



Grant Thornton

MARKET REPORT 2021

Healthcare Industry

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DISCLAIMER

All reasonable care and skill has been taken in the preparation of this report. However, neither the authors nor the University of Melbourne make any warranty whatsoever as to the accuracy or completeness of the information herein. No part of this report is intended as advice, whether legal or professional.

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Executive Summary

The outbreak of pandemic during the past few years accelerated the growth of the healthcare sector. Thailand's healthcare industry, as one of the matured institutions, is gaining global recognition with its performance in the success of therapeutics and medicine on COVID-19. This showcases the capability of Thailand's healthcare and medical industry.

Grant Thornton (Thailand) values the strength of the Thai healthcare industry and wishes to capture market trends under Thailand and international healthcare environments. Team of University of Melbourne - Global Business Practicum GT has been assigned to involve in this project of healthcare market research, providing Grant Thornton (Thailand) with the most popular trends that are occurring in the global and domestic healthcare marketplaces.

This project report will assist Grant Thornton (Thailand) to capture healthcare industrial opportunities. Three key questions will be answered:

1. What is the healthcare industry?
2. What are current trends occurring in the domestic and global healthcare industry?
3. What are the growth predictions of the healthcare industry?

To respond, market research on the healthcare industry was conducted with the supporting sources from Mckinsey, PwC, Deloitte, BOI (Thailand) etc. Additionally, an interview was held with Dr. Andrew Pascoe to achieve data and information management in accuracy, integrity, and relevance. We then conclude with major trends in the fields - digitalisation of the healthcare industry, the rise of alternative medicine, urbanisation in Thailand and the ageing population. Descriptive analysis and predictions are also outlined in the report to address the opportunities and threats.

This report provides general recommendations for the investment opportunities to Grant Thornton (Thailand) in considering future business activities, go-to-market strategies, and management consulting.



Table of Content

Executive Summary	3
Introduction	5
Healthcare Industry Analysis	7
Overview of Thailand Healthcare Industry	8
SWOT Analysis	10
Health Providers	12
Medical Tourism	14
Health Insurance	15
Market Trend Analysis	16
Digital Health	18
Alternative Medicine	23
Urbanisation	26
Ageing Population	28
Outlook	30
Healthcare Providers	31
Pharmaceutical Market	33
Insurance	35
Investment Recommendation	37
Medical Tourism	38
Pharmaceutical Market	39
Conclusion	40
Reference	41
Appendix	47



The ongoing pandemic continuously challenges the developments of global healthcare industries, raising the attentions on healthcare sectors to address the medical standards and its market diversity (Deloitte, 2021). This reflects the powerful growth and opportunities in the healthcare sectors. The recent healthcare statistics of the global healthcare industry also show the potential of the market, as the overall market expenditure will reach more than USD \$10 trillion by 2022 (EEC, 2021).

Thailand ranks 6th in the world in successfully confronting the pandemic, it is benefiting from the global market with its maturity in healthcare management and system (BOI, 2021a). Thailand also continues to create an ideal medical hub for the world which will bring more commercial opportunities for businesses.

So how can stakeholders of Grant Thornton (Thailand) capture the market opportunities of the healthcare industry in Thailand?

Introduction

Scope

The scope of the report covers the analysis of Thailand's healthcare industry and the various sectors under it. It includes local and global trends in the healthcare industry. Moreover, the influence of these trends will be analysed to match the applicability for the market growth of healthcare industry. The report highlights which of the following sectors Grant Thornton can focus on in order to obtain market opportunity.

Project Limitation

Time Constraints: The project has been conducted in a limited time of 1 month. Thus, there has not been enough time for the team to confirm the information or dig deeper into the project.

Validity of the Information: For the project, secondary research and only one primary research interview has been conducted which means that the team has not got the opportunity to confirm if the findings from secondary research are true. Moreover, some of the sources found on the internet are contradictory, thus decreasing the credibility of the source.

Currency Changes: USD has been taken as a standard while mentioning figures in the report. A standard exchange figure of *33.44 Thai Baht (equal 1 USD)* has been selected which can fluctuate on a daily basis in reality.

Methodology

For this report, secondary research has been conducted using sources such as Statista, Fitch Connect, PWC, Mckinsey, government websites and the likes of it. Meanwhile, a primary interview was conducted with Dr. Andrew Pascoe to shed further light on Thailand's healthcare industry and digitalisation.

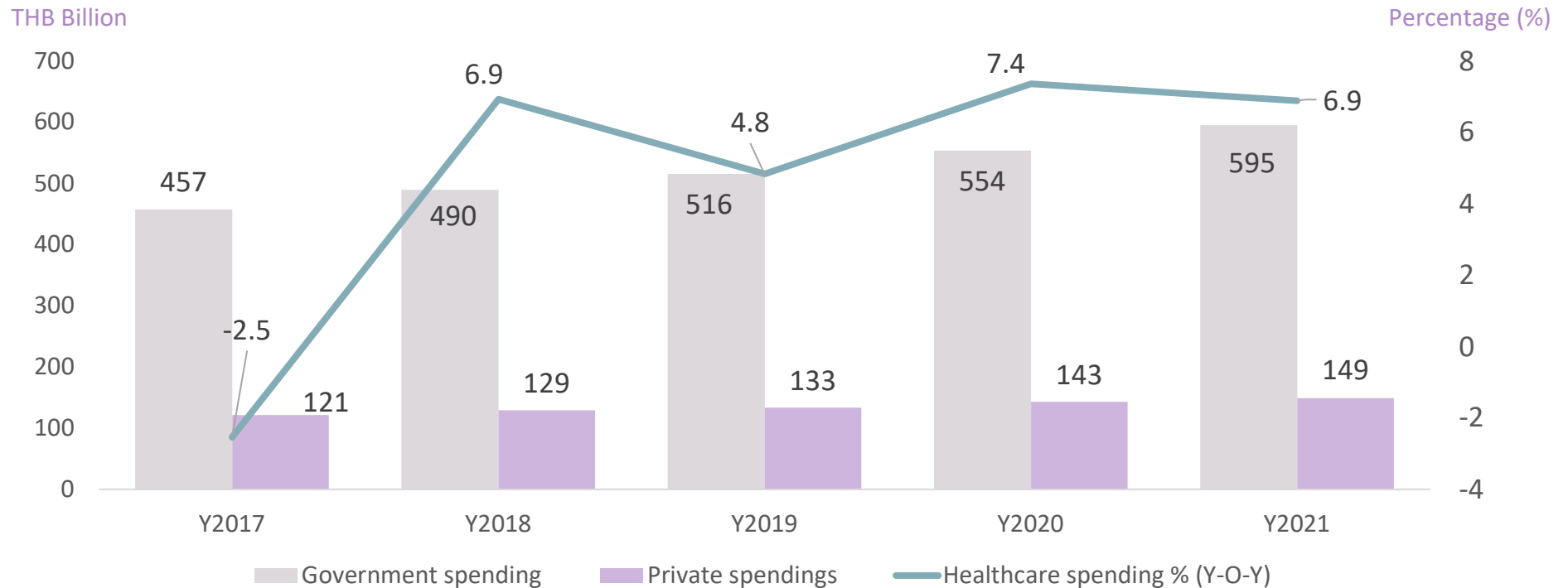


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Healthcare Industry Analysis

Section Description

With the analysis of a general Thai healthcare industry, a clear definition of healthcare industry will be illustrated. We also defined three major sectors of healthcare industry in Thailand, each sector will be explained with its current performance and competitive landscape.



Expenditure in the healthcare sector

Source: Thailand Pharmaceuticals and Healthcare Report, 2021, Fitch Solutions

Overview of Thailand Healthcare Industry

Thailand's healthcare industry has been divided into 3 major sectors: Healthcare providers, Medical tourism, and Insurance sector. The healthcare providers sector also constitutes public and private hospitals, the pharmaceuticals market, and the medical devices market. In the year 2019, Thailand was ranked 6th in world healthcare among 83 countries. The ranking is determined based on the infrastructure, competence of healthcare professionals, government readiness, availability of medicines and cost. In the year 2020, the healthcare sector contributed up to USD \$11.19 billion (0.38%) to Thailand's GDP and is expected to increase in the future. There has been a steady increase in the Government's expenditure for the healthcare industry, reaching up to USD \$17.6 billion accounting for 79.46% of total health spending (Statista, 2021a). The private sector is also seeing an increase in expenditure as shown in the graph.

Key Drivers for The Growth in The Healthcare Sector

One of the key factors that aid the growth in the healthcare sector is the rise in the ageing population. This has created an increasing incidence of chronic diseases, which will in turn, create ongoing demand for healthcare spending from the government. Another reason is the government's goal of becoming a leader in medical tourism. The government has positioned Thailand as a leader in medical tourism due to its competitive pricing and great medical facilities. In order to drive growth in the healthcare industry, the government has also come up with various medical schemes like Universal Health Coverage (UHC) which has also been voted as the best by the World Health Organisation (WHO). As of 2017, 99.02% of the population was covered by this scheme. There are three main funds that are covered in this scheme; (i) Universal Coverage Scheme (UCS) (ii) Social Security Scheme (SSS) and (iii) Civil Servants Medical Benefit Scheme (CSMBS).

Source: MarketLine (2020b) & Statista (2021f) & PwC (2017)

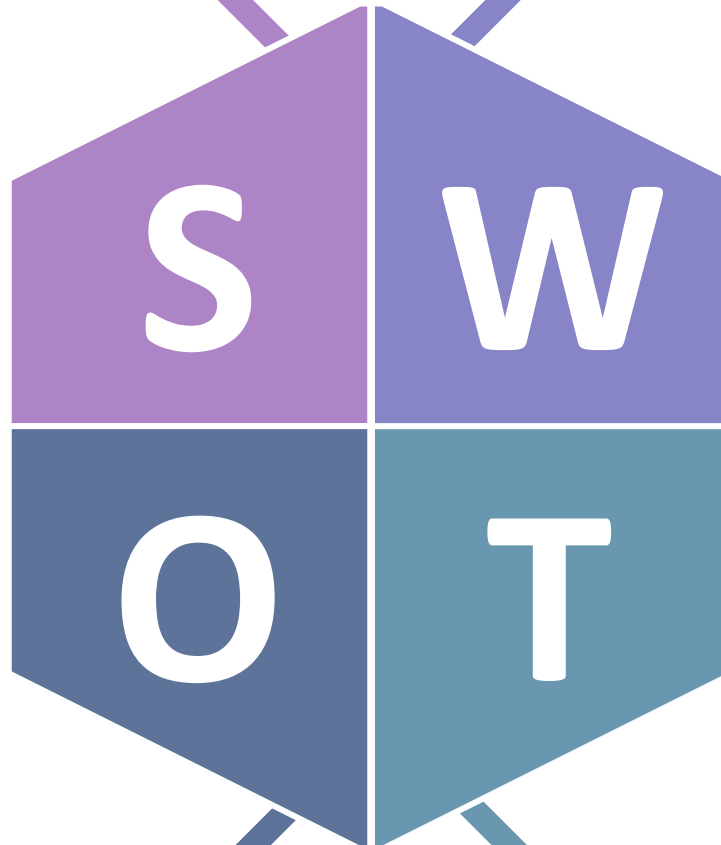


Strength

- ◆ Universal healthcare schemes resulting in improved access to healthcare
- ◆ Strong private hospital growth, reflecting the ongoing modernisation of healthcare industry
- ◆ Increased government interest and investment in various healthcare sectors, modern equipment and medical tourism
- ◆ Plans to increase drugs manufacturing in Thailand

Opportunity

- ◆ Opportunity to expand in Biosimilar drugs and all types of cancer treatment to reduce cost
- ◆ Potential to attract more medical tourists from Asia and western countries
- ◆ Provide tax benefits to companies investing in the pharma market
- ◆ Introduction of better laws protecting the intellectual property

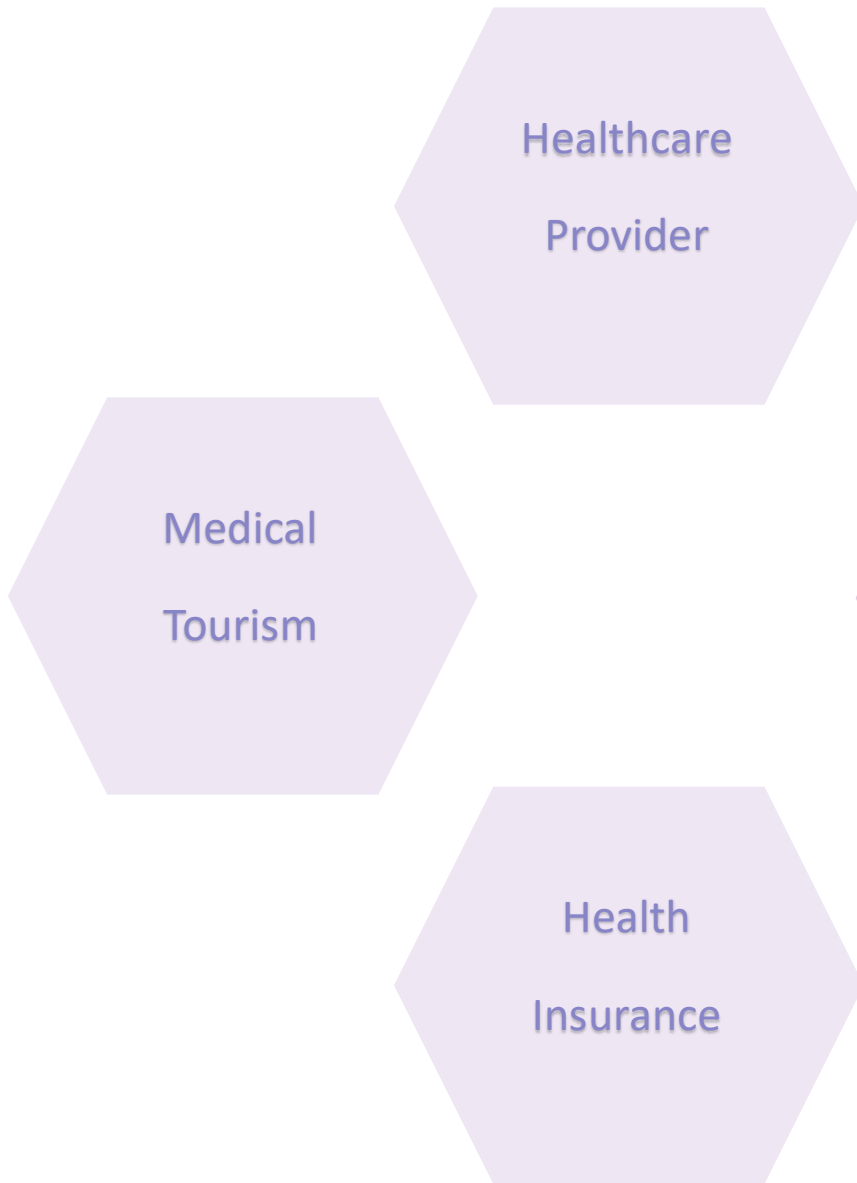


Weakness

- ◆ Inadequate spending in the pharma sector in spite of the government's keen interest in the sector
- ◆ High circulation of counterfeit drugs in the market
- ◆ Low Intellectual Property protection and uncertain pricing of drugs
- ◆ Public health sector under financial pressure due to the ageing population

Threat

- ◆ Political instability and increased corruption poses a threat to foreign investment and operation
- ◆ Doctors choose to work in the private sector due to better salaries and other benefits cause an imbalance between the private and public sectors.



Sectors in Healthcare Industry

Healthcare Provider

The Thai healthcare system is mostly tax-funded, with individual social security payments making around a 30% contribution to total expenditure. A health drive over the past twenty years has led to increased healthcare spending across the board. The Thai healthcare providers sector shrank by 5.8% in 2020 to reach a value of \$18.9 billion. The compound annual growth rate of the sector in the period 2016 – 2020 was 2.3% (Statista, 2021a & Statista, 2021b).

This sector has been divided into 3 markets: private and public hospitals, pharmaceuticals market and medical devices market.

Hospitals

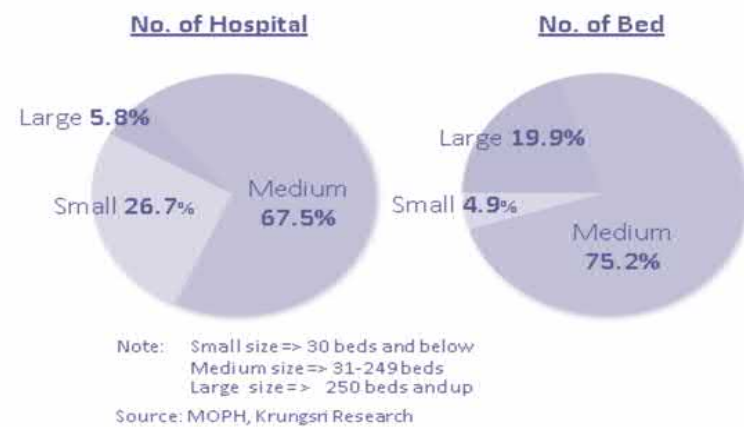
This market includes the public and private hospitals. The public sector has four times the number of beds when compared to the private sector. As of 2019, Thailand had 927 government hospitals and 363 private hospitals in addition to 9,768 government health centres and 25,615 private clinics.

The country is now home to 62 institutions that are accredited by Joint Commission International (JCI) for meeting international standards. Thailand is in fourth place, behind the United Arab Emirates with 195 JCI accredited healthcare centres, Saudi Arabia (93), and China (84), but ahead of India (35), Malaysia (16) and Singapore (7).

The public sector is favoured more due to the cheap rates and great facilities provided. However, the lines are long in government hospitals. Thus, the middle class and rich have sufficient spending power to turn to the public hospitals. There are three types of private hospitals: Large size, medium size and small size.

The large size hospitals have the highest consumption by mid to high income consumers, thus these hospitals are located in urban areas like Bangkok.

The private sector also receives most of its revenue from medical tourists, especially since the Thai government announced its goal of making Thailand a medical hub in 2003. This has also served as a major growth opportunity for the private sector.



Pharmaceuticals Market

This market projected the highest investment when compared to countries like Japan and India in the year 2020. Pharmaceutical's sales grew by 4.5% on average from 2013 to 2018 (Statista, 2021c & Statista, 2021d). With the available resources, pharmaceutical production in Thailand generated more than 75 billion Thai baht worth of pharmaceuticals in the country in recent years. In terms of the distribution, there were around 14 thousand pharmacies in the country, excluding public hospitals. This sector's growth can also be attributed to the UHC, Thailand's ageing population, and the increase in medical tourism.

Some of the key players in the Pharma market are Janssen-Cilag Co., Mega Life Sciences PCL and Berlin Pharmaceutical Industry Co.,Ltd

Thailand's exports grew by 7% between 2013 to 2019. Thailand exports most of its low-value generic products to Myanmar, Vietnam, Cambodia and Lao; these account to 0.2% of pharmaceutical exports. In terms of imports, Thailand gets the majority of its anti-anaemia treatments, antibiotics, and cholesterol-lowering medications from Germany, the United States, and France (Krungsri.com., 2021).

◆ *More data figure please refer to Appendix A*

Medical Devices

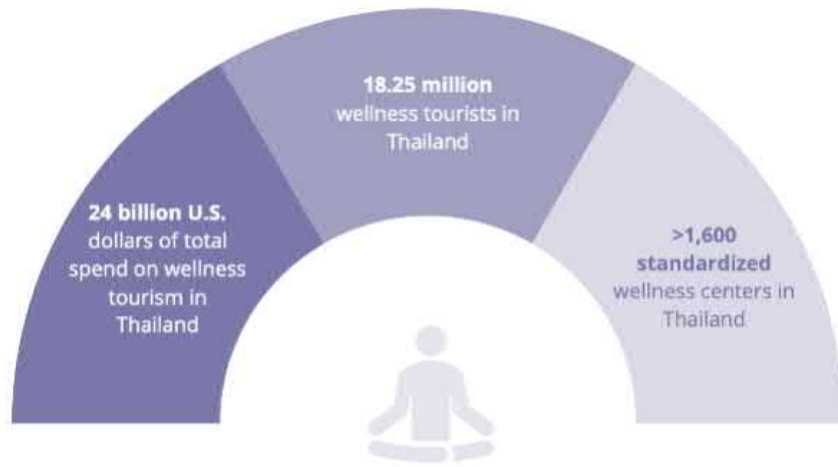
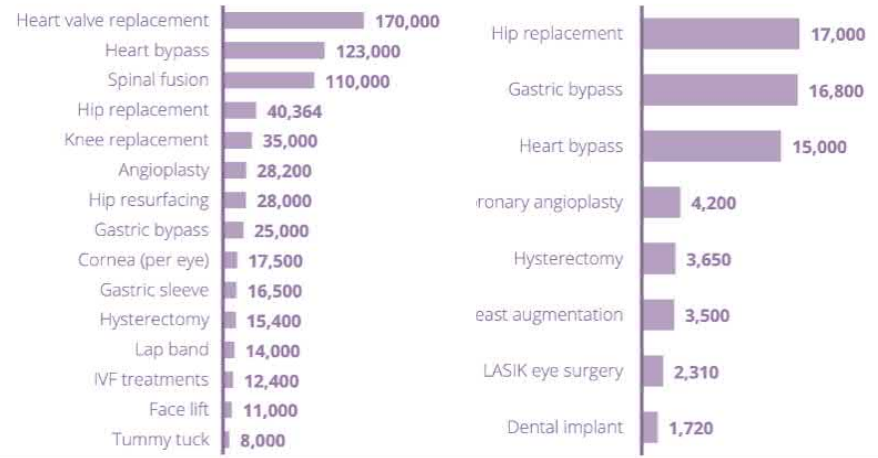
In 2020, Thailand's medical devices market was estimated to reach around USD \$6 billion (Statista, 2021e). In the same year, the country's domestic production was valued at \$7.8 billion USD, out of which it imported medical devices worth \$1.7 billion USD. These devices were fundamental medical products that are relatively low-cost in production. The main medical devices exported from Thailand were single-use devices like diagnosis kits, syringes, surgical gloves and catheters. For larger and more sophisticated medical devices, Thailand exports them from other countries. In 2020 Thailand exported \$3.65 USD billion worth of medical devices. The USA is Thailand's biggest importer and exporter of medical devices, followed by China.



Medical Tourism

Health Tourism in Thailand is increasing due to the cheap treatment and accommodation cost along with good medical healthcare facilities in the country. Patients are treated in private hospitals where the doctors have received their education from popular foreign countries like the USA and Canada. This sector has been divided into wellness tourists and medical tourists. In 2019, 632,000 medical tourists visited Thailand and generated a revenue of \$4 billion. In the same year, revenue generated by wellness tourists was \$24 billion. In 2018, Thailand was ranked as the third most popular destination for medical tourism. Thailand faces major competition from Singapore, China, Malaysia and South Korea when it comes to Medical Tourism. A few years back, Singapore was the main attraction for medical tourists in Southeast Asia, but now it has been overtaken by Thailand.

The major treatments that people come to Thailand for are cosmetic surgery, dentistry, cardiovascular disease services and orthopaedic services. Due to its ageing population, Thailand has great facilities to accommodate the elderly, which has also led to the attraction for senior citizens to come to Thailand for medical and wellness treatments.



Wellness Tourism in Thailand has also been growing. With the increase in popularity of the wellness sector, the Thai government has taken various initiatives to increase growth, such as standardisation of wellness centres, the promotion of professional traditional Thai massage training with certificates, the study of nurturing minerals found in hot springs, and the field renovation of hot springs.

Source: Health Tourism in Thailand, 2021, Statista; Mordor Intelligence. (2020).

◆ More data figure please refer to Appendix A

Health Insurance

The insurance market consists of the non-life and life insurance sectors. The life insurance sector consists of mortality protection and annuity. The non-life insurance sector consists of accident and health, and property and casualty insurance segments. As of 2019, 67.46 million people were covered by health insurance (MarketLine, 2020a.). During the pandemic, Thailand’s insurance sector faced a decline, but the health insurance sector was still growing due to the ageing population and COVID-19. The health insurance premium was the fastest growing segment (accounted 6.6%), as the registration rate was raised by 37.1% in 2020 (Statista, 2021g). Insurance has also been made easily accessible through e-Insurance and e-Policy which intend to promote e-Insurance with sufficient controls to secure and protect consumers when acquiring personal insurance through electronic transactions via websites, mobile applications, etc (Tilleke & Gibbins, 2020).

The major players in this sector are:



◆ Muang Thai Life Assurance Public Co Ltd



◆ Thai Life Insurance Public Company Ltd



◆ AXA SA.



◆ AIA Group Limited



◆ FWD Insurance

◆ More data figure please refer to Appendix A





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Market Trend Analysis

Section Description

We have defined four major trends that will influence the Thai healthcare industry, consisting of digitalisation in healthcare, alternative medicine, urbanisation in Thailand and the ageing population. Each trend will be delivered with its definition and impacts on the healthcare industry domestically and internationally.

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Trends in Healthcare Industry

Digital Health

Alternative
Medicine

Urbanisation
in Thailand

Ageing
Population

Digitalisation under Healthcare Industry

What is digitalisation?

With the announcement of industry 4.0 across the world, the trend of digitalisation has accelerated the transformation of all businesses to ensure sustainable commercial opportunities (Ang, 2021). A digitalised business can improve the operating efficiencies and enhance user's experiences of a product or service. The Covid-19 has made the demands of digitalisation even more urgent.

Digitalisation in Thailand

The healthcare industry is the second largest economic driver in Thailand. The needs for the developments and enhancements on healthcare industrial capability are always addressed with the wish of achieving greater industrial economic outcome (BOI, 2021a & BOI, 2021b).

In 2016, Thailand 4.0 Industry policy was announced to facilitate the transformation of Thai economy into the digital era. A strategic plan was built to direct the healthcare sectors in strengthening its economic position, reinforcing foundations of health systems, securing market mechanism and empowering the healthcare industry to become the prior investment option in Thailand (BOI, 2021a).

Moreover, the collaboration between the Ministry of Public Health and the Ministry of Science and Technology in 2018 enables the growth of medical innovation and digitalisation of healthcare in Thailand, allowing Thailand's digital healthcare to be the heart of the industry supply chain.

Following the government initiatives in establishing a strong healthcare industry, various supporting policies were published to attract both domestic and foreign investments for the innovation of technological devices, the trial of medical experiments and the establishments of a digitalised healthcare database. It also consists of comprehensive support on the healthcare workforce for digital talent, and other research and development activities. This ensures that Thailand's healthcare industry and its value chain can be robust.

- Thailand 4.0 Strategy
- Thailand National Digital Healthcare Workforce Development
- 2017-2026 eHealth Strategy
- Yothi Innovation District



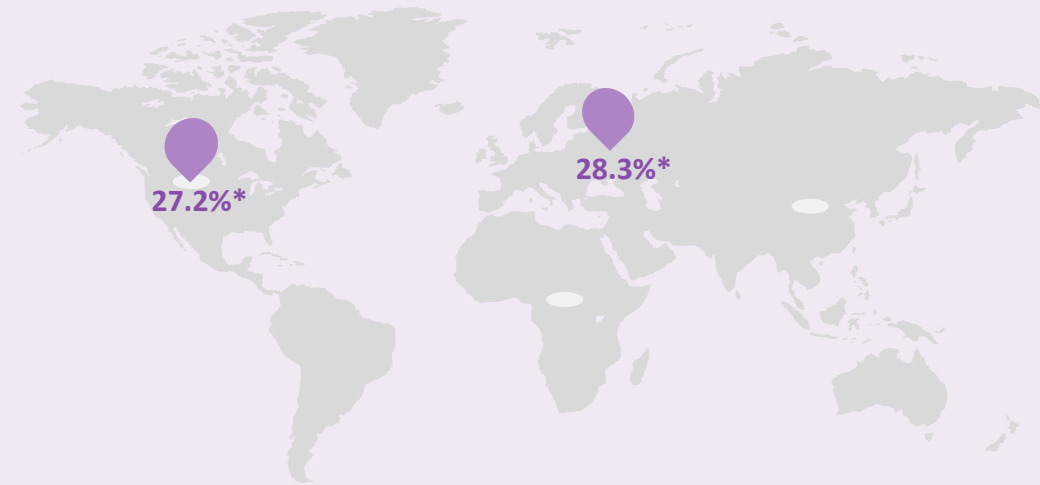
Digitalisation in Global Healthcare Market

The influences of digitalisation in the healthcare industry have gathered global responses. According to the World Wellness Institute (2021), the overall growth rate of digitalisation in healthcare sectors will lead to business growth with an annual compounding rate of 27.9% in the year 2020 to 2027. Europe and North America ranked the top two with 28.3% and 27.2% annual growth rates in the digitalised health market. The Asian Pacific region has the highest investment volume in terms of healthcare infrastructure (BUSINESSWIRE, 2021).

Additionally, the World Health Organization (2021) offers globalised strategy to facilitate the industrial scale in healthcare sectors with the growth of digital technologies in the medical sector. This strategic objective includes three key components,

- (1) The standard of accessibility on digital health data is established
- (2) The capability of use digital health devices is ensured
- (3) The patient-centric healthcare ecosystem is enabled

Overall growth rate: **27.9 % annually***



**Data Source: Global Wellness Institute (2021). & BUSINESSWIRE. (2021)*

Consulting Insight:

This data indicates that a digitalised business will be the key component in the healthcare market to gain a competitive business advantage, increase market share and boost profitability. Thailand's Healthcare Industry is significantly impacted by the global changes, thus incorporating digitalisation will be essential to capture the global market demands in healthcare.

Digital Health

Digital health is facilitated through the use of digital devices and the accessibility of information through internet technology. The different categories of digital health consist of mobile health (mHealth), Health IT system, wearable digital devices, telehealth (telemedicine), and personalised service in healthcare system (FDA.gov, 2021). Using digital tools such as artificial intelligence (AI), virtual reality (VR) and augmented reality (AR) in the healthcare sectors can enable the capability of therapeutics and empower patients to experience treatments that are influenced by digital-generated insights (Deloitte, 2021).



Mobile Health

Mobile Health, also named mHealth, is an integration of the healthcare system into our smartphone. It includes innovative mobile application products with the features of personnel information record, payment systems, booking systems, sharing functions and post-treatment services. The aim of mHealth is to enhance the patient's experiences in seeking health advice and improving health providers (including Hospital, Clinic, Rest home etc.) efficiency in providing appropriate services. An example is KhunLook, which was created with a focus on Thailand's childcare sector (Areemit et al., 2020 & KhunLook, 2021).

Since Thailand is suffering from a rapidly aging population, this technology can then be applied to the aged care sector. This would alleviate pressure on Thailand's healthcare system. mHealth applications can significantly eliminate the issue of systematic guidance from aged care involvers and enhance the health management of senior citizens.

Case Study from Australia Aged Care in Digital Health:

Similar techniques of using mHealth in the aged care sector can be seen in Australia, where digitalisation in healthcare has been maximised. Previously, **18%** of aged Australians were faced with delayed or missed services in hospitals. The implementation of digital health in Australia's aged care system enhanced the system's efficiency. As a result, the rate of booking admission was reduced to roughly **53%** and the length of stay in a hospital was reduced by **75%**. There have also been positive reactions from users and providers with an **83%** acceptance rate and **89%** referral rate from patients.

Source: Australian Digital Health Agency, 2021



Health IT System

Health IT systems are constructed through the use of advanced technologies such as blockchain, the fifth-generation network, and artificial intelligence. The purpose of building health IT systems is to significantly improve the operational efficiency of businesses in the healthcare industry. Implementing data technologies into healthcare enhances the accessibility of patients' health data. For instance, hospitals or clinics can obtain the patients' previous health records via an IT system (Biesdorf et al., 2021). In the short-term, this reduces the need for repetitive medical inspections such as blood tests, X-rays, and type-B ultrasonics, thus reducing patient expenses.

Health IT systems can also bring about benefits to the insurance market. According to Gilbert et al. (2021), there is roughly a 35-40% deduction in administrative and medical costs for insurance businesses with digital data management technologies. Current digital tools equipped with automation capabilities can simplify the administrative journey and enable an efficient supply chain. With regards to medical expenses, there is an improvement in payment accuracy, and the accessibility and analysis of real-time data (BOI, 2021c). In the future, technological data management can further remove the redundancy of administrative functions and shift insurance solutions to be more patient centric.



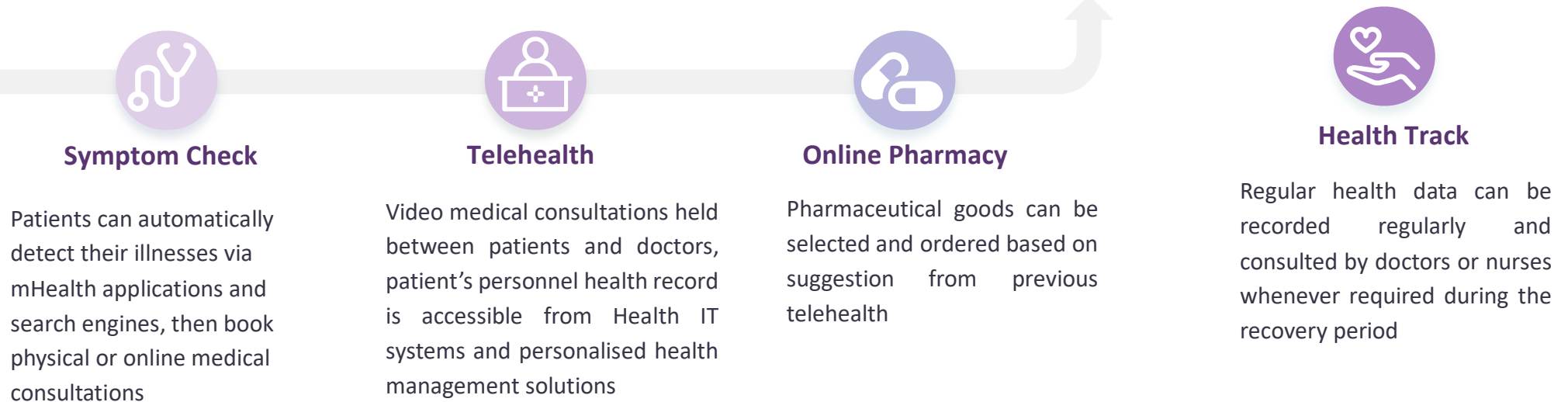
Telehealth / Telemedicine

The concept of telehealth is the transformation of traditional healthcare deliverables into an electronic format via technologies such as Virtual Reality, Augmented Reality, and the integration of other digital health techniques. This new concept can offer consistent healthcare to patients and solve various challenges, such as getting professional healthcare during COVID-19. For instance, one of Bangkok's international hospitals, Bumrungrad, provides teleconsultation and telehealth services to patients (International Medical Treatment Ltd, 2021). This especially benefits the medical tourism sector in Thailand as foreign patients who face difficulties in travelling internationally struggle to receive follow-up medical consultations in a physical environment. Telehealth drives the accessibility and efficiency of medical services.

Implication:

The diagnostic accuracy of telehealth consultations is frequently questioned. There remains a gap in the understanding of telemedicine or telehealth. According to the Society to Improve Diagnosis in Medicine (SIDM), there is a 10% chance of getting an incorrect diagnosis through video medical consulting, which is equivalent to 12 million Americans being misdiagnosed annually (Laura Joszt, 2021). Although telehealth brings about convenience to the industry, it is still crucial to consider the quality and safety of the telehealth operation.

New Patient Journey (Digitalised)



This patient journey is built on the assumption that healthcare businesses are significantly influenced by the use of technology and digital devices. Moreover, this journey is more applicable for patients who suffer less significant illnesses, such as anemofrigid cold, cough, normal headache, that can be cured by commonly used medicinal goods. A virtual pathway of getting appropriate guidance from doctors can be a more simplified approach for patients who are not able to visit a physical clinic. This approach is especially beneficial during a pandemic, where there is a higher risk of infection in physical medical environments.

Therefore, this new patient centric journey is considered more agile and convenient (Biesdorf et al., 2021). It brings unlimited market opportunities in terms of operational efficacy and patient experience to businesses in healthcare.

Implication

This journey mapping serves as a guidance for healthcare businesses to visualise the potential pathway that can be developed by digital health. It is suggested that healthcare businesses should develop their own commercial road map that is tailored to their technological capacity, business size, market environment, and cultural preferences to ensure the quality and safety of healthcare.

Alternative Medicine: Traditional Thai Medicine

What is alternative medicine ?

Alternative medicine (AM) are medical treatments that used instead of conventional therapies. The global alternative medicine market size was valued at USD 82.27 billion in 2020 and is expected to expand at a CAGR of 22.03% from 2021 to 2028 (Grandviewresearch.com., 2021)

Traditional Thai Medicine (TTM)

In Thailand, one of the most popular AM is Traditional Thai Medicine (TTM): an ancient healing science reflecting folk wisdom passed on from generation to generation. In 2018, the sales of herbal medicinal products in Thailand were 42.4 billion baht (US\$1.27b) with an 11% annual growth rate (Kwankhao et al., 2020). TTM is considered to maintain long-term growth momentum in the future.

TTM has high accessibility and acceptance in Thailand. Dr. Paijit said that almost 4,400 hospitals and health centres offer TTM services, accounting for 42% of all hospitals and health centres in Thailand (Thaiembassy.sg., 2021). It indicates that Thai people can easily access TTM services. Moreover, one of the reasons that TTM is being increasingly promoted and used is its comparatively low cost, especially compared to imported drugs.

Furthermore, many consumers have turned to using herbal medicines instead of synthetic chemical drugs as they are seeking products with perceived fewer side effects (Yaowarat et al., 2021).



Opportunities in TTM

TTM brings opportunities to the Thai Healthcare industry. This report emphasizes on the benefits that TTM can bring to the pharmaceutical and aged care sectors.

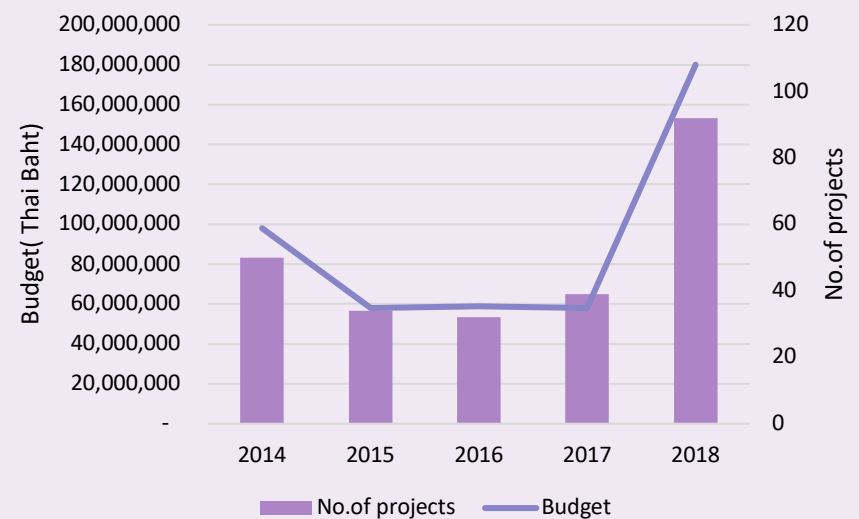
(1). The unity of tradition and innovation

The first opportunity comes from the Thailand endeavour to uphold the unity of tradition and innovation. The Thai pharmaceutical sector maintained TTM's characteristics while actively applying modern science and technology in TTM developments. For instance, Thailand's health ministry recently approved the use of Green Chiretta to treat the early stages of Covid-19. It will serve as an alternative treatment to reduce the severity of the outbreak and cut treatment costs.



Moreover, the Thai government paid attention to supporting the development of innovative Thai herbal products (Kwankhao et al., 2020). The number of research projects on Thai medicine significantly increased to almost 100 in 2018 due to the First National Master Plan on Thai Herbal Development. Research and development are crucial to move the herbal medicine product industry forward and help create innovative products by Thailand 4.0 strategy.

Number of research projects on Thai medicinal plants and budget during 2014-2018



Opportunities in TTM (Cont.)

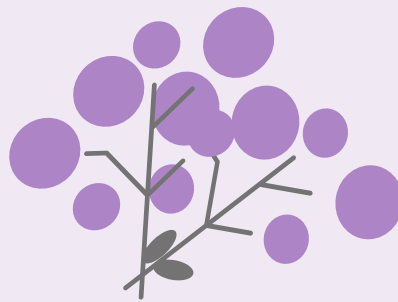
(2). The integration of TTM and aged care

The second opportunity is the integration of TTM and aged care. TTM has a relatively high acceptance level in the elderly group, 97.4% of them have used herbal medicines (Sumngern et al., 2011). The elderly is at higher risk of disease, especially chronic disease. Herbal medicines have been used either for primary prevention or complementary medicines for various chronic diseases (Peltzer & Pengpid, 2019). As the ageing population will continue to grow at a relatively high rate, we can expect that there will be a higher demand for the TTM by the elderly group.



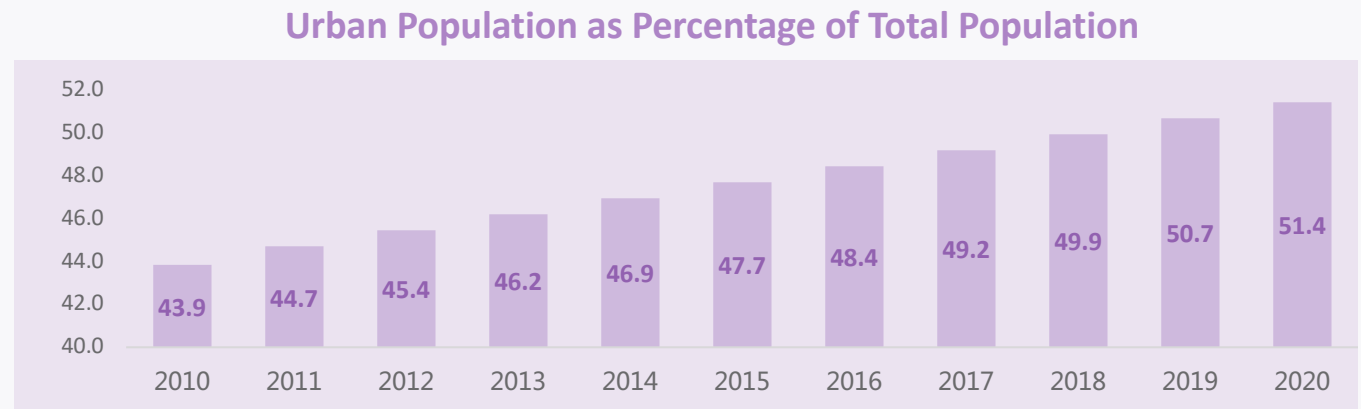
TTM can be a way to increase the healthy percentage of total longevity. Thailand can achieve it by integrating the TTM into the daily lifestyle of the elderly, to promote a healthier way of living, such as using herbal as health food. According to the World Health Organization (Who.int., 2021), 70% - 80% of populations from developing countries use traditional herbal medicine for health care, and traditional herbal medicine has been extensively embraced in Western countries. It indicates that TTM can be an attractive part of Thai aged care tourism.

“We’re not suddenly going to stop living longer,” but “we have to work extremely hard to improve, by whatever measure, the healthy percentage of the total longevity.” ---Dr. Declan Doogan



Urbanisation in Thailand

Thailand is transforming itself from a predominantly rural country to an increasingly urban one, in accordance with World Bank (2021), the country shifted from 44% urban to 51% urban in the past ten years.



Source: World Bank Org. 2021

Impact of Urbanisation



Urban Dwellers

Urbanisation caused impacts on both urban and rural areas' populations. On the one hand, the urbanisation trend worsens the health status of the urban dwellers affected. For various reasons, it increased the rate of mental disorders. Lifestyle changes also caused the increase of violence-related disabilities and non-communicable diseases. Moreover, the urbanisation trend widened the gap between rich and poor. It has negative impacts on the nutritional health of poor populations. The causes of the nutritional health problems are the limited financial resources and the higher cost of food in cities. The urban poor population lack nutrition, and this leads to illness. What is worse, the poor population has reduced financial ability to afford healthcare services (Abdul Kuddus et al., 2021).



Rural Area

On the other hand, Urbanisation caused medical resource inequity between the urban and rural areas. It moves the medical resources away from rural areas and increases financial and operational pressures on rural hospitals and other providers (Appold, 2021). Residents of urban environments often have greater access to health care and social services. Moreover, it is difficult to attract and retain professionals in rural areas. Populations in rural areas also tend to be older, sicker, and less affluent. Those factors lead to a paradoxical situation: high demand for healthcare but fewer suppliers in rural areas.

Opportunities and Challenges

The urbanisation trend brings both challenges and opportunities to the healthcare industry.

(1) As the population shift continues to increase healthcare demand in cities, there may be a period where the number of healthcare providers needs to increase to meet growing demand. Moreover, urban health providers will have the opportunity of winning patient business and loyalty by decreasing wait times, increasing-price transparency, optimising patient scheduling, etc.

(2) To mitigate the unequal distribution of healthcare resources, Thailand can use Telehealth as a way for people living in rural areas to receive healthcare. The improvement of technology and broadband infrastructure helps Telehealth expands further to less populated areas. For instance, Huawei used 5G technology to help the Thai Ministry of Health promote the “Digital Health” strategy (Bangkokpost, 2021).

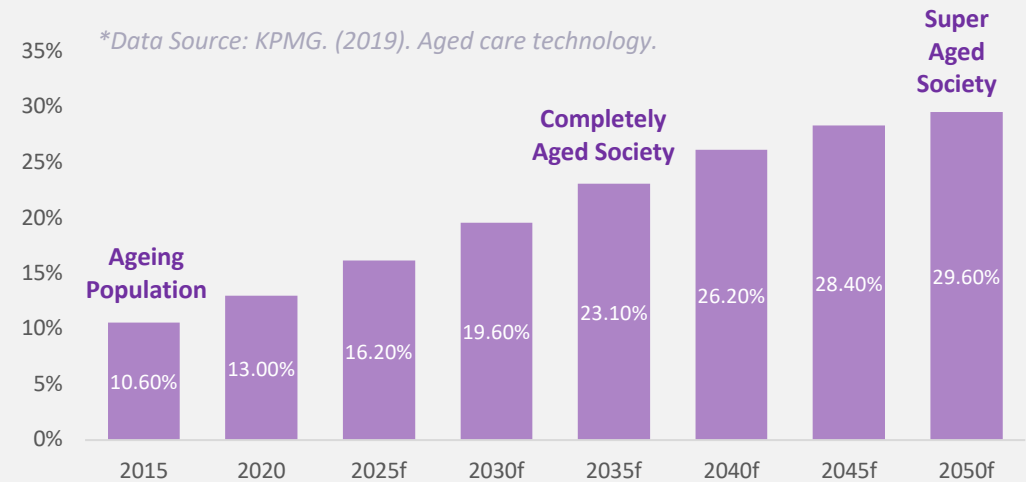
(3) Healthcare should be more affordable to all people to improve the health benefit of the poor populations. It is crucial for Thailand to save healthcare costs. According to McKinsey, Germany can achieve up to EUR 34 billion cost reduction for healthcare by utilising 26 digital solutions (Hehner et al., 2021). Therefore, Digitalisation can be a way for Thailand to achieve the goal of more affordable healthcare. For instance, Thailand can promote virtual healthcare and automate administrative tasks (Haseltine, 2021).



Ageing Population

According to a report by KPMG (2019), Thailand will be a completely 'aged' society in 2035 and a 'super aged' society by 2050. This means that by 2050, elderly citizens over the age of 60 will account for around 30% of the country's total population.

The reason for the ageing population is two-fold. Firstly, the life expectancy for an individual in Thailand has increased substantially in the past five centuries. Secondly the total fertility rate has dropped.



Challenges Posed by an Ageing Population

Health Challenges

One of the most important challenges that Thailand has to tackle is that of providing adequate elderly healthcare. The elderly have an increased risk of contracting diseases and its outcomes, such as disability and frailty.

Healthcare Services

Thailand has to solve a maldistribution problem with regards to its medical resources. This includes a shortage of professional medical staff and a misallocation of resources between rural and urban areas.

Healthcare Expenditure

Medical costs for the elderly in Thailand are also expected to increase due to the ageing population and the accelerating pace of medical innovation. This means that older people in Thailand will have less access to medical care. This is a concern especially for the elderly, who are in a poor financial state.

Healthcare Expenditure

The ageing of older people will lead to socio-economic challenges, such as an increased reliance on social support, and thus leading to an increased demand for social support services.

Opportunities Posed by an Ageing Population

Demand for Aged Healthcare Services

Firstly, the demand for aged healthcare services will increase due to the rapid ageing population. Opportunities will lie specifically in the treatment and care for chronic diseases as this will be the primary focus for maintaining elderly care.

Government Policies

There have been a few government policies and plans implemented because of the ageing population. One major example is the Second National Plan on the Elderly (2002-2021), which outlines an important strategic plan to create safety and a good standard of living for the elderly. As the situation becomes more exaggerated, there will be further pressure for the government to improve medical facilities in public hospitals.

Digitalisation

There will be advancement of technology and digitalisation to tackle the needs of the ageing population. Advanced health and medical technology need to be implemented to engage with consumers based on their needs and preferences.

Innovation: Time Banks

Innovation by not only the government but also the society has been crucial in dealing with many of the varying circumstances faced by many countries.

An idea that has been adopted in countries or regions like Switzerland, South Korea, Taiwan, the United Kingdom, and the United States is that of Time Banks. The idea behind time banking is that an individual provides a time-based service to another entity, and the time spent providing the service is recorded in a time bank. These time-based units, when accumulated could then be used by the individual to purchase time-based services from other individuals when required.

In an ageing society context, a young individual could spend time taking care of an elderly, collect time units in a time bank, and in the future use these to purchase a time-based services from others.





Grant Thornton

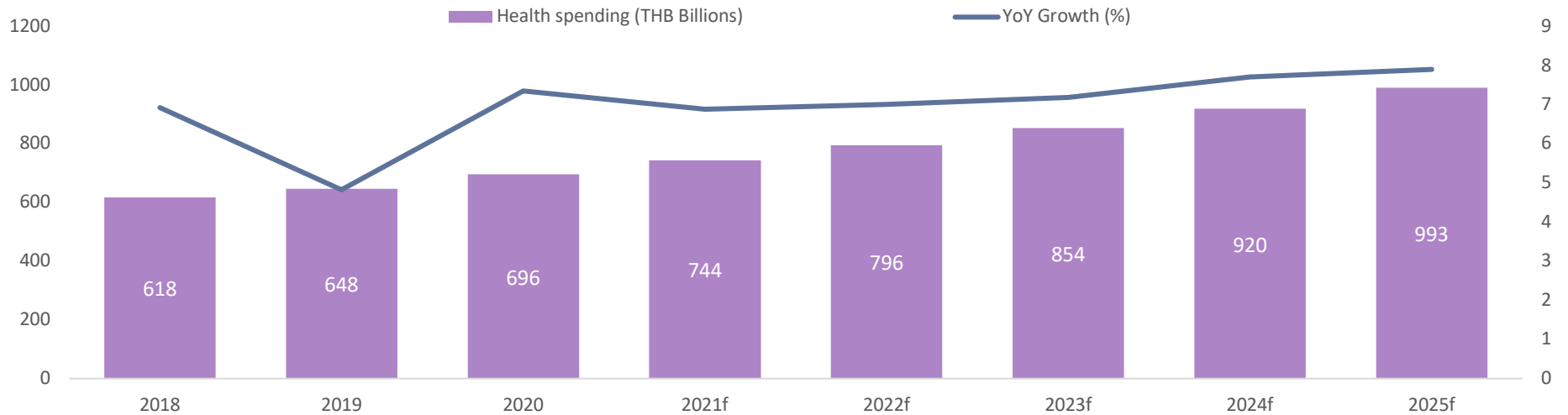
Outlook

Section Description

Our forecasts and analysis will cover three areas of the healthcare industry, namely Healthcare providers, Pharmaceuticals, and the Insurance Sector. In each of outlook, we will detail some key trends and statistics, the opportunities within the sector, and possible weaknesses or threats that may constrain growth.

University of Melbourne

Outlook of Healthcare Providers



*Data Source: Fitch Solutions (2021a) Thailand Pharmaceuticals & Healthcare Report

Key Statistics

According to Fitch Solutions (2021a), healthcare expenditure will reach a value of THB993 billion (USD33.7bn) with a CAGR of 7.3%. And by 2030, healthcare expenditure will represent 5.6% of Thailand's GDP.

Opportunities in Healthcare Sector

Development of Health System & Devices

Through further government funding, there will be more development of the healthcare system. Furthermore, Thailand's government aims to improve the accessibility of healthcare to individuals. This is evident from the various schemes implemented such as the Universal Coverage Scheme, the Civil Service Welfare system, and Social Security. These schemes allow for Universal Health Coverage, which enable increased accessibility to healthcare services.

In addition, the Thai government is actively promoting investment in medical device manufacturing in Thailand by offering various tax incentives as part of its plan to become a leading medical hub.

Opportunities in Healthcare Sector (Cont.)

Medical Tourism

There is also potential for further growth of Thailand's medical tourism. Thailand has become a top medical tourism destination in Asia due to its reasonable prices and quality treatments. With the recovery from the COVID-19 pandemic, we will see a boost in travel to Thailand, thus, an increase in medical tourism expenditure.

Private Healthcare Sector

Bumrungrad International Hospital, which is a leading private hospital group, realised a growth in revenue by 2.4 per cent year on year since 2017. In the coming years, more major private healthcare players anticipate continuous strong growth within the sector.

Threats in Healthcare Sector

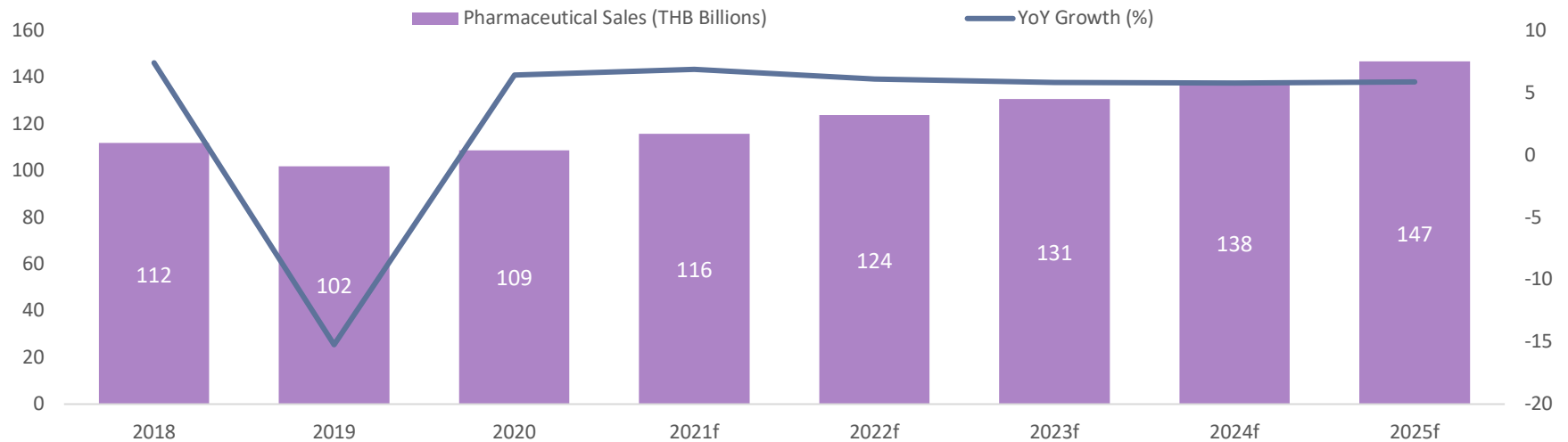
Shortage of Qualified Workers

According to statistics from the Thai Medical Council, there are just over 50,000 medical practitioners in the country. Additionally, the majority are clustered in Bangkok. This uneven distribution of doctors means that hospitals in rural or remote areas are overcrowded with patients but have only a handful of doctors.

Doctors Leaving to Private Sector

More doctors from the public sector are leaving to join private hospital groups as they give their staff better salaries, benefits paired with shorter working hours.

Outlook of Pharmaceuticals



*Data Source: Fitch Solutions (2021a) Thailand Pharmaceuticals & Healthcare Report

Key Statistics

By 2025, the pharmaceutical market is expected to reach 147.1 billion Thai Bhat with a CAGR of 6.1%. And by 2030, the pharmaceutical market will represent 0.77% of Thailand's GDP.

Opportunities in Pharmaceutical Sector

Strong Pharmaceutical Manufacturing Industry

Thailand has an increasing demand for healthcare locally and internationally. The Thai government's commitment to develop the country into a leading medical hub has enabled the country to become a lucrative market for pharmaceutical manufacturing. Furthermore, to enable the creation of more advanced products, the Thai government has introduced a complete regulatory framework to support local research and development activities.

Opportunities in Pharmaceuticals Sector (Cont.)

Emerging Market

Thailand is an emerging market for multinational pharmaceutical firms that want to expand their geographical footprint. This is because of the rapid urbanisation and relatively business friendly environment that Thailand offers.

Popular Destination for Drug Clinical Trials

Clinical trials in Thailand are cost-effective and the government is actively promoting Thailand as a primary destination for conducting clinical research.

Threats in Pharmaceuticals Sector

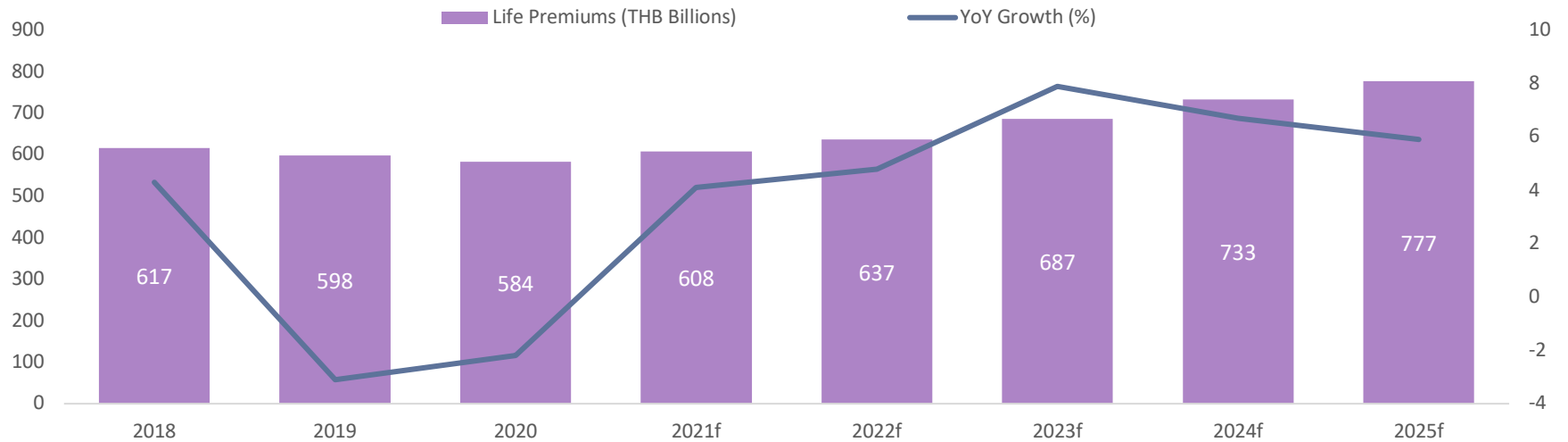
Pressure to Reduce Medicine Pricing

As the ageing population in Thailand increases and the wealth disparity in the country rises, there will be additional pressure on the government to decrease the prices of medicines. Thus, reducing the revenue and profitability of the pharmaceutical market.

Counterfeit Medicine

In Thailand, around 8.5% of the medicines sold on the market are substandard. These are usually the drugs that treat serious conditions such as antibiotics and tuberculosis. As a result of counterfeit drugs, there will be reduced trust in the pharmaceutical market, decreasing its demand.

Outlook of Insurance Market



*Data Source: Fitch Solutions (2021b) Thailand Insurance Report

Key Statistics

By 2025, life insurance premiums are expected to reach a value of THB777.2bn (USD26.35) and have a CAGR of 5.9%, which would represent 3.8% of Thailand's GDP.

Opportunities in Insurance Market

Growing cost of private healthcare

As the cost of private healthcare rises, the demand for life insurance will also increase. This is because individuals would want to be protected financially in case of the need for private hospitalisation, medical care, or treatments.

Opportunities in Insurance Market (Cont.)

Large Population & Growing Middle Class

Similarly, a large population and a growing middle class means there is a larger market for the insurance sector. Insurance is driven largely by consumer confidence and household income, and as household income rises, as it has been over the past four decades, so will the demand for insurance.

Popular Destination for Drug Clinical Trials

There are increasing opportunities in the digitalisation of insurance. An example is Insurtech, which is technical innovation that improves the efficiency of the creation, distribution and administration of the insurance business.

Threats in Insurance Market

Unaffordable to Low Income Households

One of the largest constraints on the growth of life insurance is the substantial number of households that are too poor to afford it.

Political Instability

Amidst the COVID-19 pandemic, Thailand like many of its neighbouring countries, has seen an increasing amounts of protests. An unsteady political climate may deter overseas insurers and investors.



Grant Thornton

Investment Opportunity

Section Description

Overall, two sectors under the Thai healthcare industry are recommended to be the priority for Grant Thornton Thailand to consider as investment opportunities. They are medical tourism and pharmaceutical market.

Medical Tourism



Medical tourism is one of the key components of Thailand's healthcare industry, although the current pandemic obstructs the growth of the medical tourism sector in Thailand due to the travel ban and infection rate. It is still viewed with huge potentiality, especially when it comes to the post-pandemic period. The Thailand 4.0 strategy facilitates the improvement of the Thai medical system to meet global competitive advantages. The numbers of medical tourists will increase, if travel restrictions are removed in other countries (BOI, 2021a; BOI, 2021b & BOI, 2021c).

Moreover, the acceleration of the ageing population happens across the world, the need for healthcare supports will be spread domestically and internationally. This further promotes market opportunities for investors to enter the Thai healthcare, an industry that drives to develop a medical destination for the world-class, especially with the objective of strengthening anti-aging treatments (BOI, 2021a; BOI, 2021b & BOI, 2021c). Cosmetic surgery is one of the most popular treatments in Thailand and baby boomers are the highest target segment entering Thailand. For these surgeries, there is an anticipation of further growth. The investment schemes and government initiatives to make Thailand a Medical Hub also make this sector attractive. The preferences of the age group to seek healthcare services from Thailand is expected to grow.

Pharmaceutical Market

Thailand's continuous efforts in establishing sophisticated healthcare systems also create the opportunity for growth in the pharmaceutical market. According to the Thailand 4.0 strategy, the government aims to facilitate domestic production in the field of medical products and goods. A complete regulatory framework is published to promote domestic research and the development of medical programs. There was a large increase in both the number of R&D projects and budgets on Thai Herbal Development. By looking at the Chinese government's policies of Traditional Chinese Medicine development, the Thai government can try to make TTM and western medicine complementary to each other, and develop their respective strengths. Due to its increasing performance and relatively low price, Thai traditional herbal medicine will receive more acceptance not only from the domestic but also from global markets. It might become a hot spot in the pharmaceutical investment market.



Future Implication:

Our suggestions on investment opportunities are only made on the analysis of the current Thai healthcare market environment and global trends. The value and corporation service of Grant Thornton are not taken into consideration as it is out of scope. Therefore, it is further suggested that Grant Thornton should integrate these recommendations with their value propositions and service capabilities in actions.

Conclusion

To discover market opportunities in the Thai healthcare industry for Grant Thornton (Thailand), market research and interviews were conducted to generate marketing insights.

Three competitive sectors under Thailand's healthcare industry are analysed, including Health Providers, Medical Tourism, and Insurance. Four different trends that influence the future of healthcare are defined, which are digitalisation, alternative medicine, urbanisation and ageing population. With the analysis of market sectors and trends, outlooks of the Thai healthcare industry are then offered with critical insights.

Additionally, two sectors under the Thai healthcare industry which we recommend to invest in are – the medical tourism and the pharmaceutical market - which have greater growth capability and profitability for businesses to take commercial opportunities based on the report analysis.

Reference List

- Abdul Kuddus, M., Tynan, E., & McBryde, E. (2021). *Urbanization: a problem for the rich and the poor?*. boimedcentral.com. Retrieved 16 December 2021, from <https://publichealthreviews.biomedcentral.com/articles/10.1186/s40985-019-0116-0>.
- Annett, J. (2021). *Thailand: Insurance sector shows flat growth*. Asia Insurance Review. Retrieved December 9, 2021, from <https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/72787/Type/eDaily/Thailand-Insurance-sector-shows-flat-growth>
- Appold, K. (2021). *Top Healthcare Changes Associated with Urban Growth*. Managed Healthcare Executive. Retrieved 16 December 2021, from <https://www.managedhealthcareexecutive.com/view/top-healthcare-changes-associated-urban-growth>.
- Areemit, R., Lumbiganon, P., Suphakunpinyo, C., Jetsrisuparb, A., Sutra, S., & Sripanidkulchai, K. (2020). A Mobile App, KhunLook, to Support Thai Parents and Caregivers With Child Health Supervision: Development, Validation, and Acceptability Study. *JMIR Mhealth And Uhealth*, 8(10), e15116. <https://doi.org/10.2196/15116>
- Australian Digital Health Agency. (2021). *Safe, seamless and secure: evolving health and care to meet the needs of modern Australia.*. Digitalhealth.gov.au. Retrieved 27 December 2021, from <https://www.digitalhealth.gov.au/sites/default/files/2020-11/Australia%27s%20National%20Digital%20Health%20Strategy%20-%20Safe%2C%20seamless%20and%20secure.pdf>.
- Bangprapa, M. (2021). *Cabinet approves new medical visa*. . Retrieved 9 December 2021, from <https://Www.Bangkokpost.Com>. <https://www.bangkokpost.com/thailand/general/2224271/cabinet-approves-new-medical-visa>
- Bangkokpost.com. (2021). *Huawei Empowers Thailand with Digital Technology*. <https://www.bangkokpost.com>. Retrieved 16 December 2021, from <https://www.bangkokpost.com/thailand/pr/2163691/huawei-empowers-thailand-with-digital-technology>.
- Biesdorf, S., Deetjen, U., & Kayyali, B. (2021). *Digital health ecosystems: Voices of key healthcare leaders*. McKinsey & Company. Retrieved 8 December 2021, from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/digital-health-ecosystems-voices-of-key-healthcare-leaders>.

- BOI. (2021a). *THAILAND MEDICAL DESTINATION FINDING WEALTH IN WELLNESS*. Boi.go.th. Retrieved 27 December 2021, from <https://www.boi.go.th/upload/content/TIRMay2020.pdf>.
- BOI. (2021b). *Medical Hub & Total Healthcare Services*. Retrieved 8 December 2021, from https://www.boi.go.th/index.php?page=success_stories&group_id=101371.
- BOI. (2021c). *Digital Technology Industries*. Retrieved 8 December 2021, from https://www.boi.go.th/index.php?page=success_stories&group_id=101373.
- BUSINESSWIRE. (2021). *Global Digital Health Market Report 2021: COVID-19 Growth and Change to 2025 & 2030 - ResearchAndMarkets.com*. Businesswire.com. Retrieved 8 December 2021, from <https://www.businesswire.com/news/home/20210329005618/en/Global-Digital-Health-Market-Report-2021-COVID-19-Growth-and-Change-to-2025-2030---ResearchAndMarkets.com>.
- Deloitte. (2021). *2022 Global health care sector outlook | Deloitte*. Deloitte. Retrieved 27 December 2021, from <https://www2.deloitte.com/global/en/pages/life-sciences-and-healthcare/articles/global-health-care-sector-outlook.html>.
- EEC. (2021). *Medical and Comprehensive Healthcare 2020*. Eeco.or.th. Retrieved 27 December 2021, from https://www.eeco.or.th/web-upload/fck/editor-pic/files/industry/Medical%20and%20Comprehensive%20Healthcare_2020.pdf.
- Eliteplusmagazine.com. (2019). *Thailand Ranked Sixth Best in the World for Healthcare*. Retrieved 9 December 2021, from <http://www.eliteplusmagazine.com/home/content/738/4#gsc.tab=0>
- Export.Gov. (2016). *Healthcare Resource Guide: Thailand*. Retrieved 9 December 2021, from https://2016.export.gov/industry/health/healthcareresourceguide/eg_main_108623.asp
- FDA.gov. (2021). *What is Digital Health?*. Retrieved 8 December 2021, from <https://www.fda.gov/medical-devices/digital-health-center-excellence/what-digital-health>.

- Fitch Solutions (2021a). *Thailand Pharmaceuticals & Healthcare Report*. Retrieved 9 December 2021, from <https://store.fitchsolutions.com/all-products/thailand-pharmaceuticals-healthcare-report>
- Fitch Solutions. (2021b). *Thailand Insurance Report*. Retrieved 9 December 2021, from <https://store.fitchsolutions.com/all-products/thailand-insurance-report>
- Fitch Solutions. (2021c). *Thailand Pharmaceutical Exports Expected to Demonstrate Growth As Domestic Industry Expands*. Retrieved 9 December 2021, from <https://www.fitchsolutions.com/pharma-healthcare/thailand-pharmaceutical-exports-expected-demonstrate-growth-domestic-industry-expands-04-09-2020>
- Gilbert, G., Almeida Fernandes, L., & Sawant, A. (2021). *Digital is reshaping US health insurance—winners are moving fast*. McKinsey & Company. Retrieved 8 December 2021, from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/digital-is-reshaping-us-health-insurance-winners-are-moving-fast>.
- Global Wellness Institute*. (2021). Retrieved 8 December 2021, from <https://globalwellnessinstitute.org/wp-content/uploads/2021/03/Digital-Wellness-Initiative-Digital-Health-Infographic.pdf>.
- Grandviewresearch.com. (2021). *Complementary And Alternative Medicine Market Report, 2021-2028*. Retrieved 16 December 2021, from <https://www.grandviewresearch.com/industry-analysis/complementary-alternative-medicine-market>.
- Haseltine, W. (2021). *Ten Steps To Make Healthcare Available To Everyone*. Forbes. Retrieved 9 December 2021, from <https://www.forbes.com/sites/williamhaseltine/2019/10/01/ten-steps-to-make-healthcare-available-to-everyone/?sh=7616e9996d14>.
- Hegner, S., Biesdorf, S., & Möller, M. (2021). mckinsey.com. Retrieved 16 December 2021, from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/digitizing-healthcare-opportunities-for-germany>.
- HICKS, W. (2021). *Fusing medical tourism with telemedicine*. <https://www.bangkokpost.com>. Retrieved 8 December 2021, from <https://www.bangkokpost.com/business/1865999/fusing-medical-tourism-with-telemedicine>.

- International Medical Treatment Ltd. (2021). *Bumrungrad Telemed Consultation*. Retrieved 8 December 2021, from <https://intmedicaltreatment.com/bumrungrad-telemed-consultation/>.
- ISEAS Yusof Ishak Institute. (2019). *Managing Thailand's Ageing Population*. Retrieved 9 December 2021, from https://www.iseas.edu.sg/wp-content/uploads/pdfs/ISEAS_Perspective_2019_32.pdf
- KhunLook. (2021). แอปพลิเคชัน “คุณลูก” ผู้ช่วยสุดเจ๋งของคุณพ่อคุณแม่มือใหม่. www.khunlook-com.translate.google.com. Retrieved 8 December 2021, from https://www.khunlook-com.translate.google.com/?_x_tr_sl=th&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc.
- KPMG. (2019). *Aged care technology*. Retrieved 9 December 2021, from <https://assets.kpmg/content/dam/kpmg/th/pdf/2019/04/eec-igh-aged-care-technology.pdf>
- Krungsri.com. (2021). *Industry Outlook 2021-2023 : Pharmaceuticals*. Retrieved 24 December 2021, from <https://www.krungsri.com/en/research/industry/industry-outlook/Chemicals/phamaceuticals/IO/io-pharmaceuticals-21>
- Kwankhao, P., Chuthaputti, A., Tantipidok, Y., & Bongcheewin, B. (2020). The Current Situation of the Herbal Medicinal Product System in Thailand. *Journal Of Health Science*, 29(Special Issue), 86-87. Retrieved 9 December 2021, from [http://file:///Users/nijing/Downloads/8415-Article%20Text-11799-1-10-20200127%20\(1\).pdf](http://file:///Users/nijing/Downloads/8415-Article%20Text-11799-1-10-20200127%20(1).pdf).
- Linzer, K., Ray, B., & Singh, N. (2020). *Planning for an aging population*. Mckinsey&Company. Retrieved 9 December 2021, from <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/planning-for-an-aging-population>.
- Laura Joszt, M. (2021). *Does Telemedicine for Diagnosis Have a Place in Healthcare?*. Chief Healthcare Executive. Retrieved 27 December 2021, from <https://www.chiefhealthcareexecutive.com/view/does-telemedicine-for-diagnosis-have-a-place-in-healthcare->.
- MarketLine. (2020a). *Insurance in Thailand*. Retrieved 9 December 2021, from <https://store.marketline.com/report/ohip2152--insurance-in-thailand/>
- MarketLine. (2020b). *Healthcare Providers in Thailand*. Retrieved 9 December 2021, from <https://store.marketline.com/report/ohmf13046--healthcare-providers-in-thailand-market-summary-competitive-analysis-and-forecast-to-2025/>

- Mordor Intelligence. (2020). *Medical Tourism Market | 2021 - 26 | Industry Share, Size, Growth - Mordor Intelligence*. Retrieved 9 December 2021, from <https://www.mordorintelligence.com/industry-reports/medical-tourism-market>
- Netherlands Embassy in Bangkok. (2018). *Life Sciences and Health in Thailand*. Retrieved 9 December 2021, from <https://www.netherlandsworldwide.nl/binaries/en-nederlandwereldwijd/documents/publications/2018/04/18/factsheet-life-sciences--health-in-thailand/Thailand+-+Factsheet+Life+Sciences+%26+Health.pdf>
- Peltzer, K., & Pengpid, S. (2019). The use of herbal medicines among chronic disease patients in Thailand: a cross-sectional survey. *Journal Of Multidisciplinary Healthcare, Volume 12*, 573-582. <https://doi.org/10.2147/jmdh.s212953>
- PwC. (2017). *Explore Healthcare Opportunities in Belt and Road Countries*. Retrieved 8 December 2021, from <https://pwc.com>
- Statista. (2021a). *Thailand: GDP value contribution by sector 2020 | Statista*. Retrieved 24 December 2021, from <https://www.statista.com/statistics/1023315/thailand-gdp-value-contribution-by-sector/>
- Statista, (2021b). *Industry Outlook 2020-2022: Private Hospital*. Retrieved 24 December 2021, from <https://www.krungsri.com/en/research/industry/industry-outlook/Services/Private-Hospitals/IO/io-Private-Hospitals>
- Statista. (2021c). *Asia: projected pharmaceutical sales by country 2022 | Statista*. Retrieved 24 December 2021, from <https://www.statista.com/statistics/1038561/asia-projected-pharmaceutical-sales-by-country/>
- Statista. (2021d). *Topic: Pharmaceutical market in Thailand*. Retrieved 24 December 2021, from <https://www.statista.com/topics/7375/pharmaceutical-market-in-thailand/#dossierKeyfigures>
- Statista. (2021e). *Thailand: market size of medical device 2020 | Statista*. Retrieved 24 December 2021, from <https://www.statista.com/statistics/1238032/thailand-market-size-of-medical-device/>
- Statista. (2021f). *Health in Thailand (did-67307-1)*. Retrieved 9 December 2021, from <https://www-statista-com.eu1.proxy.openathens.net/study/67307/health-in-thailand/>

Statista. (2021g). *Health Tourism in Thailand (did-82742-1)*. Retrieved 9 December 2021, from <https://www-statista-com.eu1.proxy.openathens.net/study/82742/statista-dossierplus-on-health-tourism-in-thailand/>

Sumngern, C., Azeredo, Z., Subgranon, R., Matos, E., & Kijjoa, A. (2011). The perception of the benefits of herbal medicine consumption among the Thai elderly. *The Journal Of Nutrition, Health & Aging, 15*(1), 59-63. <https://doi.org/10.1007/s12603-011-0013-9>

Thaiembassy.sg. (2021). *Major Boost for Traditional Thai Medical Services and Herbal Medicine | Royal Thai Embassy*. Retrieved 9 December 2021, from https://www.thaiembassy.sg/press_media/news-highlights/major-boost-for-traditional-thai-medical-services-and-herbal-medicine

Tilleke & Gibbins. (2020). *Thailand: e-Insurance and e-Policy Regulatory Developments*. Retrieved December 9, 2021, from <https://www.tilleke.com/insights/thailand-e-insurance-and-e-policy-regulatory-developments/>

World Bank. (2021). *Urban population (% of total population) - Thailand | Data*. Data.worldbank.org. (2021). Retrieved 9 December 2021, from <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?contextual=default&end=2020&locations=TH&start=1990&view=chart>.

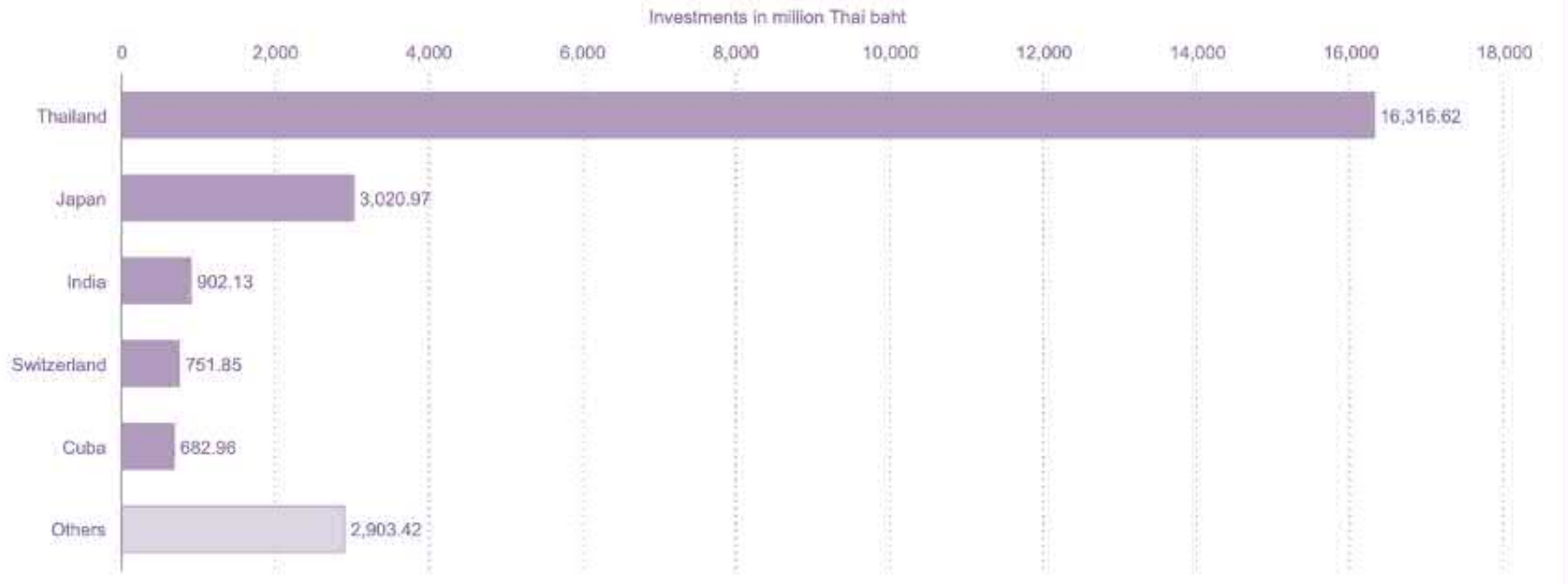
World Health Organization. (2021). *Digital health*. Who.int. Retrieved 27 December 2021, from https://www.who.int/health-topics/digital-health#tab=tab_1.

Yaowarat, K., Silpcharu, T., & Pongsiri, P. (2021). Value Creation of Thai Herbs in Natural and Herb Products Industry Leading to Patent Protection. *Preprint.Org*. <https://doi.org/10.20944/preprints202108.0173.v1>

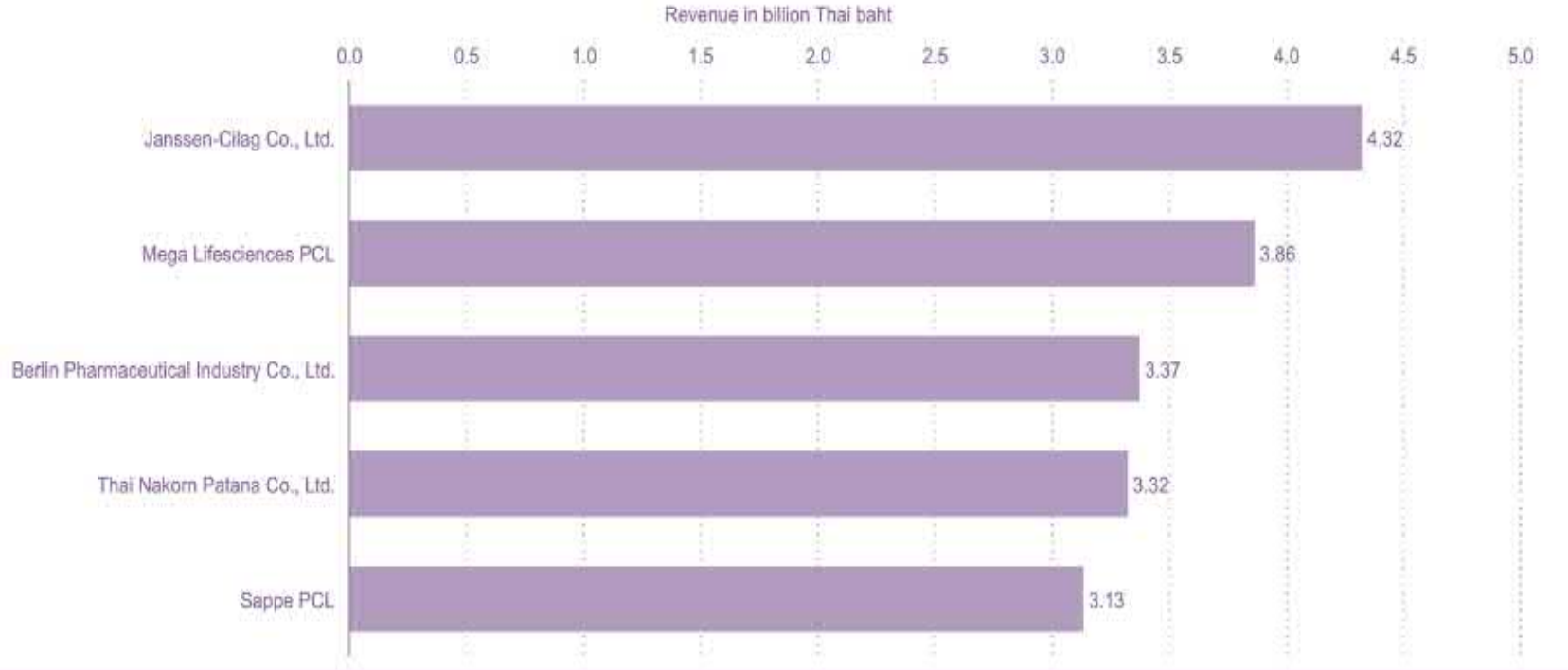
Appendix Content

Appendix A – Additional Data Figures for Healthcare Industry	48
Appendix B - Project Plan (Signature Version)	53

Appendix A – Additional Data Figures for Healthcare Industry

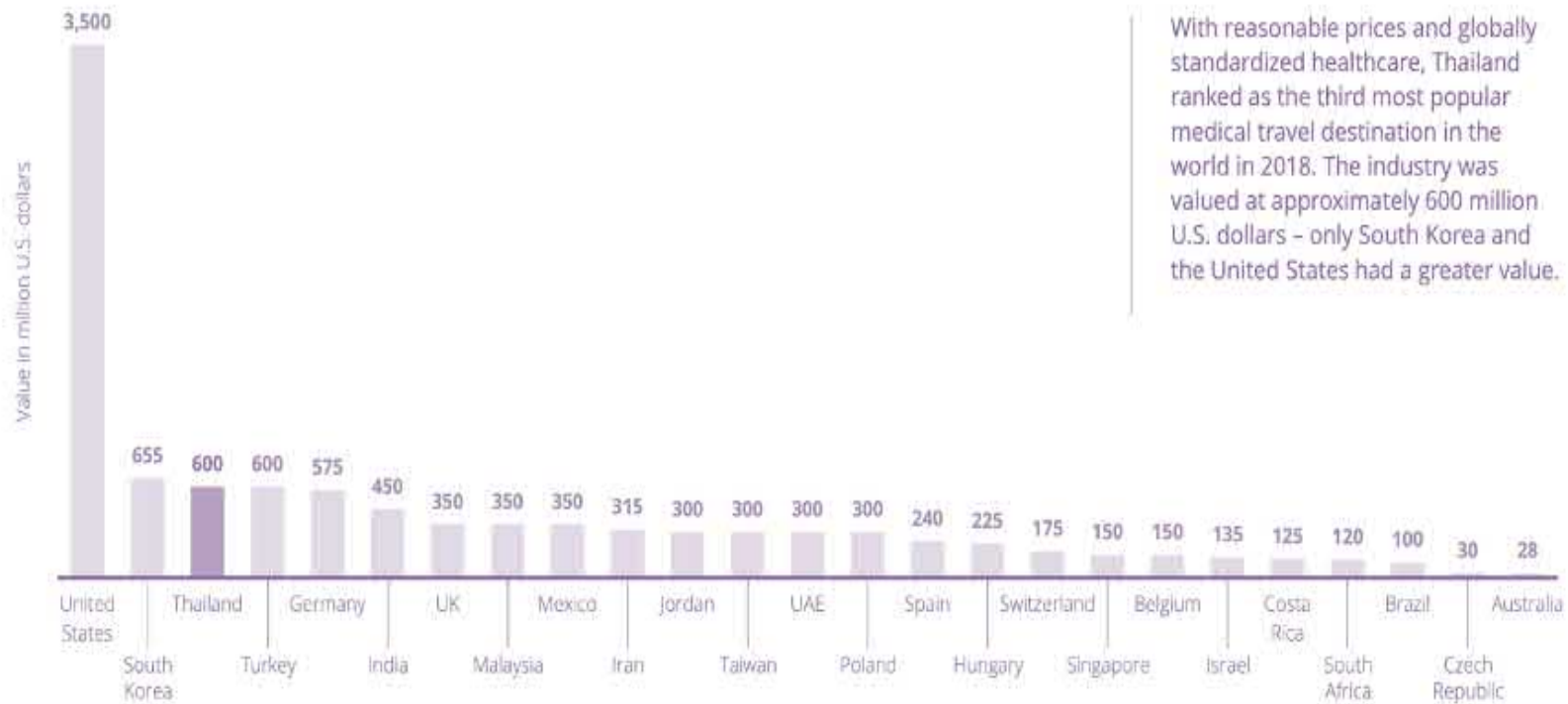


Investment in pharmaceutical market as per company, Source: Pharmaceutical Market in Thailand, 2021, Statista



Major players in Thailand's Pharmaceutical Market

Source: Pharmaceutical Market in Thailand, 2021, Statista



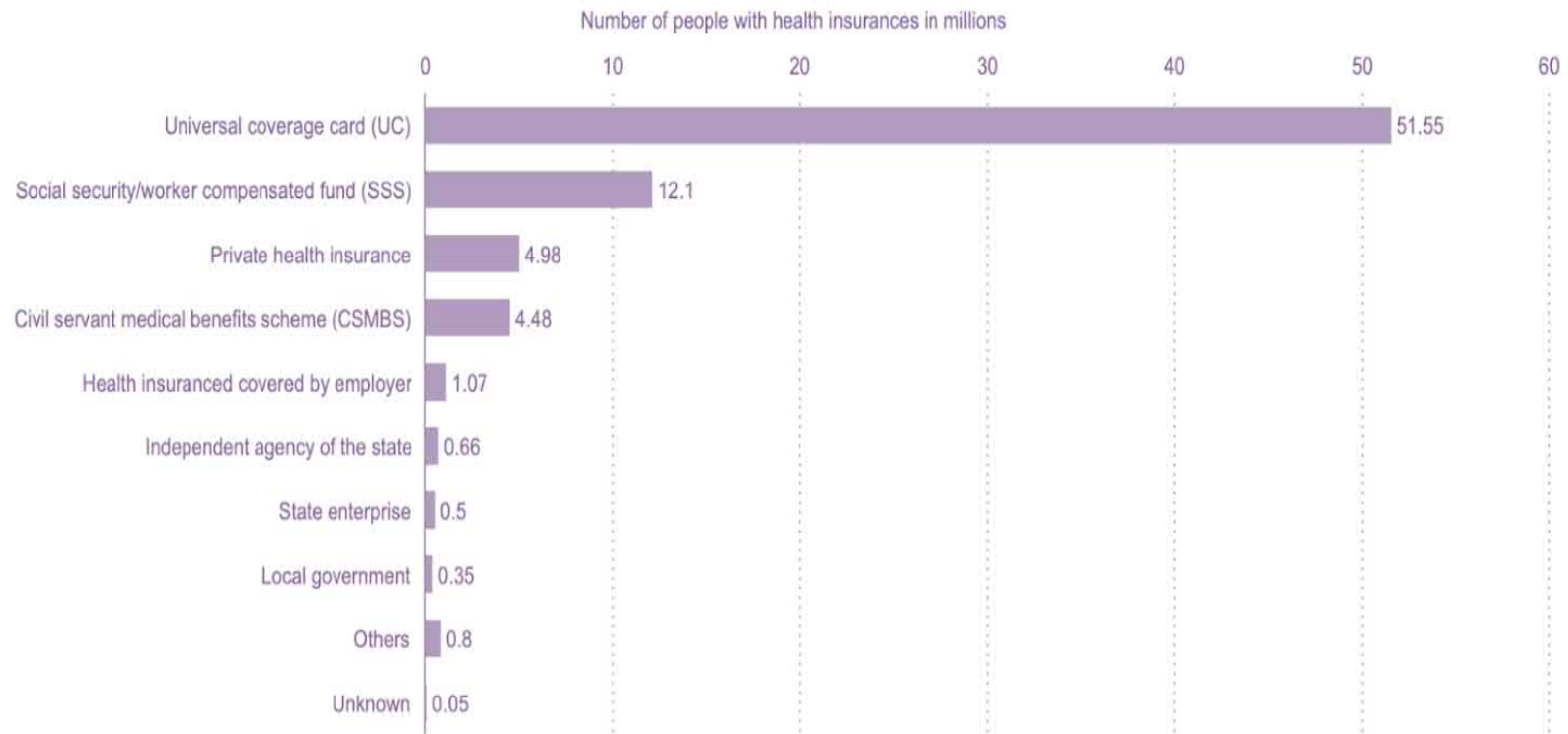
Most popular destinations for medical Tourism

Source: Health Tourism in Thailand, 2021, Statista



Wellness tourists in Asia Pacific

Source: Health Tourism in Thailand, 2021, Statista



*Number of people covered by health insurance by type.
Source: Health in Thailand, 2021, Statista*

Appendix B - Project Plan (Signature Version)



Project Plan

Market Research - Thailand Healthcare Sector



Presented by: Shane Kishan, Jing Ni, Rajvi Desai, Jingyan Cao

Version 6

Project Stakeholders



GRANT THORNTON (GT)

- Achiraya Hagelauer (Ellen)
- Chris Cracknell
- Jean-Paul
- Members from GT



PROJECT MENTOR

Nasser

ACADEMIC SUPERVISOR

Sharon Soltys



PROJECT TEAM

- Shane Kishan
- Jing Ni
- Rajvi Desai
- Jingyan Cao

Scope of the Project

In-Scope

- Define the healthcare industry
- Analysis of latest and upcoming trends in the industry including growth trends
- Exploring market opportunity with the trend analysis

Out of Scope

- Budgeting
- Research relating specific Grant Thornton services

Project Methodology

Primary Research*

- Communication with Healthcare experts and employees who are from Grant Thornton Thailand and Singapore

Secondary Research*

- Current trend of Healthcare industry in Thailand and Global
- Table, charts and diagrams that offered by data research companies, Big Four, consulting firms, government websites, etc.

*Definition of primary and secondary research - We were following a technical convention where primary research relates to information that is gathered directly from the source such as through surveys and interviews, and secondary research relates to using existing data.

Project Resources

Internal Resources

- Supported by University of Melbourne and Grant Thornton



External Resources

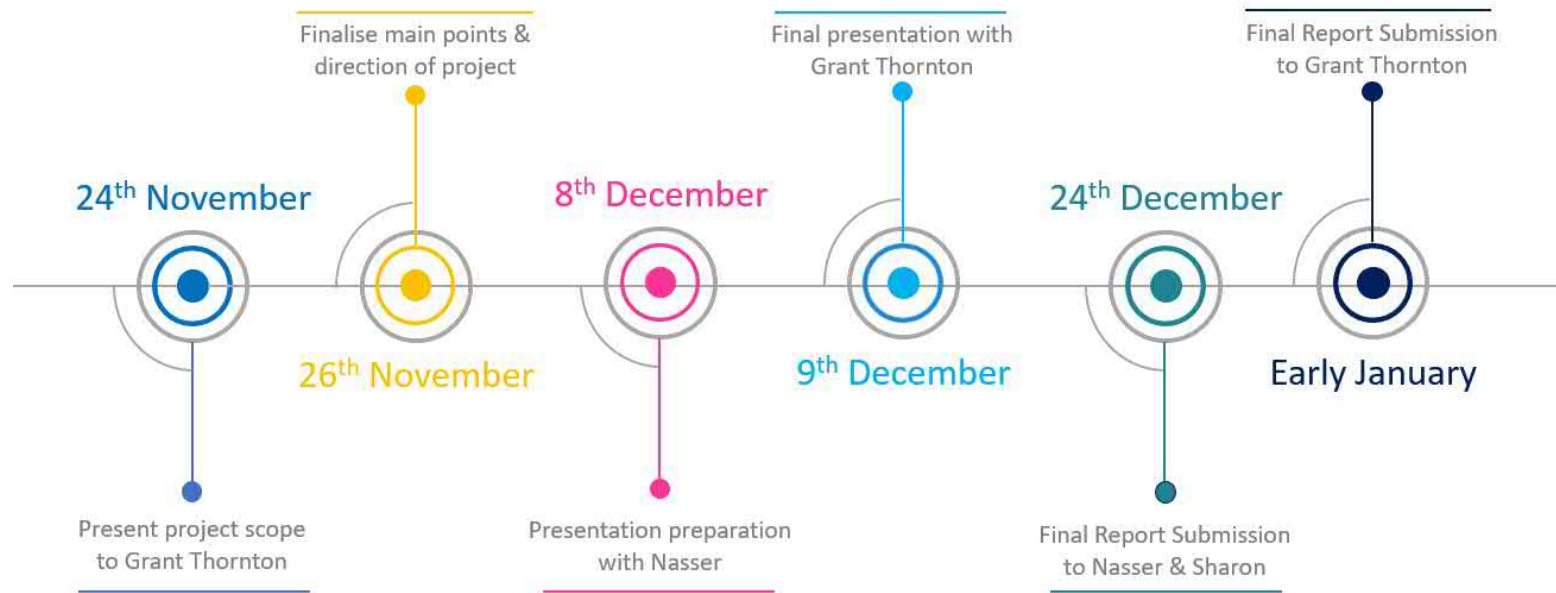
- Generated from different consulting reports, database and organisational case study from third party, such as BCG, McKinsey, Big 4, and Thailand governmental webpages etc.



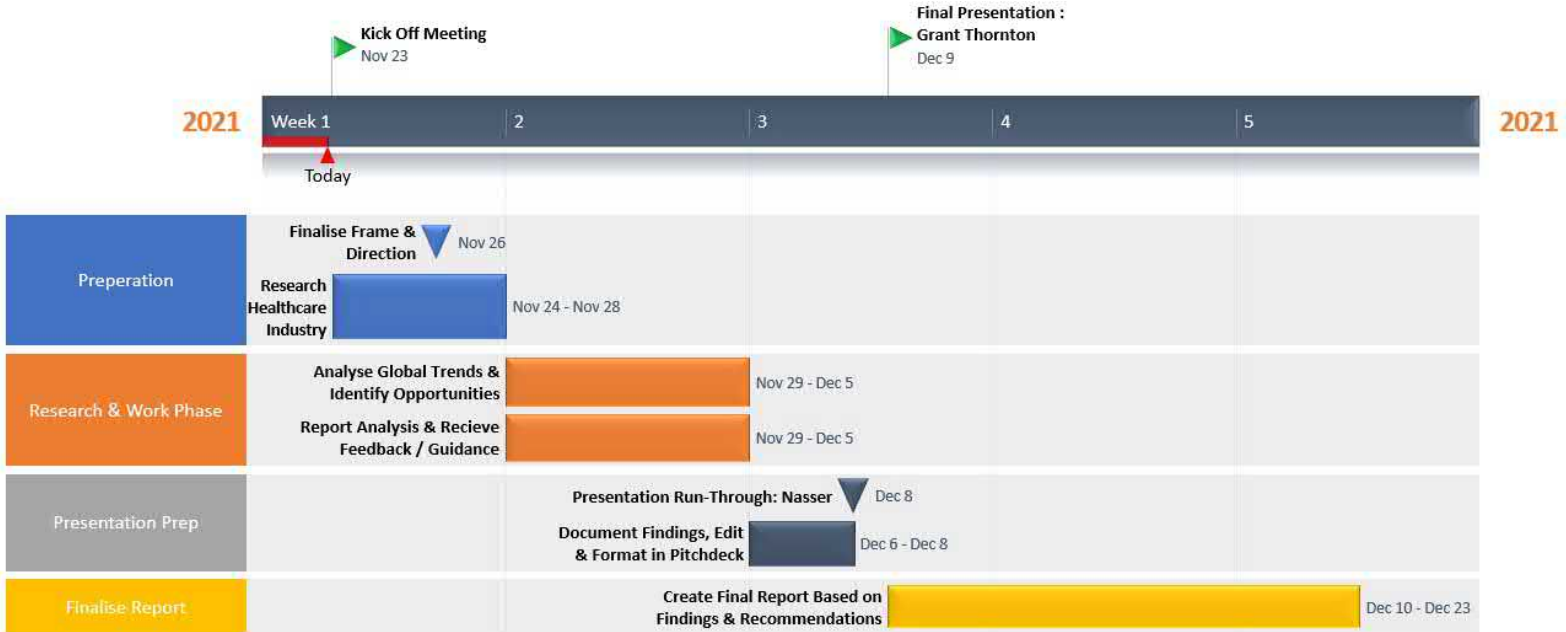
- Virtual Environment
- Time Constraints
- Accessibility of data
- Validity of data

Project Limitations








Project Timeline



Project Schedule



Roles and Responsibilities

	Roles	Responsibilities	Person in Charge
	University Liaison	Contacting with Nasser and Sharon to update the project progress and confirm any specific issues	Shane Kishan
	Grant Thornton Liaison	Contacting with Grant Thornton to update project progress and confirm any specific issues	Shane Kishan
	Project Recorders	Taking notes from host meetings, internal team meetings ,and Consultation with Nasser	Rajvi Desai and Jing Ni
	Project Organiser	Ensuring that tasks are completed timely	Jingyan Cao
	Project Researcher	Continuously carrying out in-depth research; Share information with team members	Entire project team
	Project Designer Leader	Formatting, Editing and Checking each document before the submission	Rajvi Desai
	Project Social Leader	Resolve the conflicts raised during the discussions and help the conflicting parties negotiate smoothly	Jing Ni

Communication Management

1

**INTERNAL
COMMUNICATION**



2

**EXTERNAL
COMMUNICATION**



Communication Management



COMMUNICATION WITH INTERNAL TEAM

- Team catch up meeting 1 hour per day before/after client meeting
- Weekly team update meetings
- Pre-Presentation within Team - 10th December



COMMUNICATION MENTOR

- Catch up meeting 3 days a week with Nasser - TBC
- Pre-presentation on project scope with Nasser - 24th November
- Pre-presentation on Project with Nasser - 10th December



COMMUNICATION WITH GRANT THORNTON

- Catch up call 15 minutes every two day, from 23rd November
- Presentation on Project Scope - 24th November
- Final presentation - 13th December

Risk Management

Potential Risks / Issues	Possible Solutions	Risk On a Scale of 1 - 5
<ul style="list-style-type: none"> • Technical Issues <ul style="list-style-type: none"> ◦ Poor Internet Connectivity 	<ul style="list-style-type: none"> • Team members should have the transcript of every other member so that they can take over the presentation. 	<ul style="list-style-type: none"> • 3 - Medium Risk - As we have members operating from different parts of the world
<ul style="list-style-type: none"> • External Issues / Commitments <ul style="list-style-type: none"> ◦ Absence from meetings due to unforeseen circumstances 	<ul style="list-style-type: none"> • Communicate with the team and inform that about your absence at least 24 hours prior to the meeting. 	<ul style="list-style-type: none"> • 2 - Low Risk - As our team has scheduled meetings in advanced
<ul style="list-style-type: none"> • Validating Information about Thailand <ul style="list-style-type: none"> ◦ Missinformation 	<ul style="list-style-type: none"> • Check multiple expert or authority sites. Utilise both client and school databases to attain holistic view on information 	<ul style="list-style-type: none"> • 3 - Medium Risk - There may be difficulty in ensuring that the information we use is reliable.
<ul style="list-style-type: none"> • Differences in Timezone <ul style="list-style-type: none"> ◦ May cause burnout or lack of focus 	<ul style="list-style-type: none"> • Ensure everyone is able to attend scheduled meetings and have members take notes & minutes of meetings 	<ul style="list-style-type: none"> • 3 - Medium Risk - We will be working with clients operating in different parts of the world

Stakeholders Signatures

Chris Cracknell
Representative of
Grant Thornton (Thailand)

Jean-Paul

Achiraya Hagelauer (Ellen)

