

## HEALTHCARE MARKET IN SOUTHEAST ASIA REGION: STRUCTURE AND COMPETITION

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### ABSTRACT

**Background:** The demand for healthcare in Southeast Asia is growing sustained by demographic diseases transition and rising incomes due to economic growth and globalization. Structure of the healthcare market has effect on competition and efficiency.

**Materials and Methods:** Scoping review method adopted with articles identified using Scopus, Google Scholar, PubMed and ScienceDirect databases via the keywords “healthcare market”, “Southeast Asia”, “market structure” and/or “competition”. Final 15 articles were reviewed of those published only in English in the last 15 years.

**Results and Discussion:** Majority Southeast Asia countries are striving to provide universal healthcare coverage straining resources and affecting quality. Forces in the market has pushed demand for higher quality care. General share of private healthcare expenditure, 55% of the total healthcare expenditure, is higher than that of public. Healthcare systems are moving from a publicly dominant health service provision towards greater private sector involvement. The public and private financing among the SEA countries health systems are dynamic and diverse where national health insurance (NHI) with various social security schemes exists to provide basic access to healthcare. Private health insurance is also growing. Differences in healthcare financing is driven by the growing demand for higher quality healthcare. Changing lifestyles, an aging population, and rising income have led to increased prevalence of non-communicable diseases. Increasing educational levels and aging populations led to increase health demand which affects the market and competition. Market failures in healthcare has pushed for more government intervention and growing effect of globalization has contributed to high care cost. Health systems have to adapt to rapid transformation of the market.

**Conclusion:** The health system in SEA countries consists of the public and private sector working together in the provision of health service delivery with bigger private market share. Epidemiological transition of disease, an aging population and increase demand for high quality care pushes the competition in the healthcare market.

**Keywords:** Healthcare market, Southeast Asia, market structure, competition

## 1.0 Introduction

The demand for healthcare in Southeast Asia is growing. Growing and aging populations and rising rates of non-communicable diseases are driving the demand for greater healthcare services, products and infrastructure. Rising middle-class incomes, as a result of economic growth and urbanization, are sustaining this demand. These changes affect the demands of healthcare system and the healthcare market. Competition is used to increase the quality of care of the patients and effectiveness as whole. Besides the uniqueness of the healthcare market, competition is also used to increase the quality of care of the patients and effectiveness, and with rapid changes, the healthcare market should evolve to meet the demands (The World Bank, 2016).

### 1.1 Background on Healthcare Systems in SEA

The population of Southeast Asia is around 600 million people, around 9% of the global population. Brunei with the smallest population to Indonesia which has the largest population and largest in the world (Chongsuvivatwong et al., 2011). The population in Southeast Asia have not yet climaxed. In the rural area, people live below the poverty line while the in the urban areas, the upper and middle-income class are growing. The range of people who are under the poverty line is from 11 % to 26 % among the Southeast Asia countries. This condition of inequality draw its influence to the health sectors, with a poorer rural population receiving less developed health services and weak access to health services. however the urban population struggle with facilities that are crowded because of growing urbanization (The World Bank, 2016).

The health care system in the SEA countries are mainly control by government so it is closer to the monopoly system in most of SEA countries where the governments monopolized the delivery of public health services. Governments in SEA region funds the public health sector, while monitoring the private sector, the health insurance system, and the healthcare market. However, while the current direction in the region is towards privatization the system slowly moving to oligopoly where small number of big private companies or medical consortium controls the market. This situation needs integrated policies and regulations to prevent the market failure, to protect the population, and to ensure the equity. Unfortunately, in some cases privatization in certain places may lead to a monopoly market by giving the monopoly of a particular geographical zone to one private company in offering health services there. (Onn, 2015).

This rapid increase will directly affect the type of health services required. These impacts will require several integrated approaches. For example, an early focus on preventative health education programs targeted at youth and the working population could reduce the anticipated pressure on the healthcare system. Concurrently, infrastructure, human resources, and policies need to be developed to meet the immediate health care demands of the elderly and those approaching age 65 in coming decades (The World Bank, 2016).

The SEA countries have experienced a steady decline in the incidence of infectious diseases; however, tuberculosis is still among the top 10 causes of death, and dengue fever is an emerging threat. Multidrug-resistant tuberculosis, along with general antimicrobial resistance, is a rising problem, particularly in countries where pharmacies are dispensing antibiotics without prescription (Chongsuvivatwong et al., 2011).

In SEA countries, an aging population, unhealthy food, rapid lifestyles, and harmful pollution led to increase the incidence of non-communicable disease which led to increasing the death rate also. Injuries and accident due to alcohol and drug consuming have been increased in some countries too (The World Bank, 2016).

With increasing educational levels, aging populations, and growing consciousness of human rights in the recently developing democratic environment, the demand for better care is increasing. Health systems in the region face more serious adjustment problems than ever before. The need to restructure health- care delivery and financing systems become crucial to balance new demand and supply equilibriums (Chongsuvivatwong et al., 2011).

**Table 1:** Southeast Asia Country Profile

| No | Country     | Population (millions) | Density per 1000 population | Average Life expectancy | Most Common Cause of Death   | Healthcare Delivery  | Healthcare Financing   |
|----|-------------|-----------------------|-----------------------------|-------------------------|------------------------------|--|--|
| 1  | Brunei      | 0.4                   | 1.1                         | 76                      | Malignancy                   | Publicly dominated.  | Predominantly tax-funded.  |
| 2  | Singapore   | 5.0                   | 1.5                         | 81                      | Malignancy                   | Regulated by the MOH. Almost equal distribution of private and public providers.     | Medisave, Medishield and Medifund  |
| 3  | Malaysia    | 28.3                  | 0.7                         | 72                      | Ischemic Heart Disease       | Publicly dominated health services moving towards greater private sector involvement | Predominantly tax-funded. Large share of the private health insurance.                 |
| 4  | Thailand    | 67.8                  | 0.5                         | 70                      | Ischemic Heart Disease       | Predominantly public system, with an extensive network.                              | Health Card and 30-baht Schemes, a government insurance scheme.                        |
| 5  | Philippines | 92.2                  | 1.2                         | 71                      | Ischemic Heart Disease       | Decentralization. Transfer of health services to local governments.                  | PhilHealth, a government mandated health insurance.                                    |
| 6  | Indonesia   | 243.3                 | 0.2                         | 68                      | Stroke                       | Decentralization. Transfer of health services to local governments.                  | Majority covered by Jaminan Kesehatan Nasional (JKN), a social health insurance (SHI). |
| 7  | Vietnam     | 87.3                  | 0.5                         | 72                      | Stroke                       | Decentralization. Transfer of health services to local governments.                  | Health Fund for the Poor. High out-of-pocket spending.                                 |
| 8  | Laos        | 6.3                   | 0.3                         | 61                      | Influenza and Pneumonia      | Publicly dominated.  | Health Equity Funds. High OOP expenditure.   |
| 9  | Cambodia    | 14.8                  | 0.2                         | 61                      | Lower Respiratory Infections | Publicly dominated.  | High OOP expenditure.  |
| 10 | Myanmar     | 50.0                  | 0.4                         | 56                      | Stroke                       | Publicly dominated.  | High OOP expenditure.  |

Source: (Chongsuvivatwong et al., 2011) (Kanchanachitra et al., 2011) (WHO, 2015)

## **1.2 Healthcare Market Competition and Structure**

What is term market referring? Market is a place or condition in which both the producers and the buyers can interact face to face or in directly to exchange the goods and services. Under these circumstances, the interaction of the demand and supply will define the goods' prices. for this reason, the market should include a mechanism for determining the costs and the amount of the traded goods, communicating about the prices, and ways to distribute the services and goods. Supply is the quantity of a good or service that sellers are able to sell at a certain value (Mwachofi & Al-Assaf, 2011).

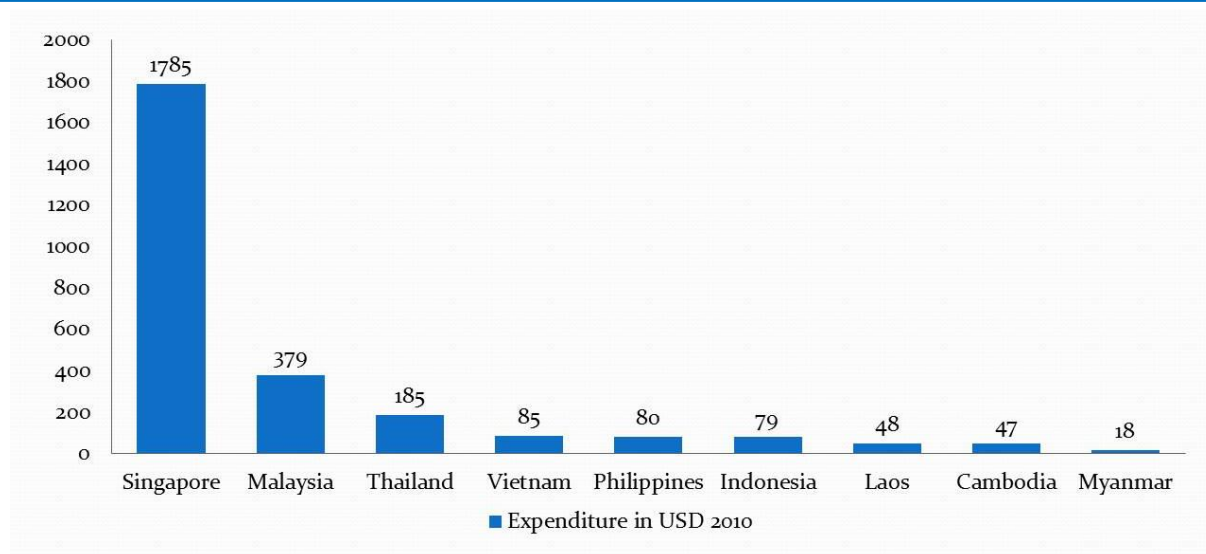
The features of perfect market structure has several characteristics include, many buyers, many producers or sellers, the size of these firms are small so they will not affect the prices, homogeneous goods, the parties can exit and enter the market unobstructed, which mean new producers can enter the market freely to increase the competition, ideal knowledge and information about the prices, easy to get the information, and lastly, no externalities in consumption and production (spill-over effects) (Mwachofi & Al-Assaf, 2011).

The efficiency of the market will be affected by the structure of the market, which is defined by the quantity and quality of the firms in the market. The ease of entering and exiting of the firms from the market besides the degree to which extent the products are differentiated will determine the market structure. The knowledge availability to both producers and the buyers regarding the prices and the product information will define the market structure too (Mwachofi & Al-Assaf, 2011).

Between the perfect competition and the pure monopoly, the market structure features to determine the competition. The monopoly which there is only one supplier and the market has only one buyer while the perfect competition where there are a lot of small supplier and a lot of buyers, the products is homogenous and everyone is a price taker. There are other market structures between these extremes which is monopolistic competition. in monopolistic competition, there are many buyers, many sellers, and differentiated products while oligopoly has several sellers with varying size and power in the market (Mwachofi & Al-Assaf, 2011).

In year 2013, Southeast Asia experienced a mixed economic growth, whereby the Vietnam, Philippines and Singapore performed great which led to robust export market and economy. This growth enabled the region to overcome the political instability in some countries and to have huge capital outflows exceeding the USA Federal Reserve. While the global economic growth the south-east Asia markets and economy appear promising in 2014. Different economic growth and strength reflects on the health expenditure which is vary widely between SEA countries (Al Masah Capital, 2014).

The data available from the World Health Organization (WHO) indicate the global healthcare sector was worth USD5.9 trillion in 2010, accounting for approximately 9.2% of the global GDP, or per capita healthcare spending of USD941 (Al Masah Capital, 2014).



**Figure 1:** Per capita health expenditures in Southeast Asia in USD, 2010.

### 1.3 Healthcare Market Continuum

There are four stages to classify the healthcare systems depending on how much the system depends on public or private financing in the country. the SEA countries are at different points along the development pathway which the country will move through these stages during his development (Chassat, Laetitia Denis, Chen, & Azizan, 2010).

In the first stage, the government usually makes a small contribution to financing healthcare, but it will support the basic vaccination campaigns and other basic public health services. the out-of-pocket will be the main source of payment for individual or it will be subsidized by non-governmental organizations. with health expenditure on health ranging from 2 to 18 USD per capita per year, Laos, Cambodia, and Myanmar are still at this stage of development (Chassat et al., 2010).

In the second stage, the government provides larger access to health care. However the out-of-pocket expenditures still the main form of financing and the government covers from 35% to 50% costs of healthcare. Indonesia, Vietnam, and Philippines are at this stage of development with the healthcare financing by public health by each one of them are 49%, 38%, and 41% respectively. these three countries are trying to implement universal public healthcare schemes as compulsory healthcare insurance systems (Chassat et al., 2010).

In the third stage, as the healthcare market get more mature, the out of pocket expenditure will decrease and the private health insurance will cover it which leads to complement the public health expenditure. Public contributions level is high as for example 75% in Thailand and 56% in Malaysia while the share of financing by private sectors are still growing. Both Thailand and Malaysia have developed a good healthcare infrastructure. The subsidies from the government decrease the patients' expenditures (Chassat et al., 2010).

In the fourth and final stage of development, the government expenditure will become less and less. The government will monitor and encourage the private contributions. This stage supports the consumer demand for more advanced healthcare services with a balance to

service access and increases in costs. Singapore alone has this system of the healthcare market (Chassat et al., 2010).

#### ***1.4 Market failure in healthcare market***

It is important in healthcare market to understand the concept of market failure, which is a circumstance with an inefficient allocation of services and goods, the result is usually social welfare waste. It happened when the individuals put their absolute self-interest as a priority above the social welfare which leads to market failure, meaning an inefficient market which leads to loss of production (Mwachofi & Al-Assaf, 2011).

There is a debate between the economists about the market failure, they argued that the use to non-market modes of coordination and distribution will be necessary to solve the market failure when the private returns exceed private one. The unique feature of healthcare as a product determined by the demand-supply condition, which is asymmetric and defected, brings special attention from governments. Besides other factors, this makes the health care market very distinguished one (Rasiah, Rosnah, Abdullah, & Tumin, 2011).

The aim of the paper is to understand the market structure of the healthcare market in SEA region, the competition within and factors affecting competition.

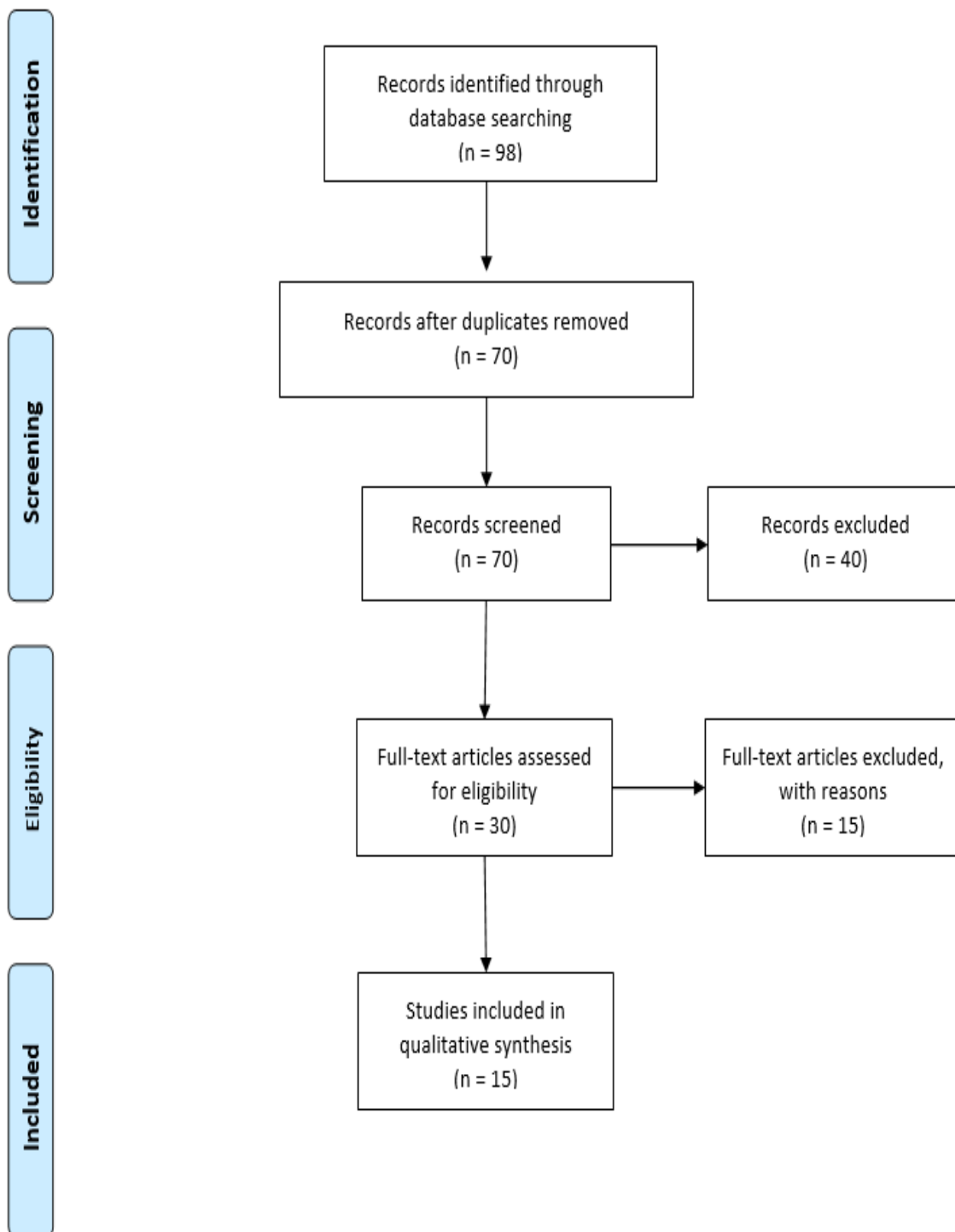
## **2.0 Methodology**

A scoping review of articles were conducted using to several specified keywords which are “healthcare market”, “Southeast Asia”, “market structure” and/or “competition”. Four databases, were utilised to determine relevant articles to be reviewed namely PubMed, Google Scholar, Scopus and Science Direct. Inclusion criteria of articles included were original articles that were written only in English, published within the last 20 years and those related to healthcare market structure and competition in Southeast Asia.

Initial identification of articles from the database search generated a total of 98 articles. Duplicates of the same article which amounted to 28 articles were removed. Abstracts were then reviewed for initial screening to check for the relevancy of the articles from the 70 articles left. Another 40 articles were removed after the initial screen. Subsequently, full-text articles were carefully assessed for eligibility. After reading the full-texts of the remaining 30 articles, only 15 articles were included in this review. Figure 2 showing the PRISMA diagram of the review explains the scoping review methodology and the resulting articles identified.

The final 15 articles were later reviewed according to six main themes that are public healthcare sector market, private healthcare sector, healthcare financing, factors affecting market, medical tourism and observations of market structure and competition in SEA region.





**Figure 2:** PRISMA Diagram of the 'Healthcare Market in Southeast Asia Region: Market Structure and Competition' Scoping Review, adapted from Moher, Tetzlaff & Altman, The PRISMA Group (2009)

### 3.0 Results and Discussion

Globally and in the SEA region, demand for better care is increasing with increasing level of education, changing demography and transitions of epidemiology with a background of ageing population. Health systems are evolving and adjusting to changes in the market with provision of care, health financing and regulatory frameworks adapting to it accordingly. The health system can be seen as a dichotomous one in most SEA countries with the public and private sector working parallel in the provision of healthcare service delivery. It is crucial to understand these two sectors to understand the balance between demand and supply.

#### 3.1 Public Healthcare Sector Market

The governments in Southeast Asian nations are making significant investments to improve their healthcare infrastructure and meet the growing demands of the market. Despite this, the development of the healthcare sector market largely depends on private sector participation. In most Southeast Asian countries, the share of public healthcare expenditure and market is lower than that of private. Only Malaysia and Thailand public sectors expenditure is higher than private expenditure. However, the private expenditure is much higher in countries such as Singapore, Indonesia, the Philippines, and Vietnam, representing nearly two-third of the total healthcare expenditure (Al Masah Capital, 2014).

Countries such as Thailand, Indonesia, Vietnam and the Philippines are striving to provide universal healthcare coverage for all their citizens, which is straining the resources and service quality in public hospitals due to the accelerated uptake. Governments have been slow to address the need for significant investment in public hospital infrastructure and for a greater number of healthcare professionals. For example, public hospitals are often overcrowded and plagued with shortages of doctors, medical supplies and diagnostic equipment, which affects their ability to deliver high- quality care. To expand healthcare offerings beyond the public sector, governments are providing incentives such as tax holidays, and raising the caps for foreign equity ownership to encourage private healthcare providers to fill the demand/supply gap (Momin, 2016).

Malaysia ranks second in terms of the quality of healthcare services available in Southeast Asia. Malaysia spends nearly 4.4% of GDP on healthcare, nearly similar to that in Singapore (Verma, Hassali, & Saleem, 2015). Furthermore, the country's per capita healthcare expenditure stood at USD381 in 2010. With a market size of USD10.9 billion, Malaysia accounts for nearly 16% of the total healthcare market in Southeast Asia. By 2020, the country's total healthcare market is expected to reach USD20.3 billion, representing a CAGR of 6.4% (Al Masah Capital, 2014).

The public healthcare system is under strains due to growing demands for services over last years. As a solution to this problem, the decision maker in Malaysia view social healthcare provision and privatization as a way to ease the difficulties in healthcare provision. By taxation and ministry of health (MOH) subsidizing, the public healthcare services are funded. The MOH in Malaysia plays three roles, provider funder, and monitor. the public healthcare is hugely subsidized with fees collection around 2 % which is very low user fee (Onn, 2015).

The Mid-Term Review of the Sixth Malaysia Plan published in 1993 indicated that the role of the MOH would shift from its traditional role of providing public healthcare to more policy-



making and regulatory aspects and putting standards of quality, accessibility and appropriateness of care (Onn, 2015).

Most of the Southeast Asia countries are striving to provide universal healthcare coverage for all their citizens, which is straining the resources and service quality in public hospitals due to the accelerated uptake. Governments have been slow to address the need for significant investment in public hospital infrastructure and for a greater number of healthcare professionals. For example, public hospitals are often overcrowded and plagued with shortages of doctors, medical supplies and diagnostic equipment, which affects their ability to deliver high- quality care (Momin, 2016).

Patients are becoming much better informed and more demanding in terms of quality of service expected. Quality of service and demanding on better quality push the middle class in Southeast Asia towards the private sector. Furthermore, differences in the cost of procedures between countries coupled with cheaper travel costs may drive patients away from their local healthcare providers to foreign providers that deliver a similar level of care at a more agreeable price. As competition intensifies in the region, providers must be able to create a rewarding patient experience with high-quality service (Momin, 2016).

Due to the SEA region balance of quality, advanced medical care and technology, availability of active medical tourism industry, and relatively affordable cost compared to the rest of the developed nations. This is why less-developed market countries like Indonesia lose a significant share of their domestic health care market spending; Indonesian residents travel to neighbouring countries like Singapore and Malaysia to seek medical treatment — nearly 1.5 million Indonesians comprise overall medical tourism numbers, with a corresponding outflow of \$1.4 billion yearly (Yap & Yong, 2015).

### ***3.2 The Role of Private Healthcare Sector***

Recent epidemiological and demographic transition has placed pressure on health systems which are augmented by the growing demands of an increasingly prosperous and educated population for high quality health care, in addition to the development of up-to-date medical technology. The push for higher quality care have expanded into a flourishing private healthcare sector (Momin, Wijaya, Chareonkul, & Bernado, 2015). Forces in the market have in turn advanced various aspects of health care into a new trade in countries such as Singapore, Malaysia, and Thailand.

In most Southeast Asian countries, the share of private healthcare expenditure is higher than that of public expenditure. Private expenditure contributes nearly 55% of the total healthcare expenditure in Southeast Asia in total (Al Masah Capital, 2014). The share is much higher in countries such as Singapore, Indonesia, the Philippines, and Vietnam, representing nearly two-third of the total healthcare expenditure.

The population in many SEA countries rely heavily on the private sector for delivery of both healthcare services and products. For instance, many of the private providers delivers majority of the primary care services in urban areas and in some countries like Vietnam and Philippines also to the rural area. Generally, the public sector is preferred for hospitalization due to affordability and access but this situation is gradually changing where the private sector is slowly evolving and improving its capacity of providing quality hospital care as well

(The World Bank, 2016). Likewise, pharmaceutical services are increasingly procured and distributed through large private pharmacies and drugstore chains. The private healthcare sector plays an instrumental role in providing healthcare needs inclusive of accessibility, affordability and quality of care.

In more developed countries like Singapore, Malaysia, and Thailand private health care market continues to relish in growth. Major private providers in the region propose outstanding services to both local and international patients (Frost, 2016). For example, Singapore with its reputation being the gold standard for healthcare in the region due to its strong healthcare industry is the reason its government is promoting the country as a regional centre of excellence for general surgery and medicine and specialist services, including cardiology and organ transplants (Yap & Yong, 2015). The medical tourism industry is also quite active in the SEA region with its balance of quality and medical technology at a comparatively affordable cost among other developed and developing nations.

In many SEA countries, healthcare systems are moving from a publicly dominant health service provision towards greater involvement of the private sector. In Malaysia for example, there are attempts to privatise public hospitals which have been highly controversial resulting in corporatized entities that are linked to government (Rasiah, Noh, & Tumin, 2009). Public-private mix in health services within the region also are some of the most innovative, for example from as early as 1985, the restructuring or corporatisation of public hospitals in Singapore (Gideon, 2016). All these, however, have caused several issues to emerge in terms of rising healthcare costs, future sustainability of current health financing systems and higher public expectations.

### ***3.3 Healthcare Financing in SEA Countries***

The public and private mix of health delivery and financing among the SEA countries health systems are dynamic with various new organisational forms such as public health institutions or hospitals that are corporatized, with advanced service delivery in response to competitive private healthcare markets and growing medical tourism. (Chongsuvivatwong et al., 2011). There is diversity in the healthcare financing mechanisms ranging from tax-based revenue to social health insurance, with growing private health insurance and high out-of-pocket payments across the region. Despite better accessibility to healthcare, more improvement is needed to ensure universal health coverage of the population especially to the poor (Al Masah Capital, 2014).

In most Southeast Asian countries, national health insurance (NHI) with various social security schemes are in the process of being set up or already in existence (Chassat et al., 2010). From country to country there are variations in how each country's health financing work, but their core aim is to provide access to basic healthcare for the entire population. In these countries mainly, there are usually different funds for civil servants, employees and the self-employed. Those who cannot afford or are not covered by specific schemes will usually receive coverage from a special fund that targets poor sections of the community (Yap & Yong, 2015).

According to a study by the Roland Berger Strategy Consultants involving nine countries in SEA region, there are four main stages of healthcare system development in a country that describes the extent of dependency on public or private healthcare financing (Chassat et al.,

2010). Each country moves through each of the stages and are at different points of development along the course. Countries like Cambodia, Laos and Myanmar are still at an early stage (Stage 0) of development where healthcare is mostly paid from out-of-pocket (OOP) or provided by non-governmental organizations with little contribution from the government. Next is Indonesia, Vietnam and the Philippines where access to basic healthcare by the government is a larger in the form of mandatory health insurance systems but OOP remains a big part of the financing. Countries with the more advanced stage of development emphasizing on quality care provision are Malaysia and Thailand where growing market for private health insurance are emerging to complement the publicly financed system and replace OOP. Healthcare infrastructure are generally well-developed in comparison to less developed countries in the same region. Malaysia has a highly subsidised healthcare sector while Thailand has a NHI system that is financed by monthly contributions from employers and employee. The market in both countries are driven by demand for higher-quality healthcare. The most advanced market is Singapore with high contributions of private healthcare financing. Demand for more sophisticated healthcare services are increasing with increasing healthcare cost and competing accessibility. Currently, in the SEA region only Singapore is at this stage of development (Chassat et al., 2010) .

The differences in healthcare financing in the region with the development of NHI from a publicly financed health system, accompanied by the development of private health insurance market is driven by the growing demand of the well-off middle-class population for better access to higher quality healthcare (Momin et al., 2015). These increase in demand pushes competition in the healthcare market with differences between markets in different stages of development. With the development of NHI paying both public and private providers, competition is increasing in the healthcare market to respond to the demands of quality healthcare provision.

### ***3.4 Factors affecting market and competition***

There are several factors that are driving the healthcare market in SEA region, growing aging population is one of the main factors. Due to the difference in fertility, mortality, and migration, the population age structures are varied widely between the countries in the region. Aging trends are on the other hand affected by economic, social cultural and political developments. with the proportion of elderly residents proposed to double from 7% to 14% in next 20 years, Thailand and Singapore are among the quickest aging population around the globe. the pace of increase in the number of very old population, 80 years and older, is predicted to surpass that of East Asia in a period between 2025 and 2050, because of more rapid fertility reduction in these countries (Chongsuvivatwong et al., 2011).

The rapidly growing population, particularly aging people, is expected to accelerate Southeast Asia's healthcare industry. The rise in elderly population means more business for healthcare providers, as the elderly generally seek more medical care and have more expensive health profiles than the younger populace (Al Masah Capital, 2014).

Decreasing the burden of communicable, maternal, and infants diseases leads to decreasing mortality, while the aged population countries are under the burden of an-communicable diseases. However, the mortality rates of these diseases and from injuries are correlated. But at the same time, countries with high death rates from communicable diseases also have high death from non-communicable diseases. Laos, Myanmar, and Cambodia still have high

mortality from communicable. Intestinally, death injuries are important reasons for death in the region as a whole, with less significant in Brunei and Singapore. Nevertheless, non-communicable illnesses already kill more population than the communicable illnesses in the poorest counties due to a lot of these deaths occurring during middle age (Chongsuvivatwong et al., 2011).

Rising income levels to surge demand for quality services which lead to increase demand from population. High demand from the population on his turn leads to development of the private sector. Out-of-pocket spending on healthcare in Southeast Asia is higher than that in the US and the UK. The per capita income of the region is expected to grow at 4.6% during 2010–20, with countries such as Vietnam, Indonesia, and the Philippines to witness higher growth than the regional average. These factors together would further accelerate the demand for improved healthcare services market and (Al Masah Capital, 2014).

High prevalence of lifestyle-related diseases means more patients partially due to ageing population. However, Lifestyle-related diseases such as hypertension, diabetes, cancer, and heart ailments (outcomes of a sedentary lifestyle and unhealthy diet) have become a more common feature in the region. The prevalence of cardiovascular diseases and diabetes in Southeast Asia is unusually high compared to that in the rest of the world (Al Masah Capital, 2014).

### **3.5 Medical tourism in Southeast Asia countries**

Medical tourism has grown an increasingly common phenomenon in Southeast Asian countries. Availability of excellent healthcare hospitals and centres, highly qualified with internationally accredited medical and paramedic staff, besides the low cost of medical treatments and services, draw people seeking medical care to Southeast Asia countries. in Thailand, Singapore, and Malaysia, the medical tourism have emerged as the prime destinations in the region (Al Masah Capital, 2014).

In case of Thailand, this distinguishes itself as the genuine pioneer of medical tourism in the globe; Thailand made significant investments in new medical technologies between 1980 and 1990. These days, Thailand treats millions of overseas patients seeking a wide range of treatments. These medical services include oncology, cardiology, ophthalmology, obstetrics, and spinal surgery. By An efficient and effective healthcare system, Singapore among the SEA countries becomes a major leading international player in the healthcare field. on the other hand, while Singapore treats more than 400,000 people as medical tourist each year, the ministry of health there plan to strengthen and enhance the country profile to become a leading world-class medical centre (Al Masah Capital, 2014).

These excellent circumstances in south-east Asia healthcare market have drawn the attention of domestic and international private actors. There are several entries of transnational private hospitals especially in well-developed healthcare markets like Singapore, Thailand, and Malaysia. This shows the high demand and profitable of the market in the SEA (Wolle, 2016). In conclusion, when the healthcare market develops from stage to stage, this development will bring the international private companies and local companies to contribute more in health in the countries and medical tourism will be one of the results of healthcare market development (Al Masah Capital, 2014).

### **3.6 Observation of market structure and competition in SEA region**

The provision of healthcare delivery in SEA countries can still be predominantly seen as provided by the public sector providers. However, the total share of private healthcare expenditure as a whole in the region is higher than that of public expenditure, near to 55% of the total health expenditure (Al Masah Capital, 2014). This fact demonstrates how the private sector in SEA countries constitutes a large portion of the healthcare market as a whole. With a more diverse package of service delivery, competition in the private sector is more varied compared to the public sector. Competition is intended to be a driving force for efficiency and quality (Ernst and Young LLP, 2009). However, in the case of healthcare, market failures such as barriers to exit and entry and information asymmetry have affected this driving force.

Financing of healthcare among SEA countries are also moving towards insurance-based financing. More countries in the region already have their own NHI systems acting as a single payer to both public and private providers. Demand for greater quality in healthcare has also pushed the demand for private healthcare. Both of this factor has encouraged for better competition within the healthcare market but again, market failures in healthcare also plays a big part in counteracting this affect (Mwachofi & Al-Assaf, 2011).

Healthcare has been defined theoretically by services that are specific to demand-supply conditions which are imperfect with information asymmetry between the supplier (healthcare providers) and the consumer (Rasiah, Rosnah, Abdullah, & Tumin, 2011). Patients who are at the receiving end may not be able to assess the need of the services provided to them by their doctors. Hence, to ensure that social returns exceed profitmaking advantage, hypothetically, economist have argued the necessity of government intervention to solve existing market failures. So far, government in SEA countries have played a strong role in controlling the healthcare market to overcome inequity problems (Chongsuvivatwong et al., 2011). In this sense, the public healthcare sector can be seen as a monopolistic market of such in most countries monopolised by the ministry of health playing a tripartite role as funder, provider, and regulator. However, crucial issues in terms of rising healthcare costs, future sustainability of a centralised health system with higher expectations of quality care by the public has become ever eminent. In Malaysia and Singapore for example, the systems are changing towards greater involvement of the private sector.

With the growing effect of globalisation, new challenges have arisen for the healthcare system and healthcare market in the SEA region (Chongsuvivatwong et al., 2011). Globalisation has resulted in increased availability of modern medical technology in the market, however, its costs is higher that what can be afforded by the population. Demand for better healthcare is also increasing due to increasing education level and awareness of human rights along with the development of trade and medical tourism. Health systems have to adapt to rapid transformation of the healthcare market that is pushing for changes in the function of the public sector to provide service, to finance and to regulate. To balance these new demand and supply equilibriums, restructuring of the healthcare delivery and financing systems becomes imperative moving forward.



## 4.0 Conclusion

The health system in SEA countries consists of the public and private sector working together in the provision of health service delivery. In most countries, healthcare services are still predominantly provided by the public sector. However, in terms of healthcare expenditure, more than half of it comes from the private sector portraying a larger market share of the private compared to the public. The evolution of epidemiological transition of disease, an aging population and growing demand for high quality care pushes and affects the competition in the healthcare market. Health systems in the SEA region are now adapting to changes in the market.

## Declaration

Authors declare that this manuscript has never been published in any other journal.

## Authors' contribution

Author 1: Information gathering, preparation and editing of manuscript

Author 2: Information gathering, preparation and editing of manuscript

Author 3: Initiation of idea, final review of manuscript and final editing

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