# The Health Care Systems of the United States and Spain: A Comparison

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Abstract

When it comes to understanding and improving the United States health care system, comparison and analysis with the health care system of another country provides valuable insights. In this thesis, the United States' health care system was compared to that of Spain, as the health care system of Spain is generally ranked well above the United States in terms of quality, function, and cost. In the comparison, information such as the health of the population, the quality of health care received, accessibility, and health care costs indicate the state of the health care systems and their ability to function well in providing their services. Overall, while both systems produce similar results in terms of population health and service quality, there are major differences in health care cost and wait time satisfaction. This suggests that while both systems perform their functions adequately, there is still room for improvement on the part of the United States in providing higher quality health care at a more affordable cost.

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# Health Care Systems of the United States and Spain: A Comparison

## Introduction

The Department of Health and Human Services Secretary Sylvia Burwell stated in a 2015 announcement, “Whether you are a patient, a provider, a business, a health plan, or a taxpayer, it is in our common interest to build a health care system that delivers better care, spends health care dollars more wisely and results in healthier people” (R. Macaskill, 2016). Concerning the health and well-being of the general public in the United States, it is important to be aware of the health and function of the health care system in place, this system being that which provides the services that contribute to public health and well-being. Understanding the processes, practices, and population perceptions of the US health care system is vital in order to promote changes and reform to increase health care quality and provide the best possible health care to patients and consumers. Patient satisfaction and population health are indicators of the quality or lack thereof of the services provided by a health care system, and it is important to study these factors and understand where consumers see fault in the health care they receive.

Another important practice when looking to improve upon the health care system in place is to compare the existing health care system to those of other countries whose systems function well. Any comparison has the ability to provide insight, but a comparison specifically with a system that is either structured differently or on average produces better results has the potential to highlight weak points within the structure or function of the US health care system. One such system is the health care system of Spain. While this health care system is not the top-rated system above all other countries, on average it rates quite high. In a recent study done by *The Lancet* (2015), the

Healthcare Access and Quality Index (HAQ) of 195 countries were analyzed to see where the world's health care systems ranked globally (p. 231-266). This index utilized a PCA (Principal Component Analysis) index in order to develop the HAQ based on factors such as per capita expenditure on health care, hospital bed ratios, vaccine administration, contraception distribution and 13 other factors (Healthcare access, 2015, p. 237). This study found that the HAQ of Spain's health care system ranked number 8 out of the 195 countries, whereas the United States ranked number 35. A more in-depth comparison between the United States and Spain will help the efforts to improve American health care and learn where changes can be made to better the quality, efficiency, and affordability of health care in the United States.

This thesis will compare side by side multiple aspects of the health care systems of the United States and Spain. It will analyze factors such as population health, the quality of health care services provided, the availability of medical assistance, and affordability of health care coverage. Each of these factors have the ability to provide insight on the state of the health care systems of the United States and Spain, and comparison with a health care system that, in general, outperforms that of the United States highlights areas of weakness in need of improvement. Through such analysis, a broader knowledge will be gained about how well the current American health care system is functioning as compared internationally.

**Background on U.S. Health Care System**

At first look, the structure of the US health care system appears somewhat complex and disorganized. There are numerous stakeholders at play, working to control and regulate the care provided to consumers. First and foremost, the US federal

government sits at the top of the pyramid of control, creating organizations and policies that determine the structure and function of the US health care system. From the federal government stem organizations such as the US Department of Health and Human Services (HHS), the Centers for Medicare and Medicaid Services (CMS), the Food and Drug Administration (FDA), and the Centers for Disease Control and Prevention (CDC). These organizations work within the authority and confines determined by the federal government to create policies and regulate the quality of health care provided to US citizens. Next, state and local governments work within federal policies and the authority of the organizations mentioned above to regulate the provision of health care to state residents. Sometimes, states are able to take health care regulations further than what federal law mandates, as in the case of Massachusetts, where health insurance coverage became state mandated for all residents in 2006 (S. Sadeghi, 2013, p. 3-4).

The US health care system is also financed in a number of ways. First, there is what is referred to as the "public sector," which includes the federal government as well as every individual state government. Through programs like Medicare, Medicaid, and other means of government financial assistance, eligible Americans are able to receive health insurance coverage by means of publicly funded government institutions. Approximately 47% of health care expenditures can be traced back to public sector funding. Second, there is what is referred to as the "private sector," which includes all private insurance agencies and insurance provided through businesses. Many companies provide health insurance benefits to their employees, making it easier for employees to access medical care when necessary. Also included in the private sector is any out-of-pocket payments made by consumers, either in the form of co-payments or voluntary

refusal of financial assistance from an insurance agency. Approximately 53% of health care expenditure comes from private sector funding (S. Sadeghi, 2013, p. 3-4).

**Background on Spanish Health Care System**

Across the ocean, the Spanish government, and consequently health care system, is structured rather uniquely. There are 17 autonomous communities and 2 autonomous cities comprising the Spanish State. These autonomous communities and cities are "the highest or first-order administrative division in the country," and in 2002 they were given control over the provision of health care for their own residents. In other words, while a central government exists, the autonomous communities and cities function somewhat like states, with governments independent yet accountable to and under the authority of the central government. Thus, 17 different regional ministries of health were developed, with jurisdiction over the methods of organization and the deliverance of health care to the citizens within their territories; this includes the health expenditure, which is also decided by each regional ministry of health. While the autonomous communities are responsible for their individual ministries of health care, health insurance coverage remains nearly universal for Spanish citizens, with the majority being covered by public health insurance financed by taxes, and the minority either having private health insurance or no insurance (G. Paparella, 2015, p. 31).

**Importance of Comparison**

Insight into the quality and efficiency of the functions of a health care system requires the investigation of multiple different elements. A complete picture of every aspect of a health care system is beyond the means of this thesis. Thus, only certain elements of a health care system will be addressed. As stated previously, analysis of

elements such as the general health and well-being of a country's population, the quality of health care received by consumers, the accessibility of medical care and health insurance coverage, and the fairness in the financing of health insurance coverage and health care practices each provide insight into specific elements of a health care system that indicate the quality and efficiency to which that system is performing its functions and providing its services to those it cares for.

In a 2000 World Health Organization (WHO) report, a criterion of three intrinsic goals was identified and utilized to compare the health care systems of 191 countries, including the United States (ranked 37) and Spain (ranked 7) (A. Tandon, et al., 2000, p. 18). These three goals, which remain useful to assess the United States' and Spain's health systems, are population health, quality of care services, and access to care/fairness in financing. Population health is defined in this thesis as the overall state of the health of the citizens residing in the country. Quality of care services is defined in this thesis as the degree of excellence of the health care being provided to the citizens of the country, and how effective this care is at keeping its citizens healthy. Access to care and fairness in financing is defined in this thesis as the degree to which health care is made obtainable to the citizens of the country and how well citizens are protected from financial problems that arise due to the high cost of health care coverage and medical assistance.

Population health will be analyzed by looking at factors such as life expectancy, infant mortality, and mortality amenable to health care. Each of these categories provide information on the state of health of the average American and Spanish citizens. This is important because it indicates how well the health care system is performing its primary function of maintaining the health and well-being of the people it serves. Quality of care

services will be analyzed by looking at factors such as patient-centered care and coordinated care. The analysis of each of these categories will highlight the efforts made by the health care system and health care providers to focus attention on the satisfaction of the patient as well as the quality of care that each patient receives. Access to care and fairness in financing will be analyzed by looking at factors such as cost of care, uninsured population levels, and timely access to care. The analysis of these categories indicates the ability of the citizens to receive medical care and health insurance in order to pay for medical assistance, as well as how accessible or inaccessible health care provision is to these citizens. These three criteria are assessed by comparing the recent statistics for each country. A side by side comparison of numbers will help to highlight the positive and negative aspects of each system, as well as provide insight on where growth and reform may take place to provide better health care.

## Population Health

### Life Expectancy

When considering the overall efficiency of a health care system, a key piece of evidence can be discovered in the overall health and well-being of the general population. More specifically, factors such as average life expectancy, infant mortality rates, and the number of deaths amenable to health care can provide insight into how well a health care system is providing its services and keeping the citizens of its nation healthy. Regarding life expectancy specifically, the number of years that the average person is projected to live may reflect on that person's ability to access quality health care when sick. A greater number of young or premature deaths occurs when citizens are not able to receive the medical assistance they need when afflicted by an illness. Thus, the greater the projected

life expectancy is, the greater the correlation between patient health, access to medical assistance, and quality of health care provided.

Life expectancies in the United States are on average decently long. According to the 2016 data from the National Center for Health Statistics and the Centers for Disease Control and Prevention, the life expectancy at birth for the average US citizen was projected to be 78.6 years (Kochanek et al., 2016). In 2015 there was a difference between the life expectancy at birth for males and for females, with the life expectancy for females trending 4.9 years higher than that of males (Murphey et al., 2017, p. 2). Although between 2015 and 2016 the average life expectancy at birth decreased by 0.1 years, dropping from 78.7 years to 78.6 years, the life expectancy at 65 years of age increased by 0.1 years, rising from 19.3 years in 2015 to 19.4 years in 2016 (Kochanek et al., 2016). These numbers indicate that, on average, a person living within the US will live to be in his or her late 70s or early 80s.

For the Spanish citizen, the average life expectancy was projected to be slightly higher. According to the WHO's *World Health Statistics 2016 Report*, the average life expectancy at birth for the Spanish citizen was projected to be 82.8 years of age ("World health statistics…", 2016, p. 8). Similarly to the US statistics, there is a small difference between the life expectancies of males and females, with the life expectancy of females, projected at 85.5 years, trending 5.4 years higher than that of males, who were projected at 80.1 years ("World health statistics…", 2016, p. 8). While these numbers are slightly higher than those projected for American citizens, they are comparable in length and suggest similarities in population health and quality of health care provision.

Life expectancy rates are not a perfect prediction of the life span of a person, as countless factors influence the number of years any one person lives. For instance, genetics, diet, possession or lack thereof of preexisting conditions, and other factors contribute to the length of a life span. However, these numbers do indicate the average life span of US and Spanish citizens. The general trend that the Spanish citizens are projected to live an average of three to four years longer than the US citizen may potentially indicate greater efficiency in medical care provision by the Spanish health care system. However, with the discrepancy being as slight as it is, it could indicate influence from other factors such as genetics or the typical diet of the Spanish citizen compared to the average American.

**Infant Mortality**

Infant mortality is another indicator of the efficiency and quality of the medical care provided by a health care system. Infant mortality provides insight into the specific care received by expectant mothers from health care facilities and health care providers. The quality of care, the efficiency of specific practices, and the ability to deal with complications in pregnancy, labor, and delivery are reflected in the numbers of children under the age of one who die on average every year. Additionally, infant mortality rates indicate a health care systems' ability to keep patients informed of potential health issues that may arise outside of health care facilities, such as Sudden Infant Death Syndrome. Care within a medical facility as well as awareness of potential dangers outside of a facility indicate the quality and efficiency of a health care system.

According to the *National Vital Statistics Report* from the U.S. Department of Health and Human Services and Centers for Disease Control and Prevention (2017), the

infancy mortality rate in the United States for the year 2015 was calculated to be 5.90 infant deaths per 1,000. Altogether, total of 23,455 deaths of children under the age of 1 year old were reported (Murphey, et al., p. 2). In 2016 and 2017, the infant mortality rate dropped to 5.7 according to the UN Inter-Agency Group for Child Mortality Estimation (The World Bank, 2019). Despite the small decrease in number, the 10 leading causes of infant death remained the same in 2016 as those reported in 2015 (Murphey, et. al., 2017, p. 2). This indicates that, while there has been some improvement in the prevention of infant death, the same health problems continue to be an issue in terms of infant mortality.

According to the UN Inter-Agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) (2019), in 2015 the infant mortality rate for those born in Spain was calculated to be 2.7 deaths for every 1,000 live births (The World Bank). In 2016 and 2017, that number dropped from 2.7 to 2.6 infant deaths for every 1,000 live births (The World Bank, 2019). While both countries have decently low rates of infant mortality, it is worth noting that this number is much lower than the U.S. statistics. Spain's infant mortality rate is less than half of what can be found in American health facilities, potentially indicating an area of health care provision that could be improved upon by physicians in the American health care facilities.

**Death Amenable to Health Care**

Deaths amenable to health care provide specific insight into the quality of health care that is received by patients in health care facilities. According to the Office for National Statistics in the United Kingdom, "A death is amenable if, in the light of

medical knowledge and technology at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided through good quality healthcare" (Definition, 2012). In other words, a death amenable to health care is one that could have been prevented if higher quality health care had been provided to the deceased patient prior to his or her death. Large numbers of deaths amenable to health care indicate a lack in quality of the care provided by a health care system, whereas low rates of deaths amenable to health care indicate attention to detail and a high-quality level of care.

In the United States, the rate of deaths amenable to health care is low. According to the Commonwealth Fund, the rate of deaths amenable to health care in the United States was 112 deaths per 100,000 in 2014 (The Commonwealth Fund, 2017). This is a decently low number, indicating that, on average, the health care received by American citizens is of good quality.

In Spain, the number of deaths amenable to health care is slightly lower than that found in the United States. According to *Health at a Glance: Europe 2016: State of Health Care in the EU Cycle* (2016), the rate of deaths amenable to health care in Spain was 82 per 100,000 in 2013 ("Amenable mortality…", section 6.1). This number is 27% lower than the number of deaths amenable to health care in the United States, indicating either slightly greater quality control in the Spanish health care facilities or more regulated focus on controlling the amount of preventable deaths. The *State of the EU* (2017) profile on Spain reports that, "Amenable mortality in Spain remains one of the lowest in EU countries, indicating that the health care system is effective in treating people with life-threatening conditions" ("Spain: Country health…", p. 3).

Table 1: Comparison of population health rates (Kochanek et al., 2016; "World health statistics…", 2016, p. 8; The World Bank, 2019; The Commonwealth Fund, 2017; "Spain: Country health…", p. 3)

| COUNTRY | LIFE EXPECTANCY | INFANT MORTALITY | DEATHS AMENABLE TO HEALTH CARE |
|---|---|---|---|
| **UNITED STATES** | 78.6 years | 5.7 deaths per 1,000 | 112 deaths per 100,000 |
| **SPAIN** | 82.8 years | 2.6 deaths per 1,000 | 82 deaths per 100,00 |

## Quality of Care Services

### Patient-Centered Care

Providing patients with the services they need in a manner that is efficient and of high quality is of great importance. One way to ensure these goals are being met is to implement patient-centered care practices. These practices, as indicated by the term itself, focus attention on the needs and desires of the patient and coordinate efforts to meet those needs in a manner that is satisfactory to the patient. If implemented correctly, a health care facility should be able to report greater patient approval rates.

According to a study reported in the *New England Journal of Medicine* (2008), most people in the United States reported that they were happy with the care they received, although they agreed there are always practices that could be improved. In fact, they found that 63% of patients rated their satisfaction at nine or 10 on a 10-point scale, and 89% rated their satisfaction seven or higher. This indicates that only small numbers of patients are extremely dissatisfied with the care they receive. However, despite these

encouraging numbers, a very small number of hospitals were given the best ratings from 90% or more of the patients they treat (A. Jha, et al., 2008, p. 1924). Even areas that have undergone quality-improvement initiatives received suboptimal ratings in performance; for example, one third of the patients did not give high ratings in the area regarding control of pain, even though this has been a target for improvement by the Joint Commission (A. Jha, et al., 2008, p. 1929). Additionally, patients have not given high ratings to the area of discharge instructions even though the CMS has been working to reduce the number of readmissions (A. Jha, et al., 2008, p.1929). There have also been numerous reports regarding problems with medications and poor communication on the subject of medication relating to side effects that lead to potential complications (A. Jha, et al., 2008, p. 1929).

On the other hand, according to the Ministerio de Sanidad, Consumo, y Bienestar Social (MSCBS, translated Ministry of Health, Consumption, and Well-being), about seven out of 10 people believe the Spanish health care system functions well, and less than two out of 10 people believe that there need to be changes made to the system. Only one out of 10 people believe that the system needs to be completely restructured ("Sanidad en Datos…", n.d.). In the past several years, initiatives have been put in place in the Spanish health care system to increase patient-centered care. One example of this shift towards patient-centered care is the Complex Care plan by Ribera Salud, a "private integrated health care provider" in Valencia, one of the autonomous regions within the Spanish State. This plan, the "Plan de Atención al Paciente Crónico" (translated "Complex Care Plan") began in 2012 to improve the care provided to the elderly populations who suffer from two or more diseases or conditions. The desired outcome

was that the care delivered to these patients would be improved by the utilization of "evidence-based clinical pathways" and "patient-centered outcomes" (A. Thoumi, et al., 2015, p. 10). Between December 2012 and 2015, there was a 16% decrease of emergency room visits, the admission of patients into hospitals went down 28%, and the readmissions rates decreased 26% (A. Thoumi, et al., 2015, p. 10).

Overall, the ratings given by Spanish and American citizens regarding their satisfaction with the quality of their health care demonstrate an optimistic view of each health care system. Both systems have enacted initiatives to bring about improvements in areas of weakness, such as those by the Joint Commission and the CMS in the United States (A. Jha, et al., 2008 p. 1929) and the Complex Care Plan in Spain (A. Thoumi, et al., 2015, p. 10). However, there are still problems to be solved as not all of the ratings were perfect. This suggests that, while the initiatives that have been put in place are a step in the right direction, there is still work to be done when it comes to patient-centered care.

**Coordinated Care**

Coordinated care is also essential on the issue of patient satisfaction. Coordinated care refers to those practices that coordinate physicians (i.e. family practice physicians and specialists, surgeons and oncologists, etc.) to work together in a manner that is efficient and promotes the best and most affordable care for the patient being treated. Without coordinated care efforts, there is opportunity for unnecessary or redundant testing, miscommunications, and low-quality patient care. This may prove frustrating for patients and cause dissatisfaction and distrust of the health care system.

In 2013 and 2014, the Commonwealth Fund conducted a study comparing the United States health care system to that of ten other countries. According to this study,

the United States' health care system performance ranked last overall when compared to Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom, but came in 6th when it came to coordinated care. This study found that the U.S. patients had the greatest likelihood of receiving a plan for continued care upon discharge from a hospital stay and to know where they can direct any questions or concerns regarding their health following their hospital stay (K. Davis, et al., p. 16-17). Additionally, they reported that 83% of Americans surveyed were given instructions for follow-up appointments with their physician or other care providers after discharge (K. Davis, et al., 2014, p. 16-17).

According to the OECD Health Working Paper No. 30, *Improved Health System Performance Through Better Care Coordination* (2007), some of the Spanish autonomous communities have smaller programs that work to provide better coordinated care to their patients; these have been successful in the smaller, more rural communities where coordination between hospital and primary physicians is more easily managed (M. Hofmarcher, et al., p. 47). In a 2003 law, the Spanish government passed regulatory criteria for their health care facilities, defining the main functions of each individual institution. In section C.2.3.1, the law defines "centros de salud" (health care centers) as those which develop attention to primary care, coordinated globally, integrally, permanently and continued, based in a team of health care workers and non-health care workers who develop their activities and functions to provide the primary care attention (Real Decreto, 2003, p. 6). In other words, coordination of care is an essential element to these health care centers in order to function at the highest capacity.

Comparatively, both the United States and Spain have generated efforts to prioritize the coordination of care. In the US, this is highlighted in the study conducted by the Commonwealth Fund where the US stood out among other top performing countries when it comes to coordinated care (K. Davis, et al., p. 16-17). Evidence for this prioritization in Spain is found in the health care laws and definitions themselves (Real Decreto, 2003, p. 6). Because of this prioritization, both countries demonstrate the importance of care coordination and consequently patient satisfaction.

## Access to Care and Fairness in Financing

### Cost of Care

Cost is arguably one of the most important and one of the most controversial factors. With the rise of technological and pharmaceutical innovations, health care costs tend to rise, making it more difficult for those who have limited access to health insurance coverage or necessary funds. One important function of a health care system is regulation of cost in order to provide high quality medical care at affordable price. This can be done through policy and regulation, as well as providing options such as affordable health insurance.

According to Nation Master (2019), the United States is ranked 41 with respect to health care cost ("Health: Spain and…,"). Additionally, the Centers for Disease Control and Prevention report that in 2016 the total national health expenditures in the United States reached $3.3 trillion, and the per capita health national health expenditures were $10,348 (CDC, *expenditure,* 2017). As a percent of Gross Domestic Product (GDP), the U.S. national health expenditure was 17.9% (CDC, *expenditure,* 2017). The International Federation of Health Plans conducted a study spanning 2014 and 2015 to compare the

United States and five other countries (Switzerland, Spain, Australia, New Zealand, and the United Kingdom). They collaborated with the Health Care Cost Institute in order to obtain health care cost estimates from each of these countries' public and commercial sectors (International Federation, 2015).

Average hospital costs in the United States are vastly greater than costs in Spain (Figure 1). In the United States, the average hospital stay for a normal labor and delivery costs the American citizen over $10,000, whereas in Spain it costs just below $2,000 (International Federation, 2015, p. 18). Similarly, for one day spent in the hospital, the average American spends almost $6,000, yet the Spaniard spends only slightly above $600 (International Federation, 2015, p. 16). These numbers reflect the stark difference in medical care costs between the United States and Spain and highlight where improvements could be made to the affordability of US medical care.

While in the United States health care coverage is largely provided through employment programs and private health insurance (Sadeghi, S., 2013, p. 4), funding for Spanish health care services is provided mainly through taxation of the public. It is estimated that about 94.07% of public resources are funded through taxation (S. García-Armesto, et al., 2010, p. 94). About 6% derives from payroll, employer contribution to work-related health problems, and mutual funds such as MUFACE, MUGEJU, and ISFAS (which are funded by payroll and taxation) (G. Paparella, 2015, p. 31). The largest contribution of private funding is from co-payments made for prescription drugs (S. García-Armesto, et al., 2010, p. 94). That being said, the majority of expenditure on Spanish health care is generated through taxation to fund the public health insurance coverage provided by the government.

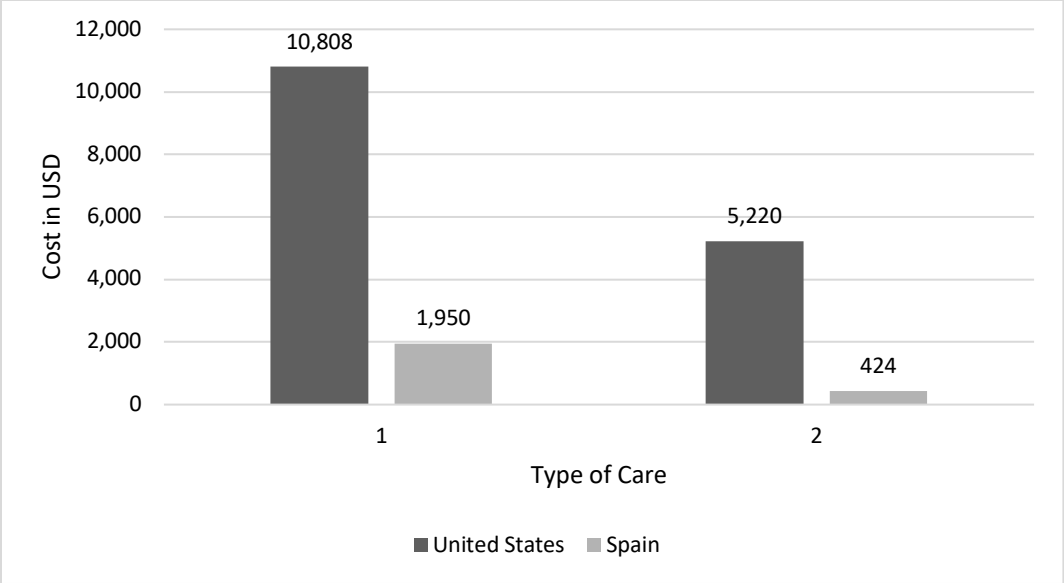


Figure 1: Comparison of the average cost of a complete hospital stay for a normal delivery (type of care 1) and for one day in a hospital (type of care 2) for the average American and Spanish citizens (International Federation, 2015, p. 16-18).

Health care coverage is nearly universal for Spanish citizens and is free of charge with the exception of medications prescribed to those under the age of 65, which require a 40% co-payment of the retail price (G. Paparella, 2015, p. 31). These co-payments provide the greatest sector of private financing for Spanish citizens (S. García-Armesto, et al., 2010). According to the MSCBS, 72 billion Euros are spent each year in the public sector of health care, amounting to approximately 1,559 Euros per capita, with 11 billion Euros being spent on pharmaceutical prescriptions. In the private sector, 29 billion Euros are spent each year, amounting to 631 Euros per capita. In total, these numbers add to 101 billion Euros being spent on health care each year, averaging 2,190 Euros per capita ("Sanidad en Datos…", n.d.). As a percent of GDP, the Spanish health expenditures was 9.6% (G. Paparella, 2015, p. 31).

In a survey, the Institute of Health Information (Instituto de Información Sanitario) in Spain found that slightly over 64% of the Spanish population spends 2,400 Euros or less on taxes related to health care annually, with roughly 9% spending 2,401 or more Euros on health care taxes annually; 26.9% of those surveyed refrained from answering the question (Table 2). Increased taxation may be of concern to the general American public relating to the idea of universal or near-universal health care coverage. However, the numbers found in Table 1 demonstrate that the majority of the Spanish citizens do not spend more than $2,800 USD or so annually on health care taxation (Centro de Investigaciones, 2011, question 42). By comparison, in 2018 the average American family paid a premium of $19, 616 annually for health care coverage, and those paying for single coverage premium paid an average of $6,896 annually (Health insurance, 2018). This is a great deal more than what the average Spanish citizen pays annually, suggesting that there may be a method of funding a near-universal health care system via taxation without costing the average American more than what he or she currently pays.

Table 2: Percent of Spanish citizens and the amount of tax euros spent annually on health care and insurance coverage (Centro de Investigaciones, 2011, question 42).

| AMOUNT (IN EUROS) SPENT ON TAXES FOR HEALTH CARE ANNUALLY | PERCENT OF POPULATION |
|---|---|
| **LESS OR EQUAL TO 300** | 1.2% |
| **301-600** | 6.5% |
| **601-900** | 13% |
| **901-1200** | 16.3% |
| **1201-1800** | 16.8% |
| **1801-2400** | 10.4% |
| **2401-3000** | 4.8% |
| **3001-4500** | 3% |
| **4501-6000** | 0.8% |
| **MORE THAN 6000** | 0.3% |

**Uninsured Population Levels**

Uninsured population levels reflect on a health care system in reference to performance and its ability to provide its services to patients and consumers. Specifically, the numbers of those uninsured indicate the accessibility of health care services to those who have lower incomes and may not be able to pay directly for medical attention. Higher levels of those uninsured demonstrate that the health care system and its policies are not promoting access to care for every individual. In contrast, low levels on uninsured

populations demonstrate that access to coverage and to medical care is made affordable and attainable for patients and consumers.

In the United States, for those between the ages of 18 and 64, almost 70% are covered by some form of private health insurance, about 19% are covered by some form of public health insurance, and 12% remain uninsured (Table 3). Additionally, for those under the age of 18, about 55% are covered by private insurance, 41% are covered by public insurance, and almost 5% do not have health insurance (Table 3). In recent years, the Affordable Care Act (ACA) decreased the uninsured non-elderly population from 44 million in 2013 to just under 27 million in 2016 by extending health insurance coverage, specifically that of Medicaid, to low-income households and allowing for Marketplace subsidies to those that fall below 400% of poverty (Henry J. Kaiser, 2018). However, 2017 saw an increase of approximately 700,000 uninsured individuals, the first time since the ACA that uninsured levels have risen (Henry J. Kaiser, 2018). In fact, in 2017 nearly 50% of those uninsured reported that they lacked coverage due to the high cost. Additionally, many do not have health insurance through their work and some are not eligible for financial assistance, specifically those low-income individuals in the states where there was no expansion of Medicaid; those who are eligible for financial assistance through the ACA may be unaware that they are able to receive help, and immigrants without proper documentation are not eligible for Medicaid or Marketplace coverage (Henry J. Kaiser, 2018). It has been found that those without coverage have inhibited access, and an estimated 20% of adults without coverage went without medical care because of high cost in 2017 (Henry J. Kaiser, 2018). The table below demonstrates they

types of health care coverage utilized by the different population groups within the United States.

Table 3: Percent of the American population and what type of health insurance coverage they have, separated by age (CDC, *Health insurance,* 2017)

| PERCENT OF POPULATION | PRIVATE INSURANCE | PUBLIC INSURANCE | UNINSURED |
|---|---|---|---|
| **AGES 18-64** | 69% | 19% | 12% |
| **UNDER AGE 18** | 54.5% | 41% | 4.5% |

According to *Health Systems in Transition* (2010), health insurance coverage is nearly universal in Spain, as 99.5% of Spanish citizens have health insurance (S. García-Armesto, et al.). In light of this near universal coverage, entitlement to health insurance in Spain is considered independent of a person's socioeconomic status; the 0.5% of the population that is not entitled to this public coverage are those individuals who do not receive a salary and are of high-income status; such a person is not obligated to receive coverage under the "social security system as per the 1088/89 Royal Decree" (S. García-Armesto, et al., 2010, p. 90, 247). Although 99.5% of the Spanish population are eligible for the coverage provided by this social security system, about 19% have private health care coverage or some combination of both in order to maximize benefits received and be provided with more customized care ("The healthcare system…", 2019).

**Timely Access to Care**

One final important factor with regards to a health care system is timely access to care. This refers to the time it takes for a patient to be seen by a physician or other health care worker in order to diagnose and treat health concerns. Patient satisfaction, preventing complications, and rapid treatment of health concerns are all affected by

timely access to care. For a health care system to promote good timely access to care, health care practices need to be efficient and coordinated.

According to a study conducted by the *Journal of General Internal Medicine,* the wait times for doctors' appointments and procedures are one of the most important predictors of patient satisfaction with their health care and was often the most frequent cause of patient dissatisfaction with their ability to deal with their health care needs. Their study surveyed the patients that were 18 years or older of 15 different metropolitan areas within the United States to learn more about the average wait times and correlation to patient satisfaction. They discovered that an average of 2 or more weeks pass before patients can be seen by their healthcare providers, and that despite the long wait times, in 8 out of 11 different scenarios, patients feel a greater urgency to be seen than the physicians surveyed (D. W. Barry, et al., 2006).

In a study conducted by the National Public Radio, patients were surveyed about the wait times between seeking an appointment, actually seeing a doctor, and their reasons for seeking emergency room care in place of scheduling an appointment. They found that, of the patients surveyed who had scheduled an appointment within the last two years, 30% were able to see their doctor in less than 24 hours, 33% were seen between one and three days, 13% waited four to seven days, 7% waited over one week, 6% waited over two weeks, 3% waited longer than three weeks, and 8% waited longer than an entire month to be seen. When asked about their satisfaction with these wait times, approximately 79% of those surveyed answered that they considered the wait times reasonable and were satisfied with the quality of care they received in a hospital stay. Additionally, approximately 72% of patients surveyed felt that the care they

received in emergency room visits and urgent care facilities was either good or excellent. When those participants who had recently been treated in an emergency room were asked why they sought care in the emergency room as opposed to another facility, 28% said that other facilities were closed or they were unable to receive an appointment at another facility,16% felt that the emergency room was the only facility that would treat them, 11% said that other places were not equipped with the necessary staff or medical supplies, and 3% said that other health care facilities were too far away ("Patients' perspectives…", 2016, p. 12-19 of second page set).

In Spain, according to the *Health Systems in Transition* Spain review (2010), while 88% of patients surveyed agreed that they would rather seek medical care in their home country (Spain) instead of traveling for medical care, the wait times for appointments and consultations remained the lowest rated areas of satisfaction with health care. For instance, on a scale of one to 10 with 10 being the most satisfied and one being the least, satisfaction with the waiting lists scored two out of 10, waiting to have a consultation once already on the waiting list received 4.6 out of 10, the waiting time to receive a procedure for diagnosis received 4.6 out of 10, and delays with regard to voluntary admission received 4.4 out of 10 (S. García-Armesto, et al., 2010, p. 259). The authors did note, however, that while the waiting list for patients awaiting surgery is over 350,000 patients, the wait time has been reduced from 81 days to 63 days (S. García-Armesto, et al., 2010, p. 260).

The Ministerio de Sanidad, Servicios Sociales, e Igualdad (translated Ministry of Health, Social Services, and Equality) conducted a survey of patients to study the average wait times and overall experience that Spanish citizens encounter with the public health

system. Of those surveyed, 72.4% had made an appointment with their family doctor in the last two months, whereas 27.4% had not (Centro de Investigaciones, 2011). The following questions were asked of those who had received medical care in the last two months:

When asked if patients receive an appointment requested to be for the same day, 13.1% said always, 26.4% said sometimes, 37% said rarely, and 21.4% said never.

When asked about their experience with the public health care system, 96.8% rated the wait times as good, 96.2% rated the wait time to see a doctor after requesting an appointment as good, and 92.3% rated the wait time for diagnostic tests as good.

When asked if the attention given to the patients was rapid, 20.2% said that attending was given very rapidly, 47.2% said it was fast enough, 21.4% said that it was somewhat slow, and 9.7% said it was very slow.

When asked about the wait time between requesting an appointment with a specialist and actually seeing one, 17.6% said they waited 15 days, 17.7% said they waited 1 month, 17.9% waited for two months, 13.5% waited for three months, 5.7% waited for four months, 2.7 waited for five months, 7.9% waited for six months, and 6.4% waited for longer than six months.

When asked if the coordination between their family doctor and a specialist was done efficiently, 60.7% said yes and19.7 said no.

When asked about experience with specialist medical attention, 89.5% rated the wait times as good, 91.2% rated the time between requesting an appointment and

seeing a specialist as good, and 89% rated the wait times for receiving diagnostic tests as good.

When an operation was necessary, 73.7% of patients reported that they were told how long they would have to wait, whereas 24.9% reported that they were not given a timeframe.

When asked about experience with public hospitals, 73.7% rated the wait time for admission in non-emergent cases as good.

When asked about the improvement of waiting lists, 18.2% said the waiting lists have improved, 18.2% said that the waiting lists have worsened, and 45.1% said that the waiting lists have not changed (Centro de Investigaciones, 2011, preguntas (questions) 17-42).

## Discussion

As can be drawn from the information above, both health care systems appear to do a decent job at providing quality and affordable health care to the citizens of each country. However, there is always room for improvement, and this is true for the US health care system. When compared to the health care system of Spain, although slight, there are certainly areas where the Spanish health care system out-performs that of the U.S. These areas of improvements highlight where potential changes could be made to U.S. policies or practices within health care facilities.

Beginning with Population Health, overall the average American citizen remains fairly healthy. The life expectancy rates at birth and again at 65 project a long life for the average American, barring any extraordinary occurrences such as accidents and the appearance of life-threatening diseases early in life (Kochanek et al., 2016). However, the

life expectancy rates for Spaniards project a slightly longer lifespan ("World health statistics…", 2016, p. 8). Apart from health care, this could be due to the genetics of the Spanish population or the Mediterranean diet consumed by the average Spanish citizen. In Spain, certain staples of the American diet that are high in sugar and fat are either harder to come across or unavailable. Additionally, the Spanish boast of their Mediterranean diet as being high quality and promoting exceptional health (Prof. M. de Vega-Díez, personal communication, Fall 2018). There have been several studies to support this claim, as noted in *Current Opinion in Clinical Nutrition and Metabolic Care* (Martinez-Gonzalez & Martin-Calvo, 2016). For instance, they write that several recent studies have found that the Mediterranean diet consistently reduces the likelihood of "myocardial infarction, stroke, total mortality, heart failure and disability" (Martinez-Gonzalez & Martin Calvo, 2016).

Additionally, infant mortality rates in the United States are twice what could be found in Spanish health care facilities (Murphey, et al., 2017, p. 2; The World Bank, 2019). This is not to say that health care professionals and facilities are always to blame for an infant death. Infant mortality is measured by counting the number of deaths of children between the ages of 0 and 1, meaning that a number of factors apart from health care (such as sudden infant death syndrome) contribute to infant mortality rates. In fact, according to the CDC, the five leading causes of infant death in the United States are: birth defects, preterm birth and low birth weight, sudden infant death syndrome, maternal pregnancy complications, and injuries (CDC, *Infant mortality*, 2018). A good portion of these are not within physician control, meaning that while infant mortality rates do reflect

on the health of a population, slightly higher numbers are not always directly correlated with the quality of health care provided.

When it comes to deaths amenable to health care, Spain continued to have slightly better numbers than the United States. In fact, as previously stated, the number of deaths amenable to health care was 27% lower in Spain than in the United States (The Commonwealth Fund, 2017; "Amenable mortality…", 2016). While both countries were able to report low rates, there is still a notable difference between the two. While the specific causes of this discrepancy may be unknown, it is safe to say that, whether through better policies, tighter regulations, or higher quality practices, the health care facilities in Spain contribute to fewer deaths than those in the United States.

Combined, these three factors indicate the overall health of the American and Spanish populations. While the data shows that both countries' health care systems keep the general public relatively healthy, the Spanish numbers outperform those of the United States. This suggests that, overall, the Spanish health care system does a better job than the American health care system at keeping its citizens healthy. Whether it's through education, tighter regulations, or more effective practices, the United States' health care system has some room to improve the health of the American public.

Following with Quality of Care Services, both health care systems have put into place active measurements to increase patient satisfaction and the quality of care that patients receive. One of the ways they have done this is through increasing patient-centered care practices. As evidenced above, patient-centeredness continues to be of high priority for both American and Spanish health care facilities. Additionally, efforts to

increase patient-centered care practices have paid off, as both systems can boast of high ratings from patients and consumers (A. Jha, et al., 2008; “Sanidad en Datos…”, n.d.).

Coordinated care is also an important indicator of the quality of health care services. This is because coordination between health care facilities and physicians promotes greater organization and prevents redundancies and unnecessary procedures and charges on behalf of the patient. While in one study the United States ranked last overall, the US fell somewhere in the middle when it came to coordinated care, suggesting that coordination is a priority in American health care facilities (“Spain: Country health…”, p. 3). This prioritization is reflected in the Spanish health care system as well, as coordination of care is written into the legal definition of health care centers (Real Decreto, 2003).

Overall, the Quality of Care Services within health care facilities in both the United States and Spain are rated highly by consumers. As physicians and facilities continue to make patient-centeredness and care coordination a top priority in both countries, there will continue to be increased levels of patient satisfaction with care. This focus on patient satisfaction also increases the quality of health care received and perceived by patients. Altogether, this suggest that while patient frustration with health care may arise, it is likely due to factors outside of the care received in hospitals and health care facilities.

Finally, Access to Care and Fairness in Financing is a large contributor to patient satisfaction and the health of the overall functions of a health care system. The cost of health care continues to be a point of conflict within the American health care system. As mentioned above, the per capita spending on health care in the United States is over

$10,000 (CDC, *Expenditure*, 2017), whereas Spanish citizens with public health care pay approximately 17% of that number (1,559 Euros or 1,786 USD) ("Sanidad en Datos…", n.d.). The high cost of health care in the United States is an ongoing conversation as policy makers look into ways to make health care more affordable for the American citizen.

Additionally, the levels of the uninsured populations are also a topic for concern, as those who remain uninsured in the United States tend to be so due to cost. For instance, in the United States over 27 million Americans lack health care coverage, and half of these citizens report that they remain uncovered due to the cost of health insurance and the fact that they are unable to receive coverage from their place of employment (CDC, *Health insurance*, 2017). This number is staggeringly high and raises concerns about the health care system's ability to provide access to medical care. In Spain, with a system that is nearly universal, only 0.5% of citizens do not have public health insurance (S. García-Armesto, 2010). While some raise concerns about the high tax rates associated with universal or near universal systems, 64% of Spanish citizens spend 2,400 Euros (about 2,750 USD) or less annually through taxation for health care coverage (Centro de Investigaciones, 2011, question 42). Perhaps the United States could learn from health care systems such as the system in Spain about how to lower costs and increase coverage for American citizens.

Finally, timely access to care indicates how efficiently the health care systems is run and how rapidly a patient is able to be seen by a physician. In the United States, on average a person needs to wait about two weeks to be seen (D. W. Barry, et al., 2006). Most patients report satisfaction with the wait times to get appointments and be seen by a

physician, and only a small percent wait longer than a month to receive health care ("Patients' perspective…", 2016). On the other hand, in Spain wait times continue to be a subject of dissatisfaction among patients. The majority of Spanish patients rated wait lists and wait times to be seen low on a scale of 1 to 10 (S. García-Armesto, et al., 2010, p. 259), and the majority of patients on average wait longer than two months to be seen by a specialist (Centro de Investigaciones, 2011, preguntas (questions) 17-42). These numbers indicate a weak spot within the Spanish health care system where improvements could be made.

Concerning health care and insurance cost, the United States' health care system could learn from countries such as Spain where costs remain low and affordable for citizens. Providing universal or near universal coverage for citizens could be of benefit for many Americans so long as policy makers are able to lower costs and make coverage affordable. Conversely, the Spanish health care system could improve their wait times and efficiency in the manner that the United States has. Many times, it is important to be seen as soon as possible by a physician, and with wait times as long as they are in Spain, the greater the chance for additional problems and complications to arise.

## Conclusion

When compared side by side, there are some obvious differences and similarities between the health care systems of the United States and Spain. Some of these similarities include the prioritization of patient satisfaction, patient-centeredness, and care coordination. Both countries have put into place efforts to improve in these areas and increase patient and consumer satisfaction with the care received, and it has paid off. They have seen increased patient satisfaction and more efficient care coordination, which

has resulted in healthier and happier patients. Some differences include the cost of medical care and health care coverage, universal care, health care access, and population health rates. While the differences in population health are only slight, there is still a difference that shows favor for the Spanish health care system. Health care cost and insurance coverage continues to be an issue in the United States as millions of people remain uncovered and go without needed medical care. In Spain, where coverage is nearly universal, this is not an issue, and thus medical care is more accessible. However, the long wait times in Spain prove frustrating for Spanish citizens, a point on which the United States performs far better on.

Based on the factors evaluated in this study, the information here suggests that the United States' health care system performs its duties decently well, but improvements could be made in making health care coverage more accessible and health care costs more affordable. As policy makers, politicians, and health care workers research and learn new and improved ways to better the existing health care system, they would do well to adhere to the goals set in place by Secretary Burwell when she notes the importance of building a system that "delivers better care, spends health care dollars more wisely and results in healthier people" (Macaskill, R., 2016).

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