, I do not know, Dr. Martin, does Prime Minister Harper change the rules and delay implementation of the system every week like we see going on with the Affordable Healthcare Act?

Dr. Martin. I am not sure that you want me to answer that question, sir. I do not completely understand what you are saying. Senator Roberts. Well, I am saying that the Prime Minister of Canada, I do not think changes the National Healthcare Act that you have in place, which I think is basically a first step toward single-payer, and I think that was the intent of it.

The President of the United States has changed the healthcare law. About every Friday we have what we call a regulation dump. OK? A consortium of unions indicated that they would like a big change in the Affordable Healthcare Act. He is going to have a

carve out for them.

On the other side of the fence, 27 members of the Finance Committee, some on this committee, wrote to Marilyn Tavenner, the Head of the Centers of Medicare and Medicaid Services to say, "Whoa. Do not change the Medicare D program that we have in this country," a very popular program, under budget, used by a great number of our senior citizens. And if we had not written a letter and if there had not been a real backlash from the people to save Medicare Part D, it would not have happened.

So we are just sort of riding this thing as we go along, except, the President does not come to us and asked us to help him do that with each individual change. I am just wondering what are the problems you have up in Canada, who makes the change if, in fact,

there needs to be a change.

Dr. MARTIN. Well, I suppose the answer to your question comes

in two parts.

The first is an acknowledgement, I think, of what Senator Enzi was saying earlier on which is that like the United States, Canada is a huge country and our health insurance is actually not provided at the national or Federal level. It is provided at the Provincial level or the equivalent of your States.

And so, the notion that something can begin in one sub-national jurisdiction and then spread is, in fact, exactly how we came to have 13 separate single-payer systems in the 13 Provinces and territories of Canada. And so, the first part of the answer to your question is, no, we do not see those kinds of changes being made to healthcare legislation at the national level.

But the second part of the answer to your question is that it is widely known in Canada that the public commitment to our single-payer Medicare system is so strong that for a prime minister of any political stripe to try to alter that and undermine it in any way would be political suicide.

Senator ROBERTS. OK. I got your message.

Dr. Hogberg, you mentioned the fact we ought to keep the politicians out and we have just had two changes, Medicare Part D and then also a carve out for the unions. Is that an example of what

we are talking about? And 33 other changes, by the way, and that is the last count that I have.

Mr. Hogberg. There are very good examples of how groups that have political clout can keep changes from happening that they do not want to see. Unions and seniors certainly have plenty of clout up here on Capitol Hill.

Would you mind if I were to just take a second to talk about

some of the outcome measures here?

Senator Roberts. I am already over time, 23 seconds.

Mr. Hogberg. OK.

Senator Roberts. I will ask the permission of the chairman if that would be possible.

Senator Sanders. Take another 30 seconds.

Senator ROBERTS. All right. Thank you, sir. You got 30 seconds. Mr. Hogberg. Yes. First of all, with regard to life expectancy

and infant mortality, using those as measures to tell you something about a healthcare system, is a bit like using batting average and on-base percentage to tell you something about football.

Life expectancy and infant mortality, there are so many factors that go into those outcomes that are not related to the healthcare system, that the healthcare system has no control over, that they are really not good measures for telling you the quality of a healthcare system.

One other problem is that many of these measures are not measured the same from country to country. Infant mortality being the-

Senator ROBERTS. I thank you for that. The Chairman has already hit the gavel.

My main question is access to care and denial of that care, and

what other alternative a person has with a single-payer system. Senator Sanders. OK. Senator, we are going to have another round of questions. We have a great panel. I think they are good questions.

Let me pick up on a point that Dr. Martin raised, because I was going to ask the same question. I live 1 hour away from the Canadian border. Canadians watch American television. Canadians are very familiar with our political system, probably know more about politics in America than most Americans know.

Is your Prime Minister a socialist?

Dr. MARTIN. No, sir. Our Prime Minister is quite conservative. He is the leader-

Senator Sanders. Conservative.

Dr. Martin. Yes, he is.

Senator SANDERS. So obviously, as a conservative, he wants to implement the American healthcare system that the Canadians are very aware of. I gather that was probably the first thing he did when he took power. Is that right?

Dr. MARTIN. Not exactly. Senator SANDERS. Why not?

Dr. MARTIN. Support for single-payer Medicare in Canada goes across all political stripes.

Quite famously, we had the leader of the most rightwing party in the Canadian Federal debate on television hold up a sign in the middle of the debate on which he had written in marker, "No TwoTier," as a means of trying to reassure the Canadian public that, if elected, he would not dismantle the healthcare system.

Senator SANDERS. In other words, you have a nation bordering on the United States, two nations that are probably as close together in so many respects as any two nations in the world, a conservative prime minister, and yet there is no effort to move to an

American healthcare system.

I would say to my colleagues there is not a better example of maybe how people feel about two systems. They know the American system. They have a conservative prime minister. They can move in our direction, but for whatever reason, and I think sensible reasons, they understand that a system that guarantees healthcare to all of their people in a cost-effective way is the way that they want to stay.

Ms. Pipes, let me ask you that question. Why do the Canadians

not come to the American healthcare system?

Ms. PIPES. As I mentioned in my testimony, about 42,000 Canadians every year come to the United States and pay out-of-pocket for—

Senator Sanders. That was not my question.

Ms. PIPES. No, I just wanted to make that point first.

Second, the Canadian Government and the Provinces who administer the Canadian healthcare system, this started in 1974. A lot of people in Canada have no idea of an alternative system.

Senator SANDERS. Oh, my goodness. They live an hour away from me in Burlington, VT. They watch American television. They read American newspapers. They have no idea of what goes on in the United States of America? That is a little bit hard for me to believe.

Ms. PIPES. Also I would say that Canadian people are very, very nice people. They are not impatient like Americans.

[Laughter.]

My mother said to me, "I hope you are not becoming an impatient American." I am an impatient American. Americans do not want to wait.

Senator Sanders. I think the answer is pretty clear. The Canadians have seen the American system. They prefer their own.

Now, I wanted to say a word about access and waiting lists. Senator Roberts raised that issue and Senator Burr did.

I want to focus on that picture over there. I know it is hard to believe, and I mean this quite seriously. This is the United States of America. This is not a Third World developing country. This is a town called Wise, VA and I do not mean to pick on Virginia, because I think the same story can be told all over America.

So when we talk about access, what we are looking at here is that a number of times a year, people, working class people who have no health insurance at all, are given free healthcare, episodic care, volunteer doctors very kindly come and in a day, thousands of people line up because this is the healthcare they get. This takes place in a field in Wise, VA. I think it is a stadium in Los Angeles where something similar takes place.

Now, if this is the kind of healthcare that we are proud of in the United States of America, well, some of us have some strong disagreements about that.

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Mr. Rodwin, I want to get back to another point which, to me, is very important. It is, and I would like Dr. Martin to comment on this as well, and maybe Dr. Yeh, and Ms. Cheng. To get good healthcare, you need medicine, very often. If I go into a French hospital, I leave the hospital, and I am sick, how much does my medicine cost?

Mr. Rodwin. Under French national health insurance, there are

very high levels of pharmaceutical coverage.

Senator SANDERS. Meaning what? My medicine is free or virtually free?

Mr. Rodwin. Virtually free, 90 percent, 80 percent, 70 percent. Senator Sanders. Dr. Martin.

Mr. Rodwin. Those prescription drugs that are cut, are cut because they are ineffective.

Senator Sanders. OK. Dr. Martin.

Dr. MARTIN. So interestingly, this is an area where we made a mistake in the design of our single-payer program in Canada. At the time that Medicare, Canadian Medicare was designed in the 1950s and 1960s, medication was not a really big part of the way that we treated disease and medicines were left out of coverage.

So the single-payer program in Canada does not include medications and as a result, 1 in 10 Canadians today fails to fill a prescription or take their medicine as prescribed because of concerns about cost.

Senator Sanders. Thank you. Mr. Kjellberg, what about pre-

scription drugs in Denmark?

Mr. KJELLBERG. All medicines used at hospital are free of charge, and if prescription drugs are needed, you have a maximum co-payment a year of about \$600.

Senator Sanders. OK. Dr. Yeh, in Taiwan, how much do pre-

scription drugs cost?

Dr. YEH. It is covered by the NHI, but patient has to pay some co-payment up to a ceiling of about 10 U.S. dollars

Senator SANDERS. Ten U.S. dollars?

Dr. YEH. Up to 10 U.S. dollars and each year, the ceiling including hospitalization, the ceiling will be one-thousand U.S. dollars.

Senator Sanders. Ms. Cheng, what is your view on prescription

drugs?

Ms. Cheng. Prescription drug use in the United States, in fact, is low compared to total health spending. Relatively speaking in Europe as well as in Taiwan, the percent of moneys spent on drugs, in terms of total health spending, is a much higher percentage.

Example, in the French system, it is roughly 25 percent; in Taiwan, 25 percent of total health spending is on drugs. So they have much greater access to drugs. That is No. 1.

No. 2, the reason why the drug price-

Senator Sanders. I apologize. My time has gone over.

Senator Murphy has joined us. Senator Murphy, do you have some questions you wanted to ask?

STATEMENT OF SENATOR MURPHY

Senator Murphy. Yes, thank you very much, Mr. Chairman. Thank you for this hearing and to all of the witnesses. I am sorry. I had to step out for a few moments.

I guess I just have one broad question for the panel, because I think it has come up in some of the testimony, especially, I think, from Ms. Pipes and Dr. Martin. I am always fascinated by this intersection between convenience and quality. And the extent to which metrics like wait times often do not automatically translate into differences in outcomes. Often, they do. I mean, there are some services in which if you do not get it right away, it is going to have a pretty severe consequence on your health and on the amount of money you are going to spend later on.

But there are parts of this country, for instance, that have enormous convenience. That you cannot drive more than a couple of miles outside your door without finding an MRI machine or a dialysis center. There is healthcare all around you. And yet, that does not seem to be adding to quality. That seems to be adding to con-

venience.

Similarly, I hear all of the stories from Canada that Ms. Pipes talked about in terms of wait times. And yet, when we sort of look at all the underlying data, it tells us that, in the end, a lot of the diseases where you have wait times that might cause you to question the system, the outcomes in Canada are fundamentally better than they are in the United States from heart disease to cancer. So that is not to say that we should not look at issues of convenience, and issues of wait times, and your proximity either spatially or temporally to services.

But I am specifically kind of asking Dr. Martin and Ms. Pipes to talk about this, but maybe asking others on the panel who have thoughts about this with your experiences to talk about how in other countries where there may be less easy access to health services, not as much healthcare as we have in the United States. We have tons of it. As to whether that actually has a true relation all

the time to the outcomes that we get.

Dr. Martin, I would be happy to have you start.

Dr. MARTIN. Thank you. It is a really thoughtful question, and I guess I might reframe it slightly by saying that what you refer to as "convenience," I would refer to as "patient experience."

When we talk about quality in healthcare, the so-called Triple Aim coined by Don Berwick of the IHI here, the notion of quality having three dimensions. One is population health outcome on which single-payer countries like Canada fair, in fact, quite well.

Another aspect of the Triple Aim is cost per capita, and the third is patient experience. And, of course, patient experience is important. I said that I was not here to be an apologist for every single thing about the Canadian healthcare system. We are working very hard on reducing wait times for elective surgeries because we believe that patient experience matters.

But, you are right, that our outcomes are very good. And I think it is critically important for the committee to understand that single-payer does not equal wait times. We heard our colleagues from Taiwan tell us quite clearly that they have a single-payer system with virtually no wait times, with 99.6 percent coverage of the entire population.

Of course we should consider all aspects of the Triple Aim when we talk about quality, but we should avoid oversimplifying the

message and equating a single-payer model with wait times. That simply is not the case.

Senator Murphy. Ms. Pipes.

Ms. PIPES. Well, Madam Justice Marie Deschamps, who retired from the Canadian Supreme Court in 2012, in that hearing in 2005 said, "The idea of a single-payer healthcare system without waiting lists is an oxymoron." So I just want to make that point and the Canadian Supreme Court is not a conservative court by any stretch of the imagination.

I think you have to—

Senator MURPHY. But you just said, do you dispute the characterization of the Taiwan system?

Ms. PIPES. Well, the United States, I think as Senator Burr said, we have 350 million people here. We have such a diverse, we do not have a homogenous society, which is much more typical in

many other countries around the world.

I did want to make a point about life expectancy, and the WHO, the World Health Organization, often says the United States ranks 37th out of 190 countries. As Professor Steven Woolf, who was the lead author in the Institute of Medicine's study, which was really based on life expectancy and infant mortality rate, said, "Life expectancy and other noted health outcomes are determined by much more than healthcare." And here in America, when you look at our lifestyle choices, we have a huge obesity problem. We have homicides and car accident deaths at a much higher per capita rate than any country in the world.

So when you look at the number for 5-year survival rates on cancer, based on the work done by "Lancet Oncology," the United States ranks No. 1 in the world on 13 of the 16 most popular cancers. So you have to be careful when you are doing statistics that

you are comparing apples to apples.

Senator MURPHY. OK. Thank you very much. My time is expired, Mr. Chairman.

Senator Sanders. Senator Burr.

Senator Burr. Thank you, Mr. Chairman. Let me say, before I ask the second round of questions, there has been a lot of reference

to Medicare and single-payer system.

Let me just remind everybody, Medicare for a working lifetime, I pay into a system to finance part. There is a Government share. When I become a senior, and I go and get Part B coverage, which is the physician's side, I pay a premium for that. When I go to get drug coverage, I pay a premium for that. You cannot look at Medicare and say, "This is like the single-payer system in Taiwan," where the Government picks up the entire tab.

Now, healthcare is not free. We all know that. It comes out of general taxes, but there is a difference for seniors in America that they are personally invested into a system and they even have choices. They can choose a Medicare Advantage, which is a private sector coverage, at least they could before Obamacare, and now, that is getting knocked out. And they can choose, as a senior, to buy medigap insurance so they can buy their way out of skin in the game.

The one thing that I heard is that everybody, except for possibly Taiwan, has some degree of co-pay. France does, Canada does not

but they do as it relates to drugs because they are on their own for drugs.

What I want to talk about is drugs because Ms. Cheng, Dr. Yeh, our friend from Taiwan, said in his testimony that patients in Taiwan can experience delays in coverage for new drugs and new technologies from 2 to 5 years from adoption of the United States in

Ms. Cheng, you touched on prescription drug prices in your testimony. Almost all countries enjoy the benefits of America's medical research and development, but developed countries do not pay their fair share for the immense expense involved in the development of innovative and lifesaving therapies. These countries are free-riders on the United States by enacting price controls on drugs and devices.

How would sharing more of the financial burden that comes with research and development of lifesaving drugs and devices affect comparison between the United States and the countries we are discussing today?

That is for you, Ms. Cheng. Ms. Cheng. Thank you for this question. First of all, yes, the United States does fund a whole lot of R&D in pharmaceutical and other device innovations. But in so doing, we are also helping to make the American healthcare system that much more expensive; in fact, so expensive that we are pricing people out of healthcare altogether—so in terms of R&D, in single-payer systems.

I think the governments of these systems can set aside specific

R&D funds to help with R&D for innovations.

Senator Burr. Ms. Cheng, in the U.S. system, when we shifted from exclusively doing bypass surgery for heart blockage

Ms. Cheng. Right.

Senator Burr. And we went to catheterization because innovation allowed us, or technology allowed us to do catheterization.

Do you consider that to be a cost savings to the United States

or the expense of a new innovation?

Ms. CHENG. If it is done on the right patients at the right time, yes, it is a cost saving innovation and application of that innova-

However, I think with the U.S. healthcare, there is a very serious issue, which has not been addressed, which is overuse of serv-

Senator Burr. Is that the risk of letting the American people choose healthcare and having a marketplace, versus having Government dictate what, where, when, and how much?

Ms. Cheng. It is not a matter of letting people decide in the mar-

ketplace where to go or what to choose what you have.

Senator Burr. We over prescribe grossly pharmaceuticals in the United States. Why? Because the American patient has the right to go in and ask their doctor, and because of our liability exposure, the doctor feels compelled to write the script in the United States. I would tell you that is a lot of the healthcare, a lot of the drug

Ms. Cheng. Right.

Senator Burr. Let me just move-Ms. Cheng. May I just say this?

Senator BURR. Yes, ma'am.

Ms. CHENG. In an Institute of Medicine book, in fact, I brought it, it says that this overuse of everything—services, devices, drugs—it causes waste in the American health system. According to this Institute of Medicine book, about one-third of U.S. healthcare is waste and \$750 billion a year, and of that, unnecessary services account for \$210 billion of the \$750 billion.

Senator Burr. I would not disagree with the conclusion of that. I have one last question, Mr. Chairman, and it is to Dr. Hogberg. In contrast to what I have just talked about with Ms. Cheng, price

controls overseas do not reward innovation.

If the United States were to follow the price control model, what would happen to patients' access to innovative treatments here in America as well as overseas?

Mr. Hogberg. In the long run, you would see less access to new,

innovative drugs. It would be that simple.

Senator Burr. So if, in fact, we eliminated innovation, in many cases that innovation, which takes somebody out of a hospital setting and puts them in an outpatient facility, they are treated. They no longer have the risk of infection because of inpatient. They no longer have the days in the hospital. That has not only been beneficial to the cost in healthcare, it is actually beneficial to the quality of the outcome.

Mr. HOGBERG. Well, sure. Frank Lichtenberg has looked at this extensively, and he has estimated that for about every dollar we put into pharmaceuticals, you save well over \$3 in hospital costs

by avoiding hospitalizations.

The price controls can have one of two impacts. If you have a price control that is lower than the market price, you will see a shortage. If it is above the market price, you will see a surplus. That is what you are going to end up with: a system of price controls.

Senator Burr. I thank you. I thank our witnesses.

I would ask the Chairman for unanimous consent to allow us to submit questions to all the witnesses for the purposes of the record.

Senator Sanders. Absolutely.

Let me thank all of you for being here. I want to apologize. I would like to stay for another round of questioning, but we have votes that are taking place right now.

So I think this has been a very thoughtful and vigorous discussion, and I appreciate all of you very much for being here. Thank you.

This hearing is adjourned.

[Whereupon, at 11:40 a.m., the hearing was adjourned.]

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