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**National Economic Education Delegation**

**Healthcare Economics Narrative**

Date: July 26, 2021

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Slides:

1. **Opening slide**
2. **DO NOT DELETE: National Economic Education Delegation**
   1. Brief discussion of what NEED is and NEED does
   2. Use your judgment about what should be said.
3. **Who we are?**
   1. 54 honorary board members, including 3 Nobel prize winners, 6 former chairs of the Council of Economic Advisers, and 2 former chairs of the Federal Reserve
   2. 600+ delegates, one in each state
   3. 45 global partners
4. **Where are we?**
5. **DO NOT DELETE: Credits and Disclaimer**
6. **Outline:**

What is healthcare economics? What is a free market economy? What are the foundations or logic behind neoclassical economics and what it has to say about healthcare?

Healthcare requires a lot of government intervention and want you to understand why that is the case. It’s not political or philosophical.

We’ll talk about where economists stand on this.

We’ll spend time comparing healthcare outcomes in other countries with those in the United States.

We’ll look at insurance and pharmaceutical markets and get an understanding of those specific markets and take some lessons for the broader issue of healthcare economics.

1. **What is Health(care) Economics?**

**Microeconomics** (from Greek prefix micro- meaning "small" + "economics") is a branch of economics that studies the behavior of how the individual modern household and firms make decisions to allocate limited resources.

**Macroeconomics** (from Greek prefix macro- meaning “large" + "economics") is the study of economy-wide phenomena, including inflation, unemployment, and economic growth.

These two branches of economics are closely intertwined, yet distinct—they address different questions.

Microeconomics studies individual markets or sectors or industries (hence health care industry is classified under microeconomics) while macroeconomics studies national economies and country/state-wide, general equilibrium questions.

Many times people think that since micro means small and macro large, that microeconomics is somehow inferior or studies smaller issues than what is studied in macroeconomics. But it should be noted, that many firms today have revenues that are substantially larger than most national incomes on nations. Obviously, this is comparing apples to oranges – but at least it gives a general idea of the size of some of these firms and markets.

<https://medium.com/@denislesak/companies-with-revenues-greater-than-gdp-of-countries-58c46af4a1a9>

<https://oxfamblogs.org/fp2p/of-the-worlds-top-100-economic-entities-29-are-states-71-are-corporates/>

See the next slide to compare US health care.

1. **Health Economics is part of Microeconomics**

Hopefully the comparison of the US health care industry to the entire economy of Germany, UK, and France will make participants also appreciate how difficult any type of a reform is – when the sector being reformed is of this size and complexity.

The list of top 10 largest economies based on the total size of GDP: 1) US, 2) China, 3) Japan, 4) Germany, 5) India, 6) UK, 7) France, 8) Italy, 9) Brazil, 10) Canada.

https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.02022

1. **Where the money goes?**

$3.8 Trillion is a lot of money. It’s worth taking just a moment to see where it goes. The largest single category of spending is hospital care, which receives fully one-third of all healthcare services. Second are physician and clinical services at 20%. The third largest category of spending is on prescription drugs.

It is worth pointing out that health insurance is not on this graph. These categories are categories for where individual private spending as well as insurance company reimbursements are directed.

1. **What is Health Economics?**

Here the big emphasis is on the distinction between other health care resource markets and health insurance – this difference is typically hard to grasp for most people.

1. **What is a market?**

This seems a pretty straightforward concept to most economists, but for most people, they have a difficult time understanding what a market is. More precisely, most people might not understand that when you go and see your physician that this is a type of a market. Or when you go to a hospital that is an example of a market. It is a bit more straightforward when it comes to buying prescription drugs, since the place looks a lot more like a store – well, in fact, it is a store. In addition, it might not be obvious that as a patient they are in the role of a consumer.

1. **Markets studied in health economics**

Many times people confuse Health Economics with Health Insurance. The topics discussed in health economics include health insurance, but also a number of other markets related to health care resources.

This is an important distinction – because it also relates to Health Care reform. Health care reform in the US is mostly dealing with the reform of Health Insurance, rather than other health care markets.

The debate about many of these issues has to do with the market structure – and the issue of when does a market work well – without a lot of government intervention (free markets) and when is it necessary for a government to play a much larger role.

We will have a discussion about markets and how those in healthcare are relatively unique and deserving of attention.

Before that we’ll take the pulse of healthcare in the United States.

1. **Pulse of the Health Economy**

We will take the pulse of the health economy by reviewing key statistics in evaluating the system. Many of which will be compared with comparable developed countries; many that we consider to be peers of the United States.

1. **Pulse of the Health Economy**

For the health economy, performance indicators are the components that make up the so-called three-legged stool of medical care: costs, access, and quality. Although health economists are more concerned about efficiency and equity, many often use some variation of the three-legged medical stool to gauge the performance of a health economy. The discussion not only introduces the various legs of the medical stool, but also motivates and acts as a roadmap for the remaining material in this lecture.

1. **Access**

The first leg of the stool that we’ll discuss is access. There are several layers of access to healthcare that are worthy of our attention. These include access to insurance as well as access to care.

1. **Health Insurance Coverage, 2019**

Health insurance is the gateway to the receipt of medical care. Although obtaining healthcare without health insurance is still possible, it is much more difficult and more expensive. Much of this care happens in the emergency rooms of hospitals in the United States.

*<the next three slides are here if useful for longer presentations or presentations that discuss the subject matter in each slide specifically, overall, income-related, or race-related coverage rates, broken out but public vs private coverage. Both of which are quite interesting in each case.>*

1. **Health Insurance Coverage by Age, 2019**

Interesting things to note:

1. We do a good job of insuring adults 65 and over – through the government, almost exclusively.
2. Kids are well covered, but primarily through the private sector, presumably employer provided insurance.
3. About 2/3rds of adults are covered by private coverage. Just 20% receive public healthcare assistance.
4. **Health Insurance Coverage by Income, 2019**

Near poor is defined as 100-200% of the federal poverty line.

Interesting things to note:

1. Very few of the poor, just one-quarter, have private insurance. Most, who are insured have public coverage.
2. It is about even for those who are near poor.
3. 4/5s of the not poor have private coverage, and just 10% public.
4. **Health Insurance Coverage by Race, 2019**

Interesting things to note:

1. Hispanics have the lowest coverage rate.
2. Asians the highest coverage rate.
3. Black Americans are uninsured about 50% more often than White Americans.
4. **Physician Visits, 2017, and Physician Supply, 2018**

Americans Visit the Doctor Less Frequently and Have Fewer Physicians: Despite having the highest level of health care spending, Americans had fewer physician visits than their peers in most countries. At four visits per capita per year, Americans visit the doctor at half the rate as do Germans and the Dutch. The U.S. rate was comparable to that in New Zealand, Switzerland, and Norway, but higher than in Sweden.

Less-frequent physician visits may be related to the low supply of physicians in the U.S. compared with the other countries. The U.S. has slightly more than half as many physicians as Norway, which has the highest supply. A contributor to this smaller number are barriers to entry – fewer slots in medical schools and higher accreditation standards to practice medicine.

Notes: Physician visit data reflect 2017 or nearest year: 2016 for FRA, 2011 for US. No recent data for UK (since 2009). Physician supply data for 2018 or nearest year: 2017 for AUS, GER, NETH, SWIZ, US; 2016 for SWE. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

1. **Number of Avoidable Deaths**

Premature deaths from conditions that are considered preventable with timely access to effective and quality health care, 10 including diabetes, hypertensive diseases, and certain cancers, are termed “mortality amenable to health care.” This indicator is used by several countries to measure health system performance. The U.S. has the highest rates of amenable mortality among the 11 countries with 112 deaths for every 100,000. It is notable that the amenable mortality rate has dropped considerably since 2000 for every country in our analysis, though less proportionately in the U.S. The U.S. rate was two times higher than in Switzerland, France, Norway, and Australia.

This poor performance suggests the U.S. has worse access to primary care, prevention, and chronic disease management compared to peer nations.

Notes: Data for 2000 (except UK, 2001) and latest available (2016 for NETH, NOR, SWE, US; 2015 for AUS, CAN, FRA, GER, SWIZ, UK; 2014 for NZ). Mortality data from World Health Organization (WHO) detailed mortality files (released Dec. 2018). Population data from WHO detailed mortality files, except CAN (UN population database) and US (Human Mortality Database). Amenable causes as per list by Nolte and McKee (2004). Calculations by the European Observatory on Health Systems and Policies (2019). Age-specific rates standardized to European Standard Population, 2013.

Data: Marina Karanikolos, European Observatory on Health Systems and Policies, 2019.

1. **Waited Less Than A Month to See A Specialist**

Not all metrics are bad for the United States. In particular, wait time to see a specialist is relatively low. Only in Switzerland do people see a specialist more quickly. This observation speaks to the oft mentioned criticism of health systems in Canada, for instance, where health care is asserted to be rationed and wait times are much longer than in the United States. We will discuss rationing later in this talk.

However, this metric isn’t necessarily praise of the way the U.S. system works. It could be that a greater proportion of doctors in the United States are specialists – because being one pays better than does internal medicine.[[1]](#footnote-1) In which case, specialists are both more accessible and raise the overall costs in the system.

In the U.S., some 88.1% of all physicians are specialists. Though many OECD countries are not far behind (and are catching up), this is the highest rate in the OECD.[[2]](#footnote-2) So it makes sense that it is easier to get in to see a specialist in the US than elsewhere, but this is also a contributor to higher costs as well.

Second, we know nothing about the care that is received. It is possible that in other countries, once you get in to see a specialist, more time is spent on the patient, leading to better care.

As with all of the statistics presented here, they should be taken with a grain of salt. The entire economic system is linked, making the story behind each statistics significantly more complicated that it appears to be.

1. **Hospital Acute Care Average Length of Stay**

Average length of stay for acute care (days)

Notes: Data reflect average length of stay for curative (acute) care for physical and mental/psychiatric illnesses, or treatment of injury; diagnostic, therapeutic, and surgical procedures; and obstetric services. Excludes rehabilitative care, long-term care, and palliative care. Data for 2017 or nearest year: 2016 for AUS, FRA, NZ, US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

U.S. Average Hospital Stay Is Similar to That in Sweden, Switzerland, and France.

The average length of a hospital stay in the U.S. in 2017 was 5.5 days, far lower than the OECD average and comparable to that in Sweden, Switzerland, and France. Canadians and Germans had the longest lengths of stay, while Australians had the shortest.

Whether or not a shorter stay is a positive or negative reflection of a system depends on the quality of care that goes along with the length of stay. If length is shorter because the overall need is less and quality is equivalent, that is a good thing, resulting in a system that has lower costs. However, if the duration of stay is determined by cost, rather than quality of care (insurance companies paying for fewer days in the hospital for a given procedure, for example), that may not be a positive reflection of the care offered by the system.

1. **Acute Care Hospital Beds per 1,000 Population**

In the United States, the supply of acute care hospital beds is low relative to most OECD countries. At just 2.5 per 1,000 in population, it is less than one-third of the supply in Japan, one-half that in Germany, and below 8 others.

In times of high demand, such as during a pandemic, this can lead to costly lack of access to care for some. It might also help explain why the average hospital stay for acute care is lower than in many other countries.

1. **Percent of Women Ages 18-64 Who Reported Having A Regular Doctor/Regular Place of Care**

Again, reflecting on access, a smaller proportion of women have a regular doctor or place of care in the United States than elsewhere in the OECD. It is just 88% in the United States, while the percent is above 94 in most of the OECD countries. This suggests that when some ill befalls a women in the United States, she is less likely to receive timely care. You can’t just call up a random doctor and expect to be seen. This is particularly problematic with urgent issues as the lack of a regular doctor then causes people to use very expensive emergency services.

1. **Percent of Women Ages 18-64 Who Reported Going to the Emergency Department in the Past Two Years**

Accordingly, the number of women who access the emergency room is higher in the United States than in most of the other OECD countries. Only Canada has a higher rate of emergency room use than does the United States.

1. **Access Notes**

<important takeaways from the data on access>

1. **Quality**

Quality is an important second leg of the stool. It is one thing to have access to the system, but quite another to receive quality care. The following slides provide some evidence on overall quality of the U.S. healthcare system.

By quality, we mean the level of effectiveness and efficiency through which services are provided, and whether they actually lead to the outcomes of people getting cured or staying healthy, that we want. Quality obviously represents a complex and multidimensional concept.

1. **A Bit About Quality**

Before we go into some hard metrics of quality, such as life expectancy, let’s first make some simple comparisons.

Chronic disease is much more common in the United States than elsewhere. The rate of obesity is twice what it is in other OECD (developed) countries.

At the same time, Americans go to see their doctor less than in other countries. As we will discuss, there are relatively fewer doctors in the United States, which might well contribute to fewer doctors visits.

We have among the highest number of hospitalizations from preventable causes and the highest rate of avoidable deaths.

Things are not all gloomy in the U.S.

We get MRIs and specialized procedures at higher rates than in our peer countries.

We also do a lot more screening for things like breast cancer and have among the highest rates of flu vaccinations among the elderly, second only to the UK.

Life expectancy is a pretty good measure of the sum total of our strengths and weaknesses.

1. **Life Expectancy: How Does the US Compare?**

* Despite the highest spending, Americans experience worse health outcomes than their international peers.
* Life expectancy at birth in the U.S. was 78.6 years in 2017 — more than two years lower than the OECD average and five years lower than Switzerland, which has the longest lifespan.

1. **Life Expectancy & Per Capita GDP**

There is generally a positive relationship between life expectancy and per capita GDP. The more money we have at our disposal, the more we can spend on things that extend life, including leisure and other activities that reduce stress.

However, the US is well off the curve in this relationship between income and life expectancy. We have relatively high per capita GDP and relatively low life expectancy.

Any country above the line is over performing. Countries below the line are under performing. The US is way under the line.

The United States, with GDP per capita of $56,207 in this graph, has the life expectancy associated with a country with GDP per capita of about $30,000, a little over half of our actual GPDPC.

1. **Life Expectancy by Race/Ethnicity**

* In the U.S., life expectancy masks racial and ethnic disparities. Average life expectancy among non-Hispanic black Americans (75.3 years) is 3.5 years lower than for non-Hispanic whites (78.8 years).
* Life expectancy for Hispanic Americans (81.8 years) is higher than for whites, and similar to that in Netherlands, New Zealand and Canada.

1. **Infant Mortality – International Comparison**

The infant mortality rate is defined as the number of deaths of children under one year of age, expressed per 1 000 live births. Some of the international variation in infant mortality rates is due to variations among countries in registering practices for premature infants. The United States and Canada are two countries which register a much higher proportion of babies weighing less than 500g, with low odds of survival, resulting in higher reported infant mortality. In Europe, several countries apply a minimum gestational age of 22 weeks (or a birth weight threshold of 500g) for babies to be registered as live births. This indicator is measured in terms of deaths per 1 000 live births.

<https://data.oecd.org/healthstat/infant-mortality-rates.htm>

Total, Deaths/1 000 live births, 2019 or latest available

1. **Infant Mortality by Race/Ethnicity, 2018**

Overall infant mortality in the U.S. is high, but it is particularly high when broken out by race. Asian Americans have the lowest mortality rate of 3.6, while White Americans have a mortality rate of about the same as Canada, 4.6. However, mortality rates for Non-Hispanic Black Americans is particularly high at 10.8, more than double the rate for Non-Hispanic White Americans.

This difference is a reflection both of differences in access to care and differences in the quality of care when it is received.

Source: https://www.cdc.gov/nchs/data/nvsr/nvsr69/NVSR-69-7-508.pdf

1. **Maternal Mortality – International Comparison**

Maternal mortality ratio (maternal deaths/100,000 live births) among women ages 15–49

Maternal mortality ratio: Death while pregnant or within 42 days of the end of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Used by the World Health Organization in international comparisons, this measure is reported as a ratio per 100,000 live births.

Data: Data reflect UNICEF estimates because of missing internationally comparable data for the U.S. National statistics are available for most countries from the OECD.

Women in the U.S. had the highest rate of maternal mortality because of complications from pregnancy or childbirth; women in Sweden and Norway had among the lowest rates. High rates of caesarean sections, lack of prenatal care, and increased rates of obesity, diabetes, and heart disease may be contributing factors to the high rate in the U.S.

In 2017, at a time when maternal mortality was declining worldwide, the World Health Organization (WHO) reported that the U.S. was one of only two countries (along with the Dominican Republic) to report a significant increase in its maternal mortality ratio (the proportion of pregnancies that result in death of the mother) since 2000. While U.S. maternal deaths have leveled in recent years, the ratio is still higher than in comparable countries, and significant racial disparities remain.

Roosa Tikkanen et al., [*Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries*](https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/maternal-mortality-maternity-care-us-compared-10-countries) (Commonwealth Fund, Nov. 2020). <https://doi.org/10.26099/411v-9255>

1. **Maternal Mortality by Race**

Black, American Indian, and Alaska Native (AI/AN) women are two to three times more likely to die from pregnancy-related causes than white women – and this disparity increases with age, researchers from the Centers for Disease Control and Prevention (CDC) report today in the [*Morbidity and Mortality Weekly Report* (*MMWR)*.](https://www.cdc.gov/mmwr/volumes/68/wr/mm6835a3.htm?s_cid=mm6835a3_w)

Most pregnancy-related deaths are preventable. Racial and ethnic disparities in pregnancy-related deaths have persisted over time.

Pregnancy-related deaths per 100,000 live births (the pregnancy-related mortality ratio or PRMR) for black and AI/AN women older than 30 was four to five times as high as it was for white women. Even in states with the lowest PRMRs and among women with higher levels of education, significant differences persist. These findings suggest that the disparity observed in pregnancy-related death for black and AI/AN women is a complex national problem.

Black–white disparities in maternal mortality have existed since the beginning of the collection of such data. In 1915, the maternal mortality ratio for Black mothers (1,065 per 100,000 births) was 1.8 times that of white mothers (601).

As white maternal mortality ratios declined more rapidly than those for Black mothers after World War II, the disparity increased until the maternal mortality ratio for Black mothers was four times that of white mothers. Since the early 1970s, Black mothers have been three to four times more likely to die than white mothers. In the recently reported 2018 maternal mortality data, the Black–white disparity was 2.5 (37.1 for Black mothers vs 14.7 for whites) — the same as the disparity seen in the 1940s.

While educational advancement is typically seen as protective in terms of health, that’s not the case for Black mothers. Education exacerbates rather than mitigates Black–white differences in maternal deaths. Five times as many Black mothers with a college education die as white mothers with a college education. Mortality ratios for white mothers decrease with higher education, but the difference in mortality risk for a Black mother with less than a high school education and one with a college degree is minimal. This leads to the startling finding that maternal deaths are more common among Black mothers with a college education than they are among white mothers with less than a high school education (40.2 vs. 25.0). Mortality ratios for Hispanic mothers decrease slightly with education but are generally lower at each level.

<https://www.cdc.gov/nchs/data/hestat/maternal-mortality-2021/maternal-mortality-2021.htm>

1. **Medical, medication, or lab errors**

<https://www.commonwealthfund.org/chart/medical-medication-or-lab-test-errors-past-two-years>

# With respect to medical records or tests, one fourth of US and Canadian patients and 22 percent of Norwegian patients reported that their medical records or test results were not available during a scheduled visit or that tests were duplicated—nearly double the rates reported in the United Kingdom and Switzerland. (New 2011 Survey Of Patients With Complex Care Needs In Eleven Countries Finds That Care Is Often Poorly Coordinated Schoen, Cathy; Osborn, Robin; Squires, David; Doty, Michelle; Pierson, Roz; et al.)

1. **Prevention and Screening**

Simple summary of the results to come.

1. **Flu Immunization**

Percent of adults age 65 and older immunized (%)

The U.S. outperforms peer nations in terms of preventive measures. In the U.S., more than two thirds of adults 65 and older had a flu vaccine in 2016, considerably more than in the average OECD country. Only the U.K. had a higher rate than the U.S. At the lower end of the spectrum, one-third of older adults in Germany and Norway received the vaccine.

Notes: Flu immunization data reflect 2017 or nearest year: 2016 for US. No recent data available for AUS, SWIZ (since 2009/2010). Breast cancer screening data reflect 2018 or nearest year: 2017 for FRA, NOR; 2016 for AUS, GER; 2015 for CAN, NETH, US; 2014 for SWE. Programmatic data for all countries except survey data for SWE, SWIZ, US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

1. **Breast Cancer Screening**

Percent of females ages 50–69 screened (%)

The U.S. also had one of the highest rates of women ages 50 to 69 being screened for breast cancer. The U.S. rate is considerably higher than the OECD average. In contrast, in Switzerland, France, and Germany, only half of women this age had been screened.

Breast cancer screening data reflect 2018 or nearest year: 2017 for FRA, NOR; 2016 for AUS, GER; 2015 for CAN, NETH, US; 2014 for SWE. Programmatic data for all countries except survey data for SWE, SWIZ, US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

1. **Suicides, 2016**

Deaths per 100,000 population (standardized rates)

Reflecting shorter life expectancy, the U.S. has the highest suicide rate of these countries, with France a close second. Meanwhile, the U.K. has the lowest rate — half that of the U.S. Elevated suicide rates may indicate a high burden of mental illness; socioeconomic variables are also a factor.

The U.S. has seen an uptick in “deaths of despair” in recent years, which include suicides and deaths related to substance use, including overdoses. This has been most acutely experienced by white, middle class men.

Notes: Rates reflect age- and sex-standardized rates for 2016 or latest available year: 2015 for CAN, FRA; 2014 for NZ. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

1. **Obesity Rates, 2017**

Percent (%)

Obesity is a key risk factor for chronic conditions such as diabetes, hypertension and other cardiovascular diseases, and cancer. The U.S. has the highest obesity rate among the countries studied — two times higher than the OECD average and approximately four times higher than in Switzerland and Norway. Overall, obesity rates were highest in English-speaking countries, all with rates of one-quarter or more of the total population. Issues that contribute to obesity include unhealthy living environments, less-regulated food and agriculture industries, and socioeconomic and behavioral factors.

1. **Adults with Multiple Chronicle Conditions**

Percent (%)

Worse health outcomes and shorter life expectancy appear related to risk factors and disease burden. More than one-quarter of U.S. adults report they have ever been diagnosed with two or more chronic conditions such as asthma, diabetes, heart disease, or hypertension during their lifetime compared to 22 percent or less in all other countries. This rate is twice as high as in the Netherlands and the U.K.

1. **The World Health Report 2000**

The world health report 2000 - Health systems: improving performance: Analysis of the world's health systems. Using five performance indicators to measure health systems in 191 member states.

The report defines goal attainment in health care in terms of five aspects (details in next section):

1. Average health: Life expectancy calculated such that years lived with illness count less than 1, and less the more burdensome the illness is ( = Disability Adjusted Life Expectancy = DALE).
2. Equity in health: Equality in probability of surviving the first 5 years of life in children born by mothers with different characteristics (age, education, number of children,etc).
3. Responsiveness of the health care system: Index covering respect for patient’s dignity, confidentiality, patients’ autonomy, prompt attention, quality of amenities, access to social support networks, freedom to choose provider.
4. Equity in responsiveness: The more subgroups that are treated with less responsiveness than the majority, and the greater these subgroups are, the lower is the country’s score on equity in responsiveness.
5. Fairness in financing: Defined as proportionality between a household’s total expenditure on health care (taxwise and out of pocket) and its permanent income above subsistence level (defined as total private expenditure plus direct tax payments minus expenditure on food).

Few comments about this report. First, it is now fairly dated – over 20 years old. Second, the issues with indices and measuring performance of overall health systems is very difficult. The report has been heavily criticized for the methodologies used.

1. **Perception of the quality of medical care**

*Percent of women ages 18–64 who rated their quality of medical care as excellent or very good*

One-Quarter of Women in the U.S. Rate Their Quality of Care as Excellent or Very Good:

U.S. women were the least likely to rate their quality of care as excellent or very good compared to women in all other countries studied. More than 60 percent of women in the U.K. and Switzerland rated the quality of their health care as high, compared with one-quarter in the U.S. Further analyses showed that women with multiple chronic conditions or emotional distress, and those who faced high out-of-pocket costs, medical bill or cost-related access problems, long specialty wait times, or had emergency department visits were significantly less likely to rate their quality of care as good

Notes: Other answer categories were “good,” “fair,” and “poor.” Excludes women who did not receive care in the past year, and women who did not have a regular doctor or place of care.   
\* Statistically significant difference compared to the United States (p<.05).

Data: The Commonwealth Fund International Health Policy Survey, 2016**.**

1. **Quality of Care Notes**

Reminder of important points in the section.

1. **Costs**

Finally, we come to the important category of costs. Costs are referring to financing. Basically, what we're talking about is the sources and the uses of money to pay for medical care services.

There's other money that goes to paying for the cost of administering health insurance, and other bureaucracy, and other kinds of needs. But understand that overwhelmingly, the money that goes into the health care system pays for medical care services, the salaries and wedges of the people who work in medical care, the costs of administering systems, and all the rest. So, that's what we mean when we say cost.

So now, let's get into the question of, how well does the US health care system perform when it comes to costs, quality, access? Here we will add a fourth dimension called health outcomes. In other words, how are we doing?

1. **National Health Expenditure as Percent of GDP**

On this chart you can see health spending as a share of GDP. GDP means Gross Domestic Product. That is, the total sum of the economy – the market value of everything produced in the US. National health expenditure (NHE) and NHE per capita (next slide) are the best available single measures of the size of the health sector. NHE reflect the total amount of spending on health care, including goods and services having to do with personal health care, public health activities, public and private health insurance, related investments in research, and capital investment. Both GDP and NHE measure output only within the borders of the US. NHE generally includes only output that is bought and sold in markets (including hospital and doctor care, even if these are provided “free” to the patient). In understates total output by excluding informal care provided by family or friends despite its importance for long-term care patients.

According to CMS figures, the United States spent 17.7% of GDP ($3.3 trillion) on health care or slightly over $11,000 per person in 2018. Compare that to the similar figures of 5% of GDP ($163.8 billion or $0.16 trillion) and $1239 dollars in 1960. This graph shows that health care spending as a percentage of GDP has grown tremendously over time in the United States. This means instead of spending $1 out of every $20, we now spend $1 out of every $6 on health care.

This graph also shows that health care spending has not increased at the same continuous rate throughout the years. For example, health care spending grew more quickly relative to GDP prior to the 1990s. In contrast, notice that after the 1990s, the ratio of health care spending to GDP remained relatively stable during the 1993 to 1999 period. You may recall when Bill Clinton was president, we had a period of about six years when health spending in the United States was not growing as a share.

The ratio of health care costs to GDP has also increase more quickly in 2001, remained stable for few years, saw another big jump, a spike in 2006 and 2007 and reached the current high of 17.9% in 2016 and 2017.

Policy makers continue to debate the cause and desirability of rising health care costs in the United States and in other countries. Some argue that the U.S. health care system contains a lot of production inefficiency that can and should be squeezed out. Others point out that the benefits from health care more than compensate for the costs. There is little question that the increase in health output per capita has contributed to better health and longevity. However, which of these health gains has been worth its cost is a matter of considerable debate. In fact, much of this debate is covered in various parts of this lecture.

Interesting fact, spending on health care in the US has increased more than 60-fold since 1929. In contrast, the US economy only 12-fold over the same period.

Note: All prices are adjusted for inflation

Source: [**https://www.cms.gov/**](https://www.cms.gov/)

1. **Health Care Spending as percentage of GDP, 1980 - 2018**

In this graph you can see the trend that all nations are growing in their healthcare spending. But they're growing by a much smaller rate than we are here in the United States.

In 2018, the U.S. spent 16.9 percent of gross domestic product (GDP) on health care, nearly twice as much as the average OECD country. The second highest ranking country, Switzerland, spent 12.2 percent. At the other end of the spectrum, New Zealand and Australia devote only 9.3 percent, approximately half as much as the U.S. does. The share of the economy spent on health care has been steadily increasing since the 1980s for all countries because health spending growth has outpaced economic growth, in part because of advances in medical technologies, rising prices in the health sector, and increased demand for services.

What we can see is that if you go back to 1980, so just about 34 years ago, we were an expensive country in terms of how much we spend on health care. And we were also pretty much in the pack of the developed, advanced nations around the globe.

Over the past four decades, the difference between health spending as a share of the economy in the U.S. and comparable OECD countries has widened. In 1970 the U.S. spent about 6% of its GDP on health, similar to spending by several comparable countries (the average of comparably wealthy countries was 5% of GDP in 1970). The U.S. was relatively on pace with other countries until the 1980s, when its health spending grew at a significantly faster rate relative to its GDP. In other words, it was in the 1980s that we first kind of broke loose from the pack and went off. In 2017, the U.S. spent 17% of its GDP on health consumption, whereas the next highest comparable country (Switzerland) devoted 12% of its GDP.

This may be considered the problem, this gap between us and all of the other advanced nations, and the questions it raises: “So we're spending all of this larger share of our nation's wealth on medical care services. What do we get for it?”

### While the U.S. has long had higher than average spending, growth rates have become more in line with other countries. The 1980s saw accelerated growth in health expenditures per capita in the U.S. The 10.1% average annual growth rate in the U.S. during the 1980s was the highest among comparable countries. The comparably wealthy countries saw an average of 7.0% annual growth during this period. Since the 1990s, health spending has grown similarly in the U.S. and comparable countries. In fact, In recent years, health spending growth has slowed in the U.S. and in comparable countries.

Health spending growth in both the U.S and comparable countries has slowed in recent years. In the 2005-2010 period, the U.S. saw a 4.3% average annual growth rate compared to 7.2% the previous five year period. Comparable countries also saw a drop to a 4.4% average annual growth rate during the 2010-2016 period, down from 5.3% on average in the 2005-2010 period. Source: How does health spending in the U.S. compare to other countries? B. Sawyer and C. Cox, December 2018, <https://www.healthsystemtracker.org/chart-collection/health-spending-u-s-compare-countries/#item-relative-size-wealth-u-s-spends-disproportionate-amount-health>)

Note: Percent (%) of GDP, adjusted for differences in cost of living

Source: Multinational Comparisons of Health Systems Data, 2019, published in January 2020

<https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019>

1. **National Healthcare Expenditure per Capita**

In this graph we are looking at the number of dollars spent per person in the US. As in the previous graph this graph also shows that health care spending in per capita terms has grown tremendously over time in the United States.

Over eight decades, constant dollar health spending per person increased five times as much as real output per capita.

Some people say, well, how much money should we spend? And there's no right or wrong answer to that. The question, to some extent, though, is, what value do we get for the money

that we spend? If we're spending so much money relative to other countries, one might expect,

we would be doing significantly better. So we'll get into that and explore that.

Note: All prices are adjusted for inflation.

Source: [**https://www.cms.gov/**](https://www.cms.gov/)

1. **GDP per capita and health consumption spending per capita, 2017**

### As would be expected, wealthy countries like the U.S., tend to spend more per person on health care and related expenses than lower income countries. However, even as a high income country, the U.S. spends more per person on health than comparable countries. Health spending per person in the U.S. was $10,224 in 2017, which was 28% higher than Switzerland, the next highest per capita spender.Relative to the size of its wealth, the U.S. spends a disproportionate amount on health care

On the graph, the country most to the right is Luxemburg (highest GDP per capita), followed by and moving from right to left Ireland, Switzerland, Norway and the US.

# Note: GDP per capita and health consumption spending per capita, 2017 (U.S. dollars, PPP adjusted)

Source: How does health spending in the U.S. compare to other countries? B. Sawyer and C. Cox, December 2018, <https://www.healthsystemtracker.org/chart-collection/health-spending-u-s-compare-countries/#item-relative-size-wealth-u-s-spends-disproportionate-amount-health>

1. **International Per Capita Healthcare Spending**

Comparing out expenditure to other developed countries here is the United States, far and away the most expensive nation on the planet in terms of the money we spend. The U.S. spends more on health care as a share of the economy — nearly twice as much as the average OECD country.

What's OECD? OECD stands for the Organization of Economic Cooperation and Development.

It is an alliance of the leading advanced nations across the world so these are some of our peer nations.

Per capita health spending in the U.S. exceeded $10,000, more than two times higher than in Australia, France, Canada, New Zealand, and the U.K. Public spending, including governmental spending, social health insurance, and compulsory private insurance, is comparable in the U.S. and many of the other nations and constitutes the largest source of health care spending.

Public spending, including governmental spending, social health insurance, and compulsory private insurance, is comparable in the U.S. and many of the other nations and constitutes the largest source of health care spending.

In the U.S., per-capita spending from private sources, for instance, voluntary spending on private health insurance premiums, including employer sponsored health insurance coverage, is higher than in any of the countries compared here. At $4,092 per capita, U.S. private spending is more than five times higher than Canada, the second highest spender. In Sweden and Norway, private spending made up less than $100 per capita. As a share of total spending, private spending is much larger in the U.S. (40%) than in any other country (0.3%–15%).

The average U.S. resident paid $1,122 out-of-pocket for health care, which includes expenses like copayments for doctor’s visits and prescription drugs or health insurance deductibles. Only the Swiss pay more; residents of France and New Zealand pay less than half of what Americans spend.

While the U.S. has much higher total spending as a share of its economy, its public expenditures alone are in line with other countries. In 2016, the US spent about 8.5% of its GDP on health out of public funds –essentially equivalent to the average of the other comparable countries. However, private spending (that includes out-of-pockets spending) in the U.S. is much higher than any comparable country; 8.8% of GDP in the U.S., compared to 2.7% on average for other nations.

Chart, bar chart

Description automatically generated

Over the last three decades, the U.S. has seen increased spending by both the public and private sectors. Comparable countries increased private sector spending from 1.4% to 2.7% of GDP from 1970 to 2016, while the U.S. increased private sector spending from 3.9% to 8.8% during the same period. In 2016, the U.S. spent 8.5% of GDP on health through public funds, a rate similar to comparable countries.

# Sicker adults can be particularly vulnerable to high out-of-pocket spending for services. The survey results showed wide differences among countries regarding exposure to such spending. Australian, US, and Swiss patients were significantly more likely to have spent more than US$1,000 out of pocket in the past year than patients in the other countries. Patients in the United Kingdom were the most protected. High out-of-pocket expenses, though, did not always translate into greater difficulty paying medical bills. Here US sicker adults stood out: 27 percent encountered serious problems paying or were unable to pay medical bills in the past year, compared with only 8 percent of Australian and Swiss patients who reported problems paying bills. In those two countries, a mix of out-of-pocket spending caps and protections for lower-income patients appeared to help shield more-vulnerable households from economic distress because of sickness- and disability-related costs.

# In addition to financial burdens, US sicker adults were the most likely to forgo needed care because of cost in the past year: 42 percent reported not visiting a doctor, not filling a prescription, skipping doses of medication, or not getting recommended care. In the United States, rates of forgone care because of cost were at least double the rates in every other country but Australia, New Zealand, and Germany.

# (New 2011 Survey Of Patients With Complex Care Needs In Eleven Countries Finds That Care Is Often Poorly Coordinated Schoen, Cathy; Osborn, Robin; Squires, David; Doty, Michelle; Pierson, Roz; et al.)

Note: Dollars (US$), adjusted for differences in cost of living

Source: Roosa Tikkanen and Melinda K. Abrams, *U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes* (Commonwealth Fund, Jan. 2020).

<https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019>

The data collected by the Organization for Economic Cooperation and Development (OECD) to compare health care systems and performance on a range of topics, including spending, hospitals, physicians, pharmaceuticals, prevention, mortality, quality and safety, and prices. They present data across eleven industrialized countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States. Whenever possible, they also present the median value of all 36 members of the OECD.

Public spending on health care amounted to $4,197 per capita in the U.S. in 2013, more than in any other country except Norway ($4,981) and the Netherlands ($4,495), despite the fact that the U.S. was the only country studied that did not have a universal health care system.

An important fact to notice, in all those other OECD countries pretty much everyone is insured. In other words, in the US we pay twice as much as elsewhere, but there are still millions that are not insured.

Some good resources:

* <https://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-global-perspective>
* <https://www.healthsystemtracker.org/chart-collection/quality-u-s-healthcare-system-compare-countries/#item-overall-age-specific-potential-years-of-life-lost-per-100000-population-1990-2017>
* <https://axenehp.com/international-healthcare-systems-us-versus-world/>

1. **Out-of-Pocket Costs**

*Percent of women ages 18–64 with out-of-pocket costs of $2,000 or more*

Notes: Percent of respondents who reported that their annual (past year) family out-of-pocket spending for medical treatments or services, that were not covered by public or private insurance, was $2,000 or more. Does not include adults who reported “don’t know”/refused to respond. \* Statistically significant difference compared to the United States (p<.05).

Women in Switzerland and the U.S. Report Very High Out-of-Pocket Costs:

High health care costs create significant financial burdens on U.S. household budgets, even among insured families. Over one-quarter of women in Switzerland and the U.S. reported spending $2,000 or more in out-of-pocket medical costs for themselves or their family in the past year. In comparison, no more than one of 20 women reported such high costs in most other countries included in the study.

Data: The Commonwealth Fund International Health Policy Survey, 2016.

Source: Munira Z. Gunja et al., [*What Is the Status of Women’s Health and Health Care in the U.S. Compared to Ten Other Countries?*](https://www.commonwealthfund.org/publications/issue-briefs/2018/dec/womens-health-us-compared-ten-other-countries) (Commonwealth Fund, Dec. 2018).

Using data from the Commonwealth Fund International Health Policy Survey (2016) and measures from the Organisation for Economic Co-operation and Development (OECD) and the United Nations Children’s Fund (UNICEF), this brief compares U.S. women’s health status, affordability of health plans, and ability to access and utilize care with women in 10 other industrialized countries.

Note: It should be noted, that some of the graphs included in this section are not simply about cost, but also about access!

1. **Medical Bill Problems**

Percent of women ages 18–64 with at least one medical bill problem.

Notes: Medical bill problems include any of the following in the past year: 1) serious problems paying or were unable to pay medical bills; 2) spent a lot of time on paperwork or disputes related to medical bills; or 3) insurance denied payment or paid less than expected. \* Statistically significant difference compared to the United States (p<.05).

Nearly Half of U.S. Women Report Medical Bill Problems: U.S. women most often reported problems paying or disputing medical bills or spending time on related paperwork. Nearly half (44%) of women in the U.S. faced such problems compared with only 2 percent in the U.K. U.S. women had the highest rates of having payment denied by their insurers or receiving a smaller insurance payment than they expected, compared to women in other countries.

Table

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Data: The Commonwealth Fund International Health Policy Survey, 2016.

Source: Munira Z. Gunja et al., [*What Is the Status of Women’s Health and Health Care in the U.S. Compared to Ten Other Countries?*](https://www.commonwealthfund.org/publications/issue-briefs/2018/dec/womens-health-us-compared-ten-other-countries) (Commonwealth Fund, Dec. 2018).

1. **Skipped Care Because of Cost**

Percent of women ages 18–64 with at least one cost-related access problem

Notes: Cost-related access problems include any of the following in the past year: 1) having a medical problem but did not visit a doctor; 2) skipped a medical test, treatment, or follow-up recommended by a doctor; or 3) did not fill or collect a prescription for medicine, or skipped doses of medicine, because of the cost in the past 12 months. \* Statistically significant difference compared to the United States (p<.05).

More Than One-Third of Women in the U.S. Skip Care Because of Cost   
vs. 5 Percent in the U.K.: Many women in the U.S. skip needed medical care because of costs, likely because of high out-of-pocket costs and the fact that 11 million women still have no insurance coverage. Thirty-eight percent of women in the U.S. reported they went without recommended care, did not see a doctor when sick, or failed to fill prescriptions because of costs in the past year. This is the highest rate among the 11 countries in our analysis. Before the implementation of the ACA in the U.S., the rate was even higher, [43 percent](https://www.commonwealthfund.org/publications/issue-briefs/2012/jul/realizing-health-reforms-potential-oceans-apart-higher-health). In the U.K. and Germany, only 5 percent and 7 percent of women, respectively, reported forgoing care because of cost.

Table

Description automatically generated

Data: The Commonwealth Fund International Health Policy Survey, 2016.

Source: Munira Z. Gunja et al., [*What Is the Status of Women’s Health and Health Care in the U.S. Compared to Ten Other Countries?*](https://www.commonwealthfund.org/publications/issue-briefs/2018/dec/womens-health-us-compared-ten-other-countries) (Commonwealth Fund, Dec. 2018).

1. **Health vs Social Care Spending**

Based on the research by Elizabeth Bradley and Lauren Taylor: The American Health Paradox: Why spending more is getting us less.

*Also see: QJM: An International Journal of Medicine*, Volume 110, Issue 2, February 2017, Pages 61–65, <https://academic.oup.com/qjmed/article/110/2/61/2681813>

A 2013 study by Bradley and Taylor found that the U.S. spent the least on social services—such as retirement and disability benefits, employment programs, and supportive housing—among the countries studied in this report, at just 9 percent of GDP. Canada, Australia and New Zealand had similarly low rates of spending, while France, Sweden, Switzerland, and Germany devoted roughly twice as large a share of their economy to social services as did the U.S.

The U.S. was also the only country studied where health care spending accounted for a greater share of GDP than social services spending.

The ratio of our social service spending to health care spending is the lowest of all countries in the OECD. From 2000 to 2011, for every dollar the US spent on health care, the country spent another $1.00 on social services, whereas across the OECD, for every dollar spent on health care, countries spend an additional $2.50 on social services

Health care spending included public and private spending across all health care providers and an array of functions, including current expenditures on health care, capital formation of health care providers, education and training of health personnel, research and development in health and social services of long-term care.

Social services spending included public and mandatory private spending both in cash and in kind across all types of programs and branches, including spending on old-age pensions and support services for older adults, survivors benefits, disability and sickness cash benefits, family support, employment programs (e.g. public employment services and employment training), unemployment benefits, housing support (e.g. rent subsidies) and other social policy areas. If we sum countries’ spending on both health care and social services, the US is no longer the high spender; in fact, we appear near the middle of the pack.

1. **Health vs Social Care Spending**

The United States, while we spend way more than any other advanced nation on medical care services, we also spent significantly less than all of those other nations on non-health social service spending, such that if you put the two measures together, the United States is no longer an outlier in terms of our total health and social spending. We're actually close to the middle of the pack. The U.S. invests the smallest share of its economy on social services.

# We may be using health care to very inefficiently and expensively address issues that are much better and cheaper and more efficiently addresses with other social programs – issues with homelessness, poverty, mental health, prevention vs. treatment of health issues, etc.

# A different study “debunks” this claim:

# The Relationship Between Health Spending And Social Spending In High-Income Countries: How Does The US Compare? by Irene Papanicolas, Liana R. Woskie, Duncan Orlander, E. John Orav, Ashish K. Jha (2019)

# They found that US social spending (at 16.1 percent of GDP in 2015) is slightly below the average for OECD countries (17.0 percent of GDP) and above that average when education spending is included (US: 19.7 percent of GDP; OECD: 17.7 percent of GDP). They found that countries that spent more on social services tended to spend more on health care. Adjusting for poverty and unemployment rates and the proportion of people older than age sixty-five did not meaningfully change these associations. In addition, when they examined changes over time, they found additional evidence for a positive relationship between social and health spending: Countries with the greatest increases in social spending also had larger increases in health care spending. The study makes the conclusion that there are other reasons as to why the US spends so much on healthcare, but it doesn't identify them.

One if the issues with the study: By including old age pensions in their comparison of social spending in OECD nations, the analysis offered by Papanicolas et al in the September 2019 issue of Health Affairs is fatally flawed. Pensions are income transfers. And while income transfers may impact health, those positive benefits would be captured in the poverty rate adjustments made by the authors.

If one appropriately backs out pensions, then the U.S., is far from being “in the middle of the pack” when it comes to social spending as a share of GDP. It ranks near the bottom. Using the authors’ own data provided in the appendix for pensions in the 11 most advanced industrial economies, and backing pensions out of total social spending, it can be calculated that the U.S. spends just 4.4% of GDP on social services. That is less than half its peer group average and far below Denmark (16.5%), France (12.4%) and Germany (10.4%). Only Japan, with 4.1% of GDP spent on social services, is more niggardly to those in need.

1. **Why the increase in healthcare spending?**

The purpose of this slide is to take a bit of a breather and to summarize what has been presented so far.

High health care spending has far-reaching consequences in the U.S. economy, contributing to wage stagnation, personal bankruptcy, and budget deficits, and creating a competitive disadvantage relative to other nations. One potential consequence of high health spending is that it may crowd out other forms of social spending that support health. As mentioned, in the U.S., health care spending substantially outweighs spending on social services.

In addition, the discussion of the main reasons of increases in healthcare spending are proposed. One of the big focus during the presentation will be on the rising prices in the health care sector. Clearly prices are going up due to higher costs of new, more expensive (but hopefully more effective) medical technology (supply side) and due to increased demand for services (demand side). However, one of the leading factors for increased prices are due to the monopolization of health care markets and price hikes that come with market power.

Medical care access, another leg of the medical stool, relates to the distribution question. That is: Does everyone have reasonable access to medical care on a timely basis? Timely access is often measured by the percentage of individuals with health insurance. For most people the cost of catastrophic care, such as organ transplants and cardiovascular surgery, lies beyond their financial means. Thus, health insurance may be an important factor in terms of ensuring timely access to medical care. Hence by access, we mean insurance coverage. That's what most people think of when they hear the word access.

Actually, insurance coverage is a fundamental part of access, and there's a lot more.

The accepted definition of access has five terms to it.

1. Affordability.

That involves health insurance, whether or not people can afford to be able to obtain the services that they need.

1. Availability.

That means the extent to which a provider has the services, the personnel, the technology, to meet people's needs. That's a fundamental point of access.

1. Accommodation.

That means the extent to which the provider is organized to meet the client's preferences and constraints. For example, if you are a disabled person, and your provider is unable to provide services to you because of your physical needs, you have a problem of access because of a lack of accommodation.

1. Accessibility.

That means for example, you may have insurance coverage. You may be able to pay for services. But you don't have a provider anywhere near where you live. And so you have a problem with accessibility.

1. Acceptability.

And that's the extent to which a client is comfortable with the provider. So for example, some people it's very important that you have a provider of the same gender. And if you can't, it makes you uncomfortable. That's an issue of acceptability.

1. **Tradeoffs**

There is a saying in health care policy: quality, access, cost, pick any two. Because normally, when you try to do something to lower costs, you're going to have some adverse impacts in terms of quality or access. A lot of times when we try to improve access, it ends up increasing costs. And so, normally, we're into the uncomfortable zone that economists refer to as tradeoffs, where one goal has to be achieved at the cost of another. Sometimes, we're able to have health policy improvements that actually end up having a positive impact on all three.

Ask your audience if they can think of any.

Here is one example: essential childhood immunizations. If we get the immunizations that kids need at the time when they need them-- so we do it the right way at the right time-- we improve quality. We improve access. And we actually lower costs when it's done well. We can refer to that as a health policy home run.

In fact, one of the big topics during this talk will be that there are many opportunities in the US, where we can hit these home runs and they are not that complicated. There are a lot of opportunities to improve outcomes in this vastly inefficient system.

But unfortunately, often times in health care policy, we're confronting these kinds of uncomfortable tradeoffs. But I think the important thing to understand is, there's no health policy issue that you're going to ever confront that doesn't involve at least one of these dimensions. Normally, at least two, and more often than we might realize, we are addressing all three at the same time. So, as you look at any health care policy problem, you want to examine and understand and think about the implications on cost, quality, and access, and not just look at one or two, as opposed to all three.

1. **Markets Matter for Access, Quality, and Costs**

In a market economy prices guide allocation of resources, ensure balance in the supply and demand (they solve the problem of shortages and surpluses).

Let’s step back and talk about how economists think about markets before talking about their effects on the healthcare system.

1. **Market Economies**

<simple description of how markets work>

1. **When does “free market does it better” hold?**

In order for the free market to reach efficient allocation (maximizing total surplus) on its own without any government interventions and interference, two very important assumptions are needed: 1) perfectly competitive market and 2) not market failure.

People typically confuse what a perfectly competitive market means. They think that because one or two companies are “competing” against each other it is a competitive market. But that’s simply a duopoly or oligopoly and results under those assumptions are very different.

Some thoughts about market failure:

1. Market failure occurs when the level of output in a market is not optimal, when marginal benefits do not equal marginal costs for the last unit of output provided. Failure in medical markets is caused primarily by information problems, including provider-induced demand, moral hazard, adverse selection, and the third-party payment structure.
2. Evidence of market failure cited by proponents of a government-run system include exceptionally high administrative costs of a private insurance system, poor access for those without insurance, asymmetric information problems giving providers too much power in the decision-making process, and the free rider problem.
3. Since market failure in medical markets is primarily an information problem, proponents of government involvement argue that the only way to provide balance is through government action. If markets are failing to provide the optimal level of output, government can intervene by regulating prices to bring output closer to the optimal level or by subsidizing consumption of low-access groups.
4. **What types of markets are there?**

This is a brief review of market structure. The main point for this slide is to show that there are in fact many types of markets. In fact, there are really few (if any) markets that can be classified as perfectly competitive. So, it is important to keep in mind, that almost no real economist (regardless of its political ideology) for example would argue that we should live monopolies and monopsonies underregulated. Other types of markets also require some type of government involvement. This means that is fairly idealistic to think that “the free market” does it best all the time and that there should be no government interventions.

It's important to talk about markets and how competitive they are.

1. **Health Care Markets are Different**

This is a great slide to show just how different health care markets are. Even if we assume that the markets are perfectly competitive (which they are not) there are a number of other issues with these markets.

Under normal circumstances, when we talk about the standard supply and demand model, we have consumers and producers (sellers) that directly interact with each other and the prices serve as an important signaling mechanism – about the preferences and about the costs.

But in health care markets consumers are patients and producers are hospitals or physicians, etc. Even with this interaction there are few important differences. First, the product or the service the patients are buying is not something that gives them pleasure – under most circumstances (elective cosmetic surgery for example might be an exception). In many case, they need to buy a service because their life depends on it, or because they are in pain – which is different from when we make other purchasing decisions.

Also, there is a principal-agent problem. The patient (principal) doesn’t really know what services are really needed. This is determined and advised by the physician (agent). This also makes a big impact on the selection and consumption of products and services that will be bought. Especially, if the agent has other motives (for example increasing revenues and profits) by suggesting certain type of drugs or prescriptions to their patients.

The price is also a major problem here. In this market, nobody really knows how much services cost. The prices are typically not known and the physician or hospitals charge completely different prices to different individuals or entities. Again, this means that the most fundamental mechanism to make markets work is broken here.

Finally, when it comes to actually paying for the service, things get even more complicated. If the individual has a private health insurance, the patient typically pays only for a fraction of the costs. This can lead to moral hazard - the additional health care that is purchased when persons become insured. The introduction of this “third-party” makes this market very unusual. In addition, there are “sponsors” like employers or the government, or even the parents, that actually pay for the health insurance premiums.

So, at the end of this slide, it should be obvious that health care markets are NOT like any other market for goods and services.

1. **Are Healthcare Markets Special?**

This is a summary slide, that should reemphasize that health care markets are NOT like any other market for goods and services due to all of the above.

The answer is that yes, health care markets are special. In particular, they are characterized by quite a bit of market power. As discussed, in many places, there is but one hospital, there are cartels of physicians that limit competition, and the pharmaceutical industry – before the generic stage – is highly concentrated and lacking in competition.

Beyond this element, there are other issues in the market that cause market failures – that cause the market to fail to achieve an efficient outcome. Some of these issues are:

* ***Principal-agent***: this problem arises when the provider, being an imperfect agent of the patient, acts to maximize profits at the expense of the patient’s interests.
  + Often, this involves inducing demand unnecessarily to collect fees from the patient, or the patient’s insurance provider.
* ***Asymmetric information***: This problem arises when one party to a transaction has greater knowledge than the other party. Very often this will be the seller having greater knowledge than the buyer.
  + In health care, this is very relevant in healthcare as purchasers of healthcare services (consumers, employers, etc.) are unaware of the cost and quality differences between providers of care and services rendered.
* ***Moral hazard***: is the notion that a party (individual or business) shielded from risk will behave in a way that is different from how they act when not shielded from risk.
  + In health care, moral hazard is most important in health insurance. The concern is that by offering payouts that protect against losses, they may be encouraging risk-taking.
* ***Self interest***: self interest is generally thought of as how markets work.
  + In healthcare, the fee-for-service aspect of our healthcare system has the effect of encouraging a greater level of care than might otherwise be offered.
    - Consumers aren’t able to evaluate what is and is not necessary, so providers respond to the fact that “the more you do the more you make”.[[3]](#footnote-3)

1. **Another Difference: “Right” or Moral Imperative**

In most markets, there isn’t great concern if some can’t afford access. However, this is different in health care, where many believe that it is important to have equitable access to care. Left to it’s own devices, the market is unlikely to provide care at prices that are affordable to all. Even if “affordable to all” isn’t actually the goal, a greater degree of affordability than the market will provide is often consistent with societal goals for health care.

In order to bring about greater access, or affordability, some intervention from the public sector will be necessary. This intervention can take the form of subsidies for insurance or care or regulations that facilitate affordability.

See: <https://www.nber.org/system/files/working_papers/w29137/w29137.pdf>, pg. 1, bottom para.

1. **Policy Matters for Costs, Access, and Quality**

That healthcare markets are so very different from most markets, and riddled with issues that reduce the likelihood that they will achieve efficient outcomes, there is significant scope for policy in terms of encouraging lower costs, greater access, and high levels of quality.

1. **How Does Policy Matter?**

Policy matters in great many ways in the healthcare context, but it matters in two particular ways. First, is how government spends on healthcare. This is most obvious in pharmaceuticals, where the government does not negotiate drug prices. The government also sometimes sets the price that it is willing to pay for pharmaceuticals relative to the market price – this can dramatically increase not only what government pays, but also what is charged in the market.[[4]](#footnote-4)

A second, and much more important way in which policy affects access, costs, and quality is through its regulation of the markets. That is, through its application of competition policy to healthcare markets. In many cases, the government provides less competition promoting influence than might be optimal.

This is particularly true when it comes to hospitals and pharmaceuticals.

1. **Concentration and Hospitals**

We talked earlier about how more providers in a market leads to a more competitive market that may lead to higher quality, greater access, and lower prices – costs.

This general principal certainly applies to hospitals.

1. **Hospital Monopolization**

Let’s jump right in and talk about one market that is getting less and less competitive. That’s the market for hospital services. There is currently a lot of market consolidation in a variety of healthcare markets.

As an example, between July 2016 and 2018, in the United States, hospitals acquired 8,000 medical practices and 14,000 physicians left private practice and became hospital employees.

This concentration has increased during COVID as small practitioners are struggling.

<https://www.cbsnews.com/news/california-sutter-health-hospital-chain-high-prices-lawsuit-60-minutes-2020-12-13/>

<https://www.youtube.com/watch?v=DVbsC2j-dNc>

1. **Potential Benefits of Consolidation**

The “Triple Aim” is a framework developed by the Institute for Healthcare Improvement. It is an approach to optimizing heath system performance. The tripe aims are:

* Improving patient experience (incl quality and satisfaction)
* Improving the health of populations
* Reducing per capita costs of health care.

It can be argued that these goals can be facilitated by hospital consolidation. By integrating care, there is better care coordination – higher quality – and a reduction of costly and unnecessary duplication. All of this is to say that there are potential benefits from consolidation.

We have to turn to the record to see how we feel about the consolidation.

And it turns out that consolidation doesn’t necessarily bring with it integration – which is where the benefits lie. Evidence suggests that consolidation has led to higher costs, lower quality, and less coordinated care.

<https://nihcm.org/publications/supersized-the-rise-of-hospital-giants>

start at minute 18

1. **Evidence on Consolidation**

The primary concern over a hospital merger is that prices will rise and quality will fall. Evidence on quality is very hard to come by, but recent work has provided some evidence on changes in prices paid by insurance companies of the privately insured.[[5]](#footnote-5)

The graph here shows the change in prices at merged hospitals following the merger. It shows the how the price effect is different for hospitals that are close to each other than it is for hospitals that are at a distance. The evidence suggests that the price effect is almost always positive, with a price increase of around 6% following a merger of hospitals geographically close to one another and much smaller and close to zero for hospitals in excess of 25 miles apart.

In generally, the evidence suggests that the primary effect of a hospital merger is an increase in prices.

1. **U.S. Hospital’s Average Charge-to-Cost Ratio**

One way to measure the price performance of hospitals is to look at their ratio of average charges relative to costs. This graph does that and shows the trend over time. This shows that in 1999, the profit margins of hospitals were on average 100%. That is, charges were double costs.

By 2018, this ratio had increased to 417%. Charges exceeded costs by a factor of more than 4 and profit margins were in exces of 300%. This increase in charges relative to costs has come about during a period of significant consolidation in the hospital sector. This consolidation is both hospitals merging as well as hospitals buying the private practices of local doctors.

In either case, where there may have once been competition, there is now less. Accordingly, hospital charges have increased rapidly relative to their costs.

[https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1414#:~:text=The%20charge-to-cost%20ratio%20is%20calculated%20as%20a%20hospital’s,of%20Costs%20to%20Charges%2C”%20submitted%20by%20the%20hospitals](https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1414#:~:text=The%20charge-to-cost%20ratio%20is%20calculated%20as%20a%20hospital’s,of%20Costs%20to%20Charges%2C).

1. **Hospital Monopolization Across the Nation**

Although the charge to cost ratio on average is around 400% in the United States, it is much higher at some hospitals. The cost of care ratio can be in excess of 1,100% among the most expensive 100 hospitals, ranging all the way up to 1,800% at the high end.

Most of these hospitals are located in the South and West. Florida has a disproportionate share, with 40 of the top 100. California, with a population 1.8x that of Florida, has just 6.

That is not to say that California is immune from hospital monopolization, it is not.

1. **Hospital Monopolization: California**

Here is an example for California. Sutter Health has grown into a huge hospital system, buying out all of the local hospitals and urgent care centers and is a big dominant player.

Sutter was able to raise prices as it reduced competition. It has then been able to further use the profits from the lack of competition to buy yet more hospitals and hire more doctors.

Turns out that insurance companies are starting to object to the high prices that Sutter is now able to charge.

1. **Hospital Monopolization: Florida**

Here is another example from Florida. Consolidation of insurers in Florida has led to 12% increases in profits and hospitals experienced their highest rates of profits following significant new construction by the largest players and through consolidation.

Evidence on the profitability of hospitals in S Florida have soared. This is evidence that helps to answer the question of why is healthcare so expensive in the United States. If hospitals receive 1/3 of healthcare expenditures, then increased consolidation increases prices and profits and the costs of healthcare overall.

1. **Concentration and Pharma**

The market for pharmaceuticals is another one in which the government could be exerting a little more influence. This neglect is in a variety of aspects of the market. First, is influence over pricing. Prescription drugs in the United States are much more expensive than they are elsewhere. There are several ways that the U.S. government has not intervened when it might have. A case might also be made that the government could have exerted more influence with regard to competition, perhaps allowing less concentration in the industry than it has.

We will discuss both.

1. **Drug Price Comparisons**

All around the world, people take the same prescription drugs, with the same formulation, made by the same company. Yet, even in the developed world, prescription drug prices vary enormously.

This table gives an idea of the relative prices of brand-name drugs in different countries – first row – and the relative prices the generic equivalents across countries.

Turning first to the brand-name drugs, it is immediately clear that they are the most expensive in the United States. Here, prices have been normalized so that the average price of this basket of 30 drugs is 1 in the U.S. So, any value in a cell in this row that is less than one indicates that the price of the brand-name drugs is lower in that country. And it is lower in each of the countries listed. In France and the New Zealand, prices are about 1/3 of what they are in the United States. At the other end, prices in Canada are the highest relative to the United States are still just two-thirds of the U.S. price.

We will explore further just why this is the case. But spoiler alert, the inability to or difficulty associated with buying drugs across country lines plays a significant role.

The story is different for generic drugs. They are cheapest, except for NZ, in the United States. This suggests that because more drug companies are located in the United States, competition in the sale of the generic version of drugs once they are off patent is stronger here than in other countries.

[**https://www.commonwealthfund.org/publications/issue-briefs/2020/sep/not-so-sweet-insulin-affordability-over-time**](https://www.commonwealthfund.org/publications/issue-briefs/2020/sep/not-so-sweet-insulin-affordability-over-time)

[**https://www.commonwealthfund.org/publications/fund-reports/2020/oct/getting-lower-prescription-drug-prices-key-drivers-costs**](https://www.commonwealthfund.org/publications/fund-reports/2020/oct/getting-lower-prescription-drug-prices-key-drivers-costs)

[**https://www.commonwealthfund.org/publications/journal-article/2020/dec/striking-right-balance-lowering-rx-drug-prices-innovation**](https://www.commonwealthfund.org/publications/journal-article/2020/dec/striking-right-balance-lowering-rx-drug-prices-innovation)

1. Helping government to become a more responsible purchaser.
2. Stopping patent abuses and anticompetitive practices that block price competition.
3. Building a sustainable biosimilar market to create price competition.
4. Fixing incentives in the drug supply chain and making the supply chain more transparent.
5. Ensuring public accountability in the government-funded drug development process.
6. **Price of Drugs in the US vs UK and Canada**

For some specific drugs, prices are enormously higher in the United States than in some other countries.

For example, the anti-blood clotting drug Xarelto sells for in excess of $425 in the United States. In both the UK and Canada, it is about $75. This graph does show prices of equivalents in other countries, so they may be generics in the UK and Canada, while still under patent in the United States. This begs a question about the generosity of the U.S. patent system, or the ability of pharmaceutical companies to play the system in the United States, but regardless, the drugs are cheaper abroad…a LOT cheaper.

Another reason for high prices in the United States is that there is no coordinated system of negotiating for drugs on the part of the U.S. government. In fact, some government programs are expressly prohibited from negotiating drug prices. More on that in a minute.

1. **Pharmaceutical Spending per Capita, 2016**

In part as a result of the higher drug prices in the United States, but also because usage is higher in the United State, per capita spending is higher.

In 2019, per capita spending on drugs was 37% higher than in Switzerland, the next highest spending country. It was nearly 3 times the spending in the Netherlands, the country with the lowest per capita spending of the countries listed.

Prices are clearly higher in the United States. Usage is also higher. Even if it were useage that explained the entire difference, one would have to ask why? It could be a result of massive spending domestically by pharmaceutical companies.

1. **Spending on Drugs: Trends Over Time**

It has not always been the case that prescription drug spending per capita has been so high in the United States. Going back to 1980, spending per person in the U.S. was middle of the pack when comparing with many of the same countries as on the previous slide. It was in roughly 1995 that spending in the United States increased so dramatically. Spending in all countries has increased significantly in the last couple of decades, but moreso in the U.S. than elsewhere.

1. **Price Hikes**

<some data on price hikes>

1. **Reasons for higher drug prices**

There are many reasons for higher drug prices. However, two stand out. The first is the government’s Medicare Modernization Act (MMA), enacted in 2003, which provided for the first time a prescription drug benefit to Medicare recipients.

The primary concern regarding this program and prescription drug prices is that the legislation forbid Medicare from negotiating directly with drug companies. This drug benefit is administered through private companies and they are allowed to negotiate, but it is reasonably clear that they do not individually have the negotiating power of the United States government.

A second reason is significant concentration of pharmaceutical companies. Through this concentration, they have been able to raise prices and achieve higher revenues.

1. **Lobbying**

One way that pharmaceutical companies raise prices is by currying favor with the federal government. The MMA was passed in 2003. The likely effect of lobbying on the legislation and the prohibition on negotiation is obvious. Lobbying in the years just before the legislation was passed was more than double what it had been in previous years. More generally, pharmaceutical companies will lobby against policies that might inhibit their ability to raise drug prices.

This all means higher prices and revenues for drug companies and higher costs for consumers and the Federal Government.

1. **Medicare Modernization Act**

The Medicare Modernization Act, or MMA, added a prescription drug component to Medicare. Medicare does not administer the drug benefit, rather, it is provided through private organizations, typically insurers. The rationale is that these providers would aggressively negotiate with pharmaceutical companies in order to be the low-cost provider of this coverage. I.e., competition for beneficiaries would keep prices low.

Arguments opposed to the government are:

1. That it would reduce choice for beneficiaries.
2. That it would raise prices of prescription drugs in other markets.
3. That it would reduce pharmaceutical R&D, by reducing revenues.

There is reasonably limited evidence on each of these items, but there seem to be areas where the federal government could experience significant savings.

In particular, the VA can negotiate drug prices. If we assume that Medicare would have similar bargaining power, and that Medicare would face prices similar to those of the VA, evidence suggests that in 2017, Medicare could have saved about $4.4 billion just on insulin.

It seems clear that there are significant savings to be had should Medicare have independent negotiating authority. It would clearly not increase drug prices relative to what the independent providers are able to negotiate.

https://www.webmd.com/diabetes/news/20200204/medicare-could-save-billions-if-allowed-to-negotiate-insulin-prices#:~:text=The%20study%20found%20that%20in%202017%2C%20Medicare%20spent,accounts%20for%20a%20third%20of%20all%20drug%20spending.

1. **How Much is Negotiation Worth?**

The nonpartisan Congressional Budget Office has recently undertaken a broader analysis of how much negotiating over prices might influence overall federal spending. In total, government balance sheets would improve by about $500 billion over 10 years.

This comes from the effects of lower prices, smaller subsidies for commercial health plans through the ACA, lower spending for federal employee health benefits, and increased government revenue as lower premiums in the private sector result in higher taxable wages.

The direct effect on Medicare spending is a reduction in direct expenditures of about $448 Billion.

Congressional Budget Office, https://www.cbo.gov/system/files/2019-12/hr3\_complete.pdf

1. **Effect on Size of Medicare**

Introducing the prescription drug benefit in 2006 has clearly had an effect on overall Medicare spending. Between 2005 and 2010, Medicare spending increased by more than 50%. Part of this increase was surely increasing during this period, but not nearly fast enough to explain this increase in costs. And the prescription drug benefit has accounted for about 15% of all Medicare spending in the years since its introduction

1. **Composition of Medicare Payments**

This figure shows the introduction of Medicare Plan B. It is the navy blue area in the upper right part of the graph. It appears in 2006 and increases slightly as a share of Medicare spending through 2015.

Items that decline in share include hospital care and physician services. It is possible that access to prescription drugs has reduce demand for these categories, but it is also possible that it has crowded out spending on these services for Medicare beneficiaries.

1. **Concentration of Pharmaceuticals Companies**

Over the course of the last several decades, there has been a concentration has increased dramatically in the pharmaceutical industry. Merges involving the top firms have become more common. More than double the number of mergers where one party is among the top 25 firms occurred in 2015 than in 2006.

There were far fewer firms in 2015 than there were in 1995, with 60 preexisting drug companies merging into 10.

There remain a large number of companies working on drug development, but many of these will not bring drugs to market. They will, instead, sell their new drug to a company that is already marketing drugs.

1. **According to the GAO**

A significant study of the pharmaceutical industry by the Government Accountability Office found the following with regard to the industry:

1. Over a 10 year period, ending in 2015, pharma and biotech revenues increased by 50%.
   1. This was in part because of the MMA, the expanded pharmaceutical coverage in Medicare.
2. Two-thirds saw a significant increase in profit margins that were already high.
3. Between 2008 and 2014, only 13$ of drug approvals were for novel drugs – those that
4. Top 25 profit margins are in excess of 15%.
   1. Elsewhere, common profit margins are between 4 and 9%.
5. Mergers in the industry are not changing significantly in number, but they are getting bigger.
   1. Particularly in generics, fewer competitors results in higher prices.
6. Mergers have an ambiguous effect on innovation as measured by R&S spending patent approvals, and drug approvals.
   1. Though some studies have found a negative effect.
7. **Concentration and Insurance**

Along with markets for care and drugs, the insurance market has been experiencing a great deal of market concentration as well.

1. **Monopolization of Health Insurance Market**

As of 2011, there were close to 100 insurers in Switzerland competing for consumer health care dollars, forcing firms to compete by setting prices to just cover costs.6 In the United States, markets are state specific and consumers may choose from plans available in the state in which they reside. In 2014, of the 50 states and the District of Columbia, 11 had only 1 or 2 insurers, 21 had 3 or 4, and only 19 states had 5 or more.7 As of July 2019, the number of states with only 1 or 2 insurers had increased from 11 to 20, indicating a growing divide between ACA exchanges and competitive markets. Measuring market concentration by HHI yields similar results (Table 3), with 43 percent of markets classified as super concentrated and 47 percent as highly concentrated. Therefore, the ACA has not yet been successful in creating highly competitive markets.

Roy, Avik. “Why Switzerland Has the World’s Best Health Care System.” *Forbes*, April 29, 2011; https://www.forbes.com/sites/theapothecary/2011/04/29/why-switzerland-has-the-worlds-best-health-care-system/#2416d9a67d74.

7 Henry J. Kaiser Family Foundation. “Number of Issuers Participating in the Individual Health Insurance Marketplaces.” State Health Facts; https://www.kff.org/other/state-indicator/number-of-issuers-participating-in-the-individual-health-insurance-marketplace, accessed July 2019.

1. **Average Annual Premiums, 1999-2018**

In part because of this concentration, insurance premiums have been increasing rapidly. They increased at nearly triple the rate of overall inflation between 1999 and 2018 and nearly double the rate of health care costs.

The graph shows changes in nominal terms in the premiums for employer provided insurance for both a single person and a family. In each case, premiums grew at about 6.5%/year. For a family, this means that premiums increased from about $5,900/year to $19,600/year.

[**https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2018.1001?utm\_campaign=HASU%3A+10-05-18+%28Copy%29&utm\_medium=email&vgo\_ee=TQLYTaMUxLuVgns98nuK7Q%3D%3D&utm\_content=Health+Affairs++October+Issue%3A+Social+Determinants%2C+Drug+%26+Device+Prices+%26+More%3B+2018+Costs+For+Employer-Sponsored+Family+Health+Coverage%3B+Aftermath+Of+A+School+Shooting&utm\_source=Newsletter**](https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2018.1001?utm_campaign=HASU%3A+10-05-18+%28Copy%29&utm_medium=email&vgo_ee=TQLYTaMUxLuVgns98nuK7Q%3D%3D&utm_content=Health+Affairs++October+Issue%3A+Social+Determinants%2C+Drug+%26+Device+Prices+%26+More%3B+2018+Costs+For+Employer-Sponsored+Family+Health+Coverage%3B+Aftermath+Of+A+School+Shooting&utm_source=Newsletter)

[**https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/state-trends-employer-premiums-deductibles-2010-2019**](https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/state-trends-employer-premiums-deductibles-2010-2019)

1. **Spending on Deductibles**

To make matters worse, not only did premiums increase during this period, but beginning in about 2009, spending on deductibles started increasing at a very rapid rate. Here we compare increases in premium spending, the navy blue line, with increases in worker’s wages and the total cost of insurance – both the co-payment and the amount the insurer pays.

Not only are workers paying more out of their paychecks for insurance, despite who actually writes the check, the employee pays for the insurance through lower wages, but they are paying more at the time they receive services as well. Quite a bit more.

1. **Reasons for Higher Health Insurance Rates**

It’s worth spending a little time talking about why insurance rates rise. There are four primary components of the cost increases. The first is increases in prices in the health sector. As we’ve discussed, this factor likely plays a significant role in rising health insurance premiums and deductibles, but it’s not the whole story.

Also contributing are advances in medical technologies. Most of the technological advances in medicine in recent years involve the development of expensive equipment. So there are new items added into the basket of healthcare items that people consume, and they are likely to be expensive.

It could be that over time people are consuming greater amounts of services, which is in part true, particularly when it comes to end of life care.

And finally, as we have already remarked, the heavy concentration and market segmentation – across states – of health insurance markets likely enables insurance companies to raise premiums and other costs at a faster rate than is supported by the other three explanations.

1. **Health Care Systems and Institutions**

This brings us to the final topic of our presentation, that of different payment systems for health care.

1. **Health System Classification**

There are nearly as many different systems for paying for health care as there are countries. But in the end, there are primarily 5 different models and most countries are some mix of them.

The systems are as follows:

* **National health insurance** – this system is used in Canada and is a single-payer system, where the government is the single payer. The system is more complicated than this, but this is the essence of the system.
* **Bismarck model** – This model is in many European countries – France, Germany, Switzerland, as well as Japan. This is a model wherein people pay a fee to a fund that in turn pays health care activities, that can be provided by State-owned institutions, other Government body-owned institutions, or a private institution.
* **Beveridge Model** – this model is where the government finances and provides both insurance and health care. There are several countries that use this model, but the United Kingdom is perhaps the most well known.
* **Out of pocket model** – this is a model where there is no insurance and you just pay out of your own pocket.
* **Mixed** – the United States is some mix of each of these four systems.

Let’s talk more about the U.S. system.

1. **US Health Care System**

* Medicare is a national health insurance program run by the federal government. Since it is a federal program, Medicare does not differ much from state to state. This is an example of a **national health insurance** system within the U.S. healthcare system.
  + Medicaid is an assistance program. It serves low-income people of every age. Medicaid is a federal-state program. It varies from state to state. It is run by state and local governments within federal guidelines.
* The **Beveridge model**, which is very close to socialized medicine, characterizes the health care provided to veterans. The insurance and care are both provided by the government.
* The **Bismarck model** is both employer-sponsored and individually purchased health insurance.
* And the **out of pocket model** is currently used by about 8% of people, as of 2019.

So, it’s not that we necessarily prefer one form over another, but our view as a society seems to be that the model is situational. No one model seems most appropriate for all citizens.

1. **Health Insurance and Reform**

In the context of these different options, we can have a reasonable conversation about health insurance reform. And bear in mind that it is health insurance that is being reformed and not the healthcare system. We’ll go through some common terms and just what is meant by them.

1. **Definitions: Universal Coverage**

First up is the concept of “Universal Coverage”. This merely refers to a health care system in which all individuals have insurance coverage.

And this insurance does two things. First, it provides access to all needed service and benefits for everybody. And second, it protects individuals from financial hardships.

There are estimates that nearly two-thirds of all bankruptcies are related to medical expenses. This is likely an over-estimate, but it is true nonetheless that about 20% of Americans are carrying substantial medical debt.

On medical bankruptcies:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5865642/

1. **Definitions: Single Payer**

A single-payer system, simply indicates that it is a single organization that makes payments on behalf of those receiving health care. Note that this does not imply universal coverage. It can be a system where many people are not covered by insurance, but as opposed to in the United States and some other countries, such as Switzerland, there is just one insurer as opposed to many.

Although single-payer systems are often decried of being socialist or as socializing healthcare, it should be understood that it is only the payments system that is being socialized – really only partially socialized if it does not provide universal coverage.

Many countries have a single-payer system, in fact as many as 17.

There are both pros and cons to a single-payer system. One of the pros is that a larger payer will have more bargaining power and can help to keep costs down. A con that is frequently mentioned is a reduction in choice over what forms of and how comprehensive insurance coverage might be.

<https://www.verywellhealth.com/difference-between-universal-coverage-and-single-payer-system-1738546>

1. **Definitions: Socialized Medicine**

Socialized medicine is the red herring in the conversation about healthcare reform in the United States. People fervently state that they are not interested in such a system, but it is also true that such a system is not being contemplated or even suggested among the potential reforms to the current system.

Socialized medicine is employed in the United Kingdom as the National Health Service. Under socialized medicine, the government not only pays for care, but also employees and pays for the care providers.

1. **Definitions: Third-Party Payer**

A third-party payer system is one where neither the recipient of care (first party) nor the provider of care (second party). It is an entity that reimburses and manages health care expenses.

It can be the government, an insurance company, or an employer that chooses to self-insure. This is the most common form of payer relationship in the United States.

It is important to note that a single-payer system is also a third-party payer system. With single-payer, there is only one third-party payer.

1. **Summary**

Among the primary takeaways from this talk include:

1. The US healthcare system is not performing very well.
   1. Expensive and with worse outcomes than in other countries.
2. Highly concentrated healthcare markets, including physicians, hospitals, insurance, and pharmaceuticals – are contributing to the high cost of care.
3. The federal government sometimes legislates against lower costs in healthcare.
   1. A prime example is the ban on government negotiating with pharmaceutical companies over drug prices.
4. There are simple and straightforward actions to be taken that could significantly reduce costs. They won’t solve all of the problems, such as gaps in coverage, but they will help to reduce the costs.
   1. Antitrust laws
   2. Negotiations
   3. Competition in insurance markets – public option
5. Universal coverage could increase access and potentially reduce costs.
6. There are tradeoffs.
   1. It is not always possible to increase access, and reduce costs while at the same time increasing quality.
   2. Note that it MAY WELL be possible in some circumstances to improve all three – the US system is so flawed.

The bottom line is that there is much to be done that is relatively simple. There are examples of more effective and efficient systems. We need not reinvent the wheel to improve things in the U.S. healthcare system to get significant improvement.

1. **Thank you!**
2. **Amount of Medical Care Spending**

These figures are potentially alarming because trade-offs may be involved. That is, high health care costs translate into lower amounts of other goods produced and consumed. Certainly, high health care costs could reflect more and better medical care, but high spending may also involve the sacrifice of other equally important goods and services like food, clothing, and shelter.

However, even the rising percentage of GDP devoted to health care does not necessarily indicate other goods and services have been sacrificed. The GDP of $18.6 trillion in 2018 is much greater than the GDP of $163.8 billion in 1960. Simply put, the greater productive capacity of the U.S. economy allowed for greater amounts of both health care and all other goods to be produced.

In fact, productivity-enhancing technologies in the rest of the economy may have freed up resources for use in the health economy where the labor intensity of medical services doesn’t allow us much productivity improvement. Of course, the relative mix of goods has certainly favored the health care sector since 1960.

1. **International Comparison**

Summary slide:

The share of the economy spent on health care has been steadily increasing since the 1980s for all countries because health spending growth has outpaced economic growth,in part because of advances in medical technologies, rising prices in the health sector, and increased demand for services.

1. **Rate of MRI Scans**

***Magnetic resonance imaging (MRI) scans per 1,000 population***

The U.S. Has a High Rate of MRI Scans

The U.S. stood out as a top consumer of sophisticated diagnostic imaging technology. Americans had the highest per capita rates of MRI, computed tomography (CT), and positron emission tomography (PET) exams among the countries where data were available. The U.S. and Japan were among the countries with the highest number of these imaging machines.

U.S. utilization for specialized scans is higher than in most countries, nearly twice as high as the OECD average but comparable to France. Germany had an even higher magnetic resonance imaging (MRI) rate, while New Zealand’s was low. Previous analyses suggest that countries with a high supply of MRI scanners also tend to have higher rates of scan utilization.

Notes: Data shown for 2017 or nearest year: 2016 for GER; 2013 for NZ. No data for NOR, SWE. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

1. **Number of Hip Replacements**

The U.S. Performs More Hip Replacements Among Older Adults;

The U.S. performs some elective surgeries at a higher rate than other countries. The U.S. rate of hip replacements per 1,000 persons age 65 and older was higher than the OECD average but similar to the rate in Norway and Switzerland. Canada, the U.K., and New Zealand had the lowest rates, with rates close to the OECD average.

Notes: Data reflect inpatient cases only (day cases not included) for 2017 or nearest year: 2016 for NZ; 2014 for NETH; 2010 for US. No recent data for AUS. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

1. **Number of Prescription Drugs Taken Regularly**

Americans were top consumers of prescription drugs. Based on findings from the 2013 Commonwealth Fund International Surveys, adults in the U.S. and New Zealand on average take more prescription drugs (2.2 per adult) than adults in other countries.

1. **Breast vs Cervical Cancer Survival Rates**

% Percent

The U.S. Has the Highest Average Five-Year Survival Rate for Breast Cancer, but the Lowest for Cervical Cancer

The five-year survival rate for breast cancer is the highest in the U.S. among the 11 countries — it is more than 5 percentage points higher than the OECD average. Breast cancer survival rates in all 11 countries compared here are higher than the OECD average. This is not true for other types of cancer. For example, five-year survival for cervical cancer among U.S. women is lower than in the 10 other countries and below the OECD average.

1. **Healthcare Quality and Access (HAQ) Index Rating**

We used the Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016) to assess personal health care access and quality with the Healthcare Access and Quality (HAQ) Index for 195 countries and territories, as well as subnational locations in seven countries, from 1990 to 2016.

Healthcare Access and Quality (HAQ) Index Provides a summary measure of personal healthcare access and quality for a given location. This measure is based on risk-standardized mortality rates or mortality-to-incidence ratios from causes that, in the presence of quality healthcare, should not result in death – also known as amenable mortality. HAQ Index performance is shown on a scale of 0 to 100, with 0 reflecting the worst observed levels across countries from 1990 to 2016 and 100 being the best observed during this time.

The Healthcare Access and Quality [(HAQ) Index](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)30818-8/fulltext) is scaled from 0 (worst) to 100 (best) and is based on amenable mortality. The HAQ index uses age-standardized, risk-standardized mortality rates for 32 causes of death that timely and effective health care could potentially prevent. Lower scores indicate high mortality rates for causes amenable to health care, while higher scores indicate lower mortality rates, possibly reflecting better quality and access to care. The U.S. ranks last among comparable countries on the HAQ index with a score of 88.7.

1. **Who are the Uninsured**
2. **Characteristics of the Nonelderly uninsured**
3. **US Uninsured Rates among the Nonelderly by State**
4. **Reasons for being uninsured**
5. **Number of Uninsured**

In 2018, 8.5 percent of people, or 27.5 million, did not have health insurance at any point during the year.

The uninsured rate and number of uninsured increased from 2017 (7.9 percent or 25.6 million).

1. **Health Insurance Coverage and Obamacare**
2. **Public Insurance**
3. **Death of Uninsured**
4. **Why care about the Uninsured**
5. **Thoughts on Rationing**

Text

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