IN PURSUIT OF EXCELLENCE:
A COMPARISON BETWEEN THE UNITED STATES AND THAI HEALTH SYSTEMS AND ACCESS TO CARE

by

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ABSTRACT

Globally, the notion of health as a human right has a variety of interpretations. The interpretation of this ideal leads to how healthcare systems are organized, specifically in terms of an individual's *true access* to healthcare services. In this comparative analysis of healthcare systems in the Kingdom of Thailand and the United States of America, healthcare access is evaluated using the Lovett-Scott and Prather model, in which systems are broken into eight categories: historical reference; structure; finance; interventional services; preventative services; resources; major health issues; and health disparities. When viewed superficially, the nations' healthcare systems appear to be vastly different; however, an exhaustive comparison identifies several similarities as well as areas for further development. Additionally, this study emphasizes the need for health promotion, preventative services and the adoption of universal healthcare coverage.

In an ever expanding world, comparing global healthcare delivery strategies can lead to improved systems and increased access to healthcare services. This comparison has public health relevance as healthcare reform that results in increased access to preventative and interventional services can produce healthier individuals and communities. Nations with healthier populations are able to not only divert national spending on healthcare towards preventative services, thus decreasing costs, but also improve the economy by investing in citizens who contribute to the workforce.

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PREFACE

I would like to recognize the extensive support received from Khon Kaen University in Khon Kaen, Thailand. The students, staff, faculty and institution welcomed me as an exchange student conducting research from May to July 2015. They allowed me to attend lectures at no charge, gave me access to their resources and data, connected me with experts in the development of policy and healthcare management, and organized field and site visits to further my understanding of the implementation of their reformed healthcare system. A special thank you to Dean Khanitta Nuntaboot and Dr. Lukawee Piyabanditkul, who served as mentors and organized my extended stay at the University.

Additionally, I'd like to recognize the University Center for International Studies, the Cutler Family Fund for Ethical Global Health Research and Education, and the University of Pittsburgh Center for Global Health for providing financial support that enabled me to travel and conduct this research abroad.

LIST OF ACRONYMS

ACA: Patient Protection and Affordable Care Act

AAMC: Association of American Medical Colleges

CHIP: Children's Health Insurance Program

CSMBS: Civil Servant Medical Benefit Scheme

CUPs: Contracted units for primary care

DALYs: Disability adjusted life years

FPL: Federal poverty level

GDP: Gross domestic product

HBHs: Health Promoting Hospitals

HMOs: Health Maintenance Organizations

MDGs: Millennium Development Goals

NHSO: National Health Security Office

OECD: Organisation for Economic Co-operation and Development

RN: Registered Nursing

PHOs: Provincial health offices

PPP: Purchasing Power Parity

SSS: Social Security Scheme

TRT: Thai Rak Thai

UCS: Universal Coverage Scheme

UN: United Nations

US: United States

WHO: World Health Organization

1.0 INTRODUCTION

Health as an inalienable and constitutional human right is not an unanimously accepted belief. While every member state of the United Nations (UN) has in some respect accepted the notion through the signing of various documents such as the Universal Declaration of Human Rights and the World Health Organization's (WHO) Constitution, how these statements are interpreted in each nation varies dramatically (Appendix A, B). In 2000, WHO, an agency of the UN, conducted an assessment of the world's health systems and how each nation achieved the UN's shared health missions. This ranking, according to their official press release, assessed each system on five indicators:

> …overall level of population health; health inequalities (or disparities) within the population; overall level of health system responsiveness (a combination of patient satisfaction and how well the system acts); distribution of responsiveness within the population (how well people of varying economic status find that they are served by the health system); and the distribution of the health system's financial burden within the population (who pays the costs).[1]

While having some flaws and having been met with considerable opposition, the ranking process did provide valuable insight to global healthcare systems. Among the insights gained was that sustaining the health and well-being of a population depends upon the effectiveness and accessibility of the healthcare system of the nation. Additionally, it was found that the portion of the population most negatively affected by ineffective healthcare systems across the world were those living in poverty, with the report stating that they are "driven deeper into poverty by lack of financial protection against ill-health."[1] According to the report, the United States was found to

spend more, in terms of gross domestic product (GDP), than any other nation, even though it ranked 37th out of 191 member nations in regards to performance.[1] At the time of the ranking, Thailand was still operating under its previous healthcare system and was ranked 47th overall. When evaluating fairness of financing healthcare, WHO calculated a household's average healthcare spending capacity. In this regard, the United States ranked between 54-55th.[1] Compared to neighboring countries, Canada was ranked 17-19th and Cuba was at 23-25th.[1] There have been no subsequent rankings by the WHO since 2000.

In addition to being morally correct, investing in health directly and positively impacts the global economy, as healthy individuals are more likely to contribute to economic growth.[2,3] Being interested in the structure, efficacy and efficiency of healthcare systems, I chose to spend my practicum experience conducting research in Thailand. Although comparing Thailand and the United States may be unusual due to their vast differences in population, geographic location and economic standing, Thailand was selected as a comparison country as it recently achieved universal access to healthcare through major health reform. In the first fifteen years after implementation, health outcomes have appeared to improve indicating that the new system has been successful in the rollout. While in the country, I enhanced my understanding of global healthcare systems through research and field visits with Khon Kaen University, and lectures on their recently reformed healthcare system. Through this experience, I developed greater appreciation for the relationship between public health and healthcare practice, being immersed in a healthcare system that placed a high importance on improving health outcomes and the community. Regardless of the differences between the United States of America and the Kingdom of Thailand, I found many similarities between the two healthcare systems and areas where both

systems could be improved by applying strategies enacted by the other nation. This study aims to provide a comprehensive comparison of the two nations in regards to healthcare access. This comparison in turn intends to strengthen the advantages of shifting the healthcare culture towards one emphasizing preventative services and health promotion, as well as the benefits of adopting some type of universal healthcare system.

1.1 COMPARING GLOBAL HEALTHCARE SYSTEMS

When evaluating healthcare systems, a primary criterion of effectiveness is *access*. Often access is confused for simple availability of resources in a healthcare setting; however, this definition is too narrow. To accurately compare global health systems, experts advocate for the utilization of the most comprehensive definition of *true access*, as coined by Margie Lovett-Scott and Faith Prather. By this terminology, individuals with true access to healthcare are not only able to transport themselves to and from the services, but are also able to pay for needed services and have all of their health needs met upon entering the healthcare system.[4] Utilizing their framework in evaluating global health systems in regards to accessing healthcare services, nations are assessed in eight categories: historical reference; structure; financing; interventional services; preventative interventions; resources; major health issues; and health disparities.[4]

- Historical describes how the healthcare system emerged and the role of different providers in the current system.
- Structure evaluates how the nation delivers health services.

- Financing explores how the nation funds the healthcare system, financial priorities in regards to healthcare, and how overall allocations of resources is determined.
- The interventional factor defines the focus of the nation's healthcare (i.e., primary care, acute care, etc.) and its outcomes.
- Preventative factor focuses on the nation's prioritization of "maintaining and preserving the physical, emotional/mental, and social health of its people."[4]
- Resources, which is related to the financial factor, describes a nation's human resources available to provide necessary services.
- When considering major health issues, nations are evaluated in terms of social determinants of health, poverty, race, gender, public health challenges and the top ten diseases, including how they are addressed and treated.
- Health disparities identifies any unequal treatment and outcomes within the healthcare system, specifically diseases that disproportionally affect part of the population.[4]

The Lovett-Scott and Prather model and these eight categories will be utilized to organize and execute the comparative analysis of the Thai and United State healthcare systems. One aspect of this comparison that deviates from this model is in evaluating future concerns for the respective healthcare systems.

Data for this comparison was obtained through a variety of sources, including: WHO, World Bank, UN reports, the Institute for Health metrics and Evaluation and more. Much of the data obtained was labeled as "Level 3" or higher data by the WHO, indicating high reliability. The United States has historically been considered meticulous in record keeping and reporting, and since the passage

of Thailand's healthcare reform, health outcomes and interventions have been tracked rigorously. Data pertaining to health prior to the millennium and reform may not be available due to lacking infrastructure for data collection as well as large coverage gaps in the Thai population.

2.0 THE HEALTHCARE SYSTEM IN THE KINGDOM OF THAILAND

2.1 OVERVIEW OF THE KINGDOM OF THAILAND

The Kingdom of Thailand is a lower-middle income nation located in Southeast Asia, and has a population of over 67 million people.[5] It is governed by a constitutional monarchy, with the royal family being revered by the public. However, in 2014 the democratically elected government was ousted by the Thai military in a coup d'état, that has yet to return to democracy.[5] As of 2013, non-communicable diseases are the leading causes of disability adjusted life years (DALYs) among both sexes of all ages, followed by injuries and then communicable, maternal, neonatal and nutritional diseases. This is a shift from 1990, when communicable diseases were the second leading causes of DALYs.[6] Over 50% of the population resides in urban areas and approximately 10.5% of the population lives below the poverty line, with fewer than 2 percent living on less than US$1 per day.[5,7] In 2015, the estimated GDP per capita (PPP) was US$16,100.[1,5] Geographically, Thailand spreads across 513,120 square kilometers, which is approximately three times the size of the American state of Florida.[5]

Ethnically, over 95% of individuals in Thailand are Thai. The remaining 4.1% of the population is mostly Burmese.[5] Thai is the official language for the nation, with English being the unofficial second language of the upper-class. The majority of Thais are Buddhist (93.6%), which is the

[1] Figures are adjusted to Purchasing Power Parity, which is a commonly utilized economic theory that adjusts currencies between countries to find equivalence in purchasing powers.

official religion of the nation, however, there are populations of Muslim (4.9%), Christian (1.2%) and other religions throughout the nation.[5]

As of 2015, the median age in Thailand is 36.7 years. While 17.41% of the population is under the age of 15, 9.86% of the population is over the age of 65.[5] This is especially important to consider, as Thailand has an aging population, with 14.6% of elderly individuals relying on their families.[5]

2.2 HISTORICAL

In the past several decades, Thailand has experienced large economic and societal booms. In 1977, during Thailand's first major economic crisis, the nation passed its first healthcare reform, which restructured the Ministry of Public Health and created a healthcare policy for impoverished individuals. The second healthcare reform in the early 1990s, similarly spurred by an economic crisis, expanded welfare to the elderly and children, established a National AIDS program, and created a social security scheme. During this time, community hospitals were introduced into the existing healthcare infrastructure, and a larger emphasis on public health also emerged. Foreign investments and increased exportation of major agricultural goods – specifically rice – led to rapid development throughout the late 1990s. An economic crisis shortly before the turn of the millennium led to widening inequalities, even as the economy recovered steadily after 2001.[8]

To address the concern of inequality among the Thai people, the government approved a Universal Coverage Scheme (UCS), which included healthcare services, healthcare financing and public

health initiatives. In doing so, Thailand became one of the few lower-middle income nations to introduce universal health coverage reform. The reform is highly associated with the Thai Rak Thai (TRT) party having won the election in 2001, which promised universal health coverage throughout the campaign. Had another party won the election, it is believed that universal coverage would not have been possible as the TRT party's close association with researchers brought evidence-based policy making into consideration while drafting the reform.[9] Additionally, it set itself apart by introducing healthcare as a human right into the Thai National Constitution. Many of the advancements of the nation, most prominently the transition from low to middle-income classification, can be attributed to this shift in healthcare systems.[10] Prior to the implementation of Thailand's UCS, approximately 30% of the population was uninsured. As a result of the healthcare reform, over 99% of Thai nationals have health insurance. In addition to insuring the majority of the population, since implementing the policy change Thailand has achieved almost all of the eight United Nations Millennium Development Goals (MDGs), including the three health-related ones. The concern for the UCS being revoked all but disappeared with the political stability in the early 2000s and the large public support for the national insurance system.[8]

2.3 STRUCTURE

The healthcare service delivery system in Thailand is broken into five levels: tertiary care, secondary care, primary care, primary healthcare, and self-care at the family level.[8] This relationship is depicted in Figure 1. Tertiary care includes medical and health services provided by specialists, which are typically located at large general hospitals, regional hospitals, university

hospitals, and large private hospitals. Secondary care facilities provide medical and healthcare that can be managed by providers with intermediate specialization. Institutions that are classified as providing secondary level care include community, general or regional, and private hospitals. The primary care level of healthcare delivery primarily consists of sub-district Health Promoting Hospitals (HPHs).[8] Originally, primary care units were established in 2002 under the expansion of the Universal Healthcare Coverage policy. The definition was expanded in 2010 to include HPHs. Other primary care facilities include health centers, outpatient hospitals, private clinics and drugstores. Primary healthcare enhances health promotion, disease prevention and other health services organized at the community level. The service providers at this level are community members, village health volunteers and non-governmental volunteers. The final level, self-care, within the family context, is based on the empowerment of any individual's capacity at making educated decisions for his or her own and family members' health and to provide self-care.[8]

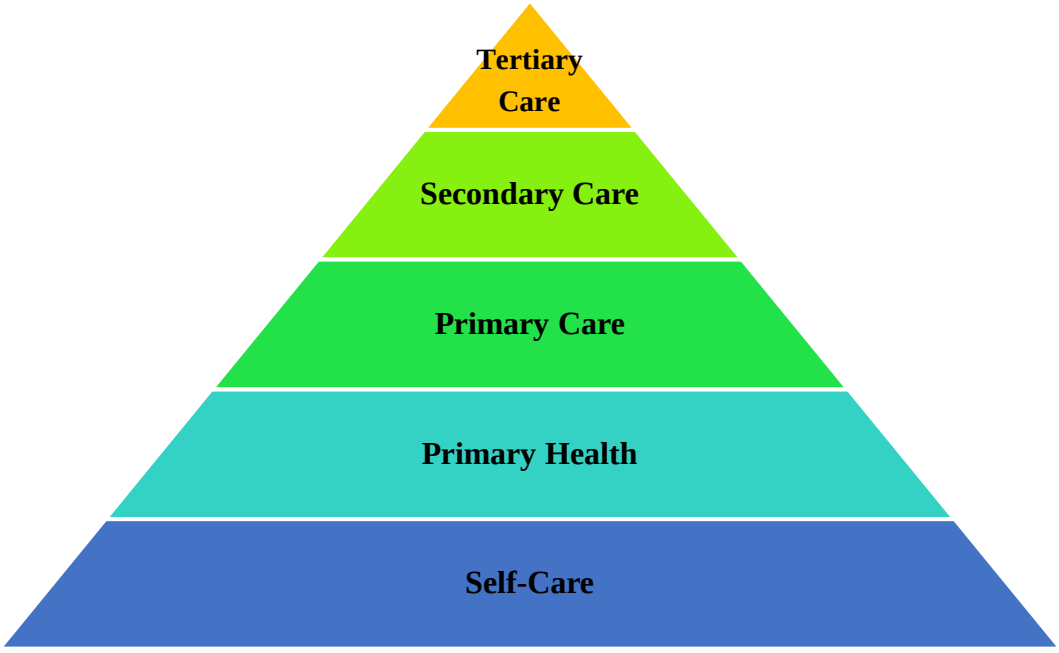

Figure 1. Levels of health service delivery system in Thailand

A key component of the implementation of the successful healthcare system was in increasing access to healthcare, not simply through financial aid but also through developing infrastructure.[11] Specifically, the creation of HPHs were essential in reducing the physical barriers in accessing healthcare services. HPHs are located at every sub-district across the nation and are staffed with a nurse practitioner, a few nurses, and a volunteer typically. This allows healthcare to be accessed relatively easily even in the most rural provinces.[11] Community members are able to access all prenatal care, obtain contraception and family planning resources, receive immunizations, and see a chronic disease physician or a dentist at a local site. If it is determined that a patient requires more specialized care, then he or she will be referred to the closest secondary care hospital. The development of a tiered referral system that begins with HPHs at the sub-district level has not only streamlined the process in regards to obtaining healthcare, but has also increased the ease of access for Thai nationals due to local point of entry into the system.

Management of the healthcare system is largely decentralized. Thailand has four regions and 76 provinces, which are then further split into local districts and sub-districts.[12] A contracted units for primary care (CUPs) board acts as a liaison between the community hospitals and the National Health Security Office (NHSO), which distributes funding. CUPs also become gatekeepers within the referral system in an effort to contain costs.[12] Each sub-district conducts community assessments to determine budget allocations, which are then processed by the respective CUP board.[13] Provincial Health Offices (PHOs) evaluate and monitor for performance at the healthcare centers and providers. Originally, PHOs were considered to have very little power in relation to CUPs; however, this slowly transitioned to a more even distribution of authority after a decade.[14]

Key performance indicators are utilized by PHOs to manage the CUPs and healthcare facilities, which insure quality and impact national funding amounts.[14]

A large part of Thailand's healthcare relies on the nursing workforce. However, it is estimated that there is currently a shortage of over 43,000 nurses, with an estimated 1.5 nurses per 1,000 population.[15] The shortage is present in both the private and public sectors, though the public sector is more heavily affected.[15] A major cause associated with the shortage is that Thailand has an aging population, which leads to a higher demand for healthcare providers. Additionally, the implementation of the Universal Coverage Scheme and the increased prevalence of chronic illness as opposed to communicable diseases has caused the number of individuals visiting healthcare facilities to grow, which led to greater need for additional staff.[15]

A major issue affecting the shortage of nurses in Thailand is associated with two economic factors. One factor is that surrounding nations will provide incentives for nurses to relocate abroad, thus decreasing the number of educated nurses that remain in the nation. The fact that positions of employment within the nation are unable to maintain a competitive salary and benefits package for nurses is often enough to push an individual to consider emigrating. The other is that during the economic crises at the turn of this century, much of the nursing workforce was diminished as hospitals were forced to reduce staff numbers.[15] The overall shortage in nurses directly impacts healthcare in Thailand, as there is a lower standard of care due to excessive workload, and stress in the workplace increases as nurses face working overtime regularly.[15] Some Thai policy makers have argued in favor of reforming healthcare to classify nurses as civil servants, as it would

improve their health coverage and guarantee job security, which could potentially incentivize more Thai nationals to pursue a career in nursing or remain in the nation as healthcare providers.[15]

2.4 FINANCE

One of the largest strategic assets of Thailand's healthcare system is in how it is financed. Beginning in the early 2000s, the creation of the Thai Health Promotion Foundation served as a funding mechanism for the healthcare system in Thailand beyond general taxation.[8] This foundation drew upon a surcharge on tobacco and alcohol sales of 2%, which produced US$50-60 million annually, to directly offset costs for programs targeting health promotion (i.e., substance abuse/education, exercise initiatives, and initiatives involving vulnerable populations such as children and the elderly).[16]

It should be noted that even though approximately 12% of the government budget is spent on healthcare, less than 5% of the GDP is dedicated to direct health costs.[5] The total cost of the healthcare system is approximately US$2 billion annually, making Thailand one of the most affordable healthcare systems in the world.[4] All funding was initially channeled through the Ministry of Public Health; however, it is now distributed by the NHSO.[12]

Since introducing the new healthcare system, over 99% of Thai nationals have health insurance. Insurance is provided by three different schemes: Social Security Scheme (SSS), Civil Servant Medical Benefit Scheme (CSMBS) and Universal Coverage Scheme (UCS) (Table 1).[8]

Table 1. Health Insurance System in Thailand

Scheme	Population Coverage		Financing Sources	Benefits Package
	Population	Percentage		
Social Security Scheme (SSS)	Private sector employees (does not include dependents)	16%	Payroll tax financed, tri-partite contribution 1.5% of salary, equally by employer, employee and government	Comprehensive: outpatient, inpatient, accident and emergency, high-cost care, with very minimal exclusion list; excludes prevention and health promotion
Civil Servant Medical Benefit Scheme (CSMBS)	Government employees and dependents (parents, spouse and up to two children <20 years)	9%	General tax, noncontributory scheme	Comprehensive: slightly higher than SSS and UCS
Universal Coverage Scheme (UCS)	Rest of the population	75%	General tax	Comprehensive: similar to SSS, including prevention and health promotion for the whole population

Source: "Health Care System in Thailand" Lecture [8]

The SSS in Thailand that covers 16% of the population is available for all private sector employees; however, it does not extend to dependents. Of the three insurance schemes in the nation, SSS is the least comprehensive. Although it is comprehensive with in- and out-patient care, accident and emergency medical needs, high-cost procedures and has very few exclusions for medical interventions, it does not cover any preventative or health promotion services. Financed through a payroll tax, three parties (the employer, employee and government) pay into the system equally.[8]

Comprising the smallest segment of the population covered, only 9% of Thais benefit from the CSMBS. This coverage is available only to government employees and their dependents, as defined as "parents, spouse and up to two children age <20."[8] The CSMBS is the most

comprehensive of the three insurance systems in Thailand, covering slightly more services than both SSS and UCS, and is financed through the general tax. The vast majority of Thais – approximately 75% of the population – possess UCS, as those not covered by SSS or CSMBS are eligible. Similar to the CSMBS, the UCS is financed through a general tax. The Universal Coverage Scheme is more comprehensive than SSS, as in addition to the expansive medical coverage provided, it also includes preventative and health promotion programs for the entire population. The Thai government established a capitation model for the universal coverage scheme, which requires individuals seeking care to be registered with their local CUPs for local health institutions to have access to funds.[11] As of 2013, Thailand invested on average US$264 per capita in total annual health expenditures.[7]

All Thais, regardless of their insurance classification, have a 30 Thai baht (THB) – less than US$1 – co-payment (co-pay) at the time of receiving services. The "30 baht" program was originally introduced at the start of the Universal Coverage Scheme and aimed to "provide equal access to quality care" to all, regardless of income or socioeconomic status.[17] This co-pay is applied to outpatient fees, inpatient fees and drug prescriptions; however, there are exclusions that are not covered by the co-pay. Exemptions are typically cosmetic in nature, but also include obstetric delivery after the second child. Programs similar to this especially in Asian nations, where a co-pay amount has been standardized, have been associated with the growth of informal payments, defined as any amount that exceeds the standard rate that are used to expedite medical services. However, after a decade of being in place, the practice of informal payments has not appeared in Thailand.[17] This could be due to how the system was rolled out and the effects of stringent government regulation, or that these side payments have not been as apparent.

The “30 baht” program has evolved greatly since its inception. It was discontinued in 2006, and replaced with a “zero co-pay” system. However, after costs began to rise, it was re-implemented in 2012 with some alterations.[18] Certain medical visits do not have a co-pay, including: emergencies, health prevention and promotion services, patient visits to HPHs and non-prescription visits.[18] All other services require the THB30 fee. The program has also expanded to include more-costly services due to public demand, including dialysis and transplants for children.

Initial research has shown that financial risk protection has greatly increased since the implementation of the UCS. The amount a household spends in direct health payments fell from 35% of total health spending before universal coverage was achieved in 2000 to under 15% in 2014.[19] Additionally, the incidence of catastrophic health spending (>10% of total household spending) decreased from 6% in 1996 to under 3% in 2011.[19]

2.5 INTERVENTIONAL

With the passage of universal medical coverage, Thailand has increased access to all health services to its citizens. Primary care is utilized regularly at the sub-district level in HPHs, with emergencies being treated free of charge at large hospitals. The physician density in the nation is low, with 0.39 physicians per 1,000 population, in comparison to the WHO recommended 2.3 health workers (physicians, nurses and midwives) per 1,000 population. This explains the high reliance on nurses and nurse practitioners at the primary care and unspecialized levels of healthcare

delivery.[5,8] It should be noted that since introducing the UCS, Thailand has achieved all eight health related Millennium Development Goals set by the United Nations, which speaks highly of the system's ability to handle the increase in patients and flexibility of providers.[19] Additionally, Thailand was highest ranked among 80 nations for average reduction in child mortality in 2008.[19]

2.6 PREVENTATIVE

Preventative health services have been a fundamental aspect of Thailand's strategy for promoting wellness. Immunization programs were established in the 1970s and have been regularly expanded with each health reform. Furthermore, the development of effective public health infrastructure has allowed Thailand to efficiently distribute healthcare services across the nation.[11] Unlike many of the surrounding nations, Thailand invested in growing the public health capacity of the nation beginning in the 1970s and has continued to do so ever since. However, no policy change emphasized the national spotlight on health promotion more than the establishment of the Thai Health Promotion Foundation in 2001 and the launch of the National Health Security Act of 2002.[8] The Thai Health Promotion Foundation finances preventative and health promotion services for Thai nationals, utilizing funding from a taxation on alcohol and tobacco, both of which behaviors are linked with negative health outcomes. Similarly, the National Health Security Act emphasizes promotion and prevention strategies, including: increasing vaccination rates for preventable illnesses; increasing access to family planning resources; increasing antenatal care and presence of a skilled birth attendant; and healthy eating and physical activity habits to prevent ailments such as diabetes and heart disease.[8]

Progress in increasing access to preventative health services is evident from several health outcomes and trends in recent decades. Success in health promotion and family planning can be seen in the the total access to contraceptives (79.3%), which likely contributed to the decrease in total fertility rate, which as fallen from 2.1 children in 1990 to 1.4 children in 2013.[5,20] As of 2013, 100% of births were attended by a skilled health professional and were conducted in a health facility, which is reflected by the improved maternal mortality rates for the nation.[5,24] Similarly, 98% of pregnant women receive at least one antenatal visit, with 93% receiving four or more.[24] When evaluating the implementation of evidence-based public health interventions, such as vaccinations, the coverage rates for the five major immunizations for vaccine-preventable diseases (tuberculosis, diphtheria/pertussis/tetanus, polio, hepatitis B and measles) increased after the Universal Coverage Scheme was introduced.[21] Under this scheme, all preventative services are free and accessible at local HPHs, which increases the likelihood of maintaining health through screening and early diagnosis of disease.[22]

2.7 RESOURCES

Family relationships are an integral piece of Thai culture, with individuals choosing to live with or close to their immediate family members. This integration of close family relations has direct impact on health and health outcomes, as individuals are able to have a regular support system in place.[23] Additionally, children are revered in the Thai society. As a nation with an extremely open and friendly culture, it is not uncommon for strangers to embrace an individual's child.[13] The reliance individuals place on their family members, both immediate and distant, is evident by relatively high dependency rates as well as the high utilization of home healthcare.[5] In the case of

a healthcare intervention where the patient is discharged from the hospital but requires fairly extensive care for some time, such as with an individual with a tracheostomy tube that requires regular cleaning, patients almost always return home with the support from family members as opposed to requiring a HPH nurse to provide daily outpatient care.[13,22]

The influence of Buddhism in Thai culture is present everywhere, even in medicine and healthcare services. Most mid-to-large sized hospitals will have a wing of the facilities dedicated to treating Buddhist monks, who are not charged anything for services provided.[13] Additionally, larger community hospitals will often offer traditional "Eastern" medicinal interventions for patients, such as acupuncture and massages, in addition to "Western" medical treatments. All hospitals collaborate with Buddhist *wats* (temples) in connecting patients with spiritual leaders during their illness.[13]

2.8 MAJOR HEALTH ISSUES

Thailand has historically focused its health efforts in combating infectious diseases, leading to interventions and education campaigns aimed at diminishing the negative effects of these illnesses being introduced to communities around the nation. While many bacterial and viral diseases are still endemic – including malaria, dengue fever, Japanese encephalitis, HIV/AIDS and tuberculosis – the sharp decline in morbidity and mortality rates is attributed to the adoption of the Universal Coverage Scheme. However, the rise in prevalence of non-communicable diseases is clearly evident. This increase in chronic conditions such as diabetes, heart disease and cancer can be traced to the aging population and increased affluence.

As evidence of its increasing development status, Thailand's top ten causes of death are mostly chronic conditions or causes typical of developed nations (Table 2)[6]. This can also be attributed to increasing rates of obesity, of which the prevalence among males and females over the age of 20 are 5.7% and 11.1% respectfully.[24] Additionally, a high prevalence among males over the age of 15 of tobacco smoking – approximately 42% – can be linked to several chronic conditions.[24]

Table 2. Leading Causes of Years of Life Lost to Premature Death in the Thailand, 2013

Ranking	Cause
1	Ischemic heart disease
2	Road injuries
3	Cerebrovascular disease
4	Lower respiratory infection
5	Liver disease
6	HIV/AIDS
7	Chronic kidney disease
8	Self-harm
9	Diabetes
10	Lung cancer

Source: Institute for Health Metrics and Evaluation[6]

One major exception not attributed to the aging of the population is the incidence of road injuries, which is the second highest cause of death in the nation. Like the surrounding non-industrialized nations, most Thais use motorcycles for transportation. In fact, approximately 60% of all registered vehicles are motorcycles, and more than 80% of drivers ride motorcycles daily.[25] Drivers are disproportionally younger (18-40 years of age), which creates a major economic impact as the mortality rate per capita due to road injuries in Thailand is the second highest in the world, with 44 deaths per 100,000 population.[26] Of all road traffic fatalities, 73% were from

motorcycles. Road traffic crashes accounted for an estimated three percent GDP loss annually, and has become a major public health issue.[25]

2.9 HEALTH DISPARITIES

Health disparities resulting from barriers to accessing health services vary somewhat based on residence (rural vs. urban) and wealth. For example, children under the age of 5 living in rural areas are more likely to be underweight (10% prevalence) than children living in urban locations (7% prevalence).[20] Similarly, 14% of children under five in the lowest wealth quintile of the population are underweight as opposed to the 4% of children under five who are underweight in the highest wealth quintile.[20] Another example is with comprehensive knowledge of HIV/AIDS, which has discrepancies by wealth quintiles, with 48% of the poorest 20% of the population having access to the necessary education about the diseases, as opposed to 59% of the wealthiest 20% of the population obtaining comprehensive health education.[20]

Additionally, Thailand has historically provided approximately THB500 (approximately US$15) per month for the first five years of the first born child's life. In recent years, this practice has been expanded to an individual's second child; however, the mother does not receive any governmental financial support for additional children. This money is typically use to purchase food, offset costs of child care, and provide any other needs of the child. Not providing funds for any child after the second restricts the types of services that family may be able to obtain for their children.

A rising concern in Thailand in terms of disparities is not necessarily specific to disease exposure, but rather insurance coverage. Because the insurance coverage options are not equally comprehensive, individuals with SSS have the fewest number of services covered, and thus may not have as regular access to healthcare as individuals with USC or CSMBS.[27] Additionally, as the system operates under a capitation model, some argue that it leads to inequitable distributions with facilities and personnel.[11,12] This in turn allows regional disparities in healthcare services to remain static, especially with shortages of professionals in more remote areas.[11]

2.10 FUTURE CONCERNS

With an ever aging population, Thailand is facing new health challenges, more healthcare needs, and increased costs.[28] Growing costs and disparities among the medical coverage options may lead to consumer dissatisfaction, which could prompt policy makers to reevaluate the SSS policy.[27] As healthcare reform had always envisioned on being a national, single-payer system, removing the SSS policy would be a step towards achieving that goal; however, it would come with a larger cost to the government. This could be detrimental as the growth in GDP has not been proportional to the increase in healthcare spending as a percent of GDP.[28] Additionally, with the large healthcare provider shortage – specifically that of nurses – the nation must make some major adjustments to compensation to ensure high quality of care.[15] Political instability as a result of a military coup d'état in May 2014 has not only adversely affected their economy and global reputation, but also causes concern about how healthcare will fare in the future.[5]

3.0 THE HEALTHCARE SYSTEM IN THE UNITED STATES OF AMERICA

3.1 OVERVIEW OF THE UNITED STATES OF AMERICA

The United States of America (U.S.) is a high-income nation located in North America, and is considered the most powerful nation in the world. It has a population of over 321 million people that is extremely diverse.[29] Non-communicable diseases have consistently been the leading causes of DALYs among both sexes of all ages, followed by injuries and then communicable, maternal, neonatal and nutritional diseases.[30] Over 80% of the population resides in urban areas, 14.8% of the population lives below the poverty line, and the PPP of US$56,300, which places the United States 19th in the world in terms of wealth.[29,31] Geographically, the United States spreads across 9,833,517 square kilometers, which is approximately twice the size of the European Union and nineteen times larger than Thailand.[29]

Ethnically, most individuals are of European descent, with 79% of individuals being white.[29] Approximately 15% of the population is of Hispanic descent, 12.85% of the population identifies as African-American or black, and 4.4% are Asian. While there is no official language for the nation, English is the most common language, with Spanish being spoken by 12.9% of the population.[29] The majority of Americans are Protestant Christians (51.3%), with Roman Catholicism being the second most common religion (23.9%). Many other Christian denominations and religions are present in the nation, where the freedom of religion is available to all citizens.

As of 2015, the median age in the United States is 37.8 years. 19% of the population is under the age of 15, whereas about 15% of the population are over the age of 65. This is especially important to consider, as the United States has an aging population, with 22.3% of elderly individuals relying on their families for support.[29]

3.2 HISTORICAL

Biomedical research, evidence-based medicine and technology have been integral aspects of the evolution of the United States' healthcare system. Increased industrialization and urbanization led to hospitals and medical professionals becoming more prevalent, and treating the poor and wealthy alike.[32] With medical advancements and public health interventions, including vaccines and screenings, infectious diseases were widely eliminated. The 20th century witnessed the introduction of licensure for health providers, the emergence of private insurance and the creation of Medicaid and Medicare.[32] The health insurance industry arose during the Great Depression (1930s) as a solution to protecting consumers and reallocating costs of medical care. With the initial success of health insurance plans, the United States saw a growth in commercial insurance companies through the following decades. The growth was further expanded with the Taft-Hartley Act of 1947, which allowed unions to negotiate benefit plans with employers.[32] This led to approximately 60% of the population having some sort of insurance by the mid-1950s.

However, as medical costs continued to increase in price, disparities in the distribution of medical services were identified. Additionally, research showed that elderly individuals (age 65 and over) were more likely to be hospitalized than those of a younger age. The Kerr-Mills Act, passed in

1960, provided federal financial support to a limited population and served as the predecessor to major healthcare reform.[32]

Medicare and Medicaid were introduced with the Social Security Amendments in 1965 and implemented in 1966. Medicare, a federally funded entitlement program, originally provided health insurance for aged individuals (age 65 and over), end-stage renal disease care and limited post-acute skilled nursing care, but has since expanded to individuals with certain disabilities.[33] There are four parts of Medicare: Part A covers hospital, home health, hospice and skilled nursing facility costs; Part B is for physician, outpatient hospital and similar costs; Part C is the Medicare Advantage program and expands service options into the private-sector; and Part D, which helps pay for prescription drugs.[33]

Medicaid is a federal- and state-partnership entitlement program that provides health coverage for low-income individuals. Originally eligibility was limited to very specific populations, including: families with an income at or below 133% of the federal poverty level (FPL); pregnant women with a family income below 133% of the FPL; and all children under age 19 with family incomes at or below FPL.[33] Additional Medicaid eligibility and services vary by state.[33]

This era also saw medical professionals dominating the healthcare system. The diagnoses, access to specialized services and treatment plans were determined by physicians and respected for a large part of the century, before slowly transitioning power to insurance and business companies.[4]

With President Bill Clinton, healthcare reform was once again spotlighted as a major campaign issue. Under his presidency, a healthcare policy that would provide universal coverage was proposed but failed to gain sufficient public and legislative support.[34] However, it was under President Clinton's leadership that the State Children's Health Insurance Program (CHIP) was created in 1997, which requires states to insure low-income children who do not qualify for Medicaid and whose families are unable to purchase insurance.[35] More comprehensive healthcare reform would not be achieved until President Barack Obama's leadership in 2009 with the introduction of the Patient Protection and Affordable Care Act.

3.2.1 The Patient Protection and Affordable Care Act

In the wake of the economic recession of 2007, millions of Americans became uninsured. Specifically, the rate of uninsured non-elderly people grew from 16.6% in 2007 to 18.2% in 2010.[36] As a result, and in spite of fierce partisan opposition, President Obama signed into law the Patient Protection and Affordable Care Act, a major healthcare reform law, in March 2010. The main components of the Act were the requirement of mandatory insurance coverage, expansion of Medicaid eligibility, and the establishment of Health Insurance Marketplaces.[36,37] Through the marketplaces, individuals are able to purchase their own insurance plans that best fit their needs and financial means. Additionally, the ACA includes an individual mandate requiring everyone to possess health insurance or pay a penalty.[4] Among other provisions, the ACA also expanded Medicaid coverage, extended coverage for children up to age 26, prohibited exclusions for pre-existing conditions, and emphasized health promotion by requiring coverage for preventative services and immunizations.[4]

Initial research indicates that the ACA has been largely successful in increasing the number or those insured. The national uninsured rate at the end of 2015 was down to 11.9%, which represents the largest reduction in uninsured Americans in forty years.[38,39] An estimated 16.4 million individuals have been able to obtain insurance since the passage of the Act in 2010, and an estimated US$7.5 billion was saved in otherwise uncompensated hospital costs by Medicaid expansion.[39] It is further estimated that up to US$8.9 billion more could be saved in uncompensated Medicaid costs if all states expanded Medicaid eligibility.[39] Even after several Constitutional challenges to the Act, the ACA has been upheld by the Supreme Court and remains in place.[39]

3.3 STRUCTURE

The structure of healthcare delivery in the United States is largely decentralized. According to the American Hospital Association, there are 5,627 registered hospitals in the nation, with the majority (87.5%) being community hospitals.[40] Of those 4,926 community hospitals; 3,071 are located in urban areas; 2,870 are non-governmental, not-for-profit hospitals; 1,003 are state and local government hospitals; 213 are federally owned, 1,053 are investor-owned for-profit hospitals; and 75 are non-federal long term care hospitals.[40]

A large share of healthcare delivery in the United States is based in hospitals, with a heavy reliance on physicians and specialists to care for patients. This is reflected in the large number of healthcare providers in the nation, as there were 2.45 physicians per 1,000 population in 2011, and 9.815 nurses or midwives per 1,000 population in 2005 (the most recent available data).[29,41] In more

recent history, however, there has been an increased utilization of primary care providers by consumers prior to accessing more expensive, specialized care.[4] Healthcare professionals are extremely well-educated in the United States, with physicians receiving up to a decade of additional higher education after obtaining a college education. In the past several decades, the shortage in nurses and primary care physicians has been a growing concern. These shortages, which are in part due to the workforce reaching retirement age, will only be aggravated by the aging population in the nation as well as the expansion of insured individuals by the ACA and the differential income potential between primary care physicians and specialized physicians.[4,42] According to the Association of American Medical Colleges (AAMC), the United States is expecting an increase in physician demand of up to 17% by 2025, with approximately 2% of the demand being attributed to the implementation of the ACA. This results in a projected shortage of between 12,500 and 31,100 primary care physicians and 28,200 and 63,700 non-primary care physicians.[42]

Similarly, the American Association of Colleges of Nursing has stated that the Registered Nursing (RN) workforce will need to grow approximately 19%, or by approximately 526,800 individuals, by 2022.[43] This large shortage can be linked to the aging of the nursing workforce reaching retirement age, with one-third of the nursing workforce reaching retirement age and more than 1 million additional nurses projected to be of retirement age by 2025.[43,44]

3.4 FINANCE

In 2013, the United States spent 17.1% of the GDP on health expenditures, with an average investment of US$9,146 per capita, making it the highest level of healthcare expenditures in the world.[24,29] When compared to similar nations by the Organisation for Economic Co-operation and Development (OECD), the United States spends more than two and a half times the average expenditure per capita, and US$2,821 more per capita than the next nation, Switzerland.[45] Of the 17.1% share of the GDP, 7.9% is spent on public health initiatives, which is approximately 46% of national health spending. In comparison, the OECD average of public health spending as part of all health spending is 73%.[45] When looking at where health spending occurs, the United States spends, in descending order, among the following categories: hospitals and nursing homes, ambulatory services, pharmaceuticals and medical goods, and finally public health and administrative services.[46]

However, even with this level of spending, people in the United States are not living as long as individuals in comparable nations. The average life expectancy at birth for OECD nations is 80.4 years, with Japan leading the list with an average life span of 83.4 years.[45] The United States has a life expectancy of 78.8 years. When broken down by gender, the disparity remains with women possessing a life expectancy of 81.2 years (OECD average: 83 years) and men possessing a life expectancy of 76.4 years (OECD average: 77.8 years).[45] In the United States, there are fewer practicing physicians, hospital beds, and hospital discharges; however, costlier diagnoses, screening examinations, and elective surgeries are performed more frequently than in other OECD nations.[46] The excessive healthcare spending is almost certainly unsustainable, and further

developing the primary care health sector could reduce the financial burden and increase the health status of the population.[46]

Healthcare costs in the United States are paid for in one of four ways: out-of-pocket costs; charity or welfare; Medicare and Medicaid; and private insurance. Out-of-pocket costs are when the individual pays directly for the services rendered, whereas charity or welfare costs are waived. Medicare and Medicaid are funded by the government, at both the federal and state levels. Medicare is funded primarily through a mandatory pay-roll tax, which is matched by an individual's employer. However, parts of Medicare are financed by premiums paid by beneficiaries and the U.S. Treasury.[33] Alternatively, Medicaid is partially funded by the federal government through the Federal Medical Assistance Percentage, which determines the share of medical assistance provided by a variety of assessments including per capita income level.[33]

The majority of health insurance in the United States, unlike every other nation of a similar economic status, is provided by a third-party payer.[4] Insurance is primarily managed by Health Maintenance Organizations (HMOs) or comparable managed care plans, which attempt to lower costs by efficient management of the individual's healthcare. HMOs provide reimbursements to healthcare providers, through a variety of strategies including fee-for-services, per diem costs, and capitation payments. In this model, insured individuals with the insurance are responsible for paying a co-payment, which represents a fraction of the actual costs for the services being utilized. To date, the effects of managed care on overall healthcare costs have been limited.[4]

As of the end of 2015, the rate of uninsured individuals in America was at 11.9% according to a Gallup public opinion poll.[38] This is down from an uninsured rate of 17.1% at the end of 2013, which was just before the ACA provision requiring Americans to obtain health insurance took effect.[38] Disparities among subgroups possessing insurance still exist, with non-elderly Caucasians having a 7.4% uninsured rate, African-Americans having a 13.5% rate, and Hispanics having a 30.9% rate.[38]

3.5 INTERVENTIONAL

Though the United States relies heavily on medical technology and the most recent advancements in treatment options, interventions are highly examined by insurance companies. This in turn can limit and restrict different services for the patient, and has become a practice that is considered by many to dampen innovation and increase avoidable cost.[4] This screening is also a potentially expensive process, that often may conflict with the physician's or other provider's evidence-based recommendations.[4] When compared to other OECD nations, the United States healthcare system has more expensive medical devices and provides more expensive, elective services.[46] For example, the United States has 25.9 MRI units per million population, whereas the OECD average is 12.2 units per million population. Similarly, the U.S. performs 212.5 knee replacements per 100,000 population in comparison to the OECD average of 118.4 procedures per 100,000 population.[46] Evidence shows that prices of procedures and products are higher in the United States than in the rest of the world, and that this plays a large role in the level of healthcare spending for the nation

3.6 PREVENTATIVE

The United States government is often accused of overregulating individuals and industries; however, it is done for the sake of ensuring quality and safe products and services for its citizens.[4] Behavioral factors, such as smoking and alcohol use, have consistently remained lower than the OECD nation average, with 13.7% of the population smoking (compared to 16.6% OECD average) and an average annual consumption of 8.8 liters of alcohol (compared to 9.3 liters OECD average) for Americans.[46] However, access to services for drug abuse have been highly inconsistent, with an epidemic in opioid abuse rising across the nation leading to 44 deaths daily due to prescription painkiller overdose.[47] The epidemic, which has annual healthcare associated costs of approximately US$72.5 billion, can be attributed to the United States being responsible for the consumption of over 80% of global opioids.[47,48]

The majority of the causes of death in the United States are preventable in nature. Many of them can be attributed to unhealthy living, such as diet and exercise behaviors, which unfortunately is prevalent in America as evidenced by the 35% adult prevalence rate of obesity.[29] Another component can be a lack of cultural competency among healthcare providers. Although the United States possesses a title and reputation of being the “melting pot” of cultures, healthcare is generally Eurocentric in nature. This leads to barriers to access, ineffective treatment pertaining to illnesses, as well as unhealthy behaviors typically associated with a specific culture, religion or society going unaddressed.[4]

The ACA was unique in many ways for healthcare reform, but specifically in that it emphasized an investment in public health services and preventative medicine. The Act, which requires

preventative services such as screenings, immunizations and birth control to be covered by insurance, represents a shift in the culture in American society towards adopting, albeit slowly and belatedly, a preventative approach for healthcare.[39]

3.7 RESOURCES

The importance of community relationships and support is highly emphasized in the United States, especially in regards to immediate family members.[4] This is exemplified by the extremely high dependency ratio (50.9%) in the nation, representing the number of youth (0-14 years) and elderly (65+ years) that rely on non-elderly adults for economic support.[29] Additionally, religion and spirituality have historically been of high importance for Americans. Public opinion polls, regularly used in measuring cultural viewpoints, show that even though the percent of respondents ranking religion as "very important" has declined, it is still a top priority for 52% of the nation, with 26% of people saying that it's "fairly important".[49] Many immigrate to the United States for religious and cultural freedom, and the ability to practice without discrimination. This in turn plays a role in the process of death, dying and end-of-life care.[4]

3.8 MAJOR HEALTH ISSUES

Like many other industrialized nations, the majority of the top ten causes of years of life lost due to premature death in the United States are chronic conditions in nature (Table 3)[30]. However, many of the diseases could be prevented through healthier lifestyle adoption and reduction in

barriers to healthcare services. With the current healthcare system, few incentives exist for providers to offer services to low-income, uninsured individuals.[4] This financial barrier can lead to detrimental health outcomes, resulting in a state of chronic illness for a significant segment of the national population. Additionally, many of these diseases disproportionally affect different vulnerable populations, aggravating the major disparities in healthcare in the United States.[4]

Table 3. Leading Causes of Years of Life Lost to Premature Death in the United States, 2013

Ranking	Disease
1	Ischemic heart disease
2	Lung cancer
3	Alzheimer disease
4	COPD
5	Cerebrovascular disease
6	Road injuries
7	Self-harm
8	Diabetes
9	Colorectal cancer
10	Drug use disorders

Source: Institute for Health Metrics and Evaluation[30]

3.9 HEALTH DISPARITIES

Health disparities in the United States are well-documented. Even with extensive resources of the United States, to great a proportion of the population remains uninsured, and an estimated 31 million people are underinsured.[50,51] This leads to negative health effects, as individuals with insurance are more likely to have a primary care provider, receive regular preventative care, and have a regular check-up, leading to enhanced health outcomes.[4] When compared to 10 other industrialized nations with similar economic status, the United States ranks last in terms of equity, as low-income Americans are more likely not to receive necessary healthcare services as compared

to their counterparts in the other 10 nations.[52] A public opinion poll revealed that 31% of Americans in 2015 delayed medical treatments because of cost, which is consistent with previous years.[53] Even when the medical condition is broken out into serious and non-serious categories, 19% of U.S. adults put off treatment for a serious condition and 12% put off treatment for non-serious conditions.[53]

Disparities become even clearer when differences in race are further examined. For instance, life expectancy at birth for African-Americans is 5 years lower than for Caucasians, while infant mortality is more than double in the African-American community than in the white, non-Hispanic community.[54] Additionally, almost 2.5 times as many Hispanic individuals report not having a regular doctor in comparison to white, non-Hispanic people.[54] Hispanics are also more likely to be uninsured, regardless of income level, with more than 20% not having insurance in 2014.[54,55] When quality of care is considered, Hispanics are less likely to get a same-day or next-day appointment to see a physician, and typically have to wait seven days or longer compared to white, non-Hispanics.[54]

3.10 FUTURE CONCERNS

The healthcare system in the United States of America has evolved greatly over the past century, with the implementation of Social Security, Medicare, Medicaid, CHIP and, most recently, the ACA. However, there is still a long way to go in terms of ensuring healthcare access to all Americans. Beyond the number of uninsured individuals, the U.S. is facing critical shortages in key groups of healthcare providers.[38] This will almost certainly cause a bottleneck effect in

healthcare delivery, which may deprive people of necessary health services.[42,43] Additionally, with the presence of an aging population, costs to support federally-funded entitlement programs, such as Medicare, are likely to increase each year. It is projected that Medicare spending in 2024 will account for 3.3% of the GDP, or approximately US$866 billion.[56] Lastly, as policies are drafted with high complexity and with a great deal of jargon, the ability to understand and implement health reform becomes muddled and more difficult. Confusion around the application of provisions of pieces of healthcare policy can lead to restrictions and delays in accessing services.[57] If the United States aims to provide equitable healthcare to all of its citizens – as its fellow industrialized nations attempt to do – healthcare reform will be necessary to ensure true access for all.

4.0 CONCLUSION

According to the mission statements of international organizations, including the World Health Organization and the United Nations, health is a basic human right (Appendix A, Appendix B). In the past decade, Thailand has not only made amendments to its national Constitution to reflect this ideology, but also completely reformed its healthcare system to reflect a commitment to improving the health of their citizens. The decision to integrate a universal health coverage scheme into the existing healthcare delivery system exemplified the nation's investment in the Thai people and that value achieved in having a healthy society.[50] By increasing access to health throughout the nation, Thailand enables its people to not only enjoy their freedom but also prosper and help grow their economy.

Alternatively, the United States shows a tension between those who view health as a privilege and those who consider it to be a Constitutional right. The outcome to date is that the United States remains the only industrialized nation without some type of universal healthcare.[50] Although policy changes in recent history, specifically the ACA, represent progress toward more universal access, the guarantee of comprehensive healthcare regardless of ability to pay has not been accepted by society as a whole in the US. This comes even as America invests more than any other nation in the world in healthcare, while producing worse results for its people through longer waiting periods, poorer health outcomes and higher costs.[50] In terms of access, the United States healthcare delivery system may be considered a hybrid of international systems.[50] The inconsistencies in providing access to healthcare services leads to high costs, which forces individuals who are uninsured or underinsured to choose between paying out of pocket for

necessary medical care instead of addressing other financial responsibilities, remaining sick or dying, or accepting a lower quality of life.

Culture plays a deep and important role in how health as a human right is accepted in a nation, and thus how healthcare delivery provides true access for its citizens. Culture is shaped by key values, which in turn influences action. A nation's culture reflects the predominant values the population shares, and those values determine what action, including political decisions concerning healthcare reform, will be taken to establish public policy.[58]

Thailand has a unique cultural structure that led to its establishment of universal healthcare and the adoption of health as a basic human right into their Constitution. The presence of strictly observed, vertical hierarchies leads to generally higher trust in government. This is manifest not only by the reverence shown to the current King, but also in how individuals respect one another, elders, and Buddhist monks. An integral part of Thai culture is seen in the quality of relationships between individuals. People in Thailand are very sensitive to feelings and behaviors, and prefer to remain in control of all emotions – both positive and negative. This is different than attitudes stereotypically found in the United States, where individuals tend to be more assertive and less considerate of feelings when conversing with one another.[58]

Similarly, the impact of Buddhism is central to Thai life. While many Thais will not worship at the wats regularly, spirit homes to honor the dead and feed spirits remaining in the world are commonplace in every community. Additionally, as Buddhists, Thai people believe in karma and that the actions and decisions they make in their life will dictate their future lives for many cycles.

If someone were to mistreat another, or behave poorly to one in need or a superior, it could result in punishments in future lives. Due to this ingrained belief, Thai people have a reputation of being extremely friendly and caring. It is part of the life view found in Thailand that accepts what is presented in life and makes the best of whatever it may be.[58] This positive attitude and genuine care for one another makes it an ideal environment to introduce a policy that may have some potentially negative effects, such as higher taxes, to be able to implement a program to help much of the population. It is also aligned with Thai values of placing individual needs and preferences below the welfare of the community.

While the United States and Thailand share many core values, the Kingdom of Thailand is very clearly different in not only acceptance and respect of hierarchies and government, but even in how people interact with one another and feel a social responsibility for the betterment of humankind.[58] Cultural difference is a major factor in explaining why comprehensive healthcare reform is easier to be achieved in some nations than in others. Different cultural values and norms have important effects on health system structure and outcomes including health status, quality and costs.

Economically and politically, the United States and Thailand are in many ways polar opposites. The United States is considered the most powerful and wealthy nation in the world, whereas Thailand is a middle-income nation that has attained economic property along with political instability. It would be easy to assume that these global reputations dictate each nation's ability to provide healthcare and increase access to health services for their people; however, this is not the case in this comparison. Thailand, with all of its continued development, has done what no other

nation of similar standing has been able to accomplish – providing universal healthcare coverage to over 99% of its nationals. This establishment and achievement of the basic human right – the right to health – has led to improved health outcomes and continued economic growth.

When *true access* to healthcare services is compared between the two nations, Thailand bypasses the United States. If the United States truly wants to be the most powerful nation in the world, it must follow in the steps of Thailand and most other industrialized nations in the world by reforming its healthcare system to insure that every American has *true access* to healthcare.

5.0 RECOMMENDATIONS

As a result of this comprehensive comparison between Thailand and the United States, several strengths and weaknesses for both healthcare delivery systems have been identified. They are listed in Table 4.

Table 4. Strengths and Weaknesses Comparison, United States and Thailand

Strengths	Weaknesses
Kingdom of Thailand	
• Over 99% coverage nationally • Promotion of preventative services and healthy behaviors via policy and finances • Stable financing through Thai Health Promotion Foundation and 30 Baht copay • Streamlined, tiered referral system • Well established primary care services and health promotion through HPHs • No informal payment systems	• Political instability • Disparities in coverage, specifically SSS • Disparities in remote areas of country • Severe shortages in health providers • Disparities in provisions for support (health and financial) after 2nd child • Aging population leads to increasing costs
United States of America	
• ACA has resulted in large increase in insured individuals • ACA has begun shift towards emphasizing preventative services • Excellent advanced care and technology • Large number of physicians and specialists • Hospitals are numerous	• >11% uninsured rate nationally • Severe shortages in nurses and primary care physicians • >17% of GDP spent on healthcare • Aging population leads to increasing costs • Insurance and pharmaceutical industries have large influence on healthcare • Expensive products and procedures • Disparities in care by race

Although their systems and strengths are dissimilar, the Thai and US systems share several weaknesses, including rising costs due to an aging population, shortages in healthcare providers, and disparities and inequalities in coverage and care. No healthcare system will ever be perfect;

however, both systems would benefit by addressing existing weaknesses to improve both their delivery systems. Several recommendations in regards to research and policy have been identified.

Thailand serves as a successful example of evidence-based policy design, after their analysis of Sweden's healthcare delivery model influenced their healthcare reform.[8] In this capacity, the need for additional research of nations that have successfully implemented some sort of universal healthcare coverage is needed. The results of this research can potentially influence the design of future healthcare reform policies, as the US currently operates with a healthcare delivery system similar to a variety of European nations. The departure of Eurocentric research can also lead to innovation, as Thailand exemplifies a model that retained employer-provided insurance in addition to universal coverage.

Thailand's prioritization of health promotion and preventative services represents a necessary shift in how medicine is approached not only to improve health, but also decrease costs.[8] However, as the system is currently structured, individuals possessing SSS face disparities in coverage of health and preventative services. To address these inequalities, it would be prudent to remove SSS entirely and redistribute the 16% of the population currently covered to the remaining two schemes. As the original intention of the healthcare reform was to establish a national single payer system, removing SSS is a logical option. However, if this recommendation is followed, costs would increase and so the government would have to either impose additional taxes or user fees, or shift funds from another purpose to healthcare services. Additionally, to address inequalities in regards to healthcare service availabilities in rural and remote areas, increasing the ease of registering with local CUP boards to achieve more accurate population counts could result in more

funds being allocated to local HPHs and healthcare facilities. Lastly, by removing limitations on health- and finance-related support services for women and their children, especially after a woman's second child, could lead to improved health outcomes and decreased disparities in the system. These recommendations, while theoretically economically and politically feasible in theory, face obstacles in implementation due to the current political instability currently in the nation.

In the United States, the passage of the ACA has been instrumental in this policy shift towards emphasizing preventative services by requiring insurance companies to cover the associated costs; however, additional health promotion strategies and initiatives must be adopted to address the growing prevalence of obesity and the associated chronic diseases.[39] Additional barriers to addressing these multi-faceted and complex health issues exist, including: limited community capacities for providing culturally competent interventions, inflexible bureaucratic practices, and fierce political partisanship. In regards to improving access for Americans and also addressing the concern of complexity of healthcare policies, the United States must consider options that migrate away from the traditional, and arguably ineffective, private-insurance based financing system and towards a policy that guarantees universal coverage for all citizens.[57] Whether or not this option is politically feasible is arguable, especially in the divided partisan political system that currently occupies the nation's capital. No matter how future healthcare reform is designed, one thing is for certain – the United States must reassess its financial and political priorities to better ensure *true access* to healthcare services for all Americans.

6.0 PUBLIC HEALTH SIGNIFICANCE

Healthcare delivery systems vary dramatically from nation to nation. When comparing global health systems – even ones that appear superficially to be polar opposites – it is not uncommon to find similarities. As the global community continues to become more integrated, it can be expected that increased collaboration will be seen among nations. In this capacity, establishing a global consensus on the right of health to all human kind and sharing best practices with international allies will be of the utmost importance. Additionally, emphasizing public health practices, specifically health promotion and preventative services, in healthcare delivery provides an important transition to improve health and decrease the prevalence of costly, wasteful and ineffective interventions. A shift in culture and policy to increase *true access* for not just those in the United States, but for the entire of the world, is essential to improving health outcomes and promoting wellness by preventing illness.

APPENDIX A: WORLD HEALTH ORGANIZATION'S CONSTITUTION PREAMBLE

THE STATES Parties to this Constitution declare, in conformity with the Charter of the United Nations, that the following principles are basic to the happiness, harmonious relations and security of all peoples:

> Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
>
> The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.
>
> The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States.
>
> The achievement of any State in the promotion and protection of health is of value to all.
>
> Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.
>
> Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.
>
> The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.
>
> Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.
>
> Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

ACCEPTING THESE PRINCIPLES, and for the purpose of co-operation among themselves and with others to promote and protect the health of all peoples, the Contracting Parties agree to the present Constitution and hereby establish the World Health Organization as a specialized agency within the terms of Article 57 of the Charter of the United Nations.

Source: The World Health Organization[59]

APPENDIX B: THE UNIVERSAL DECLARATION OF HUMAN RIGHTS PREAMBLE, ARTICLE 25 SECTION 1

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

Source: The United Nations[60]

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