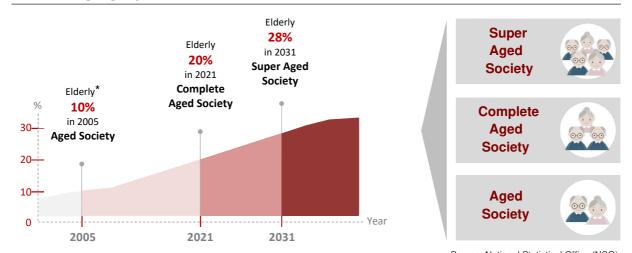
Trends of Ageing-Related Businesses in Thailand

1. Overview of Thailand's Ageing Population

The Thai population is ageing rapidly. The country became an 'aged society' in 2005 and is projected to enter a 'complete aged society' and a 'super aged society' in 2021 and 2031, respectively.

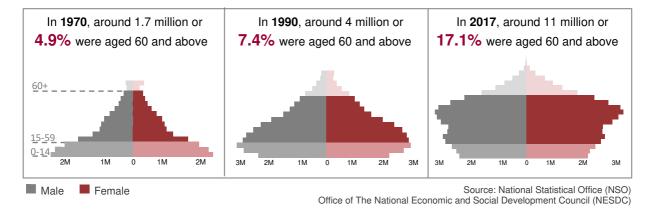
Thailand's Ageing Population



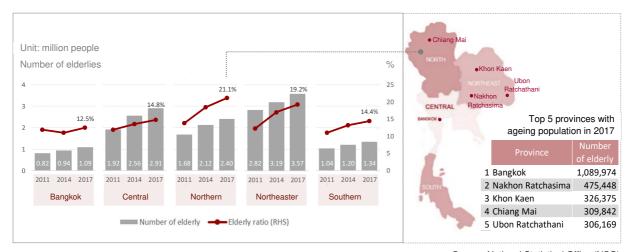
Source: National Statistical Office (NSO),
Office of the National Economic and Social Development Council (NESDC)
* In Thailand, "elderly" refers to Thai citizens aged 60 years or more.

The structure of the Thai population has been changing noticeably over the past several decades due to a constant decline in fertility and an increase in life expectancy. As shown in the charts below, children aged lower than 15 years made up almost half of the population in 1970. However, this proportion has changed over time with a dramatic fall in child population to 18% of total population and a growing share of the ageing population from around 5% in 1970 to 17% in 2017.

Thai Population Structure



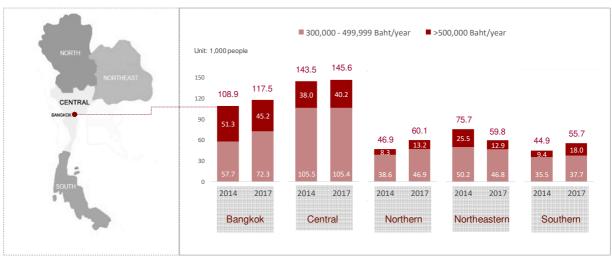
A report published by the National Statistical Office (NSO) revealed that the northeastern region has the greatest number of elderly people at around 3.57 million out of the total elderly population of 11.31 million in 2017. In terms of elderly ratio, the northern region had the highest share of people aged 60 years or older at 21.1% compared to other regions.



Source: National Statistical Office (NSO), Note: *The elderly ratio is the number of elderly people per total population.

 Figures from the NSO also show that the middle to high income elderlies mainly live in Bangkok and the central region of Thailand.

Number of Middle to High Income* Elderlies Classified by Region (2014-2017)



Source: National Statistical Office (NSO)

Note: *Middle to high income elderlies are those aged 60 years or older who have an annual income of more than 300,000 Baht.

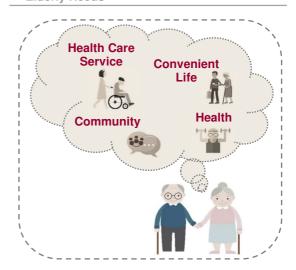
Income includes income earned from work, remuneration/pension, social security fund, government living allowance, interest assets, income supported by spouse/child/parent/brother/sister/relative and others.

- The number of elderlies living alone has been gradually increasing in Thailand due to economical and sociological changes. The percentage of elders living alone grew from 3.6% in 1994 to 10.8% in 2017 according to the NSO.
- With Thailand becoming an ageing society, healthcare support and policies are crucial not only to the elders living alone, but to all elderly population in the country as older people require more care and assistance for their wellbeing in their daily lives. The government is aware of the and sees this as an important matter as they try to facilitate the lives of the elderly. Some efforts include the universal healthcare scheme, senior housing complexes, and retirement savings programs.

Number of Elderlies Living Alone (1994 - 2017)

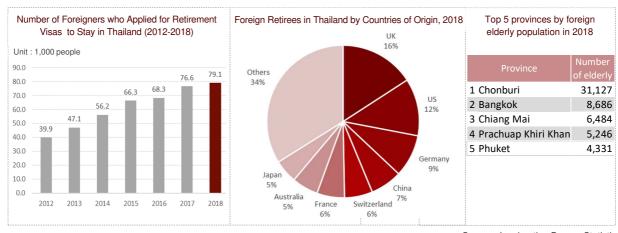
Unit: 100 people % 1400 14 10.8% 1200 12 8.7% 1000 8.6% 10 7.7% 800 6.3% 600 3.6% 400 0 1994 2002 2007 2011 2014 2017 Number of elderly ——% of elderly living alone to total elderly (RHS) Source: National Statistical Office (NSO)

Elderly Needs



- Aside from the growing ageing population in the country, Thailand is known as one of the top and most affordable destinations for expat retirees. Low costs of living, excellent standards of healthcare, the country's tropical climate, as well as the availability and accessibility of retirement visas have made Thailand an ideal place for retirement.
- The Thai Immigration Bureau reported that the number of foreigners who applied for retirement visas to stay in Thailand continue to rise every year, almost reaching 80,000 in 2018, from around 40,000 in 2012. Most foreign retirees come from the United Kingdom, the United States of America, Germany, China, Switzerland, France, Australia, and Japan. Some popular provinces in Thailand among foreign retirees are Chonburi, Bangkok, Chiang Mai, Prachuap Khiri Khan, and Phuket. These five provinces account for around 70% of the entire foreign retiree population living in Thailand.

Retirement Visas in Thailand



Source : Immigration Bureau Statistic

2. Healthcare and Medical Coverage of Thailand's Ageing Population

- There are various schemes in Thailand's healthcare system. The largest scheme, in terms of the number of beneficiaries, is the Universal Coverage Scheme (UCS) issued by the National Health Security Office (NHSO).
- A universal coverage card¹ has been provided to Thais of all ages who are not eligible for other public benefits, namely the Social Security System (SSS) and the Civil Servant Medical Benefits Scheme (CSMBS). Around 84% of elderly population receive their healthcare benefits through the UCS.
- Private health insurance has played an important role among the elderly as it helps to mitigate and protect them from high medical expenses. According to the survey published by the NSO, the number of elders with private health insurance as well as those provided by employers saw a noticeable increase of 36% and 39% CAGR between 2007 and 2017, respectively. The growing middle-class population together with the rapid increase in medical costs are the key drivers that help boost the demand for private health insurance.

Medical Benefits for the Elderly in Thailand

Type of Medical Benefits		Trend in 2007-2017	CAGR 2007-2017	Share (2017)
Public Medical Benefit Schemes	Universal coverage card (UC)	2017 2007 9.4M	6%	83.9%*
	Civil servant medical benefits scheme (CSMBS) / State enterprise / Independent agency of the state / Local government	2017 2007 1.8M	☆ 3%	16.6%
	Social security system/worker compensated fund (SSS)	2017 2007 0.2M	13%	2.1%
Private Health Insurance	Personal health insurance	2017 2007 0.4M	♣ 36%	3.6%
	Health insurance covered by employer	2017 2007 23K	♣ 39%	0.2%
Others		2017 2007 0.1M	14 %	1.1%
	No health welfare / Unknown	2007 50K 2017	— 11%	0.5%

Source: National Statistical Office (NSO)

Note: *The number may exceed total number of elderlies as the survey allows multiple answers from respondents.

In addition to medical benefits, the government also provides long-term residential support for the elderly called 'Social Welfare Development Center for the Elderly'. At present, there are over 10 of these residential care centers nationwide, providing living arrangements and basic needs such as food, medical, religious activities i.e., praying and preaching, as well as recreational activities. However, the government cannot provide complete support to all elders and only accept independent elders or those who can care for themselves due to shortage of caregivers. The Social Welfare Development Center for the Elderly is the most basic type of residential support from the government in terms of price, ranging from 200,000 - 400,000 Baht annually.

¹ The card entitles enrollees to free care at health centers in their home districts and contracted hospitals.

• Although public healthcare insurance schemes and other healthcare support have been expanded to keep up with the rising senior population, they remain insufficient in both quantity and quality of the service. Therefore, the demand for private healthcare services is expected to increase, especially those that target middle to high income elders who need more sophisticated healthcare services since it is expected that the number of these groups of elders will increase.

3. Ageing-Related Businesses in Thailand

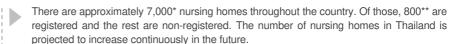
Elderly care

There are many types of elderly care businesses in Thailand. Examples are nursing home, inhome care, long stay care, and hospital care centers. These businesses provide care services for the elderly including assistance with the activities of daily life, health management, rehabilitation, and social activities.

Types of Elderly Care Businesses in Thailand

Nursing Homes

An assisted living center that offers extensive care, from personal care needs, and 24/7 supervision from staff members as well as registered nurses.



According to Department of Health Service Support, most nursing homes are in Bangkok and nearby provinces, as well as large provinces namely Nakhon Ratchasima, Khon Kaen, and Chiang Mai.

Most nursing homes are owned and operated by nurse practitioners or non-medical persons.

Home Care

Home care or in-home care services, providing on-demand nurses for the elderly at their homes.

Providers can be just an individual person, a small company, or a business operator in the healthcare industry such as hospitals.

According to the EIC survey, more than 90% of the elderly in Thailand want to stay in their own homes after retirement. Moreover, home care costs three times less than care at hospitals.

Long-Stay Care

The long-stay care center is designed to have a home-like setting and includes large outdoor spaces.

Long-stay resorts with care by skilled members of staff with professional services.

Some places provide parks with private swimming pools.

Hospital Care Centers

The center offers healthcare services to elderly patients with hospital standard.

One - stop service provider of medical and elderly care by professional caregiver.

This is considered the safest care service as there will always be doctors and nurses on standby.

Note: * Department of Health Service Support (cited in Prachachat Business News, August 2018)

**Foundation of Thai Gerontology Research and Development institute (TGRI)

Some businesses provide more than one type of elderly care services such as Kluaynamthai 2 Geriatric Hospital, a hospital for the elderly that provides care both at the hospital and at home for those who need to stay at home. Not only Thai investors have shown interest in investing in the elderly care business in Thailand, but so do foreign investors such as the Japanese and Swiss. Details of the investment will be mentioned in the table below.

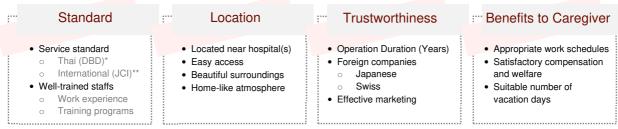
Standard	Projects	Strengths	Target Customers
Non-Hospital Qualification (Operators registered as a business entity at the Ministry of Commerce and are randomly inspected by the Ministry of Public	Baan Tarawadee Nursing Home (Thai investor) Nursing home	Provides same service standards as hospitals Inursing assistants are certified and have completed a 6-month training course Provide hospice care services First nursing home franchise business in Thailand Received best practice for service awards from the Department of Business Development (DBD) in 2017	Self-reliant patients Bedridden patients Terminally and seriously ill patients
Health)	RIEI Nursing Home Ladprao (Japanese investor) Nursing home and home care	Provides Japanese-style elderly care services Rehabilitation with Japanese experts Provides transportation services for patients Provides care and assistance at elders' home (in-home care)	Upper-middle class locals in the Ladprao area of Bangkok
	Vivobene Village (Swiss investor) Long-stay resort with nursing home	First-class resort with care provided by qualified healthcare professionals Free shuttle buses to the center of Chiang Mai for shopping and sightseeing trips Park with private swimming pool	Swiss elderly or patients who are nature lovers, looking for relaxation
Hospital Qualification (Operators registered as sanatorium with Ministry of Public Health as they	Passarapiban Nursing Home (Thai Investor) Nursing home	Chronic care with a home-like atmosphere Natural surroundings Various social activities for the elderly Modern equipment for emergency cases	Self-reliant patients Chronic disease patients Terminally and seriously ill patients
provide medical care services by doctors)	Kluaynamthai 2 Geriatric Hospital (Thai Hospital) Geriatric care center and home care	The first care center with international standard (JCI) in Thailand and Asia Caregivers are specialized in care of elderly patients Provides family-like services Short- and long-term elderly care services (care center, therapy center, and home care)	Geriatric patients or elders who need medical examination and international standard services

Source: Collected from each companies' websites

The four main factors that bring success to these companies as mentioned above are quality, location, reliability, and employees' welfare and benefits, especially for the caregivers. Caregivers are considered as the important part of the healthcare business. Shortage of caregivers and poorquality service by caregivers can have a severe negative impact on the company. Therefore, competitive welfare and benefits to caregivers is very important to attract new staff and maintain existing ones.

Key Success Factors of Elderly Care Businesses in Thailand

In addition to those success factors mentioned above, investors must also know the insight of elderly needs and conditions as this will help increase the likelihood of business success.



*Business management and quality standard for health by Department of Business Development (DBD)

**International healthcare standard by Joint Commission International (JCI)

The growth and development of elderly care businesses in Thailand has created business opportunities for both Thai and foreign investors. This type of business is expected continued growth since there seems to be an increasing number of elderlies living alone in Thailand, lacking family support or with no one to care for them.

Wellness Centers

- A trend towards health-conscious lifestyles has boosted the demand for wellness and preventive healthcare amongst Thais, especially in the elderly and pre-elderly people (those aged 50 and above).
- So far, wellness centers in Thailand are owned by private hospital operators whose aim is to help
 prevent ageing and promote longevity of the patients. Most wellness centers provide predictive
 diagnostic and therapeutic services with the latest technology from abroad.

Examples of Well-Known Wellness Centers in Thailand

Hospital Group	Projects	Strengths	Target customers
Bangkok Dusit Medical Service (BDMS)	BDMS Wellness Clinic (Thai investor) Bangkok Dusit Medical Service Company	Provides premium wellness and preventive healthcare services The leading and largest private healthcare provider in Thailand with 45 hospitals and clinics together with 10,000 physicians. Specialized in health check-ups and evaluations	Health conscious locals and foreign high-net-worth clients who seek premium wellness services Mid- to high- income elderlies
	Bangkok Longevity Center (Thai investor) Bangkok Hospital	Offers comprehensive one-stop healthcare services for the elderly Provides geriatric assessment, medication, nutrition consultation, and mobile acute care for the elderly (MACE)*	Mid- to high- income elderlies
	Samitivej Wellness Center (Thai investor) Samitivej Sukhumvit Hospital	Offers comprehensive medical examination programs for both local and international patients Tests can be conducted and analyzed within 60 to 90 minutes	Health conscious locals and foreign high- net-worth clients who seek premium wellness services
	Healthy Ageing Center (Thai investor) Samitivej Srinakarin Hospital	Offers comprehensive care and personal treatments for patients by a team of specialists in geriatric medicines Screening processes and treatment programs are specifically designed for geriatric patients with US standards guided by the Centers for Medicare and Medicaid Services (CMS)	Pre-elderly and elderly patients who are close to retirement age and wish to prepare themselves for old age
Bumrungrad International Hospital	5. VitalLife Wellness Center (Thai investor)	Asia's first wellness center which focuses on disease prevention, health optimization and rejuvenation with over 17 years of experience Offers highly personalized treatments for the prediction and prevention of age-related diseases Located in the heart of Bangkok with an expansion on its second location near Bangkok in the Bangkrajao area	Health conscious locals and foreign high- net-worth clients who seek premium wellness services
	New Life Healthy Ageing Clinic (Thai investor)	Provides holistic care for older adults, from primary health and preventive care, to consultation for medical-related issues Provides services on design changes or safety modifications to living spaces, specific to the needs of older adults	Mid- to high- income elderly

Source: Collected from each companies' websites

Note: *Mobile Acute Care for the Elderly (MACE) is a service that consists of an interdisciplinary team of geriatricians, clinical nurse specialists, pharmacists, and nutritionists with a focus on reducing the risks of adverse events during or following hospitalization for acute care.

The key success factors for wellness centers as mentioned above are globally recognized standards, customer research (understand patients' needs), extensive network of alliances and partnerships, along with technology. Nevertheless, shortage of healthcare workers such as nurses or multilingual staff will be one of the biggest challenges for wellness center businesses.

Key Success Factors for The Wellness Center Business

Standard Customers Network Technology · Globally recognized Personalized treatments · Strong network of Advanced treatments and standards and programs healthcare and wellness programs, using the latest technology and • Comfortable facilities centers both domestic Well-trained staff Work experience • Beautiful surroundings and international equipment from Training programs · Home-like atmosphere Multilingual

Senior Housing Projects / Senior Complexes

- As Thailand moves closer towards a 'super-aged society', property developers, including those in other industries, have been looking into developing housing projects that are designed to cater to the needs and lifestyles of the elderly. An interview with one of the board members of Sawangnives Home for Thai elderly revealed that Thai seniors today are more active and enjoy socializing more than those in the past.
- Even though the senior housing market remains relatively small in Thailand, it has increasingly attracted more pre-elderly people over the past couple of years, especially singles and child-free couples who wish to continue to live independently with a secure healthcare support by living near hospitals or have access to medical services.
- Operators of senior housing projects in Thailand are diverse, ranging from medical service providers, property developers, and the public sector. Medical service providers/hospitals use their expertise and existing resources to offer medical services within the project area.
- Property developers also see the potential in this market and have begun developing more senior-friendly accommodations. In the meantime, the public sector, e.g. the Department of Treasury, the Red Cross Society, and the Department of Senior Service, also plan to develop several senior complexes across the country. However, these projects require joint investment with the private sector to provide medical services.

Examples of Well-Known Housing Projects / Senior Complexes in Thailand

Projects	Strengths	Target customers
Jin Wellbeing County (Thai investor) Under construction Thonburi Healthcare Group (THG)	 An alternative senior housing for retirement with integrated healthcare services Personalized treatment programs to respond to the specific needs of the elderly Using universal design approach to construct its buildings and facilities to make them accessible to all people, regardless of age, disability, or other factors. Wide selection of indoor and outdoor activities for the elderly Surrounded by nature and fresh air on a 140-rai plot of land 	Mid- to high-income elderlies
Wellness City (Thai Investor) Wellness Hospital Group	The project includes residential buildings, a hotel, and medical services. Located on a 1,200-rai plot of land in Ayutthaya province.	Mid- to high-income elderlies
Villa Meesuk Residences (Thai Investor) Meesuk Society	Luxury residences in Chiangmai province, exclusively designed to cater to the elderly Low-rise buildings, condominiums, and villas with functional design, featuring premium quality specifications with stunning views of lakes and mountains Received elderly care innovation awards 2016 from the Ageing Asia Innovation Forum	Mid- to high-income independent elderlies, who are capable of taking care of themselves
Sawangkanives (Thai investor) Thai Red Cross Society (Non-profit organization)	A retirement community for senior people managed by the Thai Red Cross Society Accommodation designed to cater to elderly needs and lifestyles Using universal design approach to construct its buildings and facilities to make them accessible to all people, regardless of age, disability, or other factors. Wide selection of indoor and outdoor activities for the elderly	Thai mid- and high- income independent elderlies, who are capable of taking care of themselves.

Source: Collected from each company websites

Quality of service, senior-friendly design, trustworthiness, and location are the main success
factors of the above projects. Homes designed specifically for seniors should be safety-proofed
to prevent any falls and accidents that could happen in the future.

Standards

- Globally recognized standards
- Foreign partnership
- Well-trained staff
- High-quality buildings

Design

• Elderly-friendly buildings

- Universal design
- · Safety-proofed

Trustworthiness

- Collaboration between private and public sectors can build project credibility
- Team up with renowned healthcare service providers.

Location

- Access to transportation and health services
- Nearby conveniences
- Beautiful natural surroundings withni nature

4. Government Support for Investors in Ageing-Related Businesses

- An ageing population has been one of the challenges that the healthcare sector has to face, not only in Thailand, but also in several other countries around the world. The number of senior citizens will keep growing and the demand for services to support the health requirements for the elderly will rise.
- Apart from Thai elders, the number of foreign retirees has been increasing continuously as well
 due to the low costs of living, affordable access to healthcare, and the tropical climate. This
 indicates that foreign retirees could also be the target customers of elderly care businesses in
 Thailand.
- For these reasons, both Thai and foreign investors are interested in investing in elderly care businesses. The Thai government issued policies to attract new retirees and promote investment in the country. Examples of these incentives are the long stay visas for elderly and the development of senior complexes.

Support Policies in Ageing-Related Businesses

Visas for the elderly

The Non-Immigrant Visa "O-X" (Long Stay) targets nationals from 14 countries aged 50 or over. The applicants can apply for a visa and stay in the Kingdom for the maximum period of 10 years.

Applicants must hold passports and nationalities of Japan, Australia, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, Canada and the United States of America.

Development of Senior Complexes In accordance with the government's policy to prepare for an aged society, several additional senior housing projects and senior complexes have been planned for future investment and will be located in various provinces across the country such as Bangkok, Chiang Mai, Chonburi, and Prachuap Khiri Khan. The private sector, both Thai and foreign, are also encouraged to participate in the investment.

- An investment promotion given to medical device manufacturers² by the Thai Board of Investment (BOI) is believed to have a positive impact on ageing related businesses, especially wellness centers and elderly care businesses, as they might have access to medical devices at lower costs.
- The Thai government is well-aware of the challenges regarding the ageing population. However, integrated strategic planning between the public and private sectors may be needed to address the problems. Improving quality of life for the elderly with senior-friendly infrastructure and accessibility to healthcare services are some of the developments that the Thai government can do to prepare for the ageing population.

² The activities eligible for corporate income tax exemption are research and development in medical industries, manufacture of high-technology medical devices and electronic parts for medical devices. These businesses are eligible for maximum corporate income tax exemption period at 8 years.

Thailand will be entering into a complete aged society with an estimated 13 million elderlies, who will account for approximately 20% of the total population in 2021. Not only Thai elderlies, but the number of foreign retirees is also growing continuously. The demographic changes together with societal and lifestyle changes have created new opportunities for businesses in Thailand.

Because of this, businesses targeting the elderly are becoming increasing competitive in recent years. More types of products and services have been introduced to cater to the needs of seniors. The competition is predicted to be more intense in the future.

Despite the growing market, only a few operators are successful. Therefore, investors should make a smart move to ensure success in this market. Key factors for successful investment include having a wide selection of different services and products, finding the right partner, and utilizing technology in their businesses. Above all, market and customer insights are the factors that also need to be considered.

Recent Trends & Prospects

Growing number of elderly people:

- Thai elderly, especially mid- to high- income groups
- Foreign retirees in Thailand
- · Lifestyle changes:
 - Increasing trend of elderlies living alone
 - Smaller-sized families
 - Health conscious and preventative medicine
 - Senior citizens with active lifestyles

Intense competition

- Higher number of elderly care businesses, but only few offers good standard services
- Competitors from different industries entering the market
- Lots of products and service choices for customers to choose from

Challenges

Growing

Demand

- Stringent controls & regulations on elderly care businesses
 - The Ministry of Public Health is developing a set of regulations with the aim to raise the standards and quality of elderly care businesses
- · Shortages of healthcare personnel
 - Caregivers, multilingual caregivers, nurse practitioners, etc.

Business Opportunities

There are plenty of business opportunities for the ageing market in Thailand.

- ✓ Premium elderly care services
- ✓ Premium in-home services
- Integrated medical and elderly care services
- ✓ Residential complexes
- ✓ Various kinds of products: i.e.
- Daily living products
- Assistive products
- Safety devices
- Medical devices

Keys to Success

Finding the right partners:

- To gain local insights and knowledge, e.g. cultures and lifestyles, related regulations
- To gain brand recognition/ trustworthiness
- o To gain resources/ cost sharing

✓ Be different:

o Add value to products & services

Utilizing technology:

- Helps reduce the problem of labor shortages
- o Helps in cost reduction
