



## Review Article

**SWEDEN HEALTHCARE SYSTEM (SHS) REPORT**Nasser Alandas<sup>1</sup><sup>1</sup>PhD Student, Temple University, 1801 N Broad St, Philadelphia, PA 19122, USA.

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**ABSTRACT**

Healthcare system analysis provides a clear overview of the main elements presented in terms of structure, funding and financial approach, provision and delivery of care, utilization, access and quality, and health outcomes. Comparison of the Swedish healthcare system to the United States healthcare system can provide insight on improving performance, reducing healthcare cost, and enhancing overall health outcome. The main objective of this report was to examine the current literature found on Swedish healthcare system and compare it to the United States to determine differences between the two systems and potential improvement areas.

Using an exploratory, comparative literature review analysis, eight elements (OECD framework) of the Swedish healthcare system pertaining to organization and governance, financing and cost, provision and delivery, utilization, access, quality, population health outcome and equity, and COVID-19 response, were examined. Subsequently an overall assessment and comparison with the United States healthcare system focused on the proportion of individuals utilizing both private and public healthcare, healthcare coverage, cost of healthcare services, and health status indicators.

The analysis identified certain areas in which the Swedish healthcare system was advantageous compared to the United States. Results of this report found that Sweden achieved better health outcomes, including lower infant mortality and higher life expectancy, while maintain lower per capita costs through its universal, tax-funded model. However, the U.S. healthcare system excelled in innovation, cutting edge medical technology, and shorter wait times for elective surgery, driven by its market-based approach and high levels of private investment.

**Keywords: Organization and Governance:** this includes how the health system is managed and regulated, covering issues like decentralization, priority setting, and price regulation of services.

**Financing and cost:** this includes how health services are funded (public, private, mixed), the extent of health insurance coverage (universal, social, private), and mechanisms to protect against high out-of-pocket costs.

**Provision/delivery:** this includes how the provision of healthcare is organized (public, private, mixed), and is care provided in large hospitals, small clinics, tele-medicine, or other settings.

**Utilization:** this includes how much and what kind of healthcare services are consumed within a given country. This contains the average number of physicians' visit per person, the average number of days spent in a hospital per person, and the number of procedures, prescription, or tests provided per some unit of population.

**Access:** this includes how is access of care determined (universal access, inequalities in access, largest barriers to access, and waiting times).

**Quality:** this includes how consistent healthcare services are with current best practices (morbidity and mortality due to medical error, comprehension of medical and nursing training), and what principal mechanisms by which quality is measured and ensured.

**Population Health Outcomes and Equity:** this includes the relationship between healthcare system and measures of population health (life expectancy, disability adjusted life years (DALYs), and quality adjusted life years (QALYs)).

**COVID-19 response:** this includes measurements of gross domestic product (GDP) change through the pandemic, number of deaths accumulated, and what measurements were implemented to combat the virus..

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## INTRODUCTION

Located in Northern Europe in a region known as Scandinavia lies Sweden. With a population of 10.6 million, Sweden equates to around 0.13% of the world's population.<sup>[1]</sup> Most of its population resides in urban areas (87%), which has created some challenges in terms of maintaining good quality of life. Sweden is considered a high-income country with a net of 61,650 per capita.<sup>[1]</sup> This is mainly due to the large growing economic source of export-oriented manufacturing industry in the country. It is important to also note that Sweden is a popular destination for immigrants, with a net migration rate of 2.914 per 1000 population recorded in 2024.<sup>[1]</sup> It is estimated that 20% of Sweden's population were born outside of the country.<sup>[2]</sup> This large number of immigrants was linked to the rapid increase in population size especially between 2010 and 2020.

The purpose of this report is to provide a comprehensive understanding of Sweden's healthcare system in comparison with that of the United States. This report covers the structure of the healthcare system in Sweden, its funding and financing approach, provision and delivery of care. The utilization of care will include but not limited to the number of physicians and nurses, length of days spent in hospital per patient, the number of procedures and tests conducted in Sweden hospitals per unit/per population. This will allow for insights pertaining to the efficiency and potential areas for improvement within the Swedish healthcare system. Access and quality of care will provide the reader with a better understanding of the barriers of access to care, and the level of quality care found in the country. In addition, the health outcome of the Swedish population will be evaluated looking at measures of life expectancy, disability-adjusted life years (DALYs), and quality adjusted life years (QALYs). Lastly an overall assessment and comparison with the U.S. healthcare system is pivotal to provide shared experiences, learned lessons, and efficiency assessment.

## MATERIALS AND METHODS

Using a literature review analysis, an exploratory approach was utilized to examine eight elements of the Swedish healthcare system. These elements include organization and governance, financing and cost, provision and delivery, utilization, access, quality, population health outcome and equity, and COVID-19 response. Additionally, an overall

assessment and comparison with the United States healthcare system focused on the proportion of individuals utilizing both private and public healthcare, healthcare coverage, cost of healthcare services, and health status indicators. This study was informed by the Organization for Economic Co-operation and Development (OECD) Health System Characteristics Framework.

## RESULTS

### Organization and Governance:

The healthcare system in Sweden (known as the Swedish model) is considered one of the best in the world, due to having a unique universal system funded through the public that allows for all citizens to gain access to care. Funding of the Swedish health system is generated from regional and municipal-level taxations. The regulation of healthcare is conducted on a national level, meaning that the Ministry of Health and Social Affairs has the sole responsibility regarding the overall health policies and high-level oversight. In addition, the financing, purchasing, and provision of healthcare services is distributed among 21 regions in the country. On the other hand, 290 municipalities share the responsibility regarding care for individuals with disabilities, rehabilitation services, home care, elderly care and school healthcare. It is estimated that around 87% of Swedish citizens utilize the countries universal healthcare system while approximately 13% of employed residents have private supplemental healthcare.<sup>[3]</sup> Private coverage in Sweden is viewed as a method to gain faster and improved access to healthcare services. In 1990, private insurance began to become a major key player in health delivery. It is estimated that 10% of working individuals in Sweden are subscribed to some form of private health insurance.<sup>[4]</sup> In addition to providing faster access to health services, private insurance in Sweden covers care not being provided through the public plans. This includes chiropractic care, dietician access, and rehabilitation services, and much more.

The Swedish healthcare system falls under the Beveridge model, like that in Denmark and the National Health System (NHS) in the United Kingdom. However, the Swedish model for care is considered more decentralized than the NHS model. This is due to the 21 regions being self-governing and having the sole responsibility to finance and provide healthcare for its population in the Swedish model, where the NHS shares the responsibility among three

governing levels: state, regional, and the municipalities. Sweden adopted its universal health coverage model in 1955 due to the increasing number of workers who were faced with the effects of modern industrialization and how their ability to work could be suspended by illness or accidents, denying them the chance to work and support themselves. At that time a compulsory insurance was essential because of the failed previous voluntary insurance program provided through the sickness fund.<sup>[5]</sup> In Sweden, the discussion pertaining to access and quality barriers has shifted from financial to personal and organizational during the previous century. The main objectives of this to illustrates Sweden's healthcare system based on the fundamental elements of healthcare system which includes financing and cost, provision and delivery, utilization, access, quality, population health outcomes and equity, COVID-19 response, and lastly ending with an overall assessment of the Swedish model to the United States.

#### **Financing and Cost:**

Health expenditure in Sweden per capita is classified as being better than that of the European Union (EU) countries. In 2022, approximately 86% of Sweden's healthcare expenditures were financed by the government, primarily through regional and local taxes.<sup>[6]</sup> It was estimated that the healthcare spending in Sweden in 2023 reached \$10.1 billion which is equivalent to 10.67% of its GDP.<sup>[1]</sup> Between 2011 and 2021 the spending on healthcare increased from \$4663 to \$6347 per person which represents a growth from 10.4% GDP in 2011 to 11.4% GDP in 2020.<sup>[7]</sup> However, in 2022 spending was estimated at \$5,980 per person which represents a 13.35% decrease from the previous year.<sup>[1]</sup> Government health spending increased from 8.8% GDP in 2011 to 9.8% GDP in 2020.<sup>[7]</sup> At the height of the pandemic (i.e., COVID-19), the total public expenditure reported was 86% of total health expenditure which also was categorized as being higher than the EU average of 75.1%.<sup>[7]</sup> Moreover, private health financing accounted for 14% of health care spending in 2020.<sup>[7]</sup>

Moreover, out of pocket payments (OOP) was estimated to be around 13% of the health spending in Sweden.<sup>[7]</sup> The three largest areas of OOP health spending pertain to pharmaceuticals (30.9%), dental care (21.3%) and outpatient medical care (16.5%).<sup>[7]</sup> The combination of pharmaceuticals and dental care payments amounts for half of all OOP payments. Patient fees are charged for almost all types of services and medical products with each region in the country having different fees. The administrative mechanisms implemented for direct patient payments to providers include the possibility for patients to pay after receiving the care which relieves the financial burden on those who cannot afford to pay with each doctor visit. On the other hand, it was estimated that in 2022, the spending on outpatient and long-term care made up 60% of the overall health spending.<sup>[6]</sup> Outpatient care, long-term care, and inpatient care accounted for 33%, 25%, and 23%, respectively.<sup>[6]</sup>

#### **Provision/delivery:**

Healthcare in Sweden is mainly organized based on a decentralized model. This indicates that the primary responsibility for providing healthcare services lies on the 21 regions financed through local taxes with the sole responsibility for managing and delivering healthcare services. Typically, there is shared responsibility for providing primary care between regions and municipalities. Regions hold the responsibility in providing access to general practitioners (GPs) while municipalities focus more on providing basic nursing health care for patients who receive social services and home care. To provide a comprehensive approach to healthcare access for all citizens, the Swedish healthcare system primarily operates a well-organized network of primary care clinics rather than heavily relying on community workers (CHWs) as many low-income countries do. The main access point for patients in Sweden is generally through primary care clinics which are classified as small local health centers known as "vårdcentrale". The workforce in these clinics is comprised of a group of GPs, nurses, and other specialists allowing for access to both primary care services and specialist care when needed, instead of depending only on specialty care.

It is estimated that there are roughly 70 public community hospitals owned by the regions, and seven university hospitals being all public. Additionally, there are six private hospitals, three of which are nonprofit. Private hospitals contain surgical unit, orthopedic centers, and emergency departments. Healthcare providers in Sweden are paid through a salary system that is contingent on capitation (fixed base), fee-for-service (based on rate of patient visits), and performance (based on reaching quality targets). The distribution of healthcare facilities is found in both urban and rural areas with the variation in services provided. For example, it is estimated that one third of community hospitals located in rural areas lack comprehensive emergency care capabilities requiring patient transfer to major cities with more allocated medical resources.

In 2022, Sweden recorded 190 beds per 100,000 people which was considered among the lowest number of hospital beds relative to population size compared to the EU average (516 beds per 100,00 people).<sup>[8]</sup> On the other hand, Sweden ranked high in terms of long-term care beds in nursing and other residential long-term facilities with 1299 beds per 100,000 people.<sup>[8]</sup> This was higher than the EU average by 299 per 100,00 inhabitants. In addition, the Swedish healthcare system generally holds a high rank among EU countries in the number of healthcare professionals. For example, in 2022, the density of physicians in Sweden reached 71.5 physicians per 10,000 population which was above the EU average of 37.6 physicians per 10,000 population.<sup>[9]</sup> Moreover, the density of nursing and midwifery personnel per 10,000 people reported was 217, contrary to the average in EU countries of 82.6.<sup>[9]</sup>

#### **Utilization:**

Primary care is the most medical service being utilized in Sweden's healthcare system due to the view it holds of being the foundation of care. The average number of doctor visits in 2022 reached 2,173 per 1000 people of which 1,076 visits per 1000 people pertain to primary care doctors, representing approximately 50% of the total visits recorded per 1000 inhabitants.<sup>[10]</sup> Patients are generally directed to enter the Swedish healthcare system through primary care clinics which provide a wide range of medical services, including preventative care, treatment, and referrals to specialists when required. It is estimated that in Stockholm, 90% of citizens are registered in a primary healthcare facility.<sup>[11]</sup>

Sweden's universal healthcare system also includes specialized care, however one major issue pertaining to this care is the associated long waiting time for consultations which was estimated to take around 90 days. Approximately 60 – 70% of patients receive specialized care within this time frame.<sup>[5]</sup> The National Specialized Medical Care in Sweden is viewed as the highest quality care offered in the country with efficient utilization of resources available. The determination of the type of care classification as being highly specialized falls under the responsibility of the National Board of Health and Welfare department. The national board holds the power to assess and determine which counties receive such care. It is estimated that out of the 85 regional hospitals in the country, only seven provide highly specialized care which reflects the rarity of such care.<sup>[12]</sup> In addition, the utilization of inpatient and outpatient care in Sweden can be linked to income status. For example, Swedish citizens with lower income levels mainly use primary and outpatient care as opposed to those in higher income levels which have greater access to highly specialized care. In addition, citizens living in rural areas are faced with challenges regarding access to specialized care due to having such care located in major cities only.

The ongoing efforts of horizontal and vertical integration of care within Sweden's healthcare system focused on shifting from hospital inpatient care towards outpatient care and day care. These efforts were also linked to separating emergency care from elective care. For trauma patients having serious and critical conditions, patients are often redirected to regional or university hospital due to the lack of emergency care in one-third of regional hospitals. In 2022, the average stay of inpatients in hospitals reached 5.45 days which was similar to the average stay in the previous year (2021).<sup>[10]</sup> In addition, prescription of pharmacological medications is considered the most form of therapy utilized in Sweden's healthcare system. In 2021, approximately 65% of the population utilized at least one prescribed pharmaceutical.<sup>[13]</sup> Moreover, the technological capabilities funded through the regions hold great significance in the Swedish healthcare system. For example, as of 2022, Sweden accumulated 22.96 computed tomography (CT) scanners and 17.51 magnetic resonance imaging (MRI) units per

1,000,000 population in hospitals.<sup>[14]</sup> The total number of CT and MRI scans performed in 2022 was recorded at 13,075, of which 10,141 were CT scans and 2,934 being MRI scans.<sup>[15]</sup> This reflects the capabilities of technological instruments found in the Swedish healthcare system.

#### Access:

The publicly funded universal healthcare system covers a variety of services which is accessible to everyone who lives or work in Sweden. Tourists, visitors, and non-residents are entitled to care usually through emergency departments. In addition, refugees and non-citizens also have a right to care through emergency departments and dental care. Fees and expenses pertaining to non-emergency care is left to the country of residence to pay. The Swedish Association of Local Authorities and Regions focuses on four main indicators to measure the access quality of health services through the care guarantee limit. This includes having contact with primary care on the same day of visit, medical assessment must be conducted within three days from seeing a doctor, first visit to specialist care within 90 days, and lastly required interventions must be conducted within 90 days from seeing a specialist. However, with these indicators in place, long waiting times are still of great concern in the Swedish healthcare system and pose a prominent challenge.

In 2021, 71% of patients had been waiting for a first visit in specialized care within the care guarantee limit, and 54% for treatment or surgery.<sup>[7]</sup> Long waiting time is associated with the low number of disposable hospital beds, increasing population needs, and low productivity and shortage of healthcare staff. Based on the findings from the Commission for accessibility (*Tillgänglighetsutredningen*) viewing the volume of production related to the inflow and outflow of the patients in specialist care, the volume of first-time visits to specialist care was 5% below the balanced baseline between inflow and outflow of patients, and the and the volume for surgery and other planned treatments were 3.5% below baseline.<sup>[7]</sup> For example, the average waiting time for a hip replacement surgery increased from 92 days in 2019 to 112 days in 2020, and continued to increase further in 2021, before it started to fall in 2022.<sup>[6]</sup> In addition, knee replacement surgery waiting time increased from 131 days in 2019, to 153 days in 2020 and reached as high as 2000 days in 2021, before starting to decline in 2022.<sup>[14]</sup>

A survey carried out in spring of 2021 and 2022 reported 15% and 19% of the Swedish population having current unmet healthcare needs at the time of the survey.<sup>[6]</sup> This percentage recorded was slightly below the EU average and could contribute to explaining the needs of the population to access healthcare. In 2021, 1.3% of respondents reported having unmet needs for medical examination or treatment due to costs, distance, or waiting time.<sup>[7]</sup> In 2022, 1% of respondents reported making informal payments, compared with the EU27 average of 4%.<sup>[7]</sup>



On the other hand, the level of unmet needs for dental examination or treatment due to costs, distance or waiting time was estimated to be 1.8% of respondents in 2021, which is higher than medical care unmet needs and lower than EU27 average of 3.1%.<sup>[7]</sup> The quality and accessibility of the Swedish healthcare system is linked with several factors. In addition to the previously listed factors, high travel times and issues with continuity of treatment are more prevalent issues found in rural areas that might influence health outcomes.

#### **Quality:**

Quality assessment pertaining to health in Sweden measures performance, disease management, and the development of national quality registries in the country. Performance measurements are assessed based on reaching quality targets related to patient care satisfaction, coordination, and compliance. This metric allows for a monetary bounce rewarded to the doctor ranging from 0% - 3% from salary base for achieving such goals. In addition, disease management programs are developed at the regional level with the purpose of creating quality and patient safety strategies and objectives. The national quality registries are utilized to screen and assess the quality levels among health providers specifically for viewing treatment options and available clinical practices.

In 2022, most Swedish patients reported having a positive experience with healthcare staff and coordination teams. Results from the national quality survey indicated, 83% stating that they have experienced positive care encounter regarding treatment and communication.<sup>[7]</sup> In terms of coordination of care between providers, 77% have reported having a positive experience.<sup>[7]</sup> While elderly individuals, men, and people with lower education levels were in general more positive than other groups in this survey.<sup>[7]</sup> It was also found that 92% reported being involved in decision pertaining to their care and treatment options during hospital stay and 94% stating that doctors always treated them in a professional manner.<sup>[7]</sup>

Medical errors are considered as an important metric to assess the level of quality care provided in a healthcare system. It is important not to only mention the percentages of medical errors found but also highlight certain measures implemented to limit the increase and redundancy of such errors. In Sweden, healthcare providers are required to report medical errors as malpractice claims with explaining in detail the conditions that has led to the occurrence of such error. This is then investigated by the healthcare provider and is generally associated with a compensation for patients financially if deemed necessary. In Sweden, it is estimated that approximately 1400 patients die annually, and 110,000 patients are affected by medical errors.<sup>[16]</sup> However, underreporting of medical errors and nearly missed cases are of concern in the Swedish healthcare system.<sup>[16]</sup> This is linked to the highly cost

associated with the investigation process and the high turnover rate of healthcare professionals.

#### **Population Health Outcomes and Equity:**

Population health can be measured through the evaluation of certain metrics such as life expectancy, disability adjusted life years (DALYs), and the quality adjusted life years (QALYs). These metrics fall under the health-adjusted life years (HALYs) umbrella which encompasses measures that combine both the length and quality of life within a population. In 2024, the average life expectancy in Sweden was recorded at 83.42 (EU average of 81.5), reflecting 85.34 years among females (EU average 84) and 81.26 years among males (EU average 79).<sup>[17]</sup> In addition, the disability adjusted life years (DALYs) in Sweden was 17,997 per 100,000 population in 2021 which was lower than the comparable country average of 19,568 per 100,000.<sup>[18]</sup> The highest cases in Sweden were linked to cardiovascular diseases at 2,057 per 100,000 population, followed by diabetes mellitus (470 per 100,000 population), and chronic obstructive pulmonary disease (339 per 100,000 population).<sup>[18]</sup>

Sweden holds a high-quality adjusted life years (QALYs) with a life expectancy at birth of 83 years. This OECD Better Life Index found that Sweden's high rate of quality life might be linked to the strong community connection and high levels of public engagement. It was found that 94% of people believe that they know someone they could rely on in time of need.<sup>[19]</sup> Swedish citizens also rated their general statistician with life at a 7.3 grade on average, based on a 0 to 10 scale, which is reported to be higher than the OECD average of 6.7.<sup>[19]</sup> Recent changes in Sweden pertaining to QALYs include the development of a new quality of life measure tool that is based on the capability approach. This key measure resulted in the development of the Capability-adjusted life years Sweden (CALY-SWE). These set of questionnaire-based measures focus on cost-effectiveness evaluations of social welfare consequences. There are no data pertaining to CALY-SWE yet as it is considered a fairly new model. However, it would be interesting to evaluate the difference, impact, and accuracy of this model in comparison to the QALYs.

Overall, it is estimated that the average of healthy life years at birth in 2022 among EU was 62.8 years for women and 62.4 among men, in comparison to Sweden with 65.3 years for women and 67.5 among men.<sup>[20]</sup> In 2022, health life expectancy at age 65 was close to 20 years for both men and women in Sweden, for men, this was the second highest following Norway with approximately 21 years.<sup>[1]</sup> The most common death place for the older population (ages 65 and older) are hospitals. It is estimated that in Sweden, 40% of older individuals die in hospitals, compared to the low share with its neighboring Scandinavia countries.<sup>[21]</sup> In 2021, among the leading causes of deaths, ischemic heart disease was recorded at the top with 127.5 per 100,000 population, followed by Alzheimer disease and other dementias

at 90 per 100,000 population, and stroke with 54.3 per 100,000 population.<sup>[22]</sup>

#### **COVID-19 response:**

The COVID-19 pandemic has had a great impact on Sweden economically and contributed to the exposure of the deficit within the healthcare system. The GDP of Sweden fell sharply after the spread of the virus in 2020, like in most European countries. However, Sweden GDP decrease was moderate compared to that of the EU. It recorded a 6% GDP fall and has forced the country to enter a recession.<sup>[23]</sup> In addition, deficits in the healthcare system were also exposed such as the low preparedness of personal protective equipment (PPE) and the decrease in testing capacity.

Sweden recorded nearly 19,000 hospitalizations with COVID-19, of which 83% had COVID-19 as the main diagnosis.<sup>[24]</sup> Of all hospitalized cases 3% died due to the virus, whereas 9.6% died after undergoing intensive care.<sup>[24]</sup> Over half of COVID-19 cases reported in 2020 was among individuals aged 55 and over.<sup>[24]</sup> There were 249 deaths per 100,000 people associated with COVID-19 and 263,267 per 1,000,000 overall cases accumulated from the virus.<sup>[25]</sup> The total COVID-19 vaccine doses administered in Sweden was recorded at 28.31 million doses.<sup>[25]</sup>

Swedish response to the COVID-19 pandemic includes the increase in telehealth utilization and the development of policy targeting long-term care. It is estimated that nearly half (47%) of Swedish adults reported in early 2021 having had at least one teleconsultation since the start of the pandemic, which represents a 30% increase from 2020.<sup>[6]</sup> In addition, the pandemic attracted notice to long-term care in Sweden which resulted in the establishment of the Elderly Care Act. The main structural issue concerning to long-term care in Sweden (prior to the pandemic) pertains to the lack of staff due to the unpleasing working environment resulting in the negative effect on quality, quantity and safety of long-term care services. In response, Sweden allocated a budget of EUR 452 million from the Sweden recovery and Resilience Plan which aims to improve long-term care by upskilling and training new staff.<sup>[6]</sup>

## **DISCUSSION**

Overall Assessment and Comparison with the US system:

Both the United States and Sweden utilize public and private modules of healthcare delivery. Key differences between the countries pertain to the time spent in private healthcare sector where the United States lean more towards private care as opposed to Sweden focusing on the public welfare state of care. It is estimated that 87% of Swedish citizens utilize the countries universal healthcare system while approximately 13% of employed residents have private supplemental healthcare coverage.<sup>[3]</sup> When comparing that with the United States, where 54.8%

of the U.S. population are covered by group coverage and 13.9% have direct-purchase coverage.<sup>[26]</sup> I believe that this is one reason that is contributing to the high cost of care found in the U.S. compared to Sweden.

In addition, cost of healthcare services in both countries differ drastically. For example, although emergency care in both countries is accessible for all individuals regardless of status or ability to pay, the cost of such service is of great concern in the U.S. In Sweden the emergency care costs are around \$49, ambulance transportation costs up to \$18, and overnight stays cost around \$12.25 per day.<sup>[27]</sup> In general, there is usually a limit to how much a person pays (\$110 - \$135) for healthcare per year, in which after reaching this limit healthcare tends to be free.<sup>[27]</sup> On the other hand, in the United States cost of an ambulance can reach \$1200, depending on insurance coverage.<sup>[27]</sup> There could also be some out-of-pocket emergency room copay in some states. This highly cost service in healthcare is also coupled with overcrowding in emergency departments due to individuals utilizing such care as their main healthcare provider.

In 2024, the United States outranked Sweden in healthcare innovation with an overall world index of 52.96, and 52.23, respectively.<sup>[28]</sup> In both countries, innovation dimensions were surveyed based on quality care, choice, fiscal sustainability, and science and technology. Results of technological advancements focused on healthcare patents, new drug approved, and R&D expenditure. Additionally, on average, waiting times for elective surgery in the US reached 28 days, whereas Sweden recorded a waiting period of 50 days for specialized care.<sup>[29]</sup>

Another comparable metrics between both countries include infant mortality rate, maternal mortality, life expectancy at birth, and life expectancy at age 65 years. In Sweden infant mortality is recorded at 1.67 per 1,000 live births in comparison with the U.S. at 5.6 per 1,000 live births.<sup>[1]</sup> Maternal mortality was recorded at 5.0 and 22.3 per 100,000 live births in Sweden and the U.S., respectively.<sup>[1]</sup> In addition, life expectancy at birth in Sweden was 85.22 among women in comparison with the U.S. at 80.2 among the same group.<sup>[17]</sup> Male life expectancy at birth was higher in Sweden (81.65 years) than the U.S. (74.8 years).<sup>[17]</sup> In 2022, the life expectancy at age 65 years was averaged between both males and females in the Sweden at 20 years where the U.S. recorded an average of 19, making this metric very close in terms of comparison between the countries.<sup>[1]</sup> I believe that the assessment pertaining to the quality of life in both countries is important to better understand the difference between Sweden and the United States. It is apparent that Sweden provides a better life quality for its citizens than the U.S. Where on the other hand, the United States might provide better healthcare services, cost of care is of great concern.

## CONCLUSION

The analysis identified certain areas in which the Swedish healthcare system was advantageous compared to the United States. Results of this report found that Sweden achieved better health outcomes, including lower infant mortality and higher life expectancy, while maintain lower per capita costs through its universal, tax-funded model. However, the U.S. healthcare system excelled in innovation, cutting edge medical technology, and shorter wait times for elective surgery, driven by its market-based approach and high levels of private investment. The findings concluded that the Swedish health system possess low rate of unmet need, low rates of needless hospital admission, low rates of preventable and curable death, and suitable medical quality. Future research should examine a more in-depth analysis pertaining to specific reasons behind each area of this research and different ways of improvement.

### **Ethics approval and consent to participate:**

Not applicable.

### **Consent for publication:**

Not applicable.

### **Availability of data and materials:**

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### **Competing interests:**

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