



Aged care technology

Industry focus

April 2019

KPMG in Thailand

home.kpmg/th

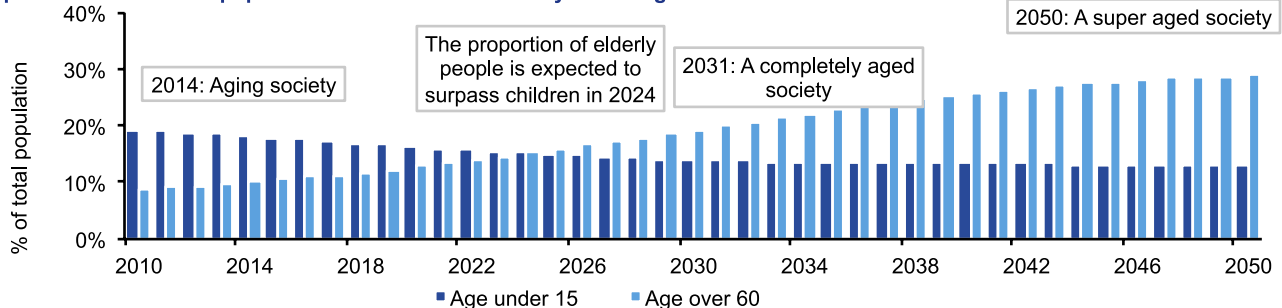


Moving towards an aged society

Since 2014, Thailand has become an aging society with more than 10 million elderly¹ people accounting for 10 percent of the total population. On the other hand, children under the age of 15 account for only 18 percent of the total population, with a significant 2 percent drop each year. Thailand is predicted to become an ‘aged’ society in 2031 and a ‘super-aged’ society in 2050, with 20 and 30 percent of the total population being aged citizens, respectively. This means that out of every three Thais, one will be a senior citizen.

This demographic shift appears in several countries around the world, particularly in developed countries. However, Thailand will be the first middle income, developing country to enter an aged society while other countries in this aging process will have already escaped the middle income stage. This translates to challenges with employability, lower economic growth, and care and support of senior people. Nevertheless, with technology and digital innovation, there is currently the rise of advanced tools as a result of the demands from aged healthcare and higher life expectancy rates. In this publication, we explore key issues in healthcare and how to cope with these challenges.

Proportion of Thailand's population under 15 and over 60 years of age: 2010-2050



Source: BMI Research, Situation of the Thai elderly 2017, Bank of Thailand – Aging Population: Global Perspectives (2017)
Note: ¹UN uses 60 years as the starting point when presenting statistical data for the elderly

Life expectancy of the Thai population increases; more expenses on healthcare services

Life expectancy	Men		Women	
	2010	2018	2010	2018
At birth (No. of years a person is expected to live from birth)	69.5	72.2	76.3	78.9
At age 60 (Number of years a person is expected to live from age 60)	19.4	20.2	21.9	23.6

Source: Mahidol Population Gazette, 2018, Situation of The Thai Elderly, 2017





Over the last decade, the life expectancy of Thai people has significantly increased from 69.5 to 72.2 years for men and 76.3 to 78.9 years for women in 2010 and 2018 respectively. It is also projected that in 2050, Thais who reach the age of 60 will be expected to live for another 26 years.

It is likely that a senior person will live longer than in previous generations. As a result, the demand of healthcare services will increase.

Government efforts on health issues regarding senior citizens

The second National Plan on the Elderly (2002-2021) that was initiated by The National Committee on the Elderly indicates a key strategic plan to establish security and good living standards for seniors. This includes having access to healthy and friendly environment, having appropriate welfare and services, leading a valuable life and having access to data, information and news.

National Plan on the Elderly: Measures related to health to be achieved in 2021

 95% Proportion of elderly persons with disabilities to be visited once a month	 90% Proportion of elderly persons undergoing annual health examination	 95% Proportion of elderly persons that receive the required vaccinations	 80% Proportion of districts which have at least one public park with an area for the elderly to exercise	 95% Proportions of hospitals with 120 beds or more, and have elderly clinics
---	---	---	---	---

Source: The 2nd National Plan on The Elderly 2002-2021, Department of Older Persons, Ministry of Social Development and Human Security











“Aging populations across the globe are driving demand for health and social care services - as people live longer and the incidence of chronic disease and multi-morbidity rises. But older citizens are also a great source of people power, actively participating in the care of themselves and others, whether that’s through volunteering for friends and family or better self-management of their own conditions. This cohort of citizens are also better informed and technologically literate than previous generations and expect more. They will not accept poorly coordinated, inefficient care, and what’s more, they have the financial means to drive change”

Mark Britnell
 Global Healthcare Chairman,
 KPMG International

Aging healthcare issues that really matter in the global context

From the insights of directors and healthcare leaders, we have listed significant issues that today's global healthcare organizations are facing and concerned about.

	Aging population	Shift in age structure can have vital implications for economy, social trajectory, resource allocations, and policy agendas which impact organizations and the way they do business.
	Risk management	Risk management continues to be essential to survive and thrive in an increasingly competitive and disruptive environment, particularly for organizations focused intensely on regulatory compliance and risk mitigation.
	Connecting digital disruption with risk management and strategy	The speed of advanced technologies are disrupting business models. Organizations need to identify the risks and opportunities, and assess the impact on the company's strategy.
	Accelerating consolidation in healthcare	Players in and outside the healthcare sector are looking at more transformational efforts to solve the challenges of cost and incentives, quality, compliance, and competitiveness. Consolidation will continue to reshape the industry.
	Potentially building, buying, partnering or aligning with health plans	Organizations need to think through potential scenarios and related investment models, including health maintenance organization, insurance or regional/national health plan.
	Maintain the quality and integrity of regulatory reporting	The focus on quality metrics continues to accelerate. Compliance departments should be working with quality and risk management departments to monitor, assess and audit the quality reporting departments across the organization.
	Cybersecurity and data privacy	Cybersecurity and data privacy continue to grow more sophisticated and aggressive, with implications for nearly every facet of the business. Organizations should be moving beyond prevention to detection, containment and response, as well as addressing cybersecurity as an enterprise-wide business issue.
	Assess, monitor and reinforce culture	Corporate culture plays a role in driving a company's performance and reputation; companies should be taking more proactive approaches to understanding, shaping and assessing corporate culture.

Source: Population Reference Bureau, KPMG publication – on the 2019 healthcare board agenda

Trends and technology towards healthcare

Generation X and Baby Boomers are entering retirement stages along with digitized behavior and different needs towards health and lifestyle, requiring more complex care. Advanced health technology has to be implemented to engage with those consumers according to their needs and preferences.



Healthcare as a service

The growth in connected devices provides greater transparency and fulfillment in consumer's expectations for anywhere, anytime monitoring, diagnoses and treatment.



Consumer-held electronic medical records (EMR)

Consumers want to be in control of their health data and are more concerned about the quality and privacy of their data. This data may include exercise, diet information or data from personal health monitoring devices.



IoT: Enabling outcome-based care anywhere

Medical technology and connected devices create a bridge between individuals and healthcare professionals, providing flexibility of care and greater insights into patients.



Wearables, digestibles and implantables

Sensors help continuously track both health and wellness in real-time. Emotion sensors are tipped to be next; indicating the interaction between patient's emotion and the environment.



Evolving relationship between humans and AI

AI is used for assisting clinicians with diagnoses and the design of treatment plans. Patient outcomes are improved and costs reduced when AI is combined with the work of clinicians.



Rise of medical robotics

Medical robotics are expected to evolve and transform medicine for the better. They are already being used to provide companionship for patients in hospitals, assist in surgical operations and to clean and disinfect operating rooms.



Healthcare environment by design

The environment can play a crucial role in helping to normalize rest-activity cycles, sleep patterns, mood and pain, in addition to enhancing the overall patient experience.

Source: KPMG publication – Healthcare reimagined



“Digital technology has a vital role in the healthcare industry especially for senior and aftercare programs. A combination of the advanced technologies can be used, in multiple angles of healthcare through real time data collection from the IoT and wearable devices. Advanced analytic tools such as AI and precision medicine and Robotic Process Automation can certainly help hospitals and healthcare providers to deliver healthy and quality living to elderly.”

Natasak Rodjanapiches

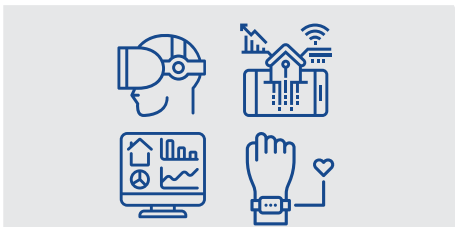
Director, Advisory
KPMG in Thailand



Turning 'aged society' into 'ageless society' with advanced technology

Connected devices are being used to monitor and record activities that are related to elderly people's health. For instance, wearables that provide real-time data and are linked with the advancement in analytic technologies such as cognitive computing, machine learning and predictive analytics, are designed to turn data into opportunities and insights that will transform healthcare.

Self-tracking through smart devices



Sensors, actuators, gateways and infrastructure need to support IoT networks; the aggregation and integration of data need to be in place and appropriate.

Advanced analytical technologies



Investing in big data, predictive analytics and AI capabilities is a critical enabler to a modern healthcare provider.

Better care and quality of aged life



Designing experiences with transparency of information and leveraging data to drive predictive, preventive and personalized health and healthcare delivery.



Source: KPMG Publication – Healthcare reimagined, KENAN Institute –The Business Of Healthcare: Adapting To An Aging Economy (2017)

Business opportunities from aging society

Overview of emerging trends involving aging populations from the investor's perspective.

Private sector	Public sector	Consolidation and construction of facilities	Connected patients	Cultural adaptation
<ul style="list-style-type: none"> Short-term care: services and support for daily activities Long-term care: residential facilities, institutional aged care Pensions and mortgages 	<ul style="list-style-type: none"> Public-private interactions Care giver and workforce Sustainable policies that can advance products for older adults 	<ul style="list-style-type: none"> Vertical consolidation: hospitals and community centers Horizontal integration: transportation, technology and housing 	<ul style="list-style-type: none"> Technology transformation: customer-oriented technology Brand reputation and the reputation of hospitals and medical services 	<ul style="list-style-type: none"> The most-overlooked and difficult to quantify aspect of the forward-thinking business opportunities in institutional aged care is the influence of culture, customers, and traditions on market expansion

Source: KPMG publication – Golden opportunities from the graying population, SCB EIC

Recent publications



On the 2019 healthcare board agenda



Value-based pricing in pharmaceuticals



Operational excellence in healthcare: Getting from good to great



Healthcare reimagined



Key contacts



Tanate Kasemsam

Head of Infrastructure,
Government, Healthcare
and Hotel
KPMG in Thailand
T: +662 677 2750
E: tanate@kpmg.co.th



Vilaivan Pholprasert

Partner, Audit
Infrastructure
KPMG in Thailand
T: +662 677 2325
E: vilaivan@kpmg.co.th



Natasak Rodjanapiches

Director, Advisory
KPMG in Thailand
T: +662 677 5752
E: natasak@kpmg.co.th



Surayos Chuephanich

Partner, Advisory
KPMG in Thailand
T: +662 677 2752
E: surayos@kpmg.co.th

KPMG in Thailand

Empire Tower, 48th – 50th Floors
1 South Sathorn Road, Yannawa
Sathorn, Bangkok 10120
T : +662 677 2000



STAY CONNECTED



Twitter: [@KPMG_TH](https://twitter.com/KPMG_TH)

Facebook: facebook.com/KPMGinThailand

home.kpmg/th [Linkedln: linkedin.com/company/kpmg-thailand](https://linkedin.com/company/kpmg-thailand)

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2019 KPMG Phoomchai Business Advisory Ltd., a Thai limited company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.