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Healthcare Progression in the United States

Background and Strategy for a Universal Healthcare System

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Abstract

The purpose of this research is to focus on the feasibility and implementation of a universal healthcare system in the United States. The research is focused on the areas of historical data, healthcare in foreign countries, political forces, financial assessments, insurance, current healthcare systems, and strategies for developing and implementing a universal healthcare system in the United States.

There are many forces at work in the healthcare industry. Political and financial interests are two of the main roadblocks to a successful universal healthcare system and health reform. The research discussed in this piece will provide information and strategies on how a universal healthcare system could be implemented and examine the positive and negative effects such a system would have.

There is historical data and modern examples of universal healthcare systems in other countries, as well as, certain instances in our own past in the United States. Several European countries, as well as, Canada, have been using some form of universal healthcare system for years. The goal of this research is to determine, based on population size, healthcare systems, and governmental structure, which systems and reforms from other countries could be used to help adapt our own form of a universal healthcare system.

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Healthcare Progression in the United States

Background and Strategies for a Universal Healthcare System

Universal healthcare is a concept that has been debated for several years in the United States. Historically, several foreign countries have achieved some form of universal healthcare system for their citizens. This information suggests that the concept of a universal healthcare system for the United States is possible. With longer lifespans due to advances in treatment, disease resistant illnesses becoming more prevalent, and a population that is constantly growing, the United States is slowly reaching a precipice where the current healthcare system will be overwhelmed by the number of citizens requiring care, as well as, the financial burden of caring for those without access to health insurance coverage. Therefore, it is incumbent upon the federal, state, and local governments of the United States to engage in healthcare strategies and reforms resulting in the formation of a universal healthcare system which will ensure access is made available to every citizen.

There are several aspects to consider when proposing a universal healthcare system for the United States. For the purposes of this research, six different areas have been examined to affirm the progression to a universal healthcare system. When reviewing data, it is always important to have a historical background on a topic, as well as, context for instances of its use. Also, relevant data from successful uses of a universal healthcare system in other countries is needed for comparison. Furthermore, an overview of the current healthcare system and its functionality will provide context and reasoning for pursuing a universal healthcare system. In relation, an overview of the current function and implementation of different universal healthcare systems in other countries and how they can be used as a roadmap for the United States is also

relevant. Overall, identifying the positive and negative effects, compiling information to create a structure for political, financial, and insurance purposes, as well as, creating a strategic outline for success are all purposes of the research being reviewed.

Universal Healthcare Defined

Universal healthcare, in its most basic definition, offers healthcare protection for anyone in a given population of a country, region, state, or area regardless of the ability to pay. However, there are many misconceptions about what universal healthcare really means. A more in-depth definition is required to resolve this confusion. Amadeo (2019) discusses universal healthcare as a concept in which the government requires citizens to have health coverage, the government taxes the citizens to help pay for coverage and services, or pre-payment systems are in place.

Often, a combination of methods and services are used to achieve complete coverage of the population. Furthermore, the World Health Organization (WHO; 2019) refers to universal health coverage as being impartial regarding health services, service quality should better the health of the patient, and the cost of service does not inflict financial harm for its use.

General Overview of Universal Healthcare

Although the idea of a system of healthcare that provides for every citizen is considered a noble effort, not every country agrees or has the resources to implement such a system.

Furthermore, the United States is the only outlier among developed countries to not have a developed form of universal health coverage for its citizens. "Out of the 33 developed countries, 32 have universal healthcare" (Amadeo, 2019). A brief overview of how universal healthcare is viewed in the United States, as well as internationally will add substance to the idea of a universal healthcare concept for American citizens.

United States Overview

Although the United States is technologically advanced in the areas of medicine, research, and the development of medical procedures, it is also one of the most expensive countries in the world to purchase healthcare services or health insurance. The U.S. healthcare system spends nearly double the amount on health services versus other countries, "despite having fewer office visits and shorter average hospital stays" (Kamal & Cox, 2018). "The average amount spent on healthcare per person in comparable countries (\$5,198) is half that of the U.S. (\$10,348)" (Kamal & Cox, 2018).

From a national viewpoint, the United States has issues at every level of healthcare, including structure, technology, insurance, and reform. "Problems of unsustainability and inequity have arisen with the high levels of funding required" (Globalization and health, 2005). This highlights one of the major roadblocks in the development of unified healthcare systems and insurance coverage in the US. Lack of support from political parties on how to approach healthcare funding is one of the main players in healthcare reform. Private insurance, Medicare and Medicaid, and the burden of cost from uninsured citizens also complicate the implementation of a unified system.

The concerns about healthcare reform by many Americans are summed up in Roehr (2011) *US healthcare falls further behind other countries*, in which it is implied that the ease of access, quality, and cost of U.S. healthcare leading up to the enactment of the Affordable Care Act in 2010 showed worsening standards. Initially, the Affordable Care Act was thought to be an avenue to Universal healthcare, however, after 10 years of service and two years of dismantling by the current government which decreased its effectiveness, the number of uninsured or

underinsured Americans is beginning to rise once again (The Editorial Board, 2019). Although there are several reforms currently being discussed by both parties, it is unlikely that a resolution will come to pass before the 2020 election. This leaves American wondering which direction healthcare in the United States is headed.

International Overview

The international community, unlike the United States, has made more strides in the area of universal health coverage, although, there isn't one uniform system being followed. Furthermore, politicians and organizations in the United States appear to be caught up in a one or done form of mentality when it comes to universal health coverage, whereas, many countries across the globe have found ways of intertwining one or more services in order to provide total coverage for their citizens. The notion of only a single-payer system or leaving things the way they are is not supported by research. Of the countries which employ some form of universal coverage system, 17 are employing a system other than single-payer; of those 17, nine are considered two-tier types of coverage (List of countries, 2013). It is of note that several countries do you a single-payer system citing its ease of function. Canada and Britain are two countries that employ a single-payer government philosophy which helps to limit excesses, inefficiency, and fraud. (The Editorial Board, 2019). According to Kamal and Cox (2018) "On average, other wealthy countries spend half as much per person on healthcare than the U.S." This is an enormous difference in terms of monetary value or financial risk, however, lower cost doesn't necessarily mean the treatment is equal to what is provided in the United States.

There are three different types of coverage being used to achieve universal healthcare in other countries; single-payer, government mandate, and two-tier coverage. An example of a well

established single-payer system is Canada, while countries like Australia and France have twotier systems, and Germany, Switzerland, and Greece all have a government mandated healthcare system (Amadeo, 2019). Overall there are several different ways to provide a universal healthcare system, a single payer system is just one of few.

The Current US Healthcare System

The current healthcare system in the United States is in a state of flux. Under the Obama administration, sweeping changes were made to provide coverage for millions of Americans without health insurance. Known as the Patient Protection and Affordable Care Act of 2010, it reduced the cost of healthcare by requiring all Americans to have health coverage or pay a tax penalty. Make affordable health insurance available to more people. "The law provides consumers with subsidies ("premium tax credits") that lower costs for households with incomes between 100% and 400% of the federal poverty level" (Health Care.Gov, 2019). See (Appendix C for poverty level guidelines). HealthCare.gov (2019) states that expanding the Medicaid program to cover all adults with income below 138% of the federal poverty level was an expansion process to help lower income adults, however every state has not implemented such changes.

The current administration has been using its power to try and dismantle portions of the Affordable Care Act, which has made healthcare coverage in the United States even less effective than before. Many Americans struggle with the healthcare system as currently constructed. Furthermore, people with chronic conditions have medications that cost several hundred dollars a month. This is something that It unaffordable without health insurance.

Preventive care is the main source of the financial issue. Most of the preventive medications on

the market for chronic illnesses are very expensive. These medications can drastically improve the quality of life for a person. This is an issue for millions of Americans across the country. Copays, deductibles, health requirements, income; they all affect the amount or type of health insurance coverage you are eligible to receive.

When it comes to private insurance many employer-based programs offer some options, however, the premium rates can be very expensive dollars a month. The price would be fine if it included certain things, such as little to no deductibles or no co-pays for medications and services; this, however, is not the case.

State and federal programs are focused on providing government sponsored care. This coverage focuses on Medicaid and Medicare plans for children, families, the elderly, and those with substantial medical difficulties. Coverage is available to those who meet certain qualifications for income, number of dependents, job status, etc. WellCare and many other insurances started as one of the first answers to the Affordable Care Act, also known as Obamacare. The benefits of these program are extensive and work well for those who qualify.

Medicaid plans provides several services at little to no cost based on the individual situation. You can have complete coverage with no co-pays or out of pocket costs or medical coverage for all services, including emergency services, medication coverage with little to no payment for medication that cost two to three hundred dollars a month, no co-pays for office visits and no monthly premium. The downside to Medicaid is recent reductions in dental and vison coverage for millions of people. Many plans no longer offer these services for adults. However, children remain covered for dental and vision plans.

Medicaid

Medicaid is a form of federal and state health coverage which is meant to help Americans who meet the eligibility requirements receive healthcare coverage. Although the federal government helps with funding, the states are responsible for dispersing health coverage based on federal regulations. Some of the eligibility requirements for Medicaid include, low-income, pregnancy, children, adults with disabilities, and the elderly. In some cases, Medicaid can be used to supplement care not covered by Medicare services. While Medicare is usually only accessible to those over the age of 65, Medicaid is accessible from birth through advanced age. In all states: "You can qualify for Medicaid based on income, household size, disability, family status, and other factors. Eligibility rules differ between states" (HealthCare.gov, 2019). The income requirements are the most important factor in securing Medicaid coverage. The federal government decides what the poverty level is, and the states regulate what type of coverage you qualify for based on their requirements in that area (refer to Appendix C for guidelines).

Medicare

Medicare is a federal government health insurance program, which is for Americans age 65 and older, however some younger citizens with a disability may qualify. The plan is intended to cover the cost of medical services for Americans that are approaching their elder years.

Medicare is broken into 4 parts, A, B, C, and D. Each of these parts entitle the user to certain services. More specifically, part A covers hospital stays, nursing homes, home health, and hospice care. Part B covers a patient's doctor visits, preventive care, and supplies. Part D is a service which enable a patient to have certain types of prescription drug coverages. Part C, also known as Medicare Advantage, is a service which allows a patient to have coverage through all

levels by having access to each part. According to the definition of *Medicare Advantage*(*Medicare part C*) from HealthCare.gov "Medicare Advantage Plans include Health

Maintenance Organizations, Preferred Provider Organizations, Private Fee-for-Service Plans,

Special Needs Plans, and Medicare Medical Savings Account Plans" (HealthCare.gov, 2019).

Although Medicare seems like it encompasses everything, some private insurance may still be necessary to coverall all the patient's costs based on eligibility and approval for each part.

Coding and Organization

Coding systems for services and insurance are scattered in the U.S. while some hospitals and insurances have worked together to develop coding systems that work, there are still issues regarding the transfer of coding and how it effects the efficiency and effectiveness of healthcare. A universal coding system would allow any insurance or medical facility to know exactly what the patient has, needs, and what insurance claims to target. Furthermore, it would allow for faster service and easier billing practices. According to MedicalBillingandCoding.org (2018), nearly 70% of health care expenses are regulated using the ICD method of coding. Although these countries have a universal way of identifying which codes to use, there are so many that often there are mistakes in processing the proper designation. "The current version, ICD-10, features more than 68,000 codes for infections and parasitic diseases, neoplasms, and congenital malformations, as well as diseases of the digestive system, respiratory system, and nervous system" (MedicalBillingandCoding.org, 2018). Organizing health information is a tedious task. Many healthcare organizations have different software with different ways of labelling, ordering tests, or even admitting and discharging a patient. A uniform approach with technology and software that is used by all would limit the amount of miscommunication and cut through the

learning curve for patients and workers going to different facilities, as well as, different countries or regions.

Allocation of Resources

Without the proper resources, organizations, both government and civilian, can't function properly. Therefore, the business, its employees, and customers are subject to hardship, even closure if the needs of the organization aren't properly managed. "While the scarcity of funds for health is a constraint everywhere, all countries can do more with existing resources" (World Health Report, 2010). Staffing and training are two areas of concern.

Staffing has always been an issue, specifically in healthcare. However, in recent years, the ratio of patients to nursing assistants, nurses, and physicians has become a strain on hospitals, long-term care facilities, and other medical facilities. According to Karl Yordy (2006) the increased needs of the aging population makes short-term fixes inadequate when it comes to the staffing crisis. By the numbers, the answer seems simple; hire more staff or move staff to areas where they are needed. Within an organization this approach could work, however, if you want to tackle the issue on a national scale it becomes much more complex. When you look at the country and the variety of areas that are expected to provide care to the population, some are simply overpopulated. However, while other areas of the country may be less populated, there also exists a need for staffing because physicians and nurses may not want to move to these areas or pay isn't as competitive in these areas. Occurrences of this type are known as geographic maldistribution. Geographic maldistribution can involve the maldistribution of physicians, specialists, or the access to healthcare services in general. In addition, the distribution of these

physicians and services in the United States does little to promote the equal access and treatment of citizens in underserved communities.

Bennett, Phillips, and Teevan (2009) found the following:

In 2006, nearly 75 percent of U.S. counties or partial counties were designated Health Professional Shortage Areas (HPSAs), meaning that the population-to-physician ratio in these areas exceeded the minimum (3,500:1) considered necessary for adequate access. Meanwhile, experts estimate that, in aggregate, non-HPSAs have a surplus of more than 70,000 physicians.

However, there are a variety of reasons for staffing woes in the United States. The problem isn't limited to hiring more people. "Choices concern priorities, so that the rationing taking place at different levels of the public service through a hierarchy from high to low often constrains spending at the lower level" (Putoto & Pegoraro, 2011). Hiring more staff will help to alleviate the pressure placed on an organization, however, the entire structure of the organization is involved in the use of resources, which can affect the ability to provide more workers.

World Health Report (2010) stated the following:

Inefficiencies can be found in many areas, for example: in the way medicines are purchased and used, in the way hospital admissions are managed, in the way the health worker capacities and motivation are addressed, and in the way the health service mix is realized.

Training and education also have a great effect on staffing and resources. Training is very important because it allows you to have staff that are efficient and understand their responsibilities to the patient and the organization. This point is particularly stressful because

what's best for the patient may not be what's best for the organization, or vice versa. "The problem of rationing (also referred to as 'priority setting', or 'resource allocation') in healthcare is therefore a problem of the moral legitimacy of such choices" (Putoto, Pegoraro, 2011). The key is being able to determine the best course of action. Whether it's from a nursing or organization perspective. Training is important when it comes to making these decisions.

Yordy (2006) revealed the following:

A substantial increase in newly educated nurses will be needed to meet projected future demand. Consequently, increased supply will require a major expansion of nursing faculty and other educational resources. The following four elements determine the adequacy of faculty to meet future needs: demand, supply, educational preparation and productivity.

The cost effectiveness or productivity of having workers who meet your supply and demand, however, aren't effective or productive because of their inexperience or lack of training costs time and money.

So how do these issues affect the care of the patient and healthcare in general. Focus on the patient. When a patient has several needs and requires constant care it falls on the facility to provide that care and the insurance to approve that care. For example, if you are a nurse and you have 10 patients to assess, treat, and provide care for, you may feel overwhelmed and the care may suffer, especially if some of those patients have more needs than others. However, if you were to split that workload between two nurses with equal training, the time it takes for a patient to receive care decreases and their satisfaction increases. This concept isn't very compatible with

the financial side of healthcare thinking. For every nurse and patient on the floor there is a certain ratio that most organizations follow to determine how much staff is necessary. The concept of providing this mixture of organizational and staffing needs could be described as allocative efficiency. According to Yip and Hafez (2015) allocative efficiency is using resources in a manner which provides an ideal mixture of healthcare services to increase the benefit to citizens. How we decide and implement our staffing based on the needs of the patient is just as important as how resources are allocated. For example, a facility that is outdated and in need of an upgrade would be assessed to determine what resources were needed, what staff would be involved, and how important each issue with the facility was. This type of thinking is like the administration of patient care. This doesn't mean that acts to save money or resources shouldn't be pursued, it simply implies that respecting the needs of the patient and allocating the proper amount of resources for their care is an ethical issue and not simply financial. "Outcome measures, in terms of health status, financial risk protection and public satisfaction, are often given priority, with little thought for the inputs expended and the costs required to effect such change" (Yip & Hafez, 2015).

The staffing and resource issues in the United States, as well as other countries are likely to increase over the next decade. According to figures tabulated by the Petersen-Kaiser Health System Tracker (2016) show the United States as having some of the highest rates for healthcare in the world compared to other developed countries (see Appendix A for healthcare expenditures).

Nursing resources are finite because you must have the proper skill and training to deal with situations and patients. While new technologies are thought of every day, it does little to

alleviate the strain of a healthcare system that has too many patients and not enough staffing or resources. This is true of the medication part of the industry as well. The opioid crisis in the US has caused shortages of certain medications that people need because of the over usage by those who don't. The future of healthcare in the United States is ever changing. Eventually an aging and diverse patient base will make resources and staffing strains increase. Universal healthcare is one avenue which governments, state and federal can employ to distribute quality resources, care, and physicians to citizens in need.

Universal Healthcare in other Countries

There are three ways a country can implement a system of universal healthcare, single-payer, mandatory enrollment, or a two-tier system. (See Appendix B for a list of countries with universal healthcare). Although many countries have devised some type of universal healthcare system, there is no universal way of implementing or paying for healthcare across different countries.

The single payer system is a system where taxes are applied to the costs of the essential health needs of citizens and governed by a single government organization. In the United States this would be the federal government. All citizens would pay a tax that is used to fund the single-payer system, thus allowing access to universal care. According to Christopher (2016) this form of healthcare would ensure that everyone has access to health insurance from one plan or insurer for essential services, physicians, nursing care, medical facilities, prescription medications, and dental and vision services.

The two-tier healthcare system is a system where the government provides basic healthcare services while a second level of care can be purchased for those who wish to access additional services, specialized, or faster care. Two-tier systems allow citizens to access coverages based on their income status, whereas, lower income people still have access to basic care and coverage but longer wait times. In essence, "a two-tier health care system in which wealth grants some patients access to medical services that others with the same needs cannot obtain (Krohmal & Emanuel, 2009).

The mandatory healthcare system is exactly that. Every citizen's is required to purchase or obtain some form of healthcare coverage for essential services. While the government can assist in obtaining coverage, it does not pay for coverage like a single-payer system. According to Amadeo (2019) there are six countries which require their citizens to purchase government or employer driven health insurance plans. The United States tried this form of coverage with the Affordable Care Act, however there were too many gray areas in coverage for it to be completely effective in providing universal coverage.

Germany – Mandatory Healthcare System

Germany has an insurance mandate. "Germany has mandatory health insurance sold by 130 private nonprofits" (Amadeo, 2019). Hospital stays, same day surgery, medications, mental health and dental and vison are all covered, some with co-pays, some without. There is additional mandatory long-term care insurance. According to Amadeo (2019) The funds for this program come from payroll taxes and the government uses this money to pay for most of the German healthcare expenditures. Just like with the United States system there are long wait times for specialist treatments and certain testing requirements.

Canada – Single Payer

Canada has a single-payer system. Canada has a single-payer system where the government pays for approximately 70 percent of the care provided. "Private supplemental insurance pays for vision, dental care, and prescription drug" (Amadeo, 2019). Hospitals are publicly funded. Canada is one country where everyone is covered even if they don't have access to funds to pay for treatment. Amadeo (2019) also stated that the government involvement limits the budget of hospitals to keep expenditures manageable while re-paying its physicians with a fee-for-service.

France - Two Tier System

France has a two-tier healthcare system. France has a mandatory health system that covers about 75 percent of its health care expenditure. Although "Doctors are paid less than in other countries, their education and insurance is free" (Amadeo, 2019). This is one pint of emphasis that can affect care in the United States because of the student loan debt issues, and rising cost of education and its correlation to healthcare costs. Furthermore, France appears to be the closest runner to the United States because of its willingness to tax certain items or services for the use of the government funds.

Amadeo (2019) revealed the following:

The French government also pays for homeopathy, house calls, and child care. Of that, payroll taxes fund 40 percent, income taxes cover 30 percent, and the rest is from tobacco and alcohol taxes. For-profit corporations own one-third of hospitals.

United Kingdom – Single Payer

The United Kingdom also has a single-payer system. The United Kingdom has single-payer socialized medicine. According to Amadeo (2019) roughly 80 percent of health costs are paid through taxes and the The National Health Service governs the facilities and physicians as an employer. This is an area of contention in the United States because of the cost of healthcare being so high, many think that government regulations should limit the prices or control the physician's wages. For such a large population, with physicians who have debt from paying for school, this idea may be impossible.

Adapting Systems for the United States

When analyzing these different systems, it is important to consider the different variables that can impact the effectiveness of a system. For example:

- Does Population size matter?
- What is the political structure?
- How are the income and poverty levels evaluated?
- How does one qualify and what services are Provided?
- Is it private or government organized?
- Will taxes be enough for funding?
- Are there enough physicians?

The largest country isn't necessarily the most densely populated, however the United States is.

Compared to France, the United Kingdom, Germany, and Canada, the United States has a larger population and various income and poverty levels. Physicians are at a premium in certain areas, as well as, having layers of political issues to funnel through to provide universal coverage.

Americans loathe taxes for the most part. However, taxing would seem to be the best means to fund healthcare services for such a large population.

In the case of adapting one of these universal health systems to suit the United States, a simple comparison to other countries is needed. A single-payer system sounds like an excellent idea because of the simplified billing and organization that comes with it, however, having a single tax payed by everyone to support the system would also cause issues for the low-income and poverty stricken in certain areas of the country. The insurance mandate has already proven that it is, at best, a stop-gap to gaining coverage for millions of Americans. The Affordable Care Act was a stepping stone; a first step in finding a way to universal coverage, not the stopping point.

In comparison to other countries, the United States most resembles France because of their taxes on alcohol and tobacco, and the funding of healthcare through income taxes. The two-tier system which France employs provides extra revenue in addition to the income tax it requires of its citizens. These taxes help fund nearly 80 percent of France's healthcare system. In addition, it is important to note, that France's population size is significantly smaller than the United States. This observation brings into light the topic of population size and its effects on universal healthcare and its viability for the United States. DeMichele (2017) recognizes this issue and has a rebuttal to size being a key, contributing factor to why universal healthcare can't work in the United States. According to DeMichele (2017) universal healthcare initiatives applied at the state level; federally backed and suited to each state's population could work. "One universal solution, applied at a state level to suit the tastes and needs of each of our 50 unique Republics, using other similar sized countries as models (DeMichele, 2017). DeMichele (2017) goes on to research the effect that universal healthcare has on quality and cost of care, stating

that some of the best healthcare systems in the world, which are universal healthcare systems, outrank the United States in terms of cost and uninsured citizens.

Case Analysis of the U.S. Healthcare System

Current Situation

The United States has one of the largest, most diverse populations in the world. "The current U.S. population is more than 327 million people (as of early 2018); the United States has the world's third largest population, following China and India," meaning healthcare services and goods are at a premium in the nation's most densely populated areas (Rosenberg, 2019). In addition, there are areas of geographic maldistribution of physicians and specialist due to population size or location.

Mission of U.S. healthcare.

As the United States has no unified healthcare system, there is no unified mission or vision to guide healthcare strategy and reform. Policy and law are constantly changing, and political parties are consistently opposed to one another's reforms. Although the Affordable Care Act was passed in 2010, opposition from states and political parties succeeded in making it less effective than it could have been if embraced wholeheartedly. The uninsured rate immediately went down, however, some states made it harder to apply, easier to be denied, or increased the requirements for free and affordable healthcare.

Technology, services, and goods.

The United States offers a large variety of healthcare services, technologies, and goods to its citizens. Technological and pharmaceutical advances are tested and later implemented once proven reasonably safe and effective by the Food and Drug Administration (FDA). Innovations in healthcare services and treatment options happen every day. These services are more efficient and often more effective in treating certain diseases. However, the cost of services in the United States are far higher than many developed countries, making access to innovation and even basic healthcare difficult for many Americans.

Current Healthcare Strategy

The United States has no clear healthcare strategy. Like the mission of national healthcare, healthcare strategy is divided by political processes and figures, state and federal governments, and financial processes. This inconsistency has made the healthcare system of the U.S. less efficient, harder to manage, and accounts for the large cost of healthcare for American citizens.

Significant Healthcare Issues

Although the United States is one of the most technologically advanced nations in the world, its healthcare system is lacking in overall function and efficiency. In terms of performance, the United States regularly remains near the mid to bottom ranks of developed countries in several categories. Schneider, Sarnak, Squires, Shah, & Doty (2016) details this information based on an international comparison of healthcare standards of care in 11 countries, including the United States, several of which have either a single-payer system or a two-tier system of care. There are several standards that are used to judge healthcare efficiency and

overall care. (Refer to Appendix D for standards). Cost, the outcomes of care, efficiency of healthcare, ease of access, and the overall process of receiving care. These standards are used in hospitals, clinics, specialists' offices, etc. to determine the overall strength of the care being provided. "The U.S., France, and Canada score lower than the 11-country average across most of the five domains, but all three achieve above-average performance on at least one domain: France on Health Care Outcomes, Canada on Care Process and Administrative Efficiency, and the U.S. on Care Process" (Schneider, Sarnak, Squires, Shah, & Doty, 2016).

Cost of care.

When reviewing cost of care in the U.S. it is striking to see that among most of the developed nations of the world, the U.S ranks 1st in cost of care and amount of Gross domestic product being utilized for healthcare. (See Appendix E for an international comparison of cost). There is also a direct correlation with cost of care and lower performance according to Scheider, et al. (2016) because of the lower rankings in the standards of healthcare, where the U.S. ranks below fifth in all but one category, the process of care. (See Appendix F and G for cost performance rankings). Cost is a paramount concern at a federal and state level because of the financial burden placed on government spending to combat the healthcare crisis. Medicare and Medicaid programs are the main source of government funded insurance programs; however, these programs are old, outdated in their functionality and efficiency with different parts being added or taken away to try to adapt to an ever changing and growing population. The Affordable Care of 2010 was supposed to be an effort to change the current system with an insurance mandate and lower costs for basic care, however, the holes in the program allowed states to adapt their own forms of coverage and thus, several million Americans remain uninsured due to cost or access issues. With rising healthcare prices and limited resources to brig to bear, healthcare in

the United States is becoming increasingly less efficient and more expensive to the average American.

Uninsured citizens.

"The number of uninsured Americans rose by 1.3 percentage points, or the equivalent of 3.2 million people, in 2017" (Sarlin, 2018). As previously stated, the Affordable Care act was the prized reform of the federal government under President Barack Obama in 2010. Although controversial, this key piece of legislature did enact a change in the levels of uninsured Americans by using a mandate that required insurance to be purchased or obtained through other means or receive a tax penalty. KHN (2012) showed a drop of 1.3 million from 2010 to 2011 in the terms of uninsured Americans after the Affordable Care Act had started. This was a change from 16.3 of Americans being uninsured to 15.7 percent in one year according to KHN (2012). Medicaid expansion in 2016 lowered the uninsured rate to 10 percent, proving that continual reform to enhance the U.S. healthcare system can work.

Inserro (2016) revealed the following:

The improvements in health insurance coverage were broadly distributed across all racial and ethnic groups, workers' industry type, income and education levels, and age groups, and every group studied had lower uninsured rates in 2016 than in 2013

Lack of continuity.

The United States, unlike most large countries with universal health coverage, has a lack of continuity of coverage for healthcare on a national level. While the Federal government mandated coverage all Americans, on a state level there was resistance, which brought about several different forms of state issued health exchanges. However, there are still gaps in coverage

for Americans who can't meet the requirements for Medicaid but can't afford a monthly premium and copays for their basic healthcare needs from month to month. Many of these citizens are in states that refused to accept Medicaid expansion in 2016 and have put their own citizens at risk because of the eligibility requirements (See Appendix H for Medicaid coverage c=gaps). "While the Medicaid expansion was intended to be national, the June 2012 Supreme Court ruling essentially made it optional for states; as of March 2019, 14 states had not expanded their programs" (Garfield, Orgera, & Damico, 2019). It is this lack of continuity which makes healthcare reform difficult to manage. Universal coverage requires continuity at the state and federal level; everyone must agree to implement the same rules at the same time.

Financial Information

The financial state of U.S. healthcare could be considered alarming compared to other nations. Out of many developed countries, the U.S. has the highest cost and gross domestic product expenditures in the world (Refer to Appendices A and E). This comparison includes pharmaceuticals, insurance costs, physicians' fees, hospitals stays, etc. According to Becker's Hospital CFO Report (2016) healthcare expenditure account for over 17.5 percent of Americans gross domestic product, as well as accounting for over three trillion dollars of money spent on healthcare; a number which is sure to increase substantially on a yearly basis due to population growth. Medicare and Medicaid both increase spending on a yearly basis. From 2013 to 2014 Medicare spending increased by over 5 percent, while Medicaid increased by over 11 percent, which is billions of dollars of spending per year according to Hospital CFO Report (2016). Refer to Appendix I for detailed information about spending). In terms of services, Americans pay nearly 10,000 dollars a year into the health care system, which is the highest in the world.

yearly basis. (Refer to Appendix I for detailed results). According to Hospital CFO Report (2016) prescription medication costs alone are trending to rise by over 20 percent by 2020 to over four billion dollars. This alone marks the need for some form of universal coverage option.

Recommendations

Recommendations for healthcare reform typically zero in on costs and uninsured Americans. "Reform proposals often focus solely on extending coverage to uninsured Americans, but coverage expansions will be less expensive and more beneficial if they are paired with delivery reforms" (Brennan, et. al, 2009). A reformation of the way the United States finances and delivers care is necessary for and major update to take place in how Americans are insured and manage their health. In addition, there are several key recommendations focused on in Brennan, et al (2009) which reveal the detail involved in healthcare reform efforts, which are abbreviated as follows:

- Increasing quality through more effective record keeping and computer systems management of payments and benefits.
- 2. An incremental change in how payments are provided and financed through private and government means.
- 3. Build a better dataset of information through improved patient outcomes by tracking socioeconomic issues in healthcare delivery and spending.
- 4. Standardized performance evaluation tools for all the healthcare system
- Increased reimbursements for primary healthcare needs in order to lower the substantial cost of un-needed emergency room visits and deter disease progression before it begins.

- 6. Implement a risk-adjusted policy for Medicaid and Medicare, allowing expansion to cover all citizens, while providing protection from higher risk patients that can't afford to pay.
- 7. Provide a tiered system of coverage options that allow for no deductible or copay when low risk care centers are used for medical treatment.
- 8. Loans or grants by the government for healthcare facilities or services should be linked to care reform in Medicaid and Medicare spending to help promote higher quality, more efficient healthcare delivery systems in the future.

In addition to these recommendations, more distinct attention should be turned on simplifying the process of approval and payment, as well as, stabilizing the cost of prescription medications, services, and physician fees. Physicians who provide high quality, cost-effective care based on new guidelines would be subject to tax benefits. (Refer to Appendix I for a cost analysis).

Strategic Implementation Plan for the U.S. Healthcare System

Internal Assessment

The overall success and stability of the United States depends on the health and safety of the population. With a population of over 327 million people, as referenced earlier by Rosenberg (2019) rising healthcare costs, disease, and overall health can have a distinct effect on the wellbeing of the nation's infrastructure. "Without healthcare services—including physical, behavioral, and oral healthcare—to help improve health, Americans are at greater risk of poor health and human services outcomes" (HHS.gov, 2019).

The goal of the U.S. government is to improve the quality of health in the United States and work with Medicaid, Medicare, and private providers to provide more cost-effective means to accessing the healthcare system, while providing high quality care to its citizens. According to HHS.gov (2019) the government is trying to invest in programs which will develop its healthcare workforce and provide a broader scope of care to help reduce cost, increase efficiency and provide access to millions of Americans regardless of age, ethnicity, disability, or race.

Although millions of Americans have gained coverage through the Affordable Care Act or increased coverages through employers or private insurance, there remains a gap in coverage for millions of Americans. Furthermore, several million Americans who have coverage find themselves in financial difficulty because of gaps in specific coverages under their insurance plans. With healthcare prices slated to rise at a rate of 5.5 percent per year according to HHS.gov (2019) healthcare spending will debilitate a significant portion of the American public in the future because of financial difficulties related to their health. In addition, the average life expectancy has increased significantly over the last 30 years, reaching nearly 80 years of age.

This shows that American healthcare has advanced in such a manner that its citizens have thrived based on their health, however, a larger population due to increases in age will lean more heavily on the healthcare system because of disease and illness that comes with advanced years.

Although the U.S typically ranks highest in amount of healthcare services as gross domestic product, the outcomes of healthcare services do not entirely reflect those costs. (See Appendices E and G for reference). Lack of services in certain areas are accountable for some of the service woes as well as lack of affordability. Some of these services have long waiting lists, low accommodations, or staff that aren't well trained in providing certain aspects of care. This topic is known as maldistribution as previously stated in this research. Medicaid and Medicare insurance also contributed to long wait times and approval complications for services. In addition, private insurances have started limiting the amount they will cover or enhancing their coverages to deter wasteful healthcare spending; however, this has caused issues with approval for those who need the services.

Overall the healthcare system has advanced over the last 50 years, allowing for exponential growth in age, technology, services, and pharmaceuticals. However, these advances have placed a higher demand on treatment and a greater financial burden on the United States and its citizens in terms of insurance and healthcare expenditures. (See Appendix E for further reference). With so much financial demand on the healthcare system, the government, and American citizens, there remains a need to develop a system which enhances the technological and service aspects of the Unites States, while limiting the cost and making healthcare coverage more affordable to the public. Universal healthcare is an option; strategies to implement a greater form of health mandate, moving past the significant progress, although failure of the Affordable Care Act to cover all Americans.

Internal Assessment Table

	Strengths	Weaknesses	
People	Large although shorthanded	Lack of qualified persons in several	
	workforce dedicated to American	fields	
	health	Lack of continuity of ideas	
	American citizens contribute to their	Political backlash	
	own healthcare	Overpopulation	
	Involvement on several levels of	Age	
	government		
Service	Technology and services include	Competition between providers and	
	state of the art medical procedures,	insurances make approval and	
	primary care, specialty care,	affordability an issue	
	pharmacy care, rehab, mental health,	n, A lack of training and maldistribution	
	long-term care, urgent care	account for gaps in coverage	
Quality	Quality of services and technology,	Many Americans can't afford high	
however quality of care process is in qual		quality care or primary care costs.	
	question.	Lack of efficient and quality staff has	
	Urgent care centers provide back-up	led to the rise of urgent care centers to	
	care for those with limited insurance	take care of the overflow of patients	
		Quality of care is directly linked to cost	

Technology and services are very	Quality of care is directly linked to cost	
advanced and available in most	Costs of American care are nearly	
areas, making investing in	10,000 dollars per year, the highest in	
healthcare insurance a primary goal	the developed world. With such high	
U.S. Healthcare can provide	cost, outcomes should be higher than	
coverage to its citizens through	they are.	
Medicare and Medicaid options, as	ıs	
well as private insurance.		
Population growth is making more	Poor organizational management of	
consumers everyday	health systems, finances, and services	
Healthcare continues to expand	Medicare and Medicaid need expansion	
through the Affordable Care Act and to cover all Americans.		
new measures that will make		
healthcare more accessible		
	advanced and available in most areas, making investing in healthcare insurance a primary goal U.S. Healthcare can provide coverage to its citizens through Medicare and Medicaid options, as well as private insurance. Population growth is making more consumers everyday Healthcare continues to expand through the Affordable Care Act and new measures that will make	

Swot Analysis

Strengths	Weaknesses	
Employer-sponsored health insurance	Insurance coverage gaps	
Medicaid expansion in some states	Maldistribution of resources, physicians, and	
Medicare coverage	services in some areas	
Technology and services	Expansion denied by some states	
Training	No unilateral decion making on universal	
Advances in medical science	coverage	
Non-profit hospitals	Divergent ideals about healthcare expansion	
	- Cost of healthcare and coverage	
Opportunities Opportunity to reduce costs through training more efficient, cost effective ways to handle care. The Affordable Care Act opened the door to Medicaid and Medicare reform to help Americans obtain coverage	Threats Maldistribution of resources Cost of care Overpopulation Inefficient systems Political upheaval and red tape Lack of support for universal coverage initiatives	

U.S. Healthcare Value Chain

Purchasers	Financial	Providers	Product	Producers
	Emissaries		Emissaries	
Citizens	Insurers	Hospitals	Wholesale	Biotech and Pharma
Government	HMOs	Physicians	Online	companies
Employers	Pharmacy Reps	Pharmacies	distributors	Medical supply and
Unions	Financial Planners	Delivery	Organizational	device companies
Organizations		Systems	groups	Information
Organizations			Mail	technology systems
			distributors	

The United States, like several countries, has many aspects to go through when providing healthcare. The value chain shows what levels services go through before they get to the patient. Pitta (2004) states the following about value chains in healthcare:

The main objectives of the value delivery network are to deliver superior quality products and services of perceived value to the customer. In addition, the value chain attempts to evaluate the lifetime value of each of its customers. It is important to visualize the network's main outputs before continuing with the specific details.

This concept should be more apparent regarding healthcare outcomes because of the cost of healthcare and the perceived lack of healthy outcomes from those expenditures. (Refer to Appendix J for more information on the healthcare value chain).

Objectives

There are several objectives for reform in the U.S. healthcare system. Finding strategies and ways of implementing them is one way to get the attention of policy makers and those providing the funding. However, the focus should be on the outcome of these changes to the healthcare system.

Tinker 2018 states the following:

The World Health Organization defines an outcome measure as a "change in the health of an individual, group of people, or population that is attributable to an intervention or series of interventions." Outcome measures (mortality, readmission, patient experience, etc.) are the quality and cost targets healthcare organizations are trying to improve.

Perhaps this is how the objectives for healthcare reform as a nation should be assessed.

Objective One: Promote Affordable and Universal Healthcare

As of 2016, the Federal Government was responsible for 28 percent of healthcare spending in the United States, citizens, 28 percent; private businesses, 20 percent; and State and local governments, 17 percent, according to HHS.gov (2019). This growth in healthcare expenditures is likely a result of coverage expansion and utilization of healthcare services. With state, local, and federal governments being financially responsible for nearly 50 percent of healthcare expenditures in the U.S., universal health coverage is a topic that needs to be broached

and further developed past an insurance mandate and into either a single-payer government branch or two-tier insurance plan.

Strategy and implementation:

Show the policy makers the results of better efficiency and quality of care outcomes due to better training and spending. HHS.gov (2019) also states that to better promote coordination and quality of care in facilities, pay rates should be set based on the service and facilities being used. Such a plan is bold because of the unilateral nature of having fixed costs. Implementing systems that have a single-payer would eliminate middle-men and allow sweeping changes in policy, framework, and cost to take place faster. Although these changes would be broad and possible costly at first, the benefits in patient outcomes and efficiency of funds spent would be worth the start-up funding. Such a plan would take years of policy development with the Affordable Care Act as a framework and state and local taxes at the disposal of those chosen to develop such a system. The other option is a two-tier system which already exist in some forms. Medicaid and Medicare make up the first tier of care, while private insurance makes up the second level for those who can afford to pay for services or less wait times. Although this is not a true, two-tier system, the framework is already in place to adapt to such a system with some help from taxes on tobacco, alcohol, and government taxes.

Objective Two: Fixed Costs for Primary Care and Essential Services

Cost is the biggest issue when it comes to healthcare in America. Everything goes up in cost year after year with no fixed rates for medical care. The problem with having no set cost for

a service is it allows it to balloon to overwhelming prices. The U.S. is already the most expensive country for healthcare in the developed world at nearly 10,000 dollars per year.

Strategy and implementation:

However, these costs could be limited under a universal health package which included fixed rates for services and "payment structure tied to quality, including care coordination, payfor-performance, or shared savings" (HHS.gov, 2019). Fixed costs and cost tied to performance will be a provision that causes heated debate because of the limits placed on physicians and hospitals that want to charge more for services rendered. This topic will be one that takes years to develop, possibly five years or more if a policy can be constructed because of the far reach and repercussions of fixed cost. Incentives on taxes, services, quality, and value will have to be discussed in order to appease those who oppose the more effective use of citizens resources.

Objective Three: Strengthen the Healthcare Workforce

With so much focus on providing universal healthcare, it is sometimes lost on Americans and government officials that the United States lacks essential personnel to cover such a large area. Some states experience geographic maldistribution of physicians and services simply because of their location. Other areas are so densely populated that there are simply not enough service and physicians to cover the area. Government sponsored training programs which over incentives for those who serve these areas would help with gaining coverage and making healthcare more effective.

HHS.gov states the following:

At a national level, by 2025, demand is expected to exceed supply for several critical health professions, including primary care practitioners, geriatricians, dentists, and

behavioral health providers, including psychiatrists, mental health and substance abuse social workers, mental health and substance use disorder counselors, and marriage and family therapists.

Strategy and implementation:

What strategies can combat such a large discrepancy in qualified personnel? Training, interning, and other opportunities can help to sustain the workforce in healthcare. There are many avenues of training available in the form of online, in person, university, and skills training. Implementing programs which provide tax benefits, grants, and scholarships to those entering medical fields of need, with clauses to ensure that areas in need of services are covered will be an important step in changing the coverage expansion for millions of Americans.

Involvement

State and federal agencies and governments will have to work collectively to expand services, fix rates, and provide training to those who wish to serve the medically underserved. Universal healthcare is a topic that will take years to implement, however a framework can be constructed to provide a five- or ten-year plan for setting the country on the right path.

Conclusions

The United States is one of the most powerful and technologically advanced countries in the world. There are several issues within healthcare that bring the quality of care and service below that of other developed countries. Cost, plan of service, insurance, and quality of care are all a part of the healthcare experience. The U.S. ranks low in overall quality pertaining to cost against nations with universal health coverages. The lack of continuity across healthcare systems, as well as affordability of services and insurances causes many of the financial burdens that

Americans must shoulder. When nations like France, the United Kingdom, and Australia, all of which are allies to the United States, have universal coverage for their citizens along with higher quality of care assessments, there appears to be a fundamental issue with how the world views U.S. healthcare. (Refer to Appendices B and F). Universal healthcare would appear to be the answer to these issues. Whether it be a two-tier system that uses government and private insurances, or a single-payer government system with incentives for paying for better quality services, the cost of implementation out-ways the need for quality healthcare for all American citizens.

Goodreads (2019) provides an answer:

"Unless we put medical freedom into the Constitution the time will come when medicine will organize itself into an undercover dictatorship. To restrict the art of healing to doctors and deny equal privileges to others will constitute the Bastille of medical science. All such laws are un-American and despotic."

— Benjamin Rush

References

- Amadeo, K. (2019, March 12). Universal Health Care in Different Countries, Pros and Cons of Each. Why America is the only Rich Country Without Universal Health Care. Retrieved from https://www.thebalance.com/universal-health-care-4156211
- Becker's Hospital CFO Report. (2016, September 13). 17 statistics on the current state of US healthcare spending, finances. Retrieved from https://www.beckershospitalreview.com/finance/17-fascinating-statistics-on-the-current-state-of-us-healthcare-spending-finances.html
- Bennett, K., Phillips, J., & Teevan, B. (2009, May). Closing the Gap: *Finding and encouraging physicians who will care for the underserved*. Retrieved from https://journalofethics.ama-assn.org/article/closing-gap-finding-and-encouraging-physicians-who-will-care-underserved/2009-05
- Brennan, N., Cafarella, N., Kocot, S.L., McKethan, A., Morrison, M., Nguyen, N., Shepard, M., & Williams II, R. D. (2009, August 21). Improving Quality and Value in the U.S. Health Care System. Retrieved from https://www.brookings.edu/research/improving-quality-and-value-in-the-u-s-health-care-system/
- Christopher, A.S. (2016, June 27). Single payer healthcare: Pluses, minuses, and what it means for you. Retrieved from https://www.health.harvard.edu/blog/single-payer-healthcare-pluses-minuses-means-201606279835

- DeMichele, T. (2017, May 8). Is the United States of America "too Big" For Universal HealthCare (like Single Payer) to Work?. Retrieved from http://factmyth.com/factoids/universal-healthcare-cant-work-in-the-us-due-to-size/
- The Editorial Board (2019, February 16). The New York Times. *How Much Will Americans*Sacrifice for Good Health Care? Retrieved from

 https://www.nytimes.com/2019/02/16/opinion/sunday/medicare-for-all-universal-health-care.html
- Garfield, R., Orgera, K., & Damico, A. (2019, March 21). The Coverage Gap: Uninsured Poor

 Adults in States that Do Not Expand Medicaid. Retrieved from

 https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/
- Goodreads. (2019). Healthcare Quotes. Retrieved from https://www.goodreads.com/quotes/tag/health-care
- HealthCare.gov. (2019). Medicaid expansion and what it means for you. Retrieved from https://www.healthcare.gov/medicaid-chip/medicaid-expansion-and-you/
- HealthCare.gov. (2019). Medicare Advantage (Medicare part C). Retrieved from https://www.healthcare.gov/glossary/medicare-advantage-medicare-part-c/
- HHS.gov. (2019, January 30). Strategic Plan FY 2018 2022. Retrieved from https://www.hhs.gov/about/strategic-plan/index.html
- Inserro, A. (2018, September 11). ACA Pushed Uninsured Rate Down to 10% in 2016, Even More So in Medicaid Expansion States. Retrieved from

- https://www.ajmc.com/newsroom/aca-pushed-uninsured-rate-down-to-10-in-2016-even-more-so-in-medicaid-expansion-states
- Kamal, R. & Cox, C. (2018, May 8). Kaiser Family Foundation. *How do healthcare prices and use in the U.S. compare to other countries?* Retrieved from https://www.healthsystemtracker.org/chart-collection/how-do-healthcare-prices-and-use-in-the-u-s-compare-to-other-countries/#item-start
- KHN Morning Briefing (2012, September 13). Number of Uninsured Americans Drops By 1.3 million. Retrieved from https://khn.org/morning-breakout/census-numbers-2/
- Krohmal, B., & Emanuel, E. (2009, February 12). Tiers Without Tears: The Ethics of a Two-Tier Health Care System. In (Ed.), The Oxford Handbook of Bioethics.: Oxford University Press,. Retrieved 17 Apr. 2019, from http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199562411.001.0001/oxf ordhb-9780199562411-e-008.
- MedicalBillingandCoding.org. (2018). What are the different types of medical coding classification systems? Retrieved from https://www.medicalbillingandcoding.org/qnas/what-are-the-different-types-of-medical-coding-classification-systems/
- Pitta, D., & Laric, M. (2004). Value chains in health care. Journal of Consumer Marketing. 21.

 451-464. 10.1108/07363760410568671. Putoto, G. & R Pegoraro, R. (2011). Resource

 Allocation in Healthcare Bioethics in the 21st Century. Retrieved from intechopen.com

- Roehr, B. (2011). US healthcare falls further behind that of other countries. *BMJ: British Medical Journal*, *343*(7829), 869-869. Retrieved from http://www.jstor.org.ezproxy.waterfield.murraystate.edu/stable/23052203
- Rosenberg, M. (2019, January 20). Current Population of the United States. Retrieved from https://www.thoughtco.com/current-usa-population-1435269
- Sarlin, B. (2018, January 6). 3.2 million more Americans were uninsured in 2017. Retrieved from https://www.nbcnews.com/politics/white-house/3-2-million-more-americans-were-uninsured-2017-n837986
- Schneider, E.C., Sarnak, D.O., Squires, D., Shah, A., & Doty, M.M. (2016). Mirror, Mirror 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care. Retrieved from https://interactives.commonwealthfund.org/2017/july/mirror-mirror/
- Tinker, A. (2018, October 30). The Top Seven Healthcare Outcome Measures and Three

 Measurement Essentials. Retrieved from https://www.healthcatalyst.com/insights/top-7healthcare-outcome-measures
- (2005). Global health priorities priorities of the wealthy? *Globalization and health*, *I*(1), 6. doi:10.1186/1744-8603-1-6
- (2013, January 21). *List of countries with universal healthcare*https://truecostblog.com/2009/08/09/countries-with-universal-healthcare-by-date/
- World Health Organization. (2019). *Universal health coverage and health financing*. Retrieved from https://www.who.int/health_financing/universal_coverage_definition/en/

World Health Report (2010) Chapter 4: More health for the money. Retrieved from

http://www.who.int/health_financing/strategy/equity_efficiency/en/

Yip, W., Hafez, R., & Heseltine, E. (2015, September). Retrieved from

http://www.who.int/health_financing/documents/synthesis_report/en/

Yordy, K. D. (2007). The Nursing Faculty Shortage: A crisis for healthcare. Retrieved from

http://hdl.handle.net/10244/533 Date: 2006-07

Appendix A

Total health expenditures per capita, U.S. dollars, PPP adjusted, 2016

United States

\$10,348
Switzerland
\$7,919
Germany
\$5,551
Sweden
\$5,488
Netherlands
\$5,385
Austria
\$5,227
Comparable Country Average
\$5,198
Canada
\$4,753
Australia
Australia \$4,708
\$4,708
\$4,708 France
\$4,708 France \$4,600
\$4,708 France \$4,600 Japan

Appendix B

Universal Health Care Comparison Chart

Country	Type	% of GDP	Per Capita	Wait 4+ wks	Infant Mortality Rate	WHO Ranking
Australia	2-tier	9.6%	\$4,798	22%	3.1	32
Canada	Single	10.6%	\$4,752	56.3%	4.3	30
France	2-tier	11.0%	\$4,600	49.3%	3.2	1
Germany	Mandate	11.3%	\$5,550	11.9%	3.2	25
Singapore	2-tier	4.9%	\$2,000		2.2	6
Switzerland	Mandate	12.4%	\$7,919	20.2%	3.6	20
United Kingdom	Single	9.7%	\$4,193	29.9%	3.7	18
United States	Private	18.0%	\$9,892	4.9%	5.6	37

Appendix C 2019 Poverty Guidelines for the 48 Contiguous States and the District of Columbia

	Persons in family/household	Poverty guideline				
1		\$12,490				
2		16,910				
3		21,330				
4		25,750				
5		30,170				
6		34,590				
7		39,010				
8		43,430				

For families/households with more than 8 persons, add \$4,420 for each additional person.

2019 Poverty Guidelines for Alaska

Persons in family/household Poverty guideline

1	\$15,600
2	21,130
3	26,660
4	32,190
5	37,720
6	43,250
7	48,780
8	54,310

For families/households with more than 8 persons, add \$5,530 for each additional person.

2019 Poverty Guidelines for Hawaii

Persons in family/household Poverty guideline

1	\$14,380
2	19,460
3	24,540
4	29,620
5	34,700
6	39,780
7	44,860
8	49,940

For families/households with more than 8 persons, add \$5,080 for each additional person.

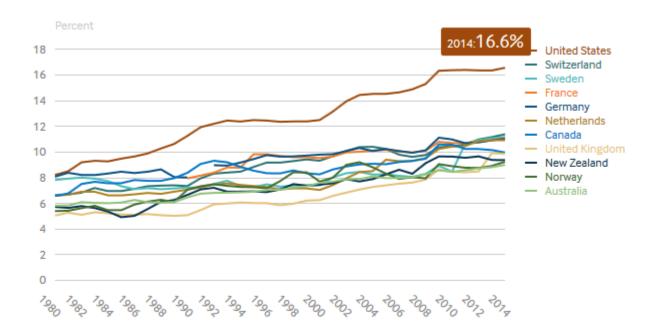
Appendix D

Health Care System Performance Rankings

header	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
OVERALL RANKING	2	9	10	8	3	4	4	6	6	1	11
Care Process +	2	6	9	8	4	3	10	11	7	1	5
Access +	4	10	9	2	1	7	5	6	8	3	11
Administrative Efficiency +	1	6	11	6	9	2	4	5	8	3	10
Equity +	7	9	10	6	2	8	5	3	4	1	11
Health Care Outcomes +	1	9	5	8	6	7	3	2	4	10	11

Health Care Spending as a Percentage of GDP, 1980–2014

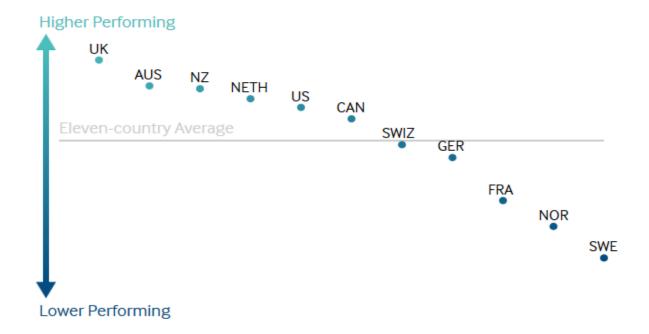
Appendix E



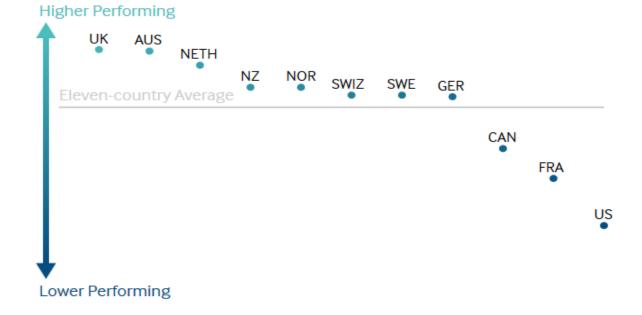
Appendix F

Health System Performance Scores

Care Process Rank

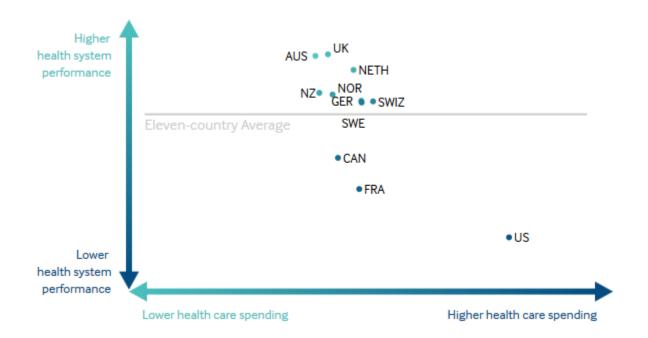


Overall Rank

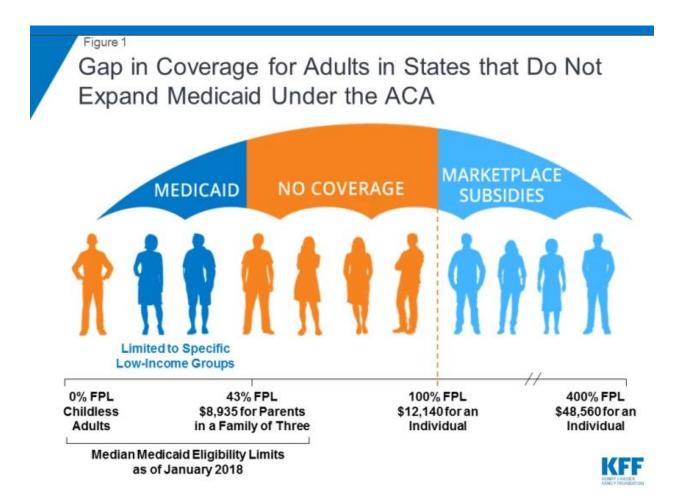


Appendix G

Health Care System Performance Compared to Spending



Appendix H



Appendix I

17 statistics on the current state of US healthcare spending, finances

Here are 17 interesting facts and statistics on finance in the U.S. healthcare industry, all in one place.

National healthcare spending

- 1. National healthcare expenditures rose 5.3 percent in 2014 to \$3 trillion, or \$9,523 per person, accounting for 17.5 percent of gross domestic product, according to the latest data from CMS.
- 2. Medicare spending grew 5.5 percent and accounted for \$618.7 billion in 2014, or 20 percent of total national healthcare spending.
- 3. Medicaid spending increased by 11 percent to \$495.8 billion in 2014, or 16 percent of total national healthcare spending.
- 4. Spending on commercial health insurance grew 4.4 percent to \$991 billion in 2014, or 33 percent of total national healthcare expenditures, while out-of-pocket spending grew 1.3 percent to \$329.8 billion, or 11 percent of national healthcare expenditures.

Hospital and clinical expenditures

- 5. Hospital expenditures increased by 4.1 percent to \$971.8 billion in 2014, up from the 3.5 percent growth in 2013, according to CMS.
- Physician and clinical services expenditures rose 4.6 percent to \$603.7 billion in 2014, higher than the 2.5 percent growth rate in 2013, according to CMS.
- 7. The average cost per inpatient day in state/local government hospitals across the U.S. was \$1,974 in 2014, the latest year for which data is available, according to Kaiser State Health Facts. The average cost per inpatient day was \$2,346 in nonprofit hospitals and \$1,798 in for-profit hospitals.

Insurance coverage

8. An estimated 20 million people gained health insurance coverage under the Affordable Care Act between the passage of the health reform law in 2010 and early 2016, according to HHS. Included in the 20 million people are those who received private health insurance on the ACA exchanges, those who gained Medicaid coverage under state expansion and young adults who were able to stay on their parents' health plans until age 26.

Physician practice

- 9. Hospital ownership of physician practices jumped 86 percent between 2012 and 2015, according to a study from Avalere Health.
- 10. Nearly 40 percent of the nation's physicians, or 140,000 providers, were hospital-employed, the study found. This marks a nearly 50 percent increase in hospital employment since 2012, when 95,000 physicians were employed across the country.
- 11. Orthopedic surgeons generate the most revenue for hospitals, according to a Merritt Hawkins survey. On average, a full-time orthopedic surgeon brought in \$2.7 million in revenue last year for his or her affiliated hospital. Invasive cardiologists generated the second-most revenue, with an average of \$2.4 million annually, and neurosurgeons followed close behind. General surgeons took the fourth spot on the list, generating nearly \$2.2 million annually for their affiliated hospitals.
- 12. However, primary care physicians presented the best return on investment for hospitals. In 2015, family physicians had an average starting salary of \$198,000 at hospitals responding to the survey, and generated 7.5 times that amount in hospital revenue. Orthopedic surgeons averaged a starting salary of \$497,000 and generated only 5.5 times that amount in revenue.
- 13. The highest ranking physician specialists, according to patients' online reviews of their care experience, are:
- i. Neuromusculoskeletal specialists
- ii. Thoracic surgeons
- iii. Podiatrists
- iv. Plastic surgeons
- v. Colon and rectal surgeons
- 14. The lowest ranked physician specialists, according to patients' online reviews of their experience, are:
- i. Psychiatrists
- ii. Preventative medicine specialists
- iii. Pain specialists
- iv. Emergency physicians
- v. Neurologists

Prescription drug spending

- 15. Spending on prescription drugs increased by 12.2 percent to \$297.7 billion in 2014, up from the 2.4 percent growth in 2013, according to CMS.
- 16. Annual spending on prescription drugs in the U.S. is estimated to rise 22 percent over the next five years, reaching \$400 billion in 2020, according to healthcare information company IMS Health Holdings.
- 17. From 2011 to 2015, spending on advertisements to market prescription drug to consumers soared by 60 percent, reaching \$5.2 billion in 2015, according to *STAT*.

 $\label{eq:continuous} \mbox{Appendix J}$ Healthcare Systems of Tomorrow Value Chain

Medical Device OEMs	 MRI, CAT, X-Ray Machine Manufacturers Component Suppliers 	SONY SIEMENS Medtronic
Connectivity & Enablement	 Device Management Communication Stacks Routers and Gateways Silicon, Boards, and Modules 	QUALCOMM:
Network Services	WirelineWPANWLAN	vodafone at&t verizon
Middleware & Application Platforms	 Data Aggregation, Transformation and Edge Processing Data Analytics Application Enablement Device Diagnostics and Prognostics 	imshealth amazon
Distribution Channels	VARsISVsDirect Sales	AIRSTRIP* PREMIER HealthLine
System Integrators & Services Delivery	 Packing and Bundling Solution Build-Up Consulting and Strategy Planning Financial Billing Operations / Care Management Hospital Information / EHRs 	Cerner Epic NEXTGEN MEKESSON Exposering Healthcare