

**FEASIBILITY STUDY AND BUSINESS STRATEGY OF  
CONTINUING CARE CENTER IN BANGKOK**



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entitled  
**FEASIBILITY STUDY AND BUSINESS STRATEGY OF  
CONTINUING CARE CENTER IN BANGKOK**

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Patamas Reslee

## EXECUTIVE SUMMARY

At present, the number of elderly in Thailand has grown rapidly and will continue to do so in future decades with the forecast that in year 2030 Thailand will be a complete aging society (or 20 percentage of population is elderly). The change of social context creates a gap of high demand and low supply in the elderly-related services. Even though, the aging society is a change to Thailand but the model of long-term care, services and a regulation to control quality of care is still in ambiguity. As well as the number of trustworthy services for elderly are insufficient compare to the growing number of elderly.

The study was conducted from October 2016 through April 2017. The aim of this study was to determine the feasibility of the nursing home service and formulating the business strategy as the continuing care center.

The first part is the feasibility study of elderly facility project. The analysis was evaluated by qualitative and quantitative data, which concerns in the industry. The evaluation is based on the factor of elderly profile in Thailand and the demand of elderly care facility in Thailand. And the in-depth interview was conducted with 30 numbers of interviewee in Bangkok as primary market area, to identify the perception of nursing home. The result came out as consistency as the secondary data review that new generation is more acceptable and planning to utilize the elderly care services, they also willing to pay for higher price for more qualified healthcare service. This feasibility research is determining the factor of market and demand for this service, operation, and technical study with the potential site selection.

The second part is business strategy. This part contains business feature, marketing plan and operation plan. I also analyze the financial forecast and the outcome is satisfied. The primary market area serves as my target groups where the priority group is medium to high income within 20 km from the site and the secondary group is more broaden to the population in Bangkok and its vicinity, the medical tourism, and day-to-day elderly service.

## **EXECUTIVE SUMMARY (cont.)**

The project is separated into 3 services of the continuing care center, the medical clinic, and the healthy restaurant. The capital investment is 75 million THB divide into 35 million of owner's equity and 40 million of long-term loan with interest rate of 7%. If the project is operated as the plan, the break-even point of this project is within 3.9 years which means if the scheduled operating plans is competent, the service will be launched in June 2018, by April 2022 the project will be break-even and the initial rate of return is 23% that means the project is profitable.

In the worst-case scenarios, the possible situation is labor shortage which would be able to solve by contract-scholarship program, the cost of program is planned for 1 million THB and the project still be break-even within 3.11 years and the initial rate of return is 22% with the net present value of 94,245,523.76THB. Alternatively, another risk of lower consumption rate than expectation for 15%, the project will be break-even within 4.89 years and the initial rate of return is 17% with the net present value of 70,498,186.70THB. However, the contingency plan is already introduced to ensure the management strategy.

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# CHAPTER I

## INTRODUCTION

### 1.1 Purpose and Intention of the Project

The purpose of this analysis is to identify feasibility and potential possibility that are appropriate for the development of nursing home targeted medium-income to high-income family that has older adults (age 60 and over). The feasibility analysis will be utilized for internal decision-making process in order to perform the elderly care facility project. The intended user of this report is the continuing care center named “The Habitat” project. The use of this report by any other user may invalidate the analysis.

### 1.2 Scope of the Study

In order to analyze the market, I have inspected the different development sites, the neighborhood, and the general market area from October 2016 to April 2017. I have analyzed demographic makeup of the market and its immediate area. In addition, I have surveyed all of the comparable residences in this market area to assess typical demand and rental rates in the Primary Market Area (PMA). I believe that most or all discoverable and pertinent market information has been obtained and considered. The analysis was evaluated by qualitative and quantitative data to prepare this feasibility study, the considerable information was collected from target group of customers, local residents, comparable residences’ administrators, and project stakeholders concerning the near-and-long term needs of the elderly and the vision of senior care facilities.

For this project, I first performed a market analysis scoping in Thailand and specifically narrow down to Bangkok and its vicinity (Nonthaburi, Pathum-Thani, Samut-Prakan, and Samut-Sakorn) which would determine the demand, if any, for elderly care facility. After I verified that there was a demand for elderly care facilities, I examined the potential site to decide the best location for the elderly care facility. My consideration is on the factors of the accessibility, visibility and services, time to start the business,

transportation, and potential user and conclude the best location for the project. I gathered information on comparable, both in the primary market area (PMA) and in the surrounding area to ascertain the number of bed units, facilities, and the market rental rates for each comparable residence in the market. This analysis is considered within a distance of 20 kilometers of each site.

As a part of this project, I have obtained and verified data with local market participants (entrepreneurs and their employee of comparable residences) to search and analyzed on data of the elderly care facility and its similar concept research, based on my knowledge of business management from CMMU and advise from my advisors. The scope of this analysis included a physical inspection of the sites, in-depth interview of potential users, and an analysis of social and health trends in Thailand. The business strategy is formulated after the result from feasibility study to determine the possibility accomplishment forecast with the tools of financial analysis, marketing, operational and situational analysis, aiming to create a business strategy that will be able to capture the target group of customer.

This study is one of the decision-making factors in order to invest in continuing care center by analyzing the feasibility, estimated cost and return in order to study the value and a possibility of the investment.

The analysis has accordingly been completed under the assumptions and limit conditions presented in this report only.

### **1.3 Problem Statement**

At present, Thailand's demographic shows that our society is shifting from younger to older age structure phenomenally, which means that Thai's society is moving towards the elderly society. Moreover, elderly care systems in Thailand is undergoing a change, both in family values and in the consequences that come with a modernizing society, however Thailand is still a country with traditional family values and the care is mainly held within the family. Despite the numbers of elderly care facility are increasing due to the change of social structure and the expansion towards modernized society, where male and female have working responsibility, effecting the social context as well. In order to maintain the safety of the older family members, elderly care becomes a great selective

choice. Additional to the reason, medical services, support services and knowledge for the elderly care are still insufficient in the communities.

Despite the great importance placed on family care in Thai culture, care services are in high demand as an aging population grows and the working age shrinks. Young generations now have to work harder, therefore the time they have to care for older family members is insufficient. Thai culture places great importance on caring for older family members, the social norm is to reverse care to their parents, the time spent by adult children on taking care of parents has fallen. As they face more opportunities and more economical pressure, especially in municipal e.g. Bangkok and vicinity area, the situation of working away from family and hometowns is higher.

The National Committee of the Elderly has found the rate of Thai elderly that are leaving alone and require the healthcare services, high risk of fall due to commuting and time constraints and a lack of assistance is gradually increase annually. These reasons reflect an opportunity to expand elderly care businesses in the future.

Having said that, the opportunity of the elderly-related facilities is still high due to the number of elderly-related goods and services is rising discordantly to the demand of consumption.

#### **1.4 Objective of the Study**

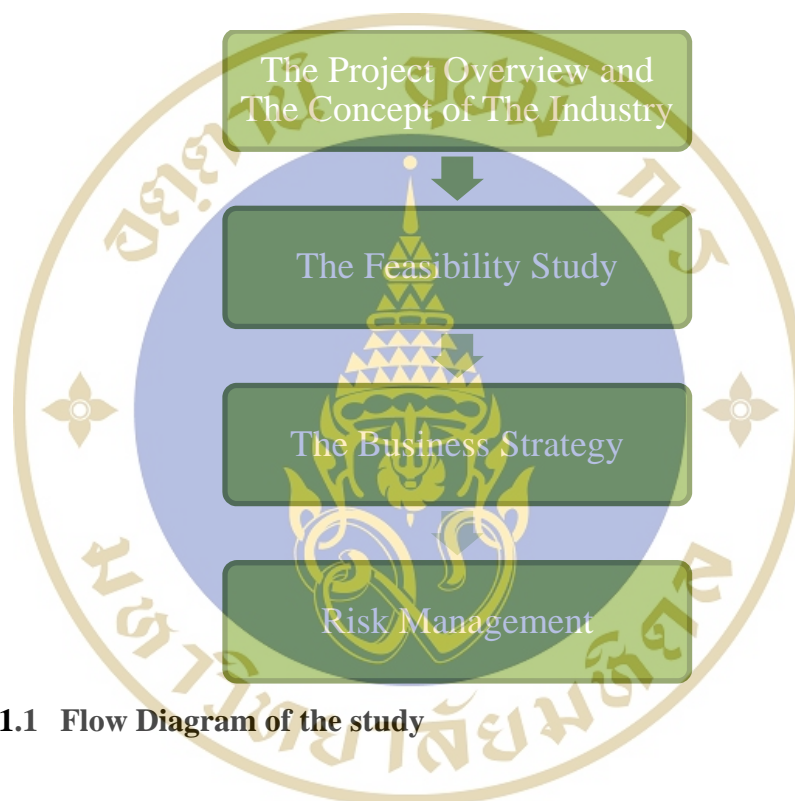
After formulate the purpose of my study I divide the study into two research topics that together will explore the possibility of elderly care facility in Bangkok, Thailand. The research questions are as follows;

1. To analyze and evaluate the possibility of the continuing care center project in Bangkok by using a feasibility analysis.
2. From the evaluation, The potential business strategy formulate to manage the continuing care center in Bangkok that matches the demand assessment for the achievement of the organization.

## 1.5 The Expected Benefits

1. The undertaking possibility of the continuing care center project.
2. The data in this analysis is a part of the decision making process to invest in the continuing care center project.

## 1.6 Flow Diagram of The Study



**Figure 1.1** Flow Diagram of the study

## 1.7 Definitions

1. Acute Care: A branch of secondary health care where a patient receives active but short-term treatment for a severe injury or episode of illness, an urgent medical condition, or during recovery from surgery. In medical terms, care for acute health conditions is the opposite from chronic care, or longer term care
2. Aged Society: Society with a population over the age of 60 and over more than 10 percent of the total population (age 65 and over more than 7 percent)

3. **Bed bound:** A bedridden person or a person who unable to leave bed for some reason and cannot perform essential daily activities by themselves.

4. **Business Strategy:** The set of strategic statements. It is a summary of how the company will achieve its goals, meet the expectations of its customers, and sustain a competitive advantage in the market.

5. **Continuing Care Center:** A facility that incorporates multi types of the institutional long-term care facilities.

6. **Continuum of Care:** A system that guides and tracks patients over time through a comprehensive array of health services spanning all levels and intensity of care. It covers the delivery of healthcare over a period of time, and may refer to care provided from birth to end of life

7. **Complete Aged Society:** Society with a population over the age of 60 and over more than 20 percent of the total population (age 65 more than 14 percent)

8. **Daily Living Activity:** The routine activities that people tend do every day without needing assistance. There are six basic activities: eating, bathing, dressing, toileting, transferring (walking) and continence.

9. **Elderly:** The population completed 60 year of age and above (Thailand).

10. **Feasibility Study:** An assessment of the practicality of a proposed project or system

11. **Hospice Care:** A type of care and philosophy of care that focuses on the palliation of a chronically ill, terminally ill or seriously ill patient's pain and symptoms, and attending to their emotional and spiritual needs.

12. **Home bound:** Elderly who can perform basic essential functions in their home, but have limited mobility and cannot easily venture outside their home

13. **The Institutional Long-Term Care (LTC):** A continuum of medical and social services designed to support the needs of people living with chronic health problems that affect their ability to perform everyday activities. Long-Term Care services include traditional medical services, social services, and housing.

14. **Nursing home:** The institutional long-term care facility that providing residential accommodations with health care, especially for elderly people.

15. **Primary Market Area:** The major area of sale and distribution for the product or service



16. Universal Design: A design that takes into account the usage of the value for money benefits coverage for everyone, such as the elderly, the sick, pregnancy woman, dwarf, small children and people with various type of disabilities.

17. Well elderly: Elderly who can perform essential daily functions in their home and be able to perform social relations outside their home.



## **CHAPTER II**

### **PROJECT OVERVIEW AND CONCEPT OF THE INDUSTRY**

#### **2.1 Secondary Data Review**

Base on several researches that aimed primarily to investigate the feasibility study affecting the successful of nursing home for elderly people and the factors affecting the selection of nursing homes in Bangkok. In conclusion, the research of Kieatchai V.(2010) on the topic of The strategy for innovative business services for elderly has shown that in Thailand, elderly service facilities can be divided in 3 categories of public sector services, institution or foundation services, and private sector services that majority are nursing home project for the aging group of population. In additional, the demand of services from each group of elderly age is also different. The early stage of elderly (age 60–69) or well elderly mostly continue their effective performance of working and still enthusiastically enjoy the out-going activities, the intermediate stage (age 70-79) or home bound elderly is in more demanding for assistance and start facing the difficulty of physical challenges, and the ending stage of elderly (age 80 and above) or bed bound elderly is weaken in performance and losing their ability, this group of elderly will require full-time assistance. Generally, Thai elderly wants warmth, generosity and attention from family members. Darunee T. (2010) researched on the policy and the management systems comparing Australia and Thailand, the conclusion is Australia systematically develop and prioritizing the strategic plan for elderly continuously. Government of Australia surveyed the demand of elderly facility then implement the solution and keep updating to match the global context. In Thailand, major supportive facilities for elderly are provided by government and private sector providers, profit-preferred organization and non-profit organization, are managing the mainstream facilities. Majority of government's actor are for social benefit and elderly welfare by community-based care program, support strong community systems. Another secondary data from Health Systems Research Institution, by Watinee B. (2011) topic of the private aged care provider in Thailand and the service management. The result reflected the 6 groups were profit-liked

hospitals, non-profit hospitals, welfare organizations (partly charging fees or no fees), the accommodation for the aging population, the nursing homes and the nursing aid training schools, found 95% of the direct users and financial supports of elderly care facility were satisfied with what they received and willing to pay for the standard of care provision. The elderly who lived with their family and needed elderly care tended to hire the certified caregivers, nurse aides, who had attended short course training from registered schools. A number of schools aimed to provide training programs were increasing based on evidence of growing number of schools or facilities being in the process of registration. The private care providers are also important for the elderly care service. Nowadays when the social context changed and 2nd generation, or adult children have a responsibility to support the family, the role as financial supporter becomes dominant and the role as family (unpaid)caregiver are recessive. The private sector caregivers are able to fulfill the requirement of elderly care, and government will be able to concern on training, educating and controlling the standard and quality of care. The service fee that was charged will be different depends on the severity and the demand for care, then result further asked for the worth-payment of the private sector fee compare to the service they received, most users gave positive feedback with the reason of they feel that the care providers are professional and give a good care to them. An Investigation of the Marketing Mix Factors Affecting the Selection of Nursing Home for Elderly People in Bangkok by Thitaree N. (2013), the results indicated that the marketing factors of product, price, place, people, and physical evidence had an influence on the selection of nursing home for elderly people in Bangkok. It also reflected the social perception of nursing home are different from the past, as long as the facility is innovated, up to standard, provide a good quality of care, price transparent, and qualified by law and regulation, they are acceptable and willing to pay that they said to lower the risk of unattended conditions for elderly in their family. The future of family supports for Thai elderly: Views of the populace by John Knodel (2012) revealed that family members are relying on paid caregivers as substitutes for children is also a potential solution affordable and acceptable to the parties involved. In addition, the research found the acceptance of communication technology from the elderly is high. The benefit of ability to contact their family members who live at a distance made them happy. Near elderly parents seemed pleased to be able to keep in touch with their children in this way. Future

advances in communication technology as well as the spread of home computers are likely to increase the ability of parents to keep in contact with their adult children who live at a distance.

## **2.2 The Importance and Potential of The Business**

From the predictions of Thai population, prepared by the National Economic and Social Development Board (NESDB), covered the year 2001 B.C. to 2030 B.C. found that population in Thailand is likely to increase at a declining rate due to the fertility decline. The proportion of junior population decreased, the ratio of working age population growing rate has been decline also the proportion of elderly population has been increases. Referred to data from the National Statistics Office in year 1994 shows that 6.8% of populations in Thailand are elderly people and increasing continuously. From 2002, the data has shown that 9.4% of population in Thailand are senior and increase to 10.7% in 2007, 12.2% in 2011, and recently in 2015 found that, the number of seniors age 60 years and above reached to 14.72% of the total population. Furthermore, we specifically consider Bangkok and its vicinity of Nonthaburi, Pathum-Thani, Samut-Prakan, and Samut-Sakorn, the data has shown that the proportion of the population aged 60 and above was accounted for 14.59% or approximately 1,367,976 people and to be 25% of the country's population in 2030, which will make Thailand a complete aging society. The number of elderly in Bangkok and area around Bangkok found that the proportion of seniors as follows

**Table 2.1 The proportion of the elderly by gender and area in 2015**

AREA	Total population in the area	age (year)	male (person)	female (person)	total (person)	Percentage of total elderly population per population in the area
bangkok	5,512,829	≥ 60	375,406	523,353	898,759	16.30
		≥ 65	243,943	353,266	597,209	10.83
nonthaburi	1,126,647	≥ 60	69,007	89,729	158,736	14.09
		≥ 65	45,674	58,136	103,810	09.21
pathum-thani	1,035,415	≥ 60	47,313	62,923	110,236	10.65
		≥ 65	28,752	39,787	68,539	06.62
samut-prakan	1,203,422	≥ 60	59,194	80,585	139,779	11.62
		≥ 65	36,125	51,253	87,378	07.26
samut-sakorn	496,466	≥ 60	25,814	34,652	60,466	12.18
		≥ 65	16,425	22,897	39,322	07.92
Bangkok and Vicinity	9,374,779	≥ 60	576,734	791,242	1,367,976	14.59
		≥ 65	370,919	525,339	896,258	09.56
nationwide	64,219,585	≥ 60	4,186,623	5,267,154	9,453,777	14.72
		≥ 65	2,775,419	3,623,161	6,398,580	09.96

Table 2.1 shows the trend of rapid increase in the number of seniors in Thailand is entering an aging society in the full form, hence the demand for the goods and services on the elderly will be increased including the service and housing for older people who are unable to perform daily activities themselves.

Since the elderly are physical, psychological and social changes, also when a person becomes older, one would face a limitation of abilities in example their height will be reduced, loss of muscle strength, slower movement pace and able to walk a short step only. Because of all the symptoms above, there could lead to a state of depression and anxiety, and the conditions of non-communicable diseases (NCDs) including diabetes, heart failure, and kidney failure. Although nowadays there are many technological advances to treat diseases and conditions of the elderly in order to prolong the life longevity but the deterioration of body's function have their own times. The elderly would come across the situation where they find the difficulty of movement, loss their appetite, or dysphagia suffer from degenerative conditions of the taste buds on the tongue, therefore the higher risk of food aspiration or choking might happen and will leads to a

lung infection. Some may be throat drilled and mucus drainage to help aspiratory systems. Moreover, it is difficult to maintain hygiene, some are bed-ridden patients unable to help themselves and require to intake nutrient through a tube. The elderly with mentioned condition as above requires personnel care with medical knowledge. Well living habits for the elderly must be unique in order to accommodate the condition of the elderly. When entering aging period, senior needs attention from others, needs to be a part of family and society, including participation in social activities.

The above-mentioned situation has resulted in increased demand for goods and services for the elderly. Including facility interior design, this should be considered with regard to safety of the elderly or Universal Design. The proper design makes family members of elderly has to pay more, to modify the current housing space to be suitable for senior family members, also there are the cost of hiring staff to make sure senior family member would have an appropriate care.

The research for products and services for the elderly in Bangkok and nearby area found that, the numbers of standardized elderly services are inconsistency increased compare to the number of elderly. Even though elderly population increased steadily, but the businesses and services specifically for elderly still maintain a small quantity compared to the increasing number of senior population.

Because the social context is changing, not only dominant adult children, family leaders, are the only person who has income, the recessive, other members, take care of housework and well-being of all family members, but in today's society family members are obliged to work outside. The major problem is lacking of time to care for the elderly who need special care, elderly feels that they are a burden of the family, and the stress of responsibility overloaded for a caregiver. Hence, the challenge is unpaid caregiver, as family members that provide the majority of long-term care for older parent, are responsible for a variety of tasks, ranging from household chores to personal care and complex medical regimens. Care giving can result in high levels of stress, depression, and other physical and emotional manifestations known as “caregiver stress syndrome.”

It is difficult to predict the progression of an elderly's health. Health care needs that initially seem manageable can develop into more serious conditions requiring constant attention Without supervision, issues such as dementia, incontinence and restricted

mobility can pose major health risks to an elderly. Family member to perform as unpaid caregiver and less medical knowledge might not suit for the demands of managing medications, keeping track of doctors' appointments, coping with changes in behavior, and lifting and moving a parent.

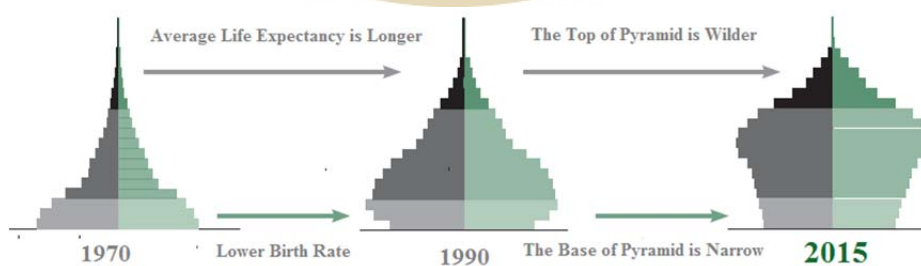
## 2.3 Elderly profile in Thailand

There are several components that must be looked at when compiling a comprehensive elderly profile for PMA;

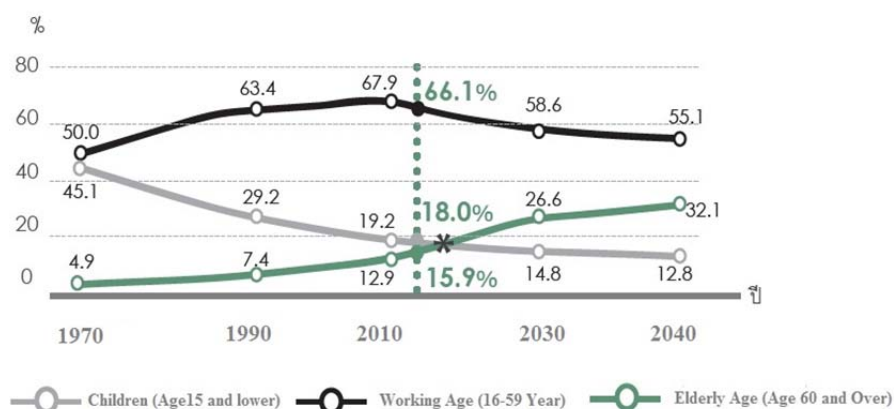
1. Population – Trends and Demographics
2. Household Income and Saving
3. The Family Unit and Care Ministration

### 2.3.1 Population

From 20-30 years in the past, the annual growth rate for Thailand's population increased at a much slower rate when compared with 40-50 years ago that was over 3%. As of 2015, that growth rate had declined to only 0.5%, and the rate is projected to decline further, resulting in a peaking of the total population at 67 million Thais in the next 15 years, and then actually declining to about 64 million in 30 years from now. Despite the stabilizing of the size of the Thai population, the age structure is changing radically as shown in Figure 2.2



**Figure 2.1 Thai Population Pyramid**



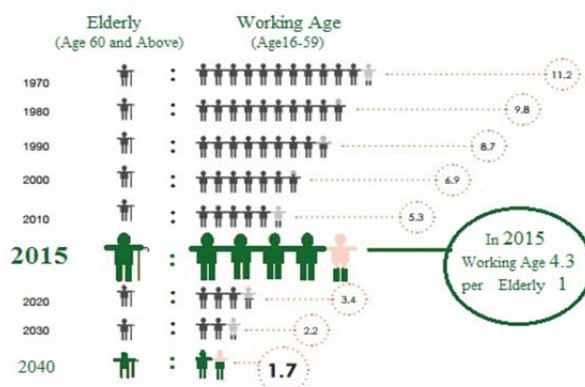
**Figure 2.2 Population of Children, Working Age, and Elderly Age**

Source: Situation of the Thai Elderly 2015, NESDB

As fertility declines and longevity increases, the population pyramid begins to transform, as the base narrows and the upper sections broaden. Figure 3, The population ratio is fast growing, from 50 years ago the elderly is only 5 percent of total population, in 2015 the elderly age is 16 percent and forecast to be 32 percent within 25 years. In 2015, the working age is 66.1 percent compare to children 18 percent and elderly age at 15.9%. In 2019, will be first time out of Thai history, that elderly age outnumbers children.

One indicator is the elderly ratio, from Figure 4, which is the number of the population in the working ages (15-59 years) divided by the elderly population (age 60 years or more). In 2000, this ratio was 7 working age to 1 elderly population and in 2015 the ration declined to only 4 to 1. It is projected that the ratio will continue to decline and reaching the ratio at 2 working age to 1 elderly in the coming 25 years





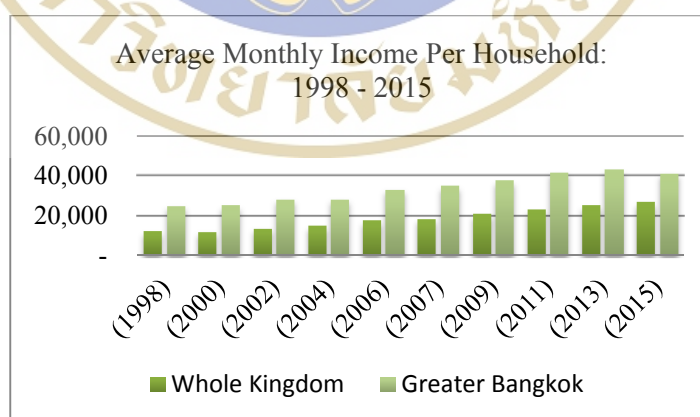
**Figure 2.3 Elderly Ratio**

Source: Situation of the Thai Elderly 2015, NESDB

Therefore, when considering short-term demand and long-term sustainability, an analysis of aging population rate and age data are a component to prepare for the future expectancy.

### 2.3.2 Household Income and Saving

The population base served by the facility must have sufficient income to utilize the facility and be engaged to ensure the success of the project. The following definition of average monthly income per household will project the clearer analysis;

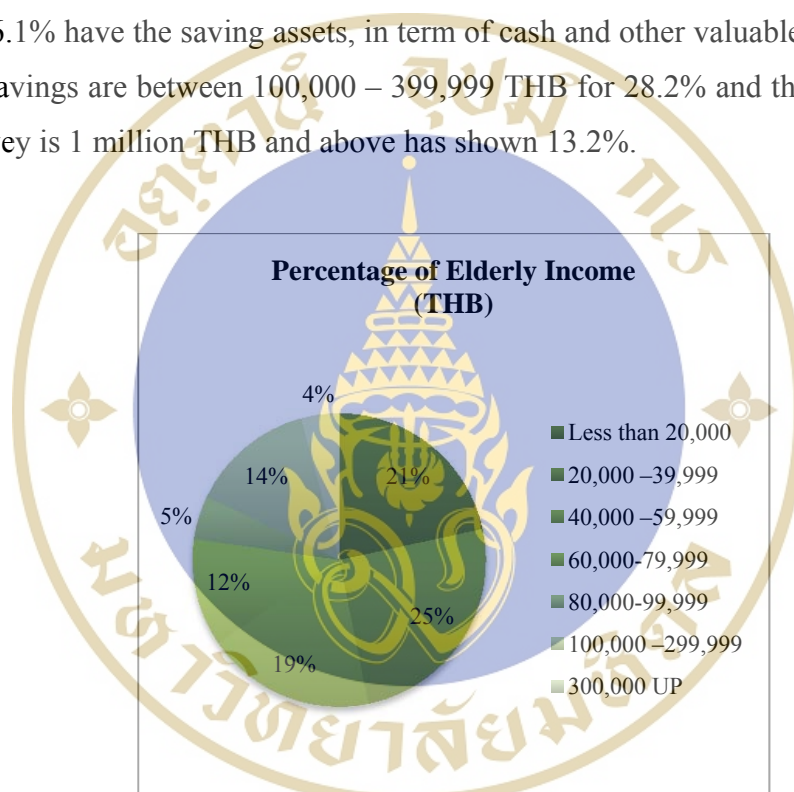


**Figure 2.4 Average Monthly Income Per Household from 1998 – 2015**

Source: Household Socio-Economical Survey, NSO (Greater Bangkok refers to Bangkok and vicinity)

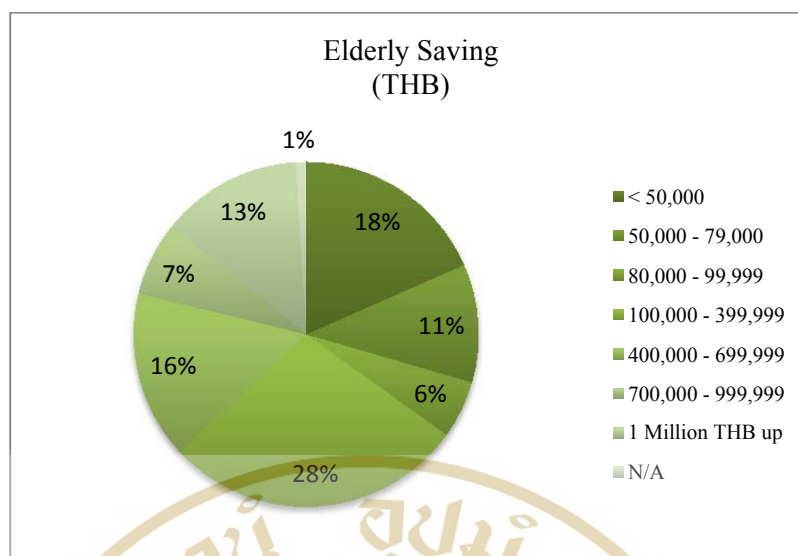
Figure 2.5 is the average monthly income per household, reflecting the purchasing power and Greater Bangkok. The research found out that the purchasing power of Greater Bangkok is almost double the purchasing power of the whole kingdom. In 2015, the average monthly income of Greater Bangkok is 41,005 THB and the whole kingdom is 26,915 THB.

Figure 2.6 is reflecting the survey from 2014 of older person in Thailand shown that only 4% of elderly that the income is more than 25,000 THB monthly. On the other hand, the data further revealed that only 23.9% of elderly does not have saving, other 76.1% have the saving assets, in term of cash and other valuable assets. Majority of the savings are between 100,000 – 399,999 THB for 28.2% and the highest rank of the survey is 1 million THB and above has shown 13.2%.



**Figure 2.5 Percentage of Elderly Income**

Source: The 2014 survey of the Older Person in Thailand

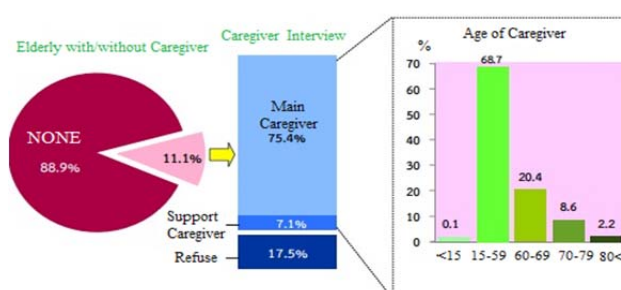


**Figure 2.6 Percentage of Elderly Saving**

Source: The 2014 survey of the Older Person in Thailand

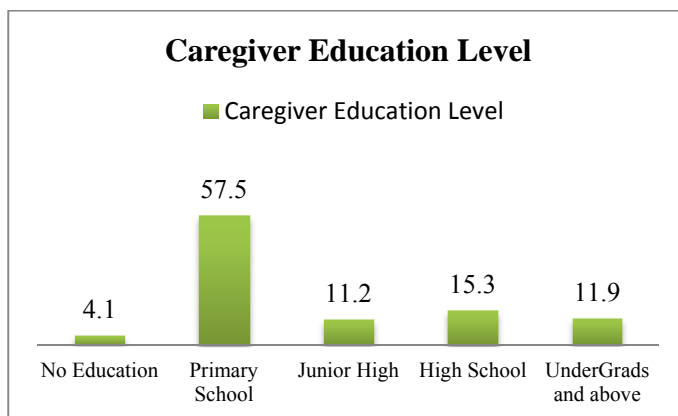
### 2.3.3 The Family Unit and Care Ministration

The survey from 2014 of older person in Thailand by NSO found the situation of elderly care ministration and assistance in family is changing. The elderly are mostly without caregiver for 88.9% and 11.1% of elderly with caregiver. The caregivers are dividing into two types of paid-caregiver and unpaid-caregiver. From the survey, majority of caregiver are high school educated. The unpaid-caregiver is referring to the family member who remains with the aging parents, mostly they are not trained to take care of the aging group of people, they can assist in basic daily activities. The main caregivers are daughters (42%), spouse (28.7%), son (13.2%), and the in-laws (5.6%).



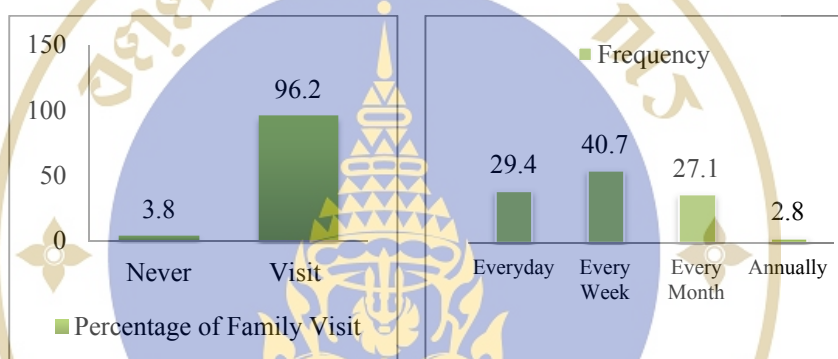
**Figure 2.7 The Percentage of elderly and care ministration and Age of Caregiver**

Source: The 2014 survey of the Older Person in Thailand

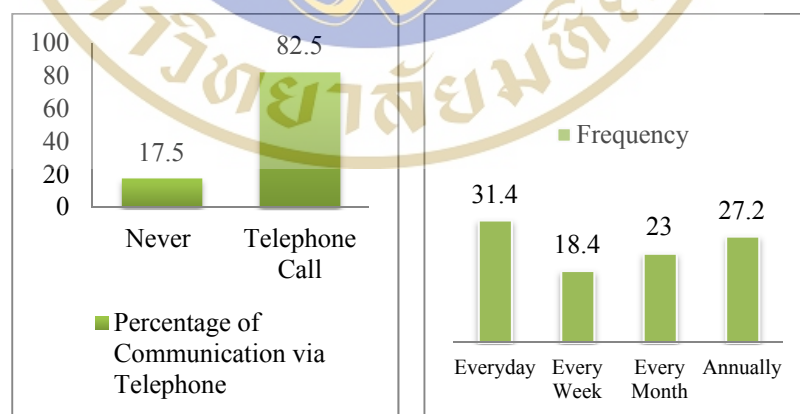


**Figure 2.8 Caregiver Education Level**

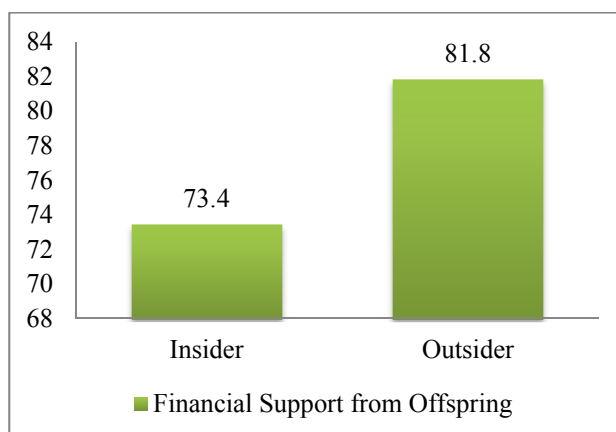
Source: The 2014 survey of the Older Person in Thailand



**Figure 2.9 Percentage of Family Visit after Moving Out**

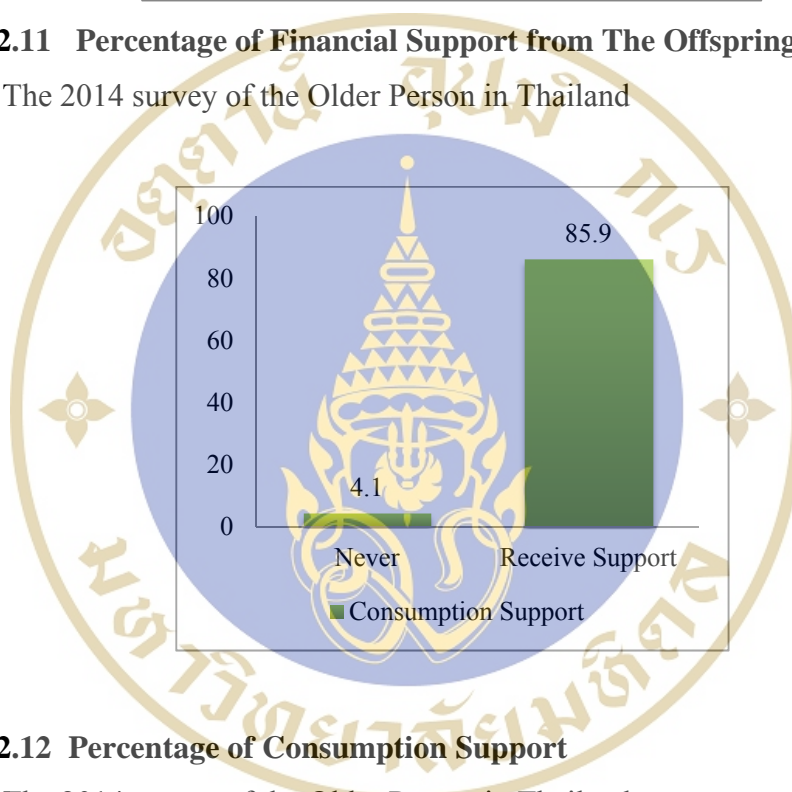


**Figure 2.10 Percentage of Communication via Telephone**



**Figure 2.11 Percentage of Financial Support from The Offspring**

Source: The 2014 survey of the Older Person in Thailand



**Figure 2.12 Percentage of Consumption Support**

Source: The 2014 survey of the Older Person in Thailand

Moreover, from Figure 2.10 – Figure 2.13 reflects the relationship in the family unit and the relationship interaction. The research found out that majority of the elderly still gain support from their children and the main financial support is the offspring that moved out. The common ground of the relationship interaction between family members, from the adult children after moving out from family, is usually a face-to-face visiting and communication via telephone.

## 2.4 Understanding Elderly Care Industry

At the moment, due to numbers of aging population are rapidly increasing around the world and the demand of such are various. This issue has made the number of different types of senior housing facilities, as well as a range of services offered by the varying types internationally. It's important to know the terminology and the differences between senior care solutions that are categorized to identify the type of the project and facilities' offered.

First, to understand senior care industry, we must differentiate between hospital and nursing home.

- Hospital is a health care center where people are admitted because of accidents or various diseases.
- Nursing home is a kind of housing health care provider where young or elderly people are taken care of for certain period of time or even lifetime.



**Figure 2.13 Model of Care Facilitator by Acuity of Patient**

Hospital service is referred to as a medical treatment facility. A hospital can be a private or public sector building where patients are admitted for treatment. It is a health care organization, which provides patients with treatment by expert staff and equipment. It is largely managed by professional physicians, surgeons and nurses. People admitted to a hospital require acute medical services. It is a 24-hour health center where patients are admitted for treatment of various diseases. There are two types of patients, outpatient and inpatient, an outpatient is treated in the hospital as a patient that has visited the hospital for consultation. Whereas, an inpatient is treated in the hospital only after admission.

A nursing home is the institutional long-term care (LTC) means the facility for people who don't require to stay in hospital but can't be cared for at home. It is

basically a small classified housing accommodation with health management to the assistance-needed group of customers that require a potential to maintain their service for at least 3 months and/or above, especially for elderly citizens. Nursing home is also known as intermediate care and can be categorized by the facility type.

The staff may provide medical care, as well as physical, speech and occupational therapy like a hospital. They try to have a neighborhood feel. The special care unit is also served for people with serious memory problems such as Alzheimer's disease. It is for anyone who requires a special treatment 24/7. Nursing homes offer assistance in daily living activities e.g. the custodial care like bathing, getting dressed, and eating. The care is provided by specially trained professionals, such as physical, nurse, and nurse aid.

The institutional long-term care (LTC) is incorporate in all dimension of social-life, health care, economical, and environmental for those with difficulties from NCDs or disabilities. The care giver in LTC can be described in 2 categories that usually perform differently divide by the medical knowledge of

1. Medical Caregiver – the caregiver that already has medical knowledge to taking care of elderly and/or disabilities.
2. Non-Medical Caregiver – the caregiver which only assist elderly and/or disabilities in daily activities, normally are family members, relatives, or neighbors. If we separate by the context of service, we can also divide the service facility into 2 types as
  3. Institutional-based care – The care provider that perform the service in specific facility type
  4. Community-based care – The care provider is normally trained to look after elderly or disabilities only in their daily living activities

In Thailand, the official facilities for elderly are government or NGOs' assisted livings (or the elderly's shelter), which normally are non-profit organization and the service is not fully covered the demand of assistance for elderly's condition. Another type of service is private care nursing homes, which the key players in this industry are hospital, medical personnel and nursing aid agencies.

## 2.5 Facility Type

Generally, from The United States of America, the concept of elderly care facility can be broken into the following types divided by the continuum of care for elderly, however to match with Thailand's elderly care facility are slightly different as followed;

1. Active Adult – Generally age 55 and above, unaffiliated with health-care services (though generally close by), for older adults who are able to care for themselves fully. Usually at this stage is called “Silver Age” where they are still perform with active life style. This type of facility usually provides a large space for outdoor activities and less concern high-risk related medical treatment. The target market of this type is aging people who choose to stay among their fellows and family members. In Thailand, This type of facility is in normal condominium or village style with Universal Design to lower a risk of accidents.

2. Independent Living/Residential Home – Generally for age 55 and above, affiliated with some type of health-care service, for older adults who can generally care for themselves fully but may have higher health or lifestyle risks. This type of facility requires plenty of space for medical service and outdoor activities. In Thailand, we do have this independent living facility but normally the facilities are located outside Bangkok. However, the location of this facility cannot be too far from tertiary hospital providers in case of any emergency.

3. Assisted Living – A residential care solution with fully integrated health services including supervisory, personal, or directed care on a daily basis for elderly requirement with the additional supports. However, this type of facility cannot provide any medical treatment due to the caregivers is mostly not qualified for medical treatment. Nonetheless, in Thailand, we have a plenty number of this type of facility from 10 units bed to more than 100 units bed owned by nurse-aid certificate entrepreneurs. This type of facility has been spreading widely in Thailand nowadays due to the reason of easy opening and does not require any regulation compensate, however with non-medical regulation for nursing home facility effects on the range and quality of services.

4. Nursing Home - This specialty care is almost exclusively residential (or 24hr home integration) as these more specific, high-risk aging related medical conditions require significant supervisory, personal and medical care on a constant basis. The demand for this type of care would normally require a medical knowledge treatment for 24hr



from registered nurse or medical doctors. With the requirement of treatments from medical doctors or registered nurse, nursing home in Thailand is considered as specific type of hospital which would require to regulate upon the hospital facility law and regulation.

5. Hospice Care – These highly specialized facilities are used during the “end of life” stage, for the extremely terminally ill and near death patients requiring constant care, but with no possibility of recovery or extended life expectancy. This type of service does not exist in Thailand (only in the hospital where relatives or family members are able to sign for Do Not Resuscitate (DNR form) in order to discontinue any relevant treatments that able to prolong patient’s life); however, the trend of hospice care is becoming well-known in society. By encouraging the hospice program readily to physically, emotionally, and mentally prepare to the end-of-life stage.

6. Continuing Care Center – A facility that incorporates some or all of the above types in one facility/campus. In Thailand, we have plenty of this type of facility. The reason is that we do not have specific law and regulation for elderly nursing home even though we have those for medical and clinical facilities. Consequently, the continuing care center is the solution as a mixture types of facility with one rule for unable to operate with any medical treatment unless the business is registered for medical facility only.



**Figure 2.14 Facility Type by the continuum of care.**

In Thailand, we do not have a dividing category for nursing homes as the government regulation are still in blurred lines between hospital service and residential homes. There are no regulations regarding standards and the registrations of these facilities are limited. Therefore, the quality and standard of services are controlled by Thai Elderly Promotion and Health Care Association (TEPHCA) as a private sector and the final penalty is to withdraw the membership of TEPHCA.



## CHAPTER III

### FEASIBILITY STUDY

#### 3.1 Marketing and Demand Feasibility

##### External Factor Analysis: PESTLE

The PESTLE (Political – Economic – Social – Technological – Legal - Environment) analysis is a framework or tool to analyze and monitor the macro-environmental or external marketing environment factors that have an impact on the organization. It gives a bird's eye view of the whole environment from many different angles that one wants to check and keep a track of while contemplating on a certain idea/plan

##### 3.1.1 P-Political

The Thai government is taking the challenges of population aging seriously and may well play a larger role in the future in terms of care provision for the elderly.

1. National Policy on Aging Population: To support and ensure the good quality of life for aging population.

- 500 Thai baht monthly incentives for 60 year-old and above.
- Housing Project for aging population called “Senior Citizen Zone”
- Department of Business Development (DBD) is corresponding with

TEPHCA to support and give advice to retirement facility project.

The mentioned factors slightly effect positively on the advice and maintain standard by DBD.

2. Thailand's 12nd National Economic and Social Development Plan 2017 – 2021 has been announced to support the healthcare industry and the medical hub program that would effect on both opportunity on the wilder market group and threat as the plan will create more players in the market.

To supporting a medical hub plan, government issued the Non-Immigrant Visa “O-A” (Long Stay) or the foreign long-stay visa. This type of visa may be issued to applicants aged 50 years and over who wish to stay in Thailand for a period of not exceeding 1 year without the intention of working.

### **3.1.2 E-Economic**

In year 2016, announced by World Bank and Asian Development Bank, Thailand's GDP grew by 3.2% in 2016, marginally higher than the 2015 rate of 2.9%. Thailand's GDP should grow by 3.5% in 2017 and 3.6% in 2018. Economic strategy plan aims to lift the country's long-term growth path through a program of strategic reform.

The rate of hospital treatments and services are increasing annually, especially a private hospital. The factor is a positive effect as for the elderly long-term of care, the cost of hospital long admission will be high compare to the service as nursing home.

This factor give us an opportunity to provide a service since family members tend to work outside their resident and will have higher purchasing power, which would possibly ensure their senior's safety by purchasing a service for elderly and nursing home business can be one of the options.

### **3.1.3 S-Social**

Demographic model has changed for the past decade; number of aging populations is increasing dramatically. The prediction by Thailand's Statistic Organization has shown that there were an increase number, which would be up to 25% of elderly by year 2050. In addition, the norm of social has changed toward western context on working factors, widespread awareness that family size has substantially declined and that increased migration related to education and employment opportunities are resulting in fewer adult children remaining in the same area as their aging parents. The situations will create a positive impact and opportunity for the nursing home business.

### **3.1.4 T-Technological**

The advances of technology can be either positive beneficial or threat for the industry. The positive beneficial support is medical technology that extend life longevity,

safety technology that fulfill the trust of potential patients and communication technology that increase the ability of parents to keep in contact between family members.

The threat is the artificial intelligence e.g. “Dinsaw” or “DinsawSpond” the elderly care technology as the medical supportive robot that will collect patient’s information and alert to nearby medical assistance in case of emergency.

However, the technology is functioned by human assistance. Also from the secondary data, elderly requires generosity and communication from human.

### 3.1.5 L-Legal

In Thailand, the Sanatoriums Act, B.E. 2558 (2015) is for the medical treatment providers. Nevertheless, no law and regulation has specifically created for nursing home business effects negativity to the business. No barrier to entry regarding the illegal of medical-related providers

The Healing Arts Practices ACT, B.E. 2542 (1999) is controlling the medical staff ethically for the patient’s benefit. To maintain an ethical behavior is a good image for the business.

The Elderly Person ACT, B.E. 2546 (2003) revised B.E. 2553 (2010) is a protection for elderly rights as for the elderly shelter need to conform with elderly physically and mentally. In addition, for financial support, the elderly’s caretaker as family members will have a tax benefit to the maximum of 30,000 Thai Baht per 1 elderly.

The Improvement and Conservation of The National Environment Quality ACT, B.E. 2535 (1992) is controlling the property to not create any pollution or act that able to harm the community. This law forces the organization to submit the environment related effects, and create the cost of management as the required reports e.g. Initial Environmental Evaluation (IEE) needs to create by a certain company and the approval time will take up to 6 months which can delay the operation process.

The effect from legal factor can be both in positive and negative. Positive for the financial support of family members that able to create more demand in the business and can deprive the players that lack of qualification for consumer’s benefit. Negative for no barrier to entry as a elderly care providers because the provider does not require any legal support to offer services. And negative for time length of property legalization and the cost of management.

### 3.1.6 E-Environment

Environment factor is the factor that depends on the organization management. If the organization manages correctly, along with development of property, will affect in a positive way and can be a marketing benefit as well. The quality of service is also depending on this factor and the organization will be a trustworthy in customer's point of view.

**Table 3.1 Analysis of PESTLE Model**

PESTLE Factors	Opportunity		Threat	
	Impact	Likelihood	Impact	Likelihood
<b>P – Politic</b> <ul style="list-style-type: none"> <li>Support and ensure good quality of life for elderly</li> <li>Support Health Care industry and medical hub program.</li> </ul>	Medium  High	Current to Future Current to Future		
<b>E – Economic</b> <ul style="list-style-type: none"> <li>Economic strategy plan aims to lift the country's long-term growth path through a program of strategic reform.</li> <li>The rate of treatments and services in private hospital increase annually.</li> </ul>	Medium  High	Current to Future Current to Future		
<b>S – Social</b> <ul style="list-style-type: none"> <li>The number of aging populations is increasing dramatically.</li> <li>The increased migration related to education and employment opportunities</li> </ul>	High  High	Current to Future Current to Future		
<b>T – Technology</b> <ul style="list-style-type: none"> <li>The advances of technology in term of medical treatment, safety, and communication.</li> <li>The AI technology e.g. Dinsaw</li> </ul>	High	Current to Future	Low	Future
<b>L – Legal</b> <ul style="list-style-type: none"> <li>The Sanatoriums Act</li> <li>The Healing Arts Practices ACT</li> <li>The Elderly Person ACT</li> <li>The Improvement and Conservation of The National Environment Quality ACT</li> </ul>	Low  Medium	Current Current	Medium  Medium	Current  Current to Future
<b>E – Environment</b>	High	Current to Future		

## 3.2 Operation Feasibility

### 3.2.1 Five Forces Model

Five Forces Analysis assumes that there are five important forces that determine competitive power in a business situation. These are:

1. Threat of New Entrants: The threat of new entrants can be from new player in the industry or the expansion of experienced players e.g. the diversified management of hospital that offers long-term services. Threat of new entrants can be divided to 3 groups of

- Financial Threat: The elderly care service is the service that require plenty of equipment e.g. safety equipment, service equipment, physiotherapy equipment. The maintenance of standard is also important and costly. The service provider will require enough budgeting plan, financial trustworthy and financial liquidity.

- Economy of Scale Threat: Elderly care services are not only in-room service but also outdoor and common-area will be utilized. The maintenance cost of facilities also high volume hence the economy of scale management will be able to lower this cost.

- Operational Threat: The elderly care management is a complicated management. Experience is important for challenges.

2. Threat of Substitutes: Elderly care facility is aimed to taking care of the aging population starts from daily living activities to physiotherapy for the outcome of well-living for elderly patients and duty-relief for family caretaker. However, the health care industry has plenty of categories that can be defined by service activities.

- Hospital Long-Term Care Service is the penetration of hospital service after the medical treatment in acute care is over, hospital can offer the long-term care service to continuing care in hospital facility. The strength of this service is trustworthy service that provide 24/7 care by licensed medical staffs. The weakness is high cost and environment does not comfortable for long stay.

- Family members as Unpaid Caregiver is a care provides by elderly's family members and elderly will be able to stay in their residence. The strength of this substitute is the warmth in family and personalizes the assistance. The weakness is the knowledge of care is limited, a caregiver might stress from elderly's demand, and the in-house facility might not applicable to physical condition of elderly.

- Home-Care Service is a service that provides a nursing aid to assist elderly in daily living activities in patient's house. The cost of home-care service is 11,000 – 18,000 Thai Baht (update March, 2017) depends on experiences. The strength of this service is patient's convenience and cost-saving compare to nursing home facility. The weakness is less medical knowledge, risk of care-error, and risk of owner's safety. In additional, if service is providing at home, a chance of house-renovating to support universal design is high, which create a high cost of renovation.

- Assisted Living Residence is a residential service for early to intermediate elderly with centralized basic medical services. Residence for elderly, who require for assistance on daily basis activities and prefer to socialize among the aging group. The cost of this facility is a house investment cost and various ranges from 2 million to 7 million Thai Baht depend on the project. The strength of this facility is one-time payment (exclude monthly cost of electricity, water supply, and own purpose), elderly can keep their independence and the space of facility is large. The weakness is the assistance is not immediate, house investment is high (and normally not pay-off) and risk of falls and medical-error.

- Assistive Technology for aging care is the assistive devices that were invented for aging care. From a communication to monitor daily performance, the AI is programed to alert for safety and assistance needed, basic health condition monitoring, and time for medication warning. The strength of this service is personalizing function, elderly can stay in their home and family members can monitor them from distance. The weakness is the assistance is not immediate, assistive technology on its own cannot provide human contact and personal care. Many users experience loneliness and social isolation. Form secondary data review, technology should be provided as an addition to contact and care, not as a replacement.

3. Bargaining Power of Customers: Nowadays, information is borderless. Customers are able to seek for information and facility providers profile and feedback. Customers educate their rights and ritual. In additional, customers are able to comment and feedback via social networking. Such mentioned effects the operation plan that has set organization standard of services and activities. The services have to comply with law and regulations that will be able to create a trust from customers, direct user and indirect users.



4. Bargaining Power of Suppliers: Power of suppliers in this industry is a labor force, especially a nurse and nursing aid group. The demand of this group is high compare to other professions in healthcare industry.

The plan for this threat is to create alliance between nursing aid training school and the organization, offer the scholarship program with contract year and maintain a good relationship with licensed nurse in hospital.

5. Rivalry Amount of Existing Firms: Even through the trend of nursing homes is continuing for a certain period already, but the competitive status is still low. The main players mostly are the hospital-penetrated service providers that offer high service fee and another type of provider is nurse-owned or nursing aid-owned facilities which offer the lower standard of care and low service fee.

The existing firms is considered as

- Main players in the market: The nursing home facility is monitored and popular in the past 5 years, however there are the main players that either have their strength by numbers of bed units, in the market for long time, or related with medical services e.g. owned by physicians, or owned by hospital.

Kluaynamthai Elderly Care Center – owned by Kluaynamthai 2 Hospital and located next to the hospital itself. This place offers premium care service, which is the only provider that received international JCI standard, with more than 100 unit beds from its 2 phases of facility.

The Senior Care Center – Owned by a group of medical doctors that able to guarantee their standard of services. The Senior currently has 3 branches in total of 145 unit beds. Geographic location is in Bangkok-Thonburi area (Bangkok-Noi area).

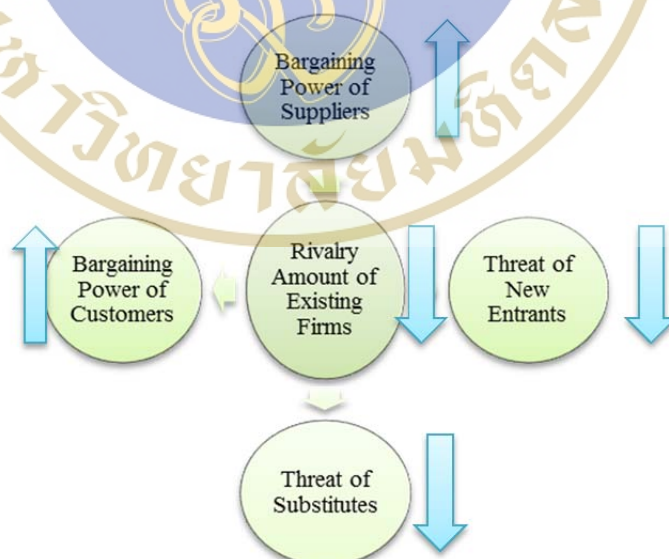
The Golden Years Center – Owned by a group of medical doctors and position to be the elderly hospital with the hospital-alike environment and service fee. Geographic location is in western Bangkok.

Sawanganives living space – The project initiated by Her Royal Highness Princess MaHa Chakri Sirinthorn and managed by Thai Red cross. The project is founded for elderly that do not require 24hr special assistance. This condominium-style elderly accommodation has 24hr nurse station and relaxes space for elderly community. Hence, when the owner comes to last stage of life, the accommodation would return to management to sell and transfer to new owner.

- The nursing home that registered with Thai elderly Promotion and Health Care Association: Thai Elderly Promotion and Health Care Association (TEPHCA) is the association that in cooperates with Ministry of Public Health and Ministry of Commerce. TEPHCA is taking its part to quality control and recommend the nursing homes which already registered or request to register the membership with TEPHCA on the standard of facilities. However the highest punishment of TEPHCA is only withdraw the membership if one does not comply to TEPHCA standard.

From the research, the nursing homes, which registered as TEPHCA membership, are in total of 110 numbers or more than 2000 bed units. If we specific on PMA, would narrowed down the number to 58 numbers with 1375 bed units. However, to be more specific to the facilities that service 24hrs from medical doctor or licensing nurse numbers are dropped to 805 bed units. Nonetheless, the facilities that offer first aid equipment in case of emergency are only 280 bed units. These facilities range in scope of services and location only.

However, the gap between hospital providing service and small player providing service is the service that offer the standardize and individualize care by licensed medical team with the medium fee which is the stage that our organization create.



**Figure 3.1 The Model of Five-Forces analysis**

### 3.2.2 Evaluating the Market for Services

There are many qualitative factors that are important when evaluating a market for senior care facility services such as community support, site location, other alternatives for care, and unique personality characteristics of the area. This study focuses on quantifying the demand for continuing care center services and the components involved in capturing the targeted market. There are six basic components to consider:

1. Primary Market Area (PMA): The PMA for the project is determined by the demographics of the area and the experience of existing providers within the area. Based on the nature of the services, most seniors requiring assisted living services typically originate from within a close proximity of a facility, generally not more than 20-kilometer radius of the facility, but the decision also depends on the facilities that are provided.

Situation of Thai Elderly Report 2014 implied that the current trend in Thailand, number of elderly to live alone or only with their spouse is increasing. The second dynamic in place is the desire of the adult children to have their elderly loved ones remain in or relocate to their community when the time comes for long-term care decisions. Two needs are met when the community can provide for the needs of the elderly person while bringing them closer to the caregiver.

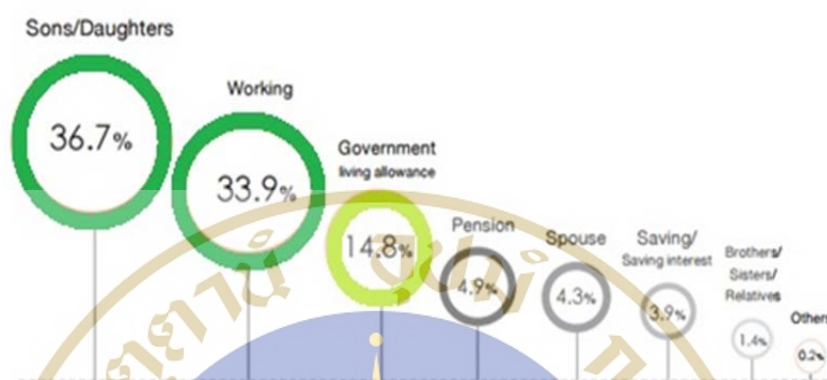
Because of the significant influence that adult caregivers have regarding parental decisions to seek care; many facilities are experiencing higher draw percentages from outside the primary market area, particularly in high growth markets with high concentrations of adult children. Remaining or relocation to be near family is a strong motivator for choice of a resident of an assisted living program.

Therefore, the priority of target group is the medium to high-income family with elderly members living in eastern-Bangkok area where the facility is located. Moreover, secondary group are elderly in Bangkok and vicinity, and medical tourism group.

2. Age Qualification: From the survey, statistics on the percentage of elderly requiring assistance with Senior Care Facilities for ages 65-74 and ages 75 and over is increasing gradually. Therefore, an age qualification of 75 years or older is typically used to measure the demand for a facility in the PMA.

3. Income Qualification: Children remain an important source of income for the elderly at present. The 2015 Survey of Elderly in Thailand found that the principal source (36.7%) of elderly income came from a child (including a foster or adopted child).

The second most common source (33.9%) of elderly income was from work/employment, 4.3% relied on a spouse, and under 4% had primary income from interest income (savings account or other asset with dividends).

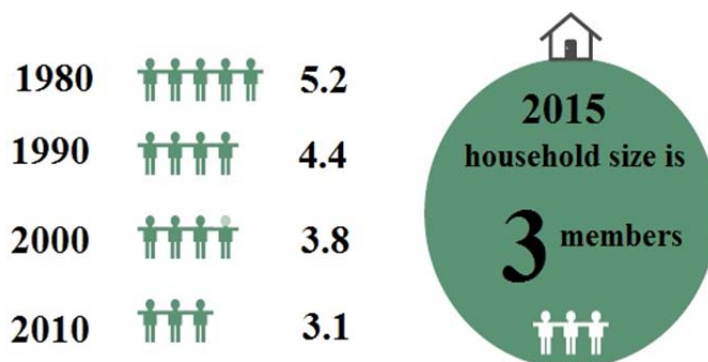


**Figure 3.2 The Elderly Main Resource of Income**

Source: Situation of the Thai Elderly 2015, NESDB

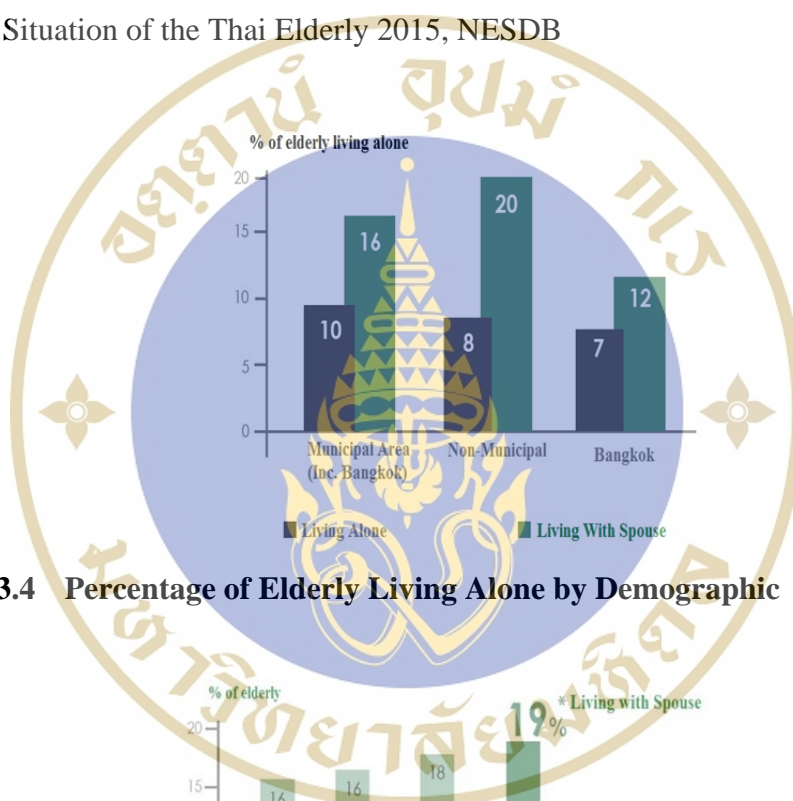
Therefore, the survey indicated that the family members are still their primary payment source. The result implied to the decision making process for choosing facility type for the elderly family members as well, means that not only elderly that authorize to choose the facility but also family members are main influencer and the income supporter for elderly expenses as well.

4. Percentage of Senior Living Alone: The research shown that the pattern of Thai residential living has changed dramatically in the past 2-3 decades as the average size of the Thai household has declined. Thirty years ago, there was an average of 5 persons per Thai household, and declined to 3 persons in 2015. Furthermore, the current trend in Thailand, number of elderly to live alone or only with their spouse is increasing. “Skipped-Generation” becomes more common in community, when the 2<sup>nd</sup> generation are the main family supporter. Usually, this living arrangement is more common in non- municipal area and areas where parents often migrate to find employment, while in municipal area has the higher percentage for elderly that manage own-business and require their descendant to assist.

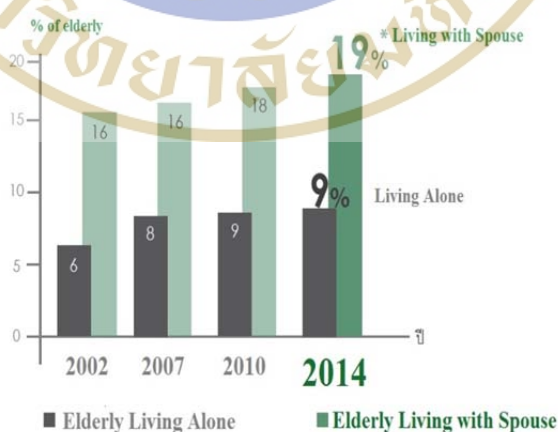


**Figure 3.3 The household size of Thailand**

Source: Situation of the Thai Elderly 2015, NESDB



**Figure 3.4 Percentage of Elderly Living Alone by Demographic**



**Figure 3.5 Percentage of Elderly Living Alone from 2002 – 2014**

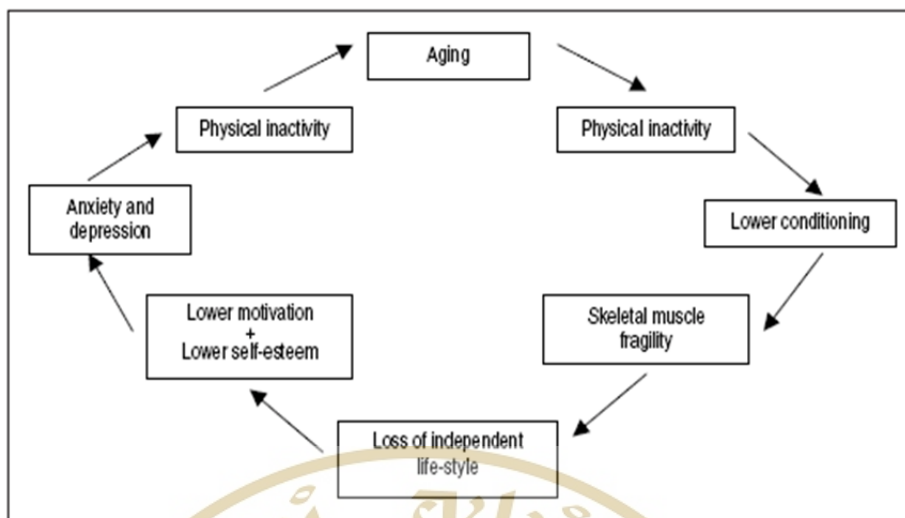
(The proportion of the elderly living with a spouse to the total elderly not including those living alone is 20.6% in 2014)

Source: Situation of the Thai Elderly 2015, NESDB

Figure 3.4– Figure 3.5 shows that in urban and municipal areas there are more percentage of elderly living alone than non-municipal areas. In addition, the same goes to the result that has shown the percentage of elderly living with spouse in non-municipal area is higher than municipal area. This can be implied that if the trend continues, this will cause serious implications for care of the elderly.

5. Elderly Physical and Mental Health Challenges: The natural part of aging is the body and physiology degradation. The elderly are facing higher risk of health problem compare to other age groups in the population. Many conditions are chronic, based on the irreversible decline in healthiness of organs and immune systems. Such conditions include hypertension, diabetes, joint ailments, orthopedic problems, and brain functions problems e.g. Dementia and Alzheimer. These conditions generally produce some level of disability in the elderly and limit the ability to perform daily activities. As the aging population, the generality of these disabilities are expected to increase which will be able to foresee that the elderly situation in Thailand will require more assistance from others depending on the severity of the individual's conditions.

Mental health and emotional well-being are as important in older age as at any other time of life. Mental health has an impact on physical health and vice versa. For example, older adults with physical health conditions such as heart disease have higher rates of depression than those who are medically well. Conversely, untreated depression in an older person with heart disease can negatively affect the outcome of the physical disease.

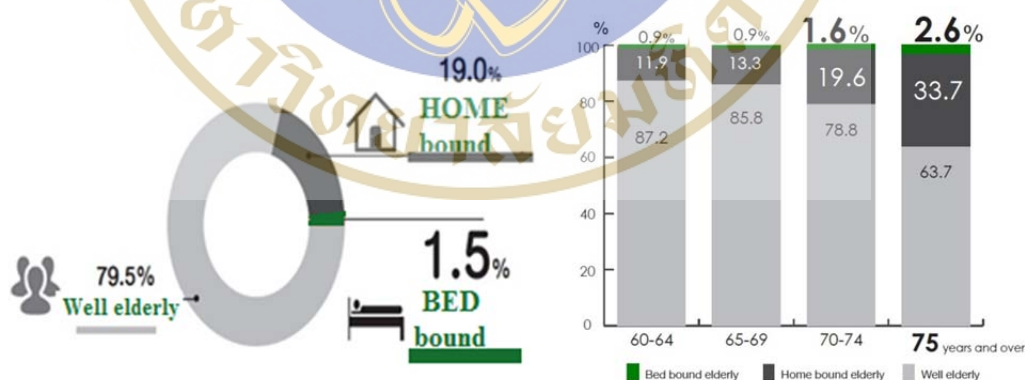


**Figure 3.6 The Vicious Cycle of Aging**

Source: American Physiological Society

6. Percentage of Seniors Requiring Assistance: The research also has surveyed and studied the health status and problem of the elderly in Thailand by using the Health Promotion Program of the Elderly and the Disabled.

The survey found that 1.5% of elderly were bed bound, 19.0% were home bound, and 79.5% were well elderly, i.e., they could function independently inside and outside their home.



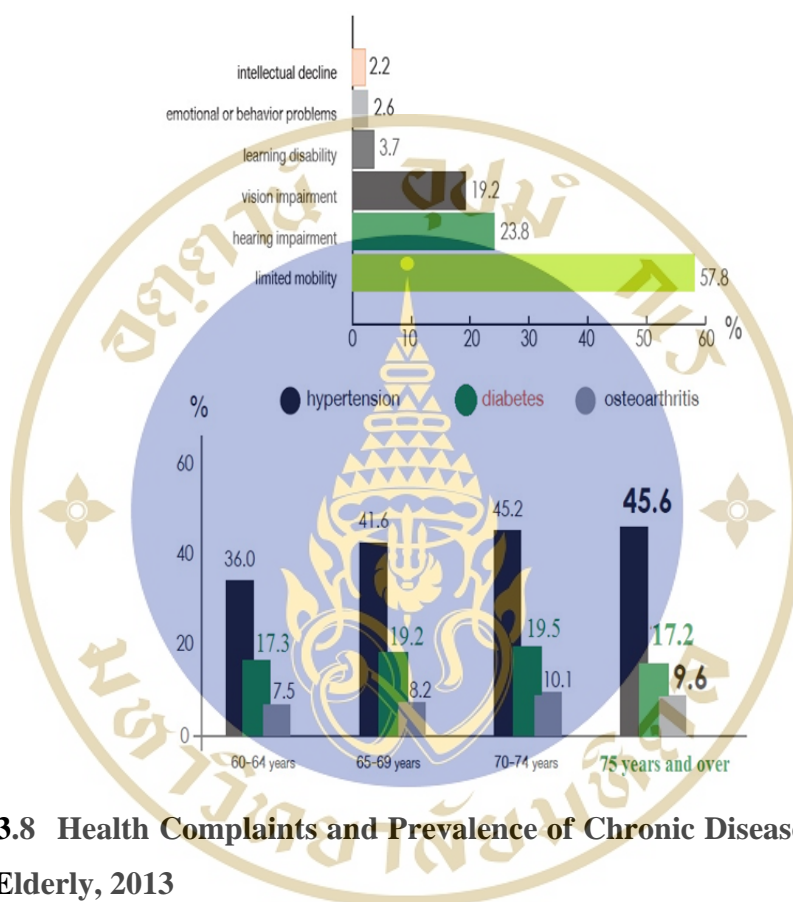
**Figure 3.7 Ability of the elderly to perform daily function, and by age 2013**

source Situation of the Thai Elderly 2015, NESDB

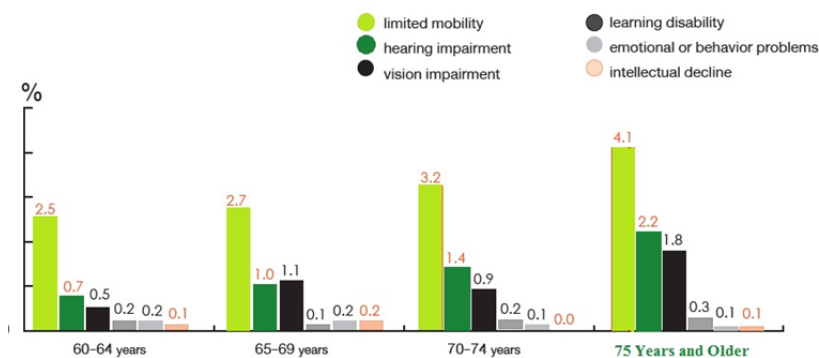
Figure 3.7 shown the most prevalent complaint was limited mobility (57.8%), followed by hearing impairment (23.8%), vision impairment (19.2%), learning disability

(3.7%), emotional or behavioral problems (2.6%) and intellectual decline (2.2%). These complaints tend to increase with age.

Figure 3.8 – Figure 3.9 reflect the health complaints by age and the percentage of elderly requires assistance which both results reflect to same direction that most of the assistance requiring is the elderly age 75 and over

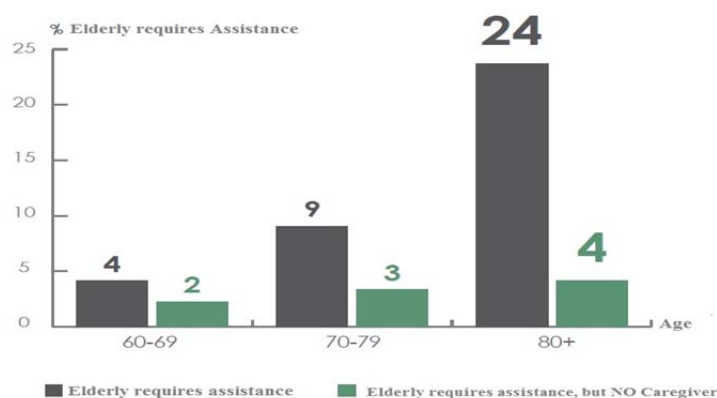


**Figure 3.8 Health Complaints and Prevalence of Chronic Disease by Age Group of The Elderly, 2013**



**Figure 3.9 Health Complaints of The Elderly by Age, 2013**





**Figure 3.10 Percent of Elderly requires Assistance, 2013**

Source: Situation of the Thai Elderly 2015, NESDB

### 3.2.3 Qualitative Information: In-Depth Interview

The interview of this project aims to identify the acceptance and preference of nursing home facilities. The target will be divided to 3 groups and 10 person each group of

1. Direct User: age 65 and above population with monthly income 30,000+ THB.
2. In-Direct User: The adult children that have elderly member with household monthly income 80,000+ THB.
3. Potential-User in the future: A 35-55 year-old population.

The interview aimed to identify the acceptance and preference of nursing home and which factor affecting the selection of nursing facilities in Bangkok and its vicinity. The interview questionnaire was collecting qualitative data in Bangkok, both male and female. The data analysis was conducted along with previous literature reviews.

The results indicated that the perception of nursing homes is changing to more acceptances from the interviewee group. Even though elderly might remain on negative thought but 3 out of 10 are acceptable with the reason of their adult children feelings, if they move to nursing home facility will lower the anxiety of their loved ones.

*“My son is working in Australia, he calls and facetime with me often. Before I moved here, I leave alone and I fell because of my legs condition. Doctor advised my son to find a caregiver to me but I am afraid if I have to stay home with stranger. I chose to be in single room at this nursing home. I have friends and still able to talk to me son too”* (By 72 year-old, female in nursing home.)

*“I’d better stay and die at home, I don’t want to feel left and abandon. I would not mind stay overnight at the nursing home when no one is home to take care of me but not all the time”* (By 83 year-old, male in personal property.)

*“When my father had his knee operation, all of us decided to find a nursing home for him because the house is not comfortable for his condition plus he needed a daily physiotherapy. We went to see him everyday. We discharged him when his condition’s fine. Personally, his condition is more important to us than the word of mouth of others, we’d rather had him safe”* (By 37 year-old, female, accountant.)

*“I used to stay in USA more than 25 years, and I always wanted to come back to Thailand in the end of my life. When my husband passed away, I told my daughter that I wanted to move back here, she refused first because she concerned about my safety. Then later, she found this nice place so we contacted them and we had to wait for 2 months because here was fully booked and my name’s on the waiting list. I’m happy here, I have friends and my daughter calls me often”* (By 67 year-old, female in nursing home.)

*“Recently, I watched the video clip about elderly facility. I do not plan to have family nor my friends. So my friends and I are planning for a nice surrounding accommodation to stay when we grow older and we also plan for the investment of financial support when we stop working”* (By 39 year-old, male, Cabin attendant.)

Stated “private provider nursing home and elderly facility” leads to another question of hospital-like or homebound facility. The hospital-appearance facility is in the illustration of modernize and standardized service attached with high cost. The homebound facility, on the other hand, a small space, hardly move facility but offer a daily assistance services for the convenience of adult children and lower risk for elderly. Majority of the group of interviewee are acceptable if the service fee is high and the quality of service is unidirectional.

*“Elderly home like Kluay-Namthai Hospital is expensive, but I wouldn’t mind pay for my mom if she is in-need to reduce the risk of harm. But the small elderly care with dull environment is not my type. I cannot take a risk to put my mom there. My wife and I are working and our children have to go to school, we also pay for nurse aid for our children. If my mom requires a special treats then my siblings and I will share on financial support.”* (By adult child, male, business owner.)

The in-depth interview result is consistent with the literature reviews. Majority of interviewee are weighted on quality of service and environment, trustworthy and hospitality-minded staffs then the service fee must be acceptable. The potential users, middle age of 35 -55, are well aware of the elderly services and they do not have negative ambigency to the nursing home service. The potential users are in more aware of their financial support in aging stage compare to indirect users that still support their elderly and young members. The type of assets that potential users collect are cash, stock investment, insurance package and condominiums. The type of assets that indirect users invest is cash, insurance package, consolidate fund, stock investment and land properties.

Communication and assistive technology is important to keep in touch with family members but those technologies are not 100% trustworthy. The technology needed to be controlled by human and the facility that combines technology and professional staffs is what they want.

### **3.3 Technical Feasibility**

#### **3.3.1 Choice of Services by Location**

To ensure that the business will reach the optimal result, the significant investigations for feasibility project will be required. Because I am anticipating opening the nursing home, or operating the facilities by self, it would be prudent to investigate the conversion of any individual existing owner facility which would possible to lower down the entering cost of capital. That said, the rough analysis of new construction is much more generalized. Below you will find a summary of several concepts, and potential sites in the PMA that could accommodate them;

When developing a project of senior services, the main concern of the project is on distance to a hospital, and the convenience of the residences. Other amenities that contribute to the appeal of senior utilities are the availability of natural parks and hospitality services: e.g. hotel for family members, nearby supermarket and convenience stores. Many of the essential components of a senior campus are currently in place. The facility are planned and developed around the area which for the convenience of those utilizing the services. The clustering of senior services, including aging in place options, provides multiple benefits for seniors, their families and healthcare service providers. Elderly will able to maintain relationships with friend/family who require a different levels of care, interaction of residents at all facilities for meals, parties, and other enrichment opportunities, and opportunity for the various service providers to leverage resources: skilled staff, training, and transportation services.

### 3.3.3.1 Location #1



**Figure 3.11** The land property of this project is 1620 square meter.

The location#1 is currently located in a contiguous area with a retail area offering hospitals, convenience stores, medical services, restaurants, and hotel as well as this space could be able to offer a continuing care center

This location is 17 km from Suvarnabhumi International airport. The transportation factor is 9 kilometer to BTS Udomsuk, 10 kilometer to BTS Bangna. The location is easily accessed by Bangna-Trad Highway, Bang-Pakong Motorway and Main road of King Rama IX road.

#### 1. Supportive Health Care Facility in the Area

**Table 3.2 Location #1 is located near 9 hospitals**

Name of Hospital	Distance to Destination (KM)	Time to Destination (Minute)
Thai-Nakarin Hospital	7.60	12
Piyamin Hospital	6.40	15
Bangna 1 Hospital	8.60	20
Sirindhorn Hospital	9.50	20
Chularat 7 Hospital	10.80	25
Vibha-Ram Hospital	10.30	15
Piyavej Hospital	17.70	30
Rama-Nine Hospital	18.70	35

2. Challenge Competitors in the Area: The challenge competitors are considered by the qualification from TEPHCA and the potential of business competition.

**Table 3.3 Challenge Competitors in the Area**

Name	Distance from Location#1 (KM)	Service fee (THB)	No. of Bed Unit
Asia Health Care	2.40	18,000 – 28,000	100
Asia Nursing Home	6.20	18,000 – 25,000	33
Kluay-NamThai Hospital Phase 1	12.20	35,000 – 68,000	90
Kluay-NamThai Hospital Phase 2	12.20	35,000 – 68,000	150 +

Source: Survey information from December, 2016

At the moment, the competitors named in survey are considered too less compare to the demand of the elderly care. From the results, nursing home facilities in this area are fully occupied with a waiting list names.

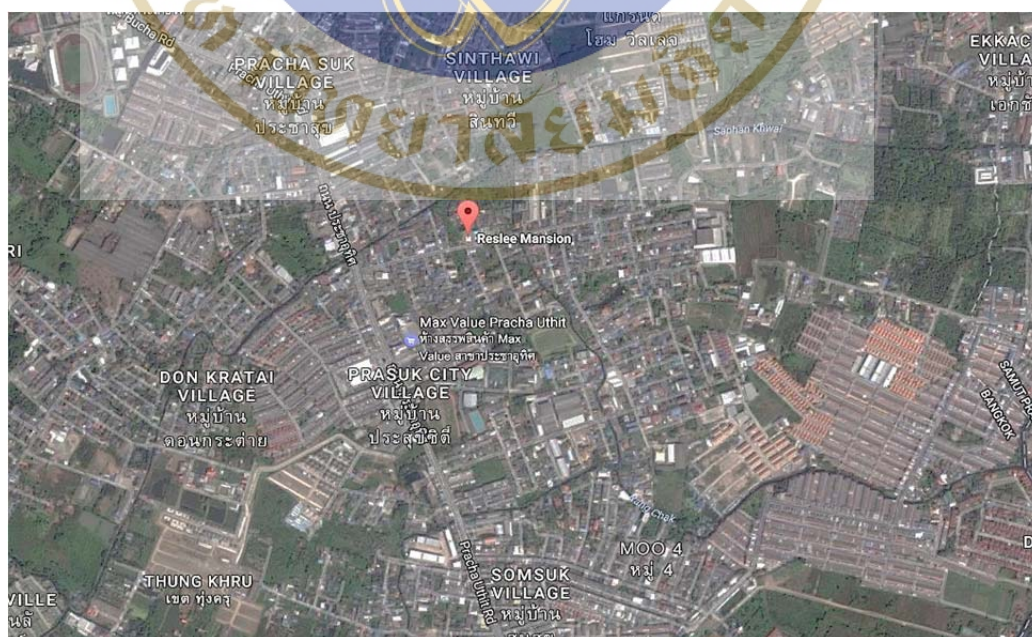
3. Community Area: The location #1 is located in community area that has plenty of villages. For the feasibility purpose, I select only the name of village that start from 6 million THB.

The research found in total of 20 villages with the accommodation 3,174 units. The owners of household that cost more than 6 million THB are considered as medium to high income group with the purchasing power. The families approximately have a monthly payment of 40,000 THB which means the individual household income is more than 80,000 Thai Baht.

Also, Location #1 is located near 2 public natural parks of The King Rama IX park and ChaleamPrakieat Mahat Thai Park and the PTT Reforest Station, 4 department stores of Mega Bangna, Paradise Park, Seacon Square, and Central Bangna.

Currently location #1 could serve as an excellent location for a number of facility types across the spectrum. Within 20 kilometer radially, the potential of using this property for the nursing home concept is high and could accommodate most facility types outlined in this report.

### 3.3.3.2 Location #2



**Figure 3.12** The location #2 is in Pracha-Uthit area

The location #2 is in Pracha-Uthit area, the 5 stories apartment facility with 120 rooms. The location is in low to medium income community area.

This location is 39.5 km from Suvarnabhumi International airport. Transportation method is not located in the main street with 2 lanes transportation road. The main mode of transportation is local public transportation e.g. taxi-motorcycle, bus, and taxi-truck. The nearest department store is Central Rama 2 with 12km. Others are supermarkets and convenience stores. Near Public natural park of King Mongkut's University of Technology Thonburi.

#### 1. Supportive Health Care Facility in the Area

**Table 3.4 Supportive Health Care Facility in the Area**

<b>Name of Hospital</b>	<b>Distance to Destination (KM)</b>	<b>Time to Destination (Minute)</b>
Nakorn Thon Hospital	14.00	33
Rama II Hospital	22.00	45
Rat Burana Hospital	6.10	27
Bang-Pakok 9 Hospital	11.30	30
Bang-Pakok 3 Hospital	10.30	27
Bangmod Hospital	10.50	29

2. Challenge Competitors in the Area: The challenge competitors are considered by the qualification from TEPHCA and the potential of business competition. Location #2 does not have a registered nursing facility in the area.

3. Community Area: The village with price more than 6 million THB is 1 project with 116 units. In additional, the Location #2 is surrounding by mosque, temple, and church. And the main road connect to Rama 2 Road.

### **3.3.2 Comparison for Business Opportunity**

I have analyzed 2 locations of this project for the development of the elderly care facility. The location have been identify by supportive health care facility, competitors, and size of location. After gathering the information, and identify the differences between each location.

I took into account accessibility to the site, its visibility and services such as hospital, department stores, and parks, time to start a business, access to transit, and potential users by the surrounding villages. These proved to be the most distinguishable characteristics that differentiated each site. After determining each feature, I ranked them on the scale of 1-5, 1 being the worst and 5 being the best, Therefore, if the site had an average characteristic it will be rated 3, above average 4-5, and below average 1-2. I also analyze the location by using the weighted score for important features. The most important is weighted 5 and the least important feature is weighted 1.

**Table 3.5 Features Location #1**

Features	Weighted Score (1-5)	Rating (1-5)	Total Score (Min=1, Max=25)
Accessibility	3	3	9
Visibility and Services	5	4	20
Time to Start Business	2	2	4
Transit	1	3	3
Potential User	4	5	20
Total Score for Location #1			56

Overall: Location #1 total rating score of 56. It contains above average is visibility and services, and potential users around the area by being located near main road, and supportive services e.g. department stores, and parks, also being surrounded by the villages with the price is more than 6 MB Thai Baht. The land surrounding is not too abundantly and quite area for village location. The accessibility and transit is at the average level for mostly require a personal transportation, the nearest BTS station is 9 km. The feature below average is time to start business for the property is a land that require construction time and operation.



**Table 3.6 Features Location #2**

<b>Features</b>	<b>Weighted Score (1-5)</b>	<b>Rating (1-5)</b>	<b>Total Score (Min=1, Max=25)</b>
Accessibility	3	2	3
Visibility and Services	5	3	15
Time to Start Business	2	4	8
Transit	1	1	1
Potential user	4	1	4
<b>Total Score for Location #2</b>			<b>31</b>

Overall: Location #2 total rating score of 31. It contains above average for time to start business as the location #2 is finished building that require a renovation only. At the average for visibility and services, even though the nearest department store is 12 km but it surrounds with 3 major religious places that could be important for elderly. The feature below average is accessibility, potential users and transit as the location is far from a potential users group, nearly low to medium income community with not quite surrounding and the transportation is a 2 lane roads with limited public transportation. The car park is also limited space.

After reviewing and taking into consideration, comparing between 2 locations, the location would make the best site for the elderly care facility. The location must be in quite area, nearby supportive facilities, and be proximate to social activities and retail establishment.

Hence, Location #1 gain the higher score of 56 and the only below average is time to start a business. I choose Location #1 to be potential site for the higher opportunity to operate as the continuing care center.

### **3.4 Demand Evaluation for Nursing Home Industry**

From the data analysis, the number of elderly in Thailand is progressively high. The gap of this business is still large room to grow. The accessibility of nursing home is divided into 2 types of Hospital model and Family-oriented model. Hospital

model of nursing home is considered as high quality and service fee. Family-oriented model is considered as small player with daily assistive services and lower service fee.

The demand for nursing home a facility is in concerned if doctors' advice. Mostly family members and elderly considering a nursing facility if elderly was already at risk, injured or the members cannot provide care assistance to them.

The main financial support of elderly are their adult children and elderly are mostly in concern of their adult children's feeling. Most elderly are prefer to stay home by themselves but if medical assistance required then they are more preferable in elderly care facility if they are left alone compare to nursing care at home but if family members are with them, elderly prefers a nursing care at home in the familiar environment. The adult children are willing to financial pay for the elderly services compare to be the caregiver by himself or herself. The family members are relying on paid caregivers as an affordable and acceptable solution. In addition, the research found the acceptance of communication technology from the elderly is high. The benefit of ability to contact their family members who live at a distance made them satisfy.

The PMA area is separated into priority group of medium to high income users that majority still working and have less time to take care of their elderly members. This group of PMA is acceptable to pay for higher fee if the service is worth the payment. The secondary group is the family of medium to high income with elderly members in Bangkok and vicinity, a medical tourism, and day-to-day care.

### **3.5 In Conclusion**

Based in the secondary data review, research and in-depth interview. Elderly care service and facility industry still has room to grow, the elderly care market still in demand of elderly care facility. Elderly care businesses are focuses on services and support for daily activities. It includes both in illness and wellness assistance. The activities for aging are from relaxing and socialize to health services for those with chronic diseases.

Despite the social context is changing for family unit in Thai culture, care services are in high demand as an aging population grows and the working age falls in opposite. The working age tends to work harder and have less time to care for elderly members. While social norm places great importance on caring for older family members,

but the less opportunity to do so by themselves, adult children are willing to pay for their parents' healthcare services. These reflect an opportunity to expand elderly care businesses in the future, while Government is the important supportive factor of this industry with the supporting policy, to ensure a good quality of life for elderly, reflecting a positive signal to the industry as well.

While the global is moving toward innovation and technology-based industry, but health-related assistive technological devices are unable to operate as a stand-alone. Human is still important when the situation comes to personal assistance and safety concerned. However, the elderly care provider with the adaptive technology is gaining more interest and trust from patient and family members.

For the sustainable potential in elderly care services, the business need to adapt and study the changing structure and behavior of an aging population and operate appropriate business strategies. The strategy should take into account for the facility's important component of quality of service and standard of service. The supportive features are location, accessibility, supportive surrounding, and visibility of the facility. From the survey, the price alone does not concerned medium to medium-high income patients as long as the service quality is paying off the price, they are more concerns toward safety and service factors. In addition, the PMA of the elderly market cannot focus on Thai elderly alone, but with government supportive policy, the business should take into account of medical tourism industry as well

## CHAPTER IV

### BUSINESS STRATEGY

After I analyze the feasibility study and select the potential location, the business strategy has to match the requirement of the primary market area but also has to forecast potential of the project provider as well. Therefore, the business strategy is planned under the warmth and modernized architecture design. The facility will provide individualize service with standard and quality of care. The operation will be supporting by medical and communication technology with the concept of continuing care center.



**Figure 4.1 Healthy Habitat Project of Continuing Care Center**



**Figure 4.1 Healthy Habitat Project of Continuing Care Center (cont.)**

## **4.1 Business Concept**

### **4.1.1 Service for Direct Users**

The project is dividing into 3 sections of service for direct users which are 1) The continuing care center, 2) The medical clinic and 3) The healthy dietary restaurant

#### **4.1.1.1 The Continuing Care Center:**

The elderly care facility is the hybrid project of assisted living residence and skilled nursing facilities that aimed to provide service for elderly and after discharged patients that require a special assistance. The vision of this project is “to care for physical and mental health of patients under the important factor of quality of care, professionalism, teamwork and partnerships. The service is designed to maintain a positive environment and attitudes of patients and to relieve the responsibility and anxiety of adult children.

The theme of the project is concerning on the environment of the elderly, we aimed to facilitate naturally style common area to make patients relax and calm to maintain physical ability of elderly and create happy and joyful mind. To create a healthy and safety environment, under the universal design concept to reduce a risk of fall. In the same time, we provide in-house camera for 24/7, health tracking device and communication technology.

The scope of service is for mild-assistant needed elderly to bed-ridden patients. The service designs under holistic care concept which providing care

physically, mentally, and socially. The service is not only assistance on daily activities but also plan for nutrition requirement, cheerful activities to maintain and develop the physical and mental strength.

The medical team will individualize creating plan for each patient, the plan will be revised and updated weekly from the patient's condition. The medical team is including medical doctor, skilled nurse, physiotherapist, and care coordinator.

By using digital equipment, the active's information will be updated daily e.g. length of sleep, movement, heart rate, and nutrient consumption. In addition, the medical diagnosis and physical follow-up will be done weekly basis to maintain the correct care plan to our patients e.g. bed sore and in-bed exercise.

The Continuing Care Center offers 134 patient units that divide into 38 single units with area for family member and 96 units for 8 shared-room (separate by gender). In each shared-room will locate a nurse station to monitor patients 24 hour. The safety and security of patient is also important, hence the cleanliness, air contamination process, and emergency operation management is up to standard of hospital regulation.

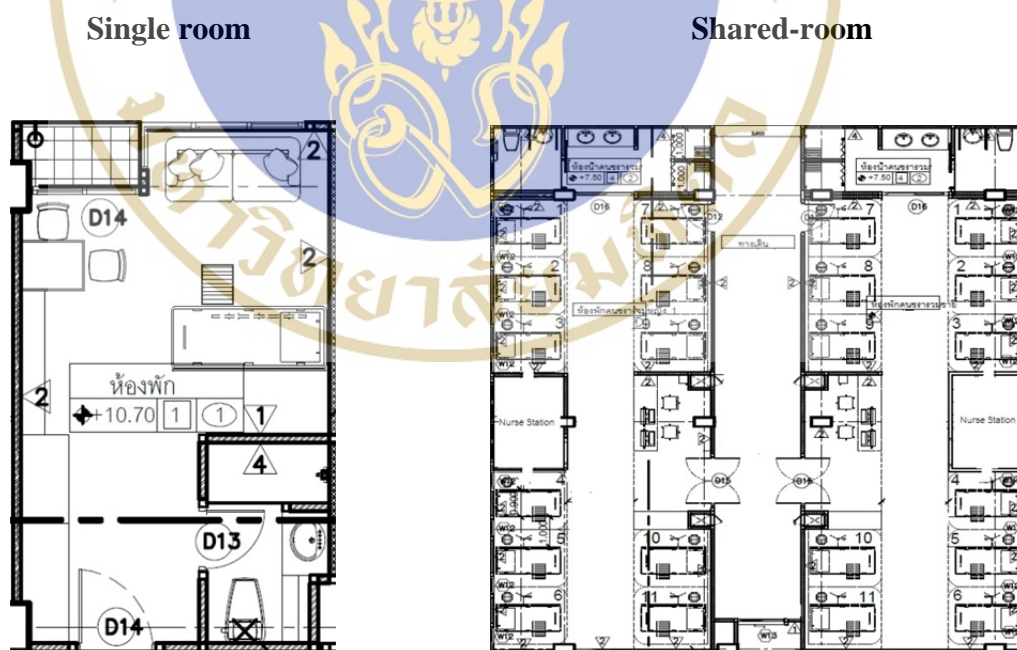


Figure 4.2 Single room & Shared-room

#### 4.1.1.2 The Medical Clinic

The medical clinic is the additional service which aimed to facilitate the outpatients. The clinical treatment will operate from 1700 – 2200 times daily.

The treatment and diagnosis will be done by experienced internal medicine physician. And the clinic is also service the therapy for outpatients in both physiotherapy and hydrotherapy.

#### 4.1.1.3 The Healthy Dietary Restaurant

The restaurant will be operated is 2 period of time for

- 0630 – 0900 time, offering breakfast and refreshing drink
- 1130 – 2100 time, offering lunch and dinner

The strength of this service is we offer the product with the same quality of freshness and cleanliness for patient consumption, but in the happy and tasty way. Because the service for elderly care is already individualize, we will adapt the nutrition knowledge to offer the individualize menu for our consumers too. From the specific age, specific conditions, to the blood type specification.

People with health condition are not necessarily consuming the same nourishment everyday; they can also enjoy the mouth-watering food in various ways. The same goes to drinking menu, we offer healthy drinks, from the vitamin booster to anti-aging juice, tea, and coffee selections.

### **4.1.2 Additional Services for Convenience of our customers**

1. Physiotherapy Service: The physiotherapy service is for both inpatients and outpatients, to maintain and produce physical strength.

2. Hydrotherapy Service: The hydrotherapy service is also for both inpatients and outpatients, to maintain and produce physical strength.

3. Medical Service: Medical service is available in 2 contexts of consulting and treatment. The inpatients or elderly care is monitored and updated health condition 2 times weekly. And outpatients medical service is available daily from 1700 – 2100 time.

In case of emergency, the emergency kits are available along with skilled physician and nurse. The ambulance service is able to activate at all time.

4. Ambulance Service: The ambulance service is available 24 hour for emergency case.

5. Additional Services: The additional services e.g. one day trip, daily exercise and brain stimulating activity will be planned by The Care Team weekly.

6. Nutrition Service: The nutrition planning is individualize, depends on patient's health condition.

7. Entertainment Service: The entertainment service is available for inpatient e.g. movie room, and karaoke room

8. Religion Related Service: The religious related room for Islamic, Buddhist, Christian is available for all patients.

9. Miscellaneous services: For the mentally and physically strength, this service will be additional benefit to the patients e.g. painting class, beauty service, and dancing class. In which the activities are created to restore muscle strength, mental strength, and social strength as well.

## **4.2 Marketing Strategy**

### **4.2.1 Market Segmentation**

The segmentation of the project is analyzed by PMA analysis, as the geographic segmentation is elderly population within 20 km radius wide and behavioral segmentation is for the group of people that able to accept high standard and medium to medium high price.

### **4.2.2 Target Market**

1. The Continuing Care Center. The target group of customer is according to PMA analysis, the priority target is the elderly within 20 km radius wild with the purchasing power. The more specific is the household income of 100,000 Thai Baht and higher.

The secondary target group is the elderly in Bangkok and vicinity, including the medical tourism group and Day - to - Day service.



Moreover, additional group of potential customers are the patients that utilize the daily services and nursing care if their caregiver of family members are not available.

2. The Medical Clinic. The target group of this facility is the community in surrounding area within 20 km. The strength of this service is the expertise of doctor and the physical therapy, within 20 km, hydrotherapy treatment that only available in Healing Habit.

3. The Healthy Dietary Restaurant. The target group of this service is separate into, priority target of the population within service area and the office employee around the area.

The secondary target is the customers who acknowledged by the marketing plan of social media, influencers, and word-of-mouth.

#### 4.2.3 Market Positioning

For marketing positioning, I accounting 2 factors of complete elderly care service and price of service.

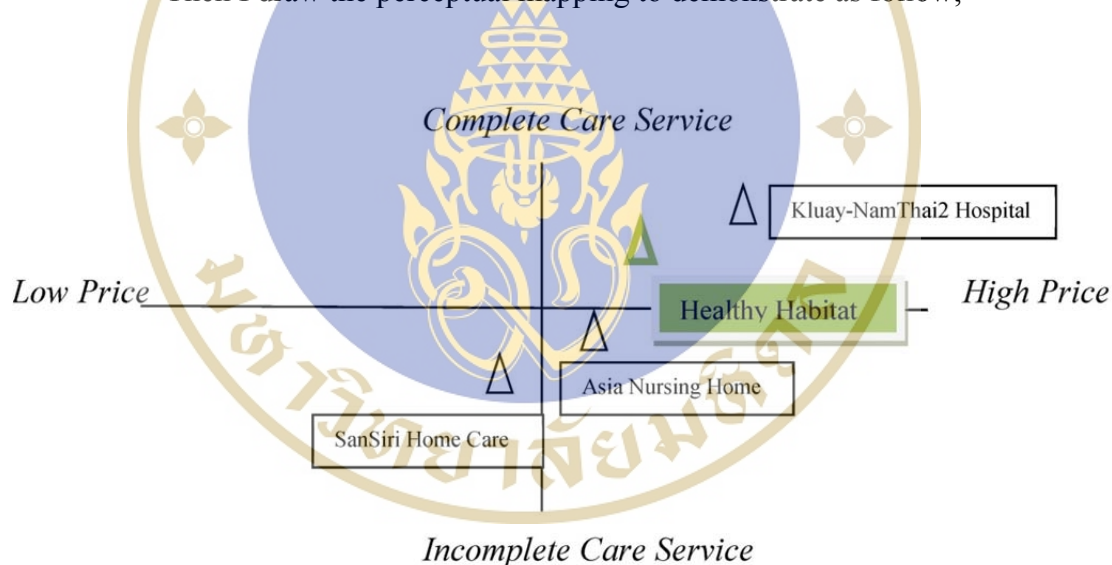
**Table 4.1 The comparison between compatible facilities in the area of 20 km.**

Name	Service	Price (Thai Baht)
Kluay-Nam Thai 2 Hospital	Complete hospital care service	35,000 – 68,000
The Continuing Care Center	<ul style="list-style-type: none"> <li>• Elderly care with medical services</li> <li>• Physiotherapy and Hydrotherapy service</li> <li>• Emergency medicine and equipment</li> <li>• Elevator and ambulance</li> <li>• Skilled and licensed nurse available 24/7</li> <li>• Outpatient for clinical treatment.</li> <li>• Restaurant</li> </ul>	25,000 – 40,000

**Table 4.1 The comparison between compatible facilities in the area of 20 km. (cont.)**

Name	Service	Price (Thai Baht)
Asia Nursing Home (Elderly Care Service)	<ul style="list-style-type: none"> <li>• In-Bed physiotherapy</li> <li>• Ambulance service</li> <li>• Skilled and licensed nurse 24/7</li> <li>• No elevator, service for day-to-day, outpatient, restaurant.</li> </ul>	25,000 – 35,000
Sansiri Nursing Home (Assisted Living Service) (Not registered in TEPHCA)	<ul style="list-style-type: none"> <li>• In-Bed physiotherapy</li> <li>• Nursing Aid 24/7</li> <li>• No elevator, service for day-to-day, outpatient, restaurant.</li> </ul>	15,000-19,000

Then I draw the perceptual mapping to demonstrate as follow;

**Figure 4.3 Perceptual Mapping**

From the perceptual mapping, marketing position of The Continuing Care Center (CCC) is in between Asia Nursing Home and Kluay-Nam Thai 2 Hospital. Comparing between price and service, our project is gaining the competitive position from the quality and variety of services, and the reasonable price.

#### 4.2.4 Internal Factor Analysis: SWOT Analysis

##### 1. Strengths

- Licensed medical team of caretakers for 24 hours and 7 days a week.
- Offer elderly care services from daily living assistance to rehabilitation.
- Offer the daycare medical clinic and healthy serving restaurant for convenience.
- Offer the physical therapy and hydrotherapy by licensed physical therapist
- Geographic location is located near 9 hospitals that the closest is 10 minutes by car, 2 natural parks, and 4 convenience stores.
- Life-saving equipment stand by for 24 hours with medical personnel, in case of emergency
- Ambulance service in case of emergency.
- Offer the individualize plan for elderly care services by the team of medical doctor, licensed nurse, nutritionist, and physiotherapist.
- Medical doctor walk around, patient visiting and update the planning 2-3 times weekly.
- Staff has to be professional and hospitality service-mind.
- Staffs are able to communicate in English and Chinese-Mandarin language.
- New and innovative facilities that prioritized in patient's safety and convenience. Also the surrounding and internal environment are a welcoming environment.
- Offer the facility and environment that has warmth-feeling like home.
- Group activity planning by a medical team.
- Support for elderly activities and inter-connection in the group of patients.
- Relax environment
- Offer 24/7 security service and in-house camera for the safety of patients.
- Available car park.
- Convenience for transportation.

##### 2. Weaknesses

- New player in health care industry. Low practical experiences.
- No customer marketing based as the new player.

- Limitation of advertisement, the health-related ads are controlled by law and regulation that will take time to be well-known.

### 3. Opportunities

- Increasing rate of elderly life longevity.
- Government supports medical hub and medical tourism.
- Number of foreign elderly and medical tourist are progressively high.
- Health trend for Thai population is forecasting for high rate of NCDs conditions.

- Service provider's quantity is not sufficient compare to the demand.
- Social norms change toward western style that the family caretaker has to perform a career as well.

- Positive social acceptance for elderly care facility if the organization is qualified.

### 4. Threats

- Demand of medical labor is high, the medical staff generally change place to work.

- Health insurance is not covered the patient's rehab.
- Social and investors are interesting in this business.
- No regulation for service provider.



**Figure 4.4 The Model of SWOT Analysis**

#### 4.2.5 Marketing Mix Strategy: 4P's

4.2.5.1 Product and Price Strategy: The product and price strategy is dividing elderly care service into day-to-day and monthly service fee with 2 type of patient class as follow;

Class A: Assisting Living Service = The patient that able to move, mild physical challenge, and no medical equipment attached.

Class B: Skilled Nursing Facility = The patient that restrict the movement by physical limitation, require the medical equipment attached, and bed-ridden.

Apart of accommodating service, we also offer

1. Food and Nutrition: 3 main meals and 2 light meals
2. Cleanliness: Daily activity assistance e.g. take a shower, and excretory system management
3. Facility for Bed-ridden patient e.g. bed protector (Other nursing homes, this service is excluded)
4. Physical therapy activities.

\*Individual medicine is personal used, the staff is available to assist in consumption only.

**Table 4.2 Type of Service**

Type of Service	Single Room (THB)	Shared-Room(THB)
Class A: Assisting Living Service		
Day-to-Day service	1,300	1,000
Monthly service	35,000	25,000
Class B: Skilled Nursing Facility		
Day-to-Day service	1,500	1,300
Monthly service	40,000	35,000

The pricing strategy of the project is medium to medium-high which aimed for quality of service. The pricing strategy is for our positioning as well, because the location of the project is located in medium to high community area, the service is offered with hospital standard, safety and security with the reasonable price.

#### 4.2.5.2 Place Strategy.

Direct marketing strategy: Main marketing channel is the location of the project, ready to give out information with showroom in example of our offered equipment. However, we also provide the essential information via online media as well.

1. Direct marketing is the strategy that we preferred, the location is available with showroom plan and information. After the project is launched, the staff will be available to assist in details. The staff is an important key messenger of the project.



**Figure 4.5 Direct marketing**

2. Website: [WWW.HEALTHY-HABITAT.CO.TH](http://WWW.HEALTHY-HABITAT.CO.TH)

The information will also available online e.g. map, gallery, service rate, available services, and nearby facility



**Figure 4.6 Online Marketing**

#### 4.2.5.3 Promotion Strategy

The plan of promotion strategy is dividing into 3 parts of brand awareness and viral marketing.

1. Brand Awareness: to be a remembrance brand required the attention-catching strategy aim towards branding

- Point of Contact by alliance with hospital and doctors.
- Build a better brand experience by offer a mock-up showroom to customer.
- Improve prospective customer engagement by a friendly and assistive staffs.
- Help prospective customers become loyal brand followers with variety of service available.

- State the positioning of the brand by give information of hospital standard service with reasonable price.

- The viral marketing is essential for this service. As the service is aimed for niche market, the influencer is important to be acknowledged by the market. This marketing technique is creating a potentially exponential growth in the visibility and effect.

## 2. Public Relations

- Advertising in social media related to elderly care services and mass media e.g. Facebook and Instagram.

- Informative pamphlet in hospital and elderly related facilities.
- For the social acknowledgment, the PR has to promote in private hospital and elderly related exhibition.

- Informative Billboard as a brand awareness

## 4.3 Operation Strategy

### 4.3.1 Operation Plan

The project is already has land property and registered as the company limited provides elderly care facility. The land property is 1,620 square meter and the registered capital of 3 million THB.

The activity planning is up to 18 months and separate into 6 quarters as

1<sup>st</sup> Quarter: January – March 2017: Preparation stage

- Bank loan preparation in the amount of 40 million THB.
- Confirm the blueprint model and the architecture model
- Request for the construction blueprint approval from the Prawet district office.

- Confirm the contract agreement with the contractor.

- Start the construction.

2<sup>nd</sup> Quarter: April – June 2017

• Operation activities planning: the clinical treatment facility and restaurant facility.

• Consult with the doctor who has experienced in managing nursing home facility

• Consult with the expertise for hospital food-prep section planning

• Prepare the alliance process of nursing aid

• Contact the nurse team

• Prepare the marketing strategies

3<sup>rd</sup> Quarter: July – September 2017

• Continue marketing strategies by

- Billboard ads. In front of the location and within 20 km location.

- Online ads via website. Facebook page, Online Banner in related to elderly website e.g. elderlycare.com, and happyoppy.com

- Poster ads. and pamphlet

- Viral marketing

• Create alliance and awareness with hospitals

• Prepare the furniture and necessary equipment sources

• IT planning

• Medical equipment and process planning with hospital-standard

• Waste disposal planning with hospital-standard

• Interior process for the clinical treatment and restaurant

• Interior process for mock-up facility in elderly care showroom.

• Maintain connection with hospital nearby for the business alliance and medical purpose, in case of emergency.

• Staff recruitment planning: prepare and announce for applications. Plan for staff's benefit and career path.

• Maintain alliance with nursing aid training school for the nursing aid labor force.

• Contract for medical equipment and facility including physiotherapy and hydrotherapy.

• Contract for elevators and hydrotherapy system.



4<sup>th</sup> Quarter: October – December 2017

- The structure contraction finishes and approve.
- The district office approves the building.
- Register for the clinical treatment approval, Ministry of Public Health.
- Continue the interior process, the relaxing garden, communication facilities,

infrastructure processes.

- The interior process starts from first floor.
- Contract for Ambulance service
- Staff recruitment process.

5<sup>th</sup> Quarter: January – March 2018: The training, coaching, service quality registration, and marketing process.

- Early-bird booking as marketing promotion
- Prepare for the readiness of the staff
- Nursing aid training for code of conduct, process of operation, and standard of quality to ensure the healthcare quality is implemented.
- All staff to be trained to
  - Deliver services along with our vision.
  - Emergency drill preparation
- Ensure the readiness of elderly care facility on the 1st and 2nd floor. (11 single rooms and 4 shared-room, physiotherapy room, hydrotherapy room, and common area.

- Run the test of 1st and 2nd floor facilities
- Register for the elderly care business qualification to TEPHCA.
- Updating the hospitals, as the business alliance, the qualification of the project.

- Launch the clinical treatment and restaurant service.
- Maintain marketing strategy

6<sup>th</sup> Quarter: April – June 2018

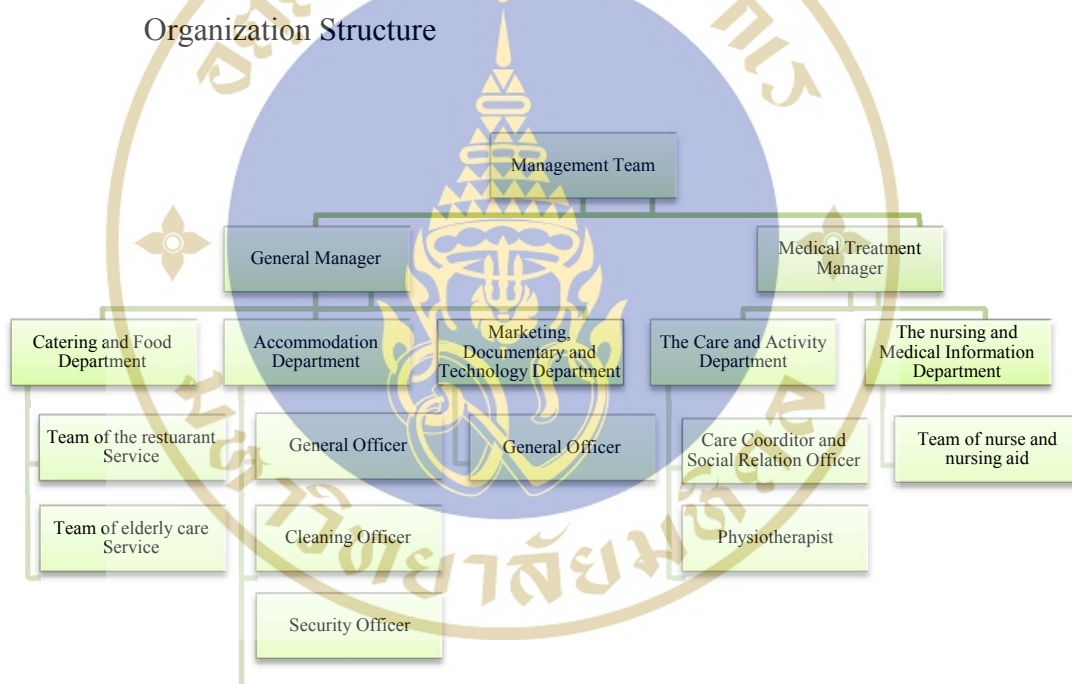
- Check and confirm the readiness of the project
- Pilot run the project for 100% operation
- Ensure the readiness of all the stakeholders



### 4.3.2 Operation Team

The structure of the project is a functional organization. We decide to maintain the lean management and effective number of staffs because the main production of the business is service that require communication and teamwork. The lean process will able to reduce the risk of imperfect communication error.

The organization structure is planned according to the core service and responsibility as medical service and non-medical services. The non-medical service can be divided into Catering and Food department, accommodation department, and documentary and technology department. The medical service can be divided as the elderly care and activity department and nursing and medical information department. The organization structure can be shown as followed



**Figure 4.7 The Organization Structure**

Remark: In the beginning, some of the duty staff will be combining responsibility, and some position will operate as a contract staff

**Table 4.4 Position and Responsibility**

<b>Position</b>	<b>Duty and Responsibility</b>
<b>Team of Management</b>	<ul style="list-style-type: none"> <li>• Set the organization's direction, including policy, operation planning, and career path.</li> </ul>
<b>Non-Medical Service</b> General Manager	<ul style="list-style-type: none"> <li>• General management in term of back office and non-medical human resource management</li> <li>• Manage and responsible for non-medical equipment and facilities</li> <li>• Recruit the value matching staffs</li> </ul>
<b>Non-Medical Service</b> General Manager	<ul style="list-style-type: none"> <li>• Responsible for contract staff</li> <li>• Be a part of the Care Team to plan for elderly individualize service.</li> </ul>
Head of Catering and Food Department	<ul style="list-style-type: none"> <li>• Plan for the restaurant service</li> <li>• Be a part of Care Team to plan for elderly individualize service.</li> </ul>
Head of Accommodation Department	<ul style="list-style-type: none"> <li>• Manage the flow and service of cleanliness, safety and security</li> </ul>
Head of Marketing, Documentary, and Technology Department	<ul style="list-style-type: none"> <li>• Manage the back office or the supportive activity process</li> </ul>
<b>Medical Service</b> Medical Treatment Manager	<ul style="list-style-type: none"> <li>• Manage the human resource in term of medical staff.</li> <li>• Manage and responsible for medical equipment and facilities</li> <li>• Recruit the value matching staffs</li> <li>• Leader of the Care Team to plan for elderly individualize service</li> </ul>
Head of Care and Activity Department	<ul style="list-style-type: none"> <li>• Responsible for social relation activity</li> <li>• Responsible for physiotherapy activity</li> <li>• Be a part of Care Team to plan for elderly individualize service.</li> </ul>

**Table 4.4 Position and Responsibility (cont.)**

Position	Duty and Responsibility
Head of Nursing and Medical Information Department	<ul style="list-style-type: none"> <li>Responsible for nurse and nursing aid activity</li> <li>Responsible for medical supplies</li> <li>Be a part of Care Team to plan for elderly individualize service.</li> </ul>

## 4.4 Financial Forecast

### 4.4.1 Financial Structure

Capital and Source of Capital: From the estimation of capital investment, income, and expenses of the project, the project is required the capital investment of 75 million THB.

The source of capital is from owner's equity: liability in the ratio of 1: 1.25. The registered capital and the land property belong to owner's equity.

**Table 4.5 The source of capital**

	Description	Amount (THB)
1	Owner's Equity	35,000,000.00
2	Long Term Financial Loan	40,000,000.00
<b>Total</b>		<b>75,000,000.00</b>

The source of capital is inside the organization and outsource.

- The inside capital as owner's equity is 35 million THB
- The outsource as long-term financial loan from a commercial bank:

The loan amount of 40 million THB for 10 years pay back, MLR interest rate 7% under the condition to pay back fixed rate of principal, the payback starts after business launch, payback principal and interest together.

**Table 4.6 Outsource Capital and payback Principal**

Description	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
Principal	4,000,000.00	4,000,000.00	4,000,000.00	4,000,000.00	4,000,000.00
Interest	2,800,000.00	2,520,000.00	2,240,000.00	1,960,000.00	1,680,000.00
Total per year	6,800,000.00	6,520,000.00	6,240,000.00	5,960,000.00	5,680,000.00
Debt Remain	36,000,000.00	32,000,000.00	28,000,000.00	24,000,000.00	20,000,000.00
Principal	4,000,000.00	4,000,000.00	4,000,000.00	4,000,000.00	4,000,000.00
Interest	1,400,000.00	1,120,000.00	840,000.00	560,000.00	280,000.00
Total per year	5,400,000.00	5,120,000.00	4,840,000.00	4,560,000.00	4,280,000.00
Debt Remain	16,000,000.00	12,000,000.00	8,000,000.00	4,000,000.00	-

#### 4.4.2 Income Estimation

The income of the project is from 3 main services of continuing care, medical clinic, and restaurant.

Financial Assumption: From the feasibility study, the project is able to set the financial assumption with the expectation of growth rate 15% annually

1. The Continuing Care Center: Start from 2018 the service for elderly forecasts to be occupied 65%, 2019 increase to 80% and the service is forecasted to be occupied 100% in year 2020 onward.

2. The Medical Clinic: Start from 2018 the service forecast to be utilize 500 cases monthly, 2019 for 800 cases monthly, 2020 for 1100 cases monthly, and will be utilize fully by 2021 at the rate of 1200 cases.

3. The Restaurant: Start from 2018 the number of order per month forecasts to be utilized 600 orders, 2019 for 1000 orders, and fully operate and 1800 orders per month.

**Table 4.7 Financial Assumption**

Description	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
The Continuing Care Center	65%	80%	95%	100%	100%
No. of Bed Unit per Month	87	107	127	134	134
The Medical Clinic	1 Physician	2 Physicians	2 Physicians	2 Physicians	2 Physicians
No. of Patient Case per Month	500	800	1100	1200	1200
The Restaurant					
No. of Order per Month	600	1000	1800	1800	1800
The Continuing Care Center	100%	100%	100%	100%	100%
No. of Bed Unit per Month	134	134	134	134	134
The Medical Clinic	2 Physicians	2 Physicians	2 Physicians	2 Physicians	2 Physicians
No. of Patient Case per Month	1200	1200	1200	1200	1200
The Restaurant					
No. of Order per Month	1800	1800	1800	1800	1800

This expecting Income is calculating from Price per Unit x Expecting Customer

**Table 4.8 Income Estimation**

Description	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
Continuing Care Center	65%	80%	95%	100%	100%
No. of Bed Unit per Month	87	107	127	134	134
Single Room (35,000 THB per Month)	31	38	38	38	38
Shared Room (25,000 THB per Month)	56	69	89	96	96
Total of NH Income per Month	2,485,000.00	3,055,000.00	3,555,000.00	3,730,000.00	3,730,000.00
Income per Year	29,820,000.00	36,660,000.00	42,660,000.00	44,760,000.00	44,760,000.00
Medical Clinic	1 Physician	2 Physicians	2 Physicians	2 Physicians	2 Physicians
No. of Patient Case per Month (500 THB per Case)	500	800	1100	1200	1200
Income per Year	3,000,000.00	4,800,000.00	6,600,000.00	7,200,000.00	7,200,000.00

**Table 4.8 Income Estimation (cont.)**

Description	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027
<b>Restaurant</b>					
No. of Order per Month (400THB per Order)	600	690	794	913	1049
Income per Year	2,880,000.00	3,312,000.00	3,808,800.00	4,380,120.00	5,037,138.00
<b>Total Income Per Year</b>	<b>35,700,000.00</b>	<b>44,772,000.00</b>	<b>53,068,800.00</b>	<b>56,340,120.00</b>	<b>56,997,138.00</b>
<b>The Continuing Care Center</b>					
	100%	100%	100%	100%	100%
No. of Bed Unit per Month	134	134	134	134	134
Single Room (35,000 THB per Month)	38	38	38	38	38
Shared Room (25,000 THB per Month)	96	96	96	96	96
Total of NH Income per Month	3,730,000.00	3,730,000.00	3,730,000.00	3,730,000.00	3,730,000.00
Income per Year	44,760,000.00	44,760,000.00	44,760,000.00	44,760,000.00	44,760,000.00
<b>The Medical Clinic</b>					
	2 Physicians	2 Physicians	2 Physicians	2 Physicians	2 Physicians
No. of Patient Case per Month (500 THB per Case)	1200	1200	1200	1200	1200
Income per Year	7,200,000.00	7,200,000.00	7,200,000.00	7,200,000.00	7,200,000.00
<b>The Restaurant</b>					
No. of Order per Month (400THB per Order)	1207	1388	1596	1835	2111
Income per Year	5,792,708.70	6,661,615.01	7,660,857.26	8,809,985.84	10,131,483.72
<b>Total Income Per Year</b>	<b>57,752,708.70</b>	<b>58,621,615.01</b>	<b>59,620,857.26</b>	<b>60,769,985.84</b>	<b>62,091,483.72</b>

**4.4.3 Cost Estimation**

1. Cost before operation: The combination cost of 3 parts (the elderly care, medical clinic, and the restaurant)

**Table 4.9 Cost before operation**

No. 1	Description	Amount (THB)
1	Land	24,000,000.00
2	Building	32,000,000.00
3	Facility and Equipment	17,000,000.00
4	Working Capital	2,000,000.00
Total		75,000,000.00



## 2. Cost during operation:

The expenses from the operation and management per year, 1<sup>st</sup> year of operation is expecting to run 65% and 2nd year onward will run the cost as 100% operation (Unit:THB)

- Salary Expense

**Table 4.10 Salary Expense: Year 1**

No.	Position	No. of Employee	Monthly Salary	Monthly Payment	Payment per Year
1	Physician	1	50,000.00	50,000.00	600,000.00
2	General Manager	1	30,000.00	30,000.00	360,000.00
3	Restaurant Manager	1	25,000.00	25,000.00	300,000.00
4	Nurse	4	23,000.00	92,000.00	1,104,000.00
5	Nurse Aid	8	12,000.00	96,000.00	1,152,000.00
6	Physical Therapist	1	20,000.00	20,000.00	240,000.00
7	General Employee	1	15,000.00	15,000.00	180,000.00
8	Restaurant Employee	2	10,000.00	20,000.00	240,000.00
9	Chef	1	15,000.00	15,000.00	180,000.00
10	Cleaner	2	8,000.00	16,000.00	192,000.00
11	Security Guard	2	9,000.00	18,000.00	216,000.00
<b>Total</b>		<b>24</b>		<b>363,000.00</b>	<b>4,764,000.00</b>

**Table 4.11 Salary Expense: Year 2 – Year 10**

No.	Position	No. of Employee	Monthly Salary	Monthly Payment	Payment per Year
1	Physician	2	50,000.00	100,000.00	1,200,000.00
2	General Manager	1	30,000.00	30,000.00	360,000.00
3	Restaurant Manager	1	25,000.00	25,000.00	300,000.00
4	Nurse	4	23,000.00	92,000.00	1,104,000.00
5	Nurse Aid	12	12,000.00	144,000.00	1,728,000.00
6	Physical Therapist	2	20,000.00	40,000.00	480,000.00
7	General Employee	2	15,000.00	30,000.00	360,000.00
8	Restaurant Employee	4	10,000.00	40,000.00	480,000.00
9	Chef	1	15,000.00	15,000.00	180,000.00
10	Cleaner	3	8,000.00	24,000.00	288,000.00
11	Security Guard	2	9,000.00	18,000.00	216,000.00
<b>Total</b>		<b>34</b>		<b>516,000.00</b>	<b>6,696,000.00</b>

2. Social Security Expense: 5% per month, not exceeding 750 THB

**Table 4.12 Social Security Expense: 5% per month, not exceeding 750 THB (Year1)**

No.	Position	No. of Employee	Monthly Salary	SS Payment per Year
1	Nurse	4	20,000.00	36,000.00
2	Nurse Aid	8	10,000.00	48,000.00
3	Physical Therapist	1	18,000.00	9,000.00
4	General Employee	1	15,000.00	9,000.00
5	Restaurant Employee	2	10,000.00	12,000.00
6	Chef	1	15,000.00	9,000.00
7	Cleaner	2	8,000.00	9,600.00
8	Security Guard	2	9,000.00	10,800.00
<b>Total</b>		<b>21</b>	<b>105,000.00</b>	<b>143,400.00</b>

**Table 4.13 Social Security Expense: 5% per month, not exceeding 750 THB  
(Year 2 – Year 10)**

No.	Position	No. of Employee	Monthly Salary	SS Payment per Year
1	Nurse	4	20,000.00	36,000.00
2	Nurse Aid	12	10,000.00	72,000.00
3	Physical Therapist	2	18,000.00	18,000.00
4	General Employee	2	15,000.00	18,000.00
5	Restaurant Employee	4	10,000.00	24,000.00
6	Chef	1	15,000.00	9,000.00
7	Cleaner	3	8,000.00	14,400.00
8	Security Guard	2	9,000.00	10,800.00
	<b>Total</b>	<b>30</b>	<b>105,000.00</b>	<b>202,200.00</b>

3. Expense from the service

**Table 4.14 Expense from the service**

No.	Description	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
1	Variable Cost	4,000,000.00	6,000,000.00	6,300,000.00	6,615,000.00	6,945,750.00
2	Waste Disposal Cost	50,000.00	80,000.00	80,000.00	80,000.00	80,000.00
3	Office Supplies Cost	800,000.00	900,000.00	1,000,000.00	1,000,000.00	1,000,000.00
4	Maintenances Cost	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00
5	Public Relations	20,000.00	18,000.00	18,000.00	18,000.00	18,000.00
6	Water Supply Cost	120,000.00	180,000.00	180,000.00	180,000.00	180,000.00
7	Electricity Cost	600,000.00	720,000.00	840,000.00	840,000.00	840,000.00
8	Communication Service	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00
9	IT	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00
10	Account	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00
11	Misc.	50,000.00	80,000.00	80,000.00	80,000.00	80,000.00
	<b>Total</b>	<b>5,737,200.00</b>	<b>8,075,200.00</b>	<b>8,595,200.00</b>	<b>8,910,200.00</b>	<b>9,240,950.00</b>

**Table 4.17 Expense from the service (cont.)**

No.	Description	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027
1	Variable Cost	7,293,037.50	7,657,689.38	8,040,573.84	8,442,602.54	8,864,732.66
2	Waste Disposal Cost	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00
3	Office Supplies Cost	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00
4	Maintenances Cost	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00
5	Public Relations	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00
6	Water Supply Cost	180,000.00	180,000.00	180,000.00	180,000.00	180,000.00
7	Electricity Cost	840,000.00	840,000.00	840,000.00	840,000.00	840,000.00
8	Communication Service	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00
9	IT	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00
10	Account	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00
11	Misc.	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00
<b>Total</b>		<b>9,588,237.50</b>	<b>9,952,889.38</b>	<b>10,335,773.84</b>	<b>10,737,802.54</b>	<b>11,159,932.66</b>

## 4. Depreciation Cost

**Table 4. 15 Depreciation Cost**

No.	Description	Cost	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
1	Facility and Equipment	17,000,000.00	1,700,000.00	1,700,000.00	1,700,000.00	1,700,000.00	1,700,000.00
2	Building	32,000,000.00	3,200,000.00	3,200,000.00	3,200,000.00	3,200,000.00	3,200,000.00
<b>Total</b>		<b>49,000,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>

No.	Description	Cost	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027
1	Facility and Equipment	17,000,000.00	1,700,000.00	1,700,000.00	1,700,000.00	1,700,000.00	1,700,000.00
2	Building	32,000,000.00	3,200,000.00	3,200,000.00	3,200,000.00	3,200,000.00	3,200,000.00
<b>Total</b>		<b>49,000,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>	<b>4,900,000.00</b>

#### 4.4.4 Financial Statement Analysis

Then I could forecast the financial statement for 5 years as follow

**Table 4.16 forecast the financial statement for 5 years**

Financial Statement Analysis					
5-Year Income Statement					
				Unit:	Thai Baht
	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
Revenues & Gains					
The Continuing Care Center	29,820,000.00	36,660,000.00	42,660,000.00	44,760,000.00	44,760,000.00
The Medical Clinic	3,000,000.00	4,800,000.00	6,600,000.00	7,200,000.00	7,200,000.00
The Restaurant	2,880,000.00	3,312,000.00	3,808,800.00	4,380,120.00	5,037,138.00
Total Revenues & Gains	35,700,000.00	44,772,000.00	53,068,800.00	56,340,120.00	56,997,138.00
Expenses & Losses					
Salary Expenses	4,764,000.00	6,696,000.00	7,030,800.00	7,382,340.00	7,751,457.00
Operation Expenses	5,880,600.00	8,277,400.00	8,797,400.00	9,112,400.00	9,443,150.00
Financial Cost	4,000,000.00	4,000,000.00	4,000,000.00	4,000,000.00	4,000,000.00
Depreciation Cost	4,900,000.00	4,900,000.00	4,900,000.00	4,900,000.00	4,900,000.00
Total Expenses & Losses	19,544,600.00	23,873,400.00	24,728,200.00	25,394,740.00	26,094,607.00
Earnings Before Interest and Tax	16,155,400.00	20,898,600.00	28,340,600.00	30,945,380.00	30,902,531.00
Interest Payment	2,800,000.00	2,520,000.00	2,240,000.00	1,960,000.00	1,680,000.00
Income Tax	1,669,425.00	2,297,325.00	3,262,575.00	3,623,172.50	3,730,956.06
Net Income	11,685,975.00	16,081,275.00	22,838,025.00	25,362,207.50	25,569,714.63

#### 4.4.5 Financial Analysis

##### 1. Break-Even Analysis

Break-Even Point is the point at which its sales exactly cover its expenses.

$$\text{Break-Even Point in units} = \text{Fixed Costs} \div (\text{Price} - \text{Variable Costs})$$

Under the financial assumption: the major activity that is the continuing care center, which obtain 80% of the business.

The break-even of the project is when the project utilizes the elderly care facility of 438 units, with the Payback Period for 3.9 years. The project plans to launch the service within June 2018, which means in April 2022 the project will be break-even.

##### 2. Net Present Value Analysis

The NPV of a project or investment reflects the degree to which cash inflow, or revenue, equals or exceeds the amount of investment capital required to fund it. A higher NPV indicates that the project or investment is more profitable. R = Rate of Return, T = Time Period

$$\text{NPV} = \sum \{ \text{Net Period Cash Flow} / (1+R)^T \} - \text{Initial Investment}$$

Rate of Return of this investment = Weighted Average Cost of Capital (WACC)

$$\text{WACC} = R_d + R_e$$

$R_d$  = Rate of Return of Debt (7%),  $R_e$  = Expected Rate of Return of Owner's Equity (30%)

When WACC = 16.58%, the Net Present Value of the project is 98,976,193.37 THB from the discount rate of Net Cash Flow from Operation of 173,976,193.37 THB

##### 3. The Internal Rate of Return

The Rate of Return of this project or The Internal Rate of Return (IRR) is used to evaluate the attractiveness of a project or investment. IRR that will discount the NPV to 0% is 23%. Means, The rate of return for this project is more than the cost of capital, imply that this project is profitable.

## CHAPTER V

### RISK MANAGEMENT

#### 5.1 Operation Plan for Risk Management

The challenge of operation

- The labor pool situation, the shortage of medical staff. (Nurse and Nursing Aid)
- Emergency Case (Life Threatening Situation)

##### 5.1.1 The labor pool situation, the shortage of medical staff.

To manage the risk of not enough labor force is require in both tangible and intangible form.

###### 1. Intangible form

- The recruitment has to recruit the staff with matching organization value.
- Create a happy working space; the medical service can be stressful, management need to maintain a positive environment for the benefit of patients and staff.
- Remain equality of working shift and responsibility.
- Applause and compliment, staff needs to be recognized.
- Create the career path or a room to grow in the organization.
- Monthly reward to the good performance
- Maintain alliance with the nursing aid training school.

###### 2. Tangible form

- The welfare and compensation is also important, attractive benefit with
- Offer higher extra pay rate for experienced staff.
- Maintain a progressive pay rate, at least to cope with inflation
- Scholarship program with 2-year contract.

In worse case of labor pool, financial assumption is extra 1million cost for labor expense.

NPV = 94,245,523.76THB from WACC 16.58%, break-even within 3.11 years and IRR = 22% which still in good condition.

However, to protect the knowledge drain from staff resignation is also important. Management has to plan for the knowledge transfer program by

- Create a standard of service
- Facilitate the training and coaching program semi-annually
- Maintain monitoring the service activities
- Utilize the assistive technology and create an intranet space for information

exchange inside the organization.

### 5.1.2 Emergency Case (Life Threatening Situation)

The risk of emergency case of life threatening situation needs to be assessed and well planned.

Management requires setting the Emergency Drills for Emergency case in Before-During-After situation. And have the lifesaving equipment ready and maintain the readiness of the equipment.

Standard Operating Procedure will require the employees to maintain their knowledge of equipment location, the drills to cope with the emergency situation, and awareness of situation at all times.

## 5.2 Contingency Plan

In case the operation result is not as planned, I am planning for the contingency plan as follow:

1. In case, number of facilitated patients are lower than expectation.

Weight higher target marketing on secondary PMA, especially the foreign medical tourism. Especially, Chinese and Middle Easterner and a day-to-day service.

Chinese elderly population is high, and the country is already enter the complete aging society with the world's leading country with high GDP make Chinese a great target group to catch. The strength of our organization is communication skill, as one of the management team is able to communicate fluently in Chinese-Mandarin



and she graduated a master degree program in Chinese Tourism Business Management that acknowledges her in the business with Chinese.

Middle-Eastern tourism is always a large group of medical tourism. The organization's strength is religious related service, as the meal preparation and the service providing is already following Islamic standard of Halal. The Middle Easterner could confidently trust our service.

Marketing plan will adjust to weight more on medical tourism and day-to-day service, by creating an attractive program and adjustable price for membership should be able to accomplish.

However, if the management is lower than expectation for 15%, the project will still be break-even within 4.89 years and the initial rate of return is 17% with the net present value 70,498,186.70 THB.

2. In case, number of restaurant users are lower than expectation

Offer delivery service within the range of 20 km. emphasizing on daily meal prep, freshness with individualize health focus meal. Target group of this service is the office workers who do not have time to cook or not good in cooking and a working-housewife, with two responsibilities the target group might lack of time to prepare for meals for the family members.

3. In case, number of clinical users are lower than expectation

Add the wellness and aesthetic service, since the wellness service is able to capture users variously. In addition, the location of the project is in medium to high income that people mostly has a purchasing power.

4. In case, negative financial liquidity

Plan and manage cash flow and budgeting ahead of time, to be able to forecast the income. In additional, prepare the short-term loan from the bank to be ready in certain time.

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## Appendix A: The Average Monthly Income, Thailand 1998 - 2015

2541	2543	2545	2547	2549	2550	2552	2554	2556	2558	Region and province
(1998)	(2000)	(2002)	(2004)	(2006)	(2007)	(2009)	(2011)	(2013)	(2015)	
<b>12,492</b>	<b>12,150</b>	<b>13,736</b>	<b>14,963</b>	<b>17,787</b>	<b>18,660</b>	<b>20,904</b>	<b>23,236</b>	<b>25,194</b>	<b>26,915</b>	<b>Whole Kingdom</b>
<b>24,929</b>	<b>25,242</b>	<b>28,239</b>	<b>28,135</b>	<b>33,088</b>	<b>35,007</b>	<b>37,732</b>	<b>41,631</b>	<b>43,058</b>	<b>41,002</b>	<b>Greater Bangkok</b>
26,054	26,909	29,589	29,843	36,658	39,020	42,380	48,951	49,191	45,572	Bangkok
18,100	15,745	19,680	19,946	20,382	21,302	23,359	23,798	29,575	25,457	Samut Prakan
24,211	24,566	29,119	26,658	31,152	32,743	34,626	35,120	30,664	36,884	Nonthaburi
21,793	19,282	22,838	21,530	25,143	26,107	26,686	21,616	33,461	41,057	Pathum Thani
<b>12,643</b>	<b>13,012</b>	<b>14,128</b>	<b>16,355</b>	<b>19,279</b>	<b>18,932</b>	<b>20,960</b>	<b>20,822</b>	<b>26,114</b>	<b>26,601</b>	<b>Central Region</b>
12,918	14,904	13,319	14,980	19,676	21,676	25,820	22,302	26,482	28,379	Phra Nakhon Si Ayutthaya
10,878	12,544	11,653	12,855	18,300	17,704	25,506	21,140	28,641	23,351	Ang Thong
10,587	10,649	11,010	15,003	19,935	16,852	22,405	17,178	23,426	22,955	Lop Buri
10,786	11,894	14,434	14,788	18,510	20,558	25,419	26,068	28,115	26,112	Sing Buri
11,159	12,693	11,119	13,383	13,058	13,995	18,719	20,181	32,754	22,059	Chai Nat
13,281	12,319	14,677	18,742	20,468	22,363	21,947	27,114	32,834	29,413	Saraburi
14,075	13,807	16,797	22,286	21,869	22,260	24,052	23,007	28,367	27,257	Chon Buri
12,491	14,739	13,255	18,962	20,018	25,090	22,983	21,929	30,401	30,315	Rayong
15,548	11,527	15,959	15,897	20,606	18,866	19,442	24,278	27,284	36,024	Chanthaburi
11,703	7,426	13,822	14,080	20,286	16,664	16,949	28,118	21,653	25,333	Trat
14,010	13,781	14,829	16,938	16,770	20,665	21,252	23,031	34,548	27,555	Chachoengsao
9,852	10,477	12,720	15,032	16,031	18,263	22,548	25,338	21,039	24,166	Prachin Buri
11,809	12,595	10,722	13,096	14,104	15,983	17,503	17,042	23,391	23,555	Nakhon Nayok
6,958	8,355	9,951	10,777	11,577	13,593	15,525	17,781	24,805	26,953	Sa Kaeo
12,868	15,174	14,692	19,867	23,202	17,576	20,994	18,713	25,742	19,590	Ratchaburi
13,082	11,680	15,380	12,122	15,606	15,326	17,571	15,210	18,746	18,884	Kanchanaburi
12,409	13,334	12,984	15,781	14,783	15,112	15,797	15,928	17,260	15,786	Suphan Buri
15,178	18,297	18,674	20,701	33,835	25,447	24,989	22,955	30,856	40,347	Nakhon Pathom
17,565	13,775	16,437	15,347	19,555	18,735	20,978	20,850	23,658	29,347	Samut Sakhon
11,540	13,072	13,876	12,528	16,923	12,634	18,363	15,068	16,257	18,310	Samut Songkhram
14,135	12,390	15,993	13,040	15,042	17,855	17,440	20,026	21,784	26,431	Phetchaburi
<b>9,779</b>	<b>8,652</b>	<b>9,530</b>	<b>10,885</b>	<b>13,146</b>	<b>13,568</b>	<b>15,727</b>	<b>17,350</b>	<b>19,267</b>	<b>18,952</b>	<b>Region and province Northern Region</b>
10,349	9,243	9,582	12,586	14,904	14,386	16,141	18,323	14,393	14,950	Chiang Mai
8,722	10,231	11,328	11,843	14,361	14,104	20,048	18,778	22,505	23,834	Lamphun
14,177	9,735	9,759	10,576	15,585	13,531	14,020	18,454	19,262	20,466	Lampang
10,044	7,270	8,581	10,940	14,220	15,001	15,865	17,602	21,344	19,239	Uttaradit
8,522	9,366	10,048	11,333	12,591	14,045	13,034	18,157	19,418	21,796	Phrae
7,387	7,334	8,130	10,751	10,590	11,407	14,624	16,249	17,598	17,886	Nan
7,491	5,928	9,520	9,643	10,352	11,348	13,189	14,457	15,491	17,673	Phayao
8,924	7,930	8,369	8,920	10,495	13,736	13,278	15,034	13,510	13,497	Chiang Rai
5,934	6,317	6,696	8,676	6,544	7,245	7,936	9,024	8,821	15,119	Mae Hong Son

2541	2543	2545	2547	2549	2550	2552	2554	2556	2558	Region and province
(1998)	(2000)	(2002)	(2004)	(2006)	(2007)	(2009)	(2011)	(2013)	(2015)	
9,500	7,602	9,660	10,200	14,953	15,141	17,127	21,561	24,158	21,952	Nakhon Sawan
7,887	9,598	6,519	9,817	13,258	12,036	17,425	18,487	20,150	20,115	Uthai Thani
9,769	12,354	12,583	12,776	15,337	15,559	18,115	18,672	22,083	20,140	Kamphaeng Phet
9,423	9,674	7,763	9,549	10,963	10,791	12,453	12,936	17,020	20,079	Tak
10,475	7,156	8,299	11,427	13,843	12,720	15,411	18,098	24,121	22,252	Sukhothai
12,068	8,965	10,637	12,751	14,117	13,364	15,779	17,474	27,490	19,235	Phitsanulok
11,185	8,318	10,887	10,951	13,488	15,603	21,821	18,130	21,664	22,101	Phichit
8,051	8,435	9,548	9,572	11,323	12,914	17,096	15,678	19,918	21,337	Phetchabun
<b>8,546</b>	<b>7,765</b>	<b>9,279</b>	<b>10,139</b>	<b>11,815</b>	<b>12,995</b>	<b>15,358</b>	<b>18,217</b>	<b>19,181</b>	<b>21,094</b>	<b>Northeastern Region</b>
9,418	8,415	9,494	11,398	13,320	14,177	19,158	19,399	22,479	26,376	Nakhon Ratchasima
8,365	8,137	7,861	8,632	9,698	10,263	13,734	17,316	15,624	18,480	Buri Ram
6,398	6,226	6,675	8,095	11,850	12,257	11,310	18,287	21,351	20,315	Surin
7,669	7,593	7,564	8,745	9,406	10,782	10,666	13,944	16,207	18,793	Si Sa Ket
10,267	9,874	12,258	11,697	12,035	14,534	16,747	21,660	22,344	20,453	Ubon Ratchathani
7,478	4,826	6,045	9,410	9,969	10,040	11,813	16,767	14,418	19,518	Yasothon
6,220	7,683	8,364	9,161	11,551	11,253	12,380	15,794	18,641	23,830	Chaiyaphum
8,139	7,711	9,307	11,423	13,134	11,889	14,763	15,975	17,273	21,173	Amnat Charoen
								20,207	23,767	Bungkan
8,386	5,532	7,326	8,318	11,030	11,889	14,012	17,139	15,390	22,553	Nong Bua Lam Phu
11,521	9,757	11,554	13,088	11,349	15,065	19,779	16,030	18,095	21,337	Khon Kaen
7,744	6,841	9,885	10,789	14,097	17,273	16,684	22,017	25,966	22,817	Udon Thani
9,905	7,387	9,289	10,013	12,083	13,765	13,411	17,958	16,338	20,990	Loei
12,548	7,123	11,001	11,466	12,877	12,885	14,467	16,979	18,058	21,207	Nong Khai
8,444	8,746	9,642	10,178	13,646	15,812	19,845	25,461	21,644	18,540	Maha Sarakham
5,987	7,207	9,442	9,817	10,849	11,779	14,932	20,167	20,505	19,990	<b>Region and province</b>
6,908	6,469	8,736	8,908	12,470	12,507	11,748	17,293	13,921	15,452	Roi Et Kalasin
7,660	7,751	10,227	8,971	11,295	11,957	16,679	15,326	16,854	19,281	Sakon Nakhon
7,909	5,343	7,613	8,168	9,927	10,009	12,859	14,053	14,310	15,804	Nakhon Phanom
9,890	9,485	9,236	9,284	13,497	13,406	17,370	19,048	16,494	22,870	Mukdahan
<b>11,461</b>	<b>11,186</b>	<b>12,487</b>	<b>14,469</b>	<b>18,668</b>	<b>19,716</b>	<b>22,926</b>	<b>27,326</b>	<b>27,504</b>	<b>26,286</b>	<b>Southern Region</b>
11,196	10,789	12,317	14,079	17,377	18,087	23,296	29,970	27,479	25,124	Nakhon Si Thammarat
11,986	9,928	13,318	16,877	18,446	18,852	23,647	33,350	27,276	31,012	Krabi
7,650	10,217	12,428	16,965	29,617	22,211	22,356	24,470	26,168	28,842	Phangnga
19,313	20,702	26,363	25,082	25,630	25,084	28,515	26,048	31,857	31,500	Phuket
11,967	10,800	14,056	16,150	21,747	26,207	30,604	34,417	36,865	36,466	Surat Thani
9,033	9,410	10,765	14,328	18,679	21,620	19,274	26,049	32,292	22,035	Ranong
10,232	10,454	10,922	11,482	17,232	19,003	25,179	28,022	27,540	29,306	Chumphon
15,057	13,505	14,192	15,481	22,093	22,342	27,356	26,711	26,824	27,660	Songkhla
8,924	9,711	12,702	11,826	14,307	17,328	20,695	21,047	25,400	23,209	Satun
12,973	12,782	14,332	17,038	20,801	23,650	21,992	36,245	33,270	23,309	Trang
12,315	11,550	10,820	14,985	18,045	18,670	19,381	25,202	26,169	21,478	Phattalung
10,737	9,759	9,702	11,837	12,547	11,840	13,511	16,122	20,199	17,513	Pattani
7,560	9,932	10,018	11,886	14,354	13,698	19,619	21,859	22,483	15,584	Yala
6,281	7,802	7,603	9,240	11,586	13,148	11,244	16,834	16,773	19,890	Narathiwat

## Appendix B: Name of the members in Thai Elderly Promotion and Health Care Association

ลำดับที่	ชื่อ	ที่อยู่	เบอร์ติดต่อ
1	โรงพยาบาลวิชัยเวช อินเตอร์เนชั่นแนล อ้อมน้อย	74/5 ถนนเพชรเกษม ตำบล อ้อมน้อย อำเภอ กระทุ่มแบน สมุทรสาคร 74130	02-431-0070
2	โรงพยาบาลวิชัยเวช อินเตอร์เนชั่นแนล หนองแขม	456-456/8 ถนนเพชรเกษม แขวงหนองค้างพลู เขต หนองแขม กทม. 10160	02-441-6999
3	โรงพยาบาลวิชัยเวช อินเตอร์เนชั่นแนล สมุทรสาคร	93/256 ถนนเศรษฐกิจ 1 ตำบลท่าทราย อำเภอเมือง สมุทรสาคร 74000	034-826-732
4	โรงพยาบาลกล้วยน้ำไท	80 ซ. โรงพยาบาล 2 ถ.พระราม 4 แขวงคลองเตย เขต คลองเตย กทม.	02-769-2000
5	กานต์ทิทานอร์สซิงโฮม	205/4 ซอยงามวงศ์วาน 39 แขวงทุ่งสองห้อง เขตหลักสี่ กทม. 10210	02-952-5911, 02-954-1973, 081-750-2362
6	บ้านอ้อมอุ่น ฌัฐณาเนอร์สซิงโฮม	18/1 หมู่ 2 ซอยคลองเรือ ตำบลเชียงรากใหญ่ อำเภอสามโคก จังหวัดปทุมธานี	086-995-9166
7	Smart Healthy Care Nursing Home	105/43-45 หมู่บ้านปิ่นเกล้าการ์เด้นซิตี ถ.พุทธมณฑลสาย2 ซ.25 ศาลาธรรมสพน์ ทวีวัฒนา กทม 10170	081-830-8015
8	ดวงใจเนอร์สซิงโฮม	99/148-150 ซ.มามีนคอนโดทาวน์ ถนนสีหบุรานุกิจ แขวงมีนบุรี เขตมีนบุรี กทม. 10510	02-918-9402-3
9	วราวรรณเนอร์สซิงโฮม	33/20 ม.สินทวีท่าข้าม3 อนามัยงามเจริญ 31 ท่าข้าม บางขุนเทียน กรุงเทพฯ 10150	02-439-3037, 089-883-3865
10	บริษัทโครนัส (ประเทศไทย) จำกัด	ห้อง 805 ชั้น 8 อาคารสำนักงานเซ็นทรัลเวิลด์ 999/9 พระราม 1 แขวงปทุมวัน เขตปทุมวัน กทม. 10330	02-646-1338, 081-439-2103
11	บ้านพอใจเนิร์สซิงโฮม	390 ซอยพัฒนาการ 53 แขวงสวนหลวง เขตสวนหลวง กทม. 10250	084-116-3388
12	บ้านดูแลรักบ้านพักคนชรา	2/1 ลาดพร้าว101แยก42 คลองจั่น เขตบางกะปิ กทม. 10240	02-719-7480, 081-855-3042
13	บ้านทิพย์ราดาเนิร์สซิงโฮม	4/1 ถ.บางบอน 3 (ซอยเพชรเกษม 69) ซอย 5 แยก6 แขวงหนองแขม เขตหนองแขม กทม. 10160	02-806-5130, 02-445-5389, 081-682-6036

ลำดับที่	ชื่อ	ที่อยู่	เบอร์ติดต่อ
14	คูัดเนอร์สซิงโฮม	174/86-87ถ.พระราม2 ซอย 60 (การไฟฟ้าบางขุนเทียน) แขวงแสมดำ เขต บางขุนเทียน กทม. 10150	02-416-2595, 089-491-4473
15	Golden life Nursing Home	(สำนักงานใหญ่) 25/303 ซ.12 ก หมู่บ้านสี่ไชยทอง 3 ถ.แจ้งวัฒนะ 24 ต.บางตลาด อ.ปากเกร็ด นนทบุรี 11120	02-584-3705, 086-895-1100, 081-496-3744
16	มาสเตอร์ซีเนียร์โฮม	144 หมู่บ้านเขมรัฐ ถนนบรมราชชนนี แขวงศาลาธรรมสพน์ เขตทวีวัฒนา กทม. 10170	086-444-8226, 081-628-5420, 089-687-6571
17	บ้านสมถวิลดูแลผู้สูงอายุ	42/203 ซอยนิคมใหม่6/1 ถนนนิคมใหม่ แขวงมีนบุรี เขตมีนบุรี กทม. 10510	02-181-0086, 089-829-1136
18	สายใยสัมพันธ์เนอร์ซิงโฮม	100-391 รามอินทรา 67 แขวงยานนาวา เขตบึงกุ่ม กทม.	055-298-371, 081-951-0646, 082-207-6515
19	บัวเพื่อนโฮมแคร์	18/5 หมู่ 6 ตำบลหน้าไม้ อำเภอลาดหลุมแก้ว ปทุมธานี 12140	02-979-3272, 081-984-8418, 081-446-1750
20	บริษัท เพอร์มา จำกัด	33/6 นวมินทร์ แขวงคลองกุ่ม เขตบึงกุ่ม กทม. 10240	02-738-7108- 9, 02-375- 3586-7, 02- 738-7244
21	ศูนย์ดูแลผู้สูงอายุลิฟวิ่งเวิลด์	1579/2 ถนนกรุงเทพ-นนทบุรี แขวงวงศ์สว่าง เขต บางซื่อ กทม. 10800	02-587-0167, 084-155-3908
22	บริษัท ปาป้า มาม่า เนอร์ซิงโฮม จำกัด	24/34-36 ซอยวิภาวดีรังสิต 37 ถ.วิภาวดีรังสิต แขวงสีกัน เขตดอนเมือง กทม. 10210	087-080-2747, 089-082-6807
23	บ้านพักผู้สูงอายุ ” ทรภัทร ” (เนอร์สซิงโฮม)	139/5 หมู่1 ต.บางขุนกอง อ.บางกรวย จ.นนทบุรี	089-828-7456, 086-330-9553
24	สายทิพย์เนอร์เนอส์ซิงโฮม	32/102-103 ตำบลคลองหลวง อำเภอคลองหลวง ปทุมธานี 12120	02-901-0858
25	บริษัท บางกอกเฮลท์แคร์ เซอร์วิส จำกัด	87/414 หมู่6 ถนนบางกรวย-ไทรน้อย บางรักใหญ่ บางบัวทอง นนทบุรี 11110	02-4474478-9, 089-1128155, 02-4474479
26	B – well Healthcare	302 ถ.สามัคคี30 (ติดปั้มเชลล์)ต.ท่าทราย อ.เมือง นนทบุรี 11000	02-952-2109, 086-893-5599

ลำดับที่	ชื่อ	ที่อยู่	เบอร์ติดต่อ
27	สถานบำบัดฟื้นฟูผู้สูงอายุ เอเชียเฮลท์แคร์	41 ซอยเฉลิมพระเกียรติ ร.9 28 แยก 3-2 ถนนเฉลิม พระเกียรติ ร.9 แขวงดอกไม้ เขตประเวศ กทม. 10250	061-565-8869
28	บ้านพักผู้สูงอายุ ระพีลิริ	194 / 18 หมู่ 17ถ.ศาลาธรรมสพน์ แขวงศาลา ธรรมสพน์ เขตทวีวัฒนา กทม. 10170	02-885-0965, 080-629-6888
29	บ้านอุ่มรัก	หลังหอศิลป์ ตลาดต้นตาล ถ.มิตรภาพ อ.เมือง จ. ขอนแก่น 40000	083-362-5423
30	ธนิดา เนอร์สซิ่งแคร์	1136 เพชรเกษม 94 แขวงบางแคเหนือ เขตบางแค กทม. 10160	094-4294598
31	บางกอกเนอรัลซิ่งโฮม	5/1 ถนน รามอินทรา ซอย ประสพสุข/รามอินทรา 4 แขวงอนุสาวรีย์พิทักษ์กรรมนุญ เขตบางเขน กทม. 10220	02-971-6582, 081-584-8520
32	จุโคะคะอิ เนอร์สซิ่งโฮม	108/1หมู่บ้านวิลล่าสราลีนิ ซอยสายไหม74/1 ถนน สายไหม เขตสายไหม กทม. 10220	094-4403642
33	การ์เด็นเนอรัลซิ่งโฮม	88/4 หมู่3 ตำบล ลาดสวาย อำเภอ ลำลูกกา ปทุมธานี 12150	02-998-6547, 089-508-2038
34	กัญญาเวทเนอรัลซิ่งโฮม	37/72 ซ.ระอุม 2 สุขุมวิท 103 แขวง หนองบอน เขต ประเวศ กรุงเทพฯ 10250	02-747-0171, 089-229-8561
35	Goodcare Nursing Home	92/112 หมู่บ้าน นารีสา ถ.เสรีไทย 29 คลองกุ่ม บึงกุ่ม กทม. 10240	02-732-6105, 089-677-6221
36	บริษัท วาสนาคูแดูแลผู้สูงอายุ จำกัด	46/60 หมู่ 6 ถนนสุขุมวิท 89 สัตหีบ ชลบุรี 20180	087-140-3688
37	Bann Fah Exclusive Nursing Home	125/10 บางเสร่ สัตหีบ ชลบุรี 20250	038-435559, 083-366-3274
38	PremiumHomeCare (พรีเมียมโฮมแคร์)	5/16 ซ.นนทบุรี42 ถ.สนามบินน้ำ บางกระสอ เมือง นนทบุรี 11000	084-089-8886, 087-001-3922
39	คุณันทา สิงห์โนนตาด (Z- Breeze Elderly Resort)	137/2 ถนนสุขุมวิท ตำบล นาจอมเทียน อำเภอสัตหีบ ชลบุรี	085-667-6139
40	โรงเรียนศรีวิชัยอาชีวศึกษา	74/5 หมู่ 4 ถ.เพชรเกษม ต.อ้อมน้อย อ.กระทุ่มแบน จ.สมุทรสาคร 74130	02-431-0070
41	ดิษฐ์ราเฮลท์แคร์เซอร์วิส	117/4 ซอยรุ่งประชา ถนนบรมราชชนนี แขวงอรุณ อมรินทร์ เขตบางกอกน้อย กทม. 10700	02-8826030
42	พีดี เนอร์สซิ่งโฮม	100/1321-1322 หมู่8 (หมู่บ้านลานทอง) ต.บางพูด อ. ปากเกร็ด จ.นนทบุรี 11120	089-4572118, 02-5836629



ลำดับที่	ชื่อ	ที่อยู่	เบอร์ติดต่อ
43	บริษัทจัดหางานไทยริเออิ และดูแลผู้สูงอายุ จำกัด	1/340-341 ถนนร่มเกล้า 26 แขวงคลองสามประเวศ เขตลาดกระบัง กทม. 10520	02-915-1969
44	ศูนย์พยาบาลพินิจนันทเนอร์ สซิ่งโฮม	39 เพชรเกษม 51 แขวงหลักสอง เขตบางแค กทม. 10160	080-6148606, 081-3818433
45	วีราวัลย์ เนอร์สซิ่งโฮม	64 ซอยลาดกระบัง 14/1 ถนนอ่อนนุช เขตลาดกระบัง กทม.	084-334-3073, 02-727-7524
46	ณัฐติฎการ เนอสซิ่งโฮม	6/72 ม.16 ม.ปาล์มวิลล่า ถ.ศรีนครินทร์ ต.บางแก้ว อ. บางพลี สมุทรปราการ	080-6040472, 02-758-9958
47	ศรีสกุล เนอร์สซิ่งโฮม	หมู่บ้านอู่ทอง 459/44 หมู่3 ต.ดอนตะโก อ.เมือง จ. ราชบุรี 70000	086-4459451, 090-9659197
48	สุขสบาย เนอร์สซิ่งโฮม	100/1035 ซ.29/1 ม.ลานทอง ต.บางพลู อ.ปากเกร็ด จ. นนทบุรี	02-964-6923 , 086-902-9070
49	ประเวศ เนิร์สซิ่งโฮม	100 ซ. เฉลิมพระเกียรติ ร.9 ซอย 85 ถ. เฉลิมพระ เกียรติ กทม.	088-7085129, 083-9998021
50	บ้านมีรัก เนอร์สซิ่งโฮม	54 ซอยฉิมพลี 3 แขวงฉิมพลี เขตตลิ่งชัน กทม. 10170	082-7958865, 0957484222
51	โรงเรียนอนันตรักษ์การ บริหาร	160/71-72 ถนนชมสินธุ์ ตำบลหัวหิน อำเภอหัวหิน ประจวบคีรีขันธ์ 77110	092-269-0944
52	ดีแคร์ เนอสซิ่งโฮม	98 ซ.63/1 ถ.รังสิต-นครนายก ต.ประชาธิปไตย อ. ธัญบุรี จ.ปทุมธานี	02-996-0847, 089-124-2959
53	ห้างหุ้นส่วนจำกัด เทค แกร์ อินเตอร์กรุ๊ป	450 ซอย บางบอน 3 ซอย 8 ถนนบางบอน แขวงบาง บอน เขตบางบอน กทม. 10150	02-890-8090, 081-818-8337
54	เฮลท์ดีลีฟวิ่งเซ็นเตอร์	55/1 ซอยรามอินทรา 58 ถนนรามอินทรา แขวงราม อินทรา เขตคันนายาว กทม. 10230	091-920-4069, 090-976-9196
55	มณฑลสายสี่ เนอสซิ่งโฮม	หมู่บ้านปรีชา ซอย 2 ถ.พุทธมณฑลสาย4 อ.สาม พราน นครปฐม	089-914-9897, 086-377-5290
56	บริษัท นิกเกะ (ประเทศไทย) จำกัด	29 อาคารบางกอก บิสซิเนส เซ็นเตอร์ ชั้นที่ 18 ห้อง 1805 ถนนสุขุมวิท 63 คลองตันเหนือ เขตวัฒนา กทม. 10110	02-714-4101
57	ณัฐฐานันท์ เนอร์สซิ่งโฮม	50 ซอยเพชรเกษม 48 แยก 6 ถนนเพชรเกษม บาง ด้วน ภาษีเจริญ กทม. 10160	02-869-6799 081-199-6542
58	บริษัท บ้านอำนวยการพิทักษ์ จำกัด	363 ม.12 ซอยชัยพฤกษ์ 1 ถนนชัยพฤกษ์ 1 ตำบล หนองปรือ อำเภอบางละมุง ชลบุรี 20150	092-254-2311

ลำดับที่	ชื่อ	ที่อยู่	เบอร์ติดต่อ
59	บ้านแกรนนี่แคร์	31/140(40) ม. เอกชัยเลควิลด์ ถ.เอกชัย ซอย เอกชัย 131 แขวง บางบอน เขต บางบอน กทม.10150	02-892-3099, 086-511-3810, 086-777-7793
60	บิลิฟเนอร์สซิงโฮม	99/198 ถนนสายเอเชีย นครสวรรค์ ตำบลวัดไทร อำเภอเมือง นครสวรรค์ 60000	081-575-2451
61	ห้างหุ้นส่วนจำกัด นัฐนันท์ ดูแลและการบริการ	58/650 ม.13 ถ. พหลโยธิน คลองหนึ่ง อ. คลองหลวง จ.ปทุมธานี 12120	080-821-7026
62	เดอะ ไลฟ์ แคร์ เนอร์สซิง โฮม	99/543 ม.อมรชัย 5 ต.บางน้ำจืด อ.เมือง จ. สมุทรสาคร 74000	081-497-8000, 087-597-3666
63	นภา โฮมแคร์	99/35 หมู่ 19 ถนนพุทธมณฑลสาย 2 ซอย26 แขวง ศาลาธรรมสพน์ เขตทวีวัฒนา กทม. 10170	02-885-9381, 087-296-8185
64	จันดีเนอร์สซิงโฮม	100/18 ม.ธารารินทร์ คลอง 2 ต.คูคต อ.ลำลูกกา จ. ปทุมธานี 12130	096-946-5663, 085-944-6659
65	ใจรักเนอร์สซิงโฮม	10/45 พุทธมณฑลสาย 2 ถนนพุทธมณฑล แขวงบาง แคเหนือ เขตบางแค กรุงเทพฯ 10160	02-803-1858, 087-322-5016
66	บ้านมานิตา	10/46 หมู่บ้านวารินทร์ ถนนพุทธมณฑลสาย 2 ซอย 7 วัดบุญประดิษฐ์ บางแคเหนือ บางแค กรุงเทพฯ 10160	081-754-9844, 084-917-6554

## Appendix C: Name of the villages near Location #1 and Location #2

### Location #1

Name of The Village near Location#1	No. of Unit	Price (Million THB)
Centro	63	7.79-12
AQ Arbor	114	7.8
Nirvana Beyond Srinakarin	58	16.9
Promphan Village	46	20-80
Mantana Srinakarin	414	5.79-16.99
Mantana Bangna	229	9.09-20
Nuntawan Onnut	371	20-50
Chaiyaphuk Onnut	118	6.99
Lake Side Villa 1	217	15-35
Lake Side Villa 2	115	20-40
Cascade Bangna	63	12
Life Bangkok Boulevard	140	6-10 ml
Nusasiri	58	20
Setthasiri	126	12-25ml
Casa Premium	139	6-15ml
Casa Grand	210	8-15ml
Laddarom Bangna	99	12-12ml
Blue Lagoon	262	9.01-20
Blue Lagoon 2	151	7.9
Grand Monaco	181	8.9-40

### Location #2

Name of The Village near Location#2	No. of Unit	Price (Million THB)
Mantana RamaII	118	7.79-12