

Financing and Provision of Primary Health Care in Malaysia

Makmor Tumin, PhD¹, Ganeshwaran Kana², Aimi Ahmad Zaki³

¹ Associate Professor, Department of Administrative Studies and Politics, Faculty of Economics and Administration, University of Malaya, 50603 Kuala Lumpur, Malaysia. Email: makmor@um.edu.my

² Research Assistant, Department of Administrative Science and Politics, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, Malaysia. Email: ganeshwarankana@yahoo.com.my

³ Research Assistant, Department of Administrative Science and Politics, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, Malaysia. Email: aimijune888@gmail.com

ABSTRACT

In spite of being recognised as among the world's better health system, Malaysia tries to reform its present two-tier health policy, proposing a social health insurance approach. Primary care services in public hospitals are fully subsidised and public-private providers are widely accessible. The aim of this paper is to present Malaysia's primary care achievements (financial and provision), questioning the social health policy in the process. Data in this paper was gathered from government sources, mainly from the Ministry of Health (MOH) library (including the virtual library) and was compiled mostly through time series, explaining the dynamics of financial and provision of healthcare. The results indicate that Malaysia still spends less despite the relatively impressive achievements although problems such as waiting list remain germane in the system. We conclude that while social health status are largely competitive and the government still spends less, especially following the World Health Organisation (WHO) indicators of health expenditure, the social health insurance proposed in this country could perhaps be at best missed time.

Keywords: Primary Health Care, Financing, Provision, 1Care, Malaysia

Introduction

Malaysia is a prosperous country and a land with an abundance of natural resources. It is composed of multi-ethnic, multi-religious, and multi-cultural inhabitants. According to the latest census, Malaysia has a population of 28.3 million.¹ The thriving population in Malaysia clearly indicates that the health condition of Malaysians are progressing and presumed to be encouraged by a top-notch health care system as well as continuous health initiatives. In essence, the health status of Malaysians have improved from the period of independence

⁴ Correspondence:

Makmor Tumin, Department of Administrative Studies and Politics, Faculty of Economics and Administration, University of Malaya, 50603 Kuala Lumpur
Email: makmor@um.edu.my
Phone: +603-79673690
Fax: +603-79673719

induced by vigorous health programmes along with the introduction of health institutions and agencies dedicated to oversee and scrutinise particular health disciplines. More importantly, life expectancy at birth has increased significantly for both males and females (see Table 1) and it was deemed to be influenced by the decreasing trend in mortality rates, better environment, improved nutritional status and advanced socio-economic status of the population. Malaysia, Portugal, Chile and Thailand were the countries in which under-five mortality rates were reduced by at least 80 per cent from 1975 to 2006 due to enhanced access to health care systems realised by supportive political commitment and excellent economic growth.

Table 1:
Life Expectancy at Birth by Gender, year; 1960 – 2015

Year	Female	Male	Total	Year	Female	Male	Total
1960	60.3	58.7	59.5	1988	72.1	68.5	70.3
1961	60.9	59.3	60.1	1989	72.4	68.8	70.5
1962	61.5	59.8	60.6	1990	72.6	69.0	70.8
1963	62.0	60.3	61.2	1991	72.9	69.2	71.0
1964	62.6	60.8	61.7	1992	73.1	69.4	71.2
1965	63.1	61.3	62.2	1993	73.4	69.6	71.4
1966	63.7	61.7	62.7	1994	73.6	69.8	71.7
1967	64.2	62.2	63.1	1995	73.9	70.0	71.9
1968	64.7	62.6	63.6	1996	74.1	70.2	72.1
1969	65.2	63.0	64.0	1997	74.3	70.3	72.3
1970	65.7	63.3	64.5	1998	74.5	70.5	72.5
1971	66.1	63.7	64.9	1999	74.7	70.7	72.7
1972	66.5	64.1	65.3	2000	75.0	70.9	72.9
1973	67.0	64.4	65.7	2001	75.2	71.0	73.0
1974	67.4	64.8	66.0	2002	75.3	71.2	73.2
1975	67.8	65.1	66.4	2003	75.5	71.3	73.3
1976	68.2	65.4	66.8	2004	75.7	71.4	73.5
1977	68.6	65.7	67.1	2005	75.8	71.5	73.6
1978	68.9	66.0	67.4	2006	75.9	71.6	73.7
1979	69.3	66.3	67.7	2007	76.1	71.7	73.8
1980	69.6	66.6	68.1	2008	76.2	71.7	73.9
1981	70.0	66.8	68.4	2009	76.4	71.8	74.0
1982	70.3	67.1	68.7	2010	76.5	71.9	74.2
1983	70.6	67.4	68.9	2011	76.6	72.0	74.3
1984	70.9	67.6	69.2	2012	76.8	72.2	74.4
1985	71.2	67.9	69.5	2013	77.0	72.3	74.6
1986	71.5	68.1	69.8	2014	77.1	72.4	74.7
1987	71.8	68.3	70.0	2015*	77.4	72.5	74.8

*Figures of 2015 are estimates.

Source World Development indicators, World Bank [<http://data.worldbank.org/country/malaysia/>].

After independence in 1957, the government strived to eradicate communicable diseases such as tuberculosis, leprosy, and malaria by intensifying vaccination campaigns, elevating the condition of facilities to establish a national centre for leprosy control, and spraying and inspecting affected areas. The control and eradication of communicable diseases experienced significant progress as the number of reported and confirmed malaria cases in Peninsular Malaysia dropped from 25,400 in 1970 to 10,000 in 1980. At the same time, the number of deaths caused by malaria in various government hospitals also shrunk from 135 to 30. Likewise, tuberculosis prevalence reduced from 90.6 per cent in 1970 to 73.5 per cent in 1980 while dengue haemorrhagic fever cases reduced from 1,482 cases with 104 deaths in 1970 to 317 cases and 12 deaths in 1980.²

After two decades of independence, the government managed to identify the changing patterns of diseases from infectious to chronic diseases that emerged because of lifestyle and behaviour as well as demographic transition. For the past ten years, non-communicable diseases⁵ were among the top ten principal causes of death in public hospitals and every year, septicaemia (diseases related to blood infection), and heart diseases and diseases of pulmonary circulation contributed to the highest percentage of cause of death in public hospitals.³ The looming of non-communicable diseases in Malaysia is dreadfully alarming as 15.2 per cent or 2.6 million of adults 18 years and above had diabetes, 32.7 per cent (5.8 million) had hypertension, and 35.1 per cent (6.2 million) had hypercholesterolemia.⁴ To make matters worse, 12.8 per cent (2.3 million) of adults 18 years and above consumed alcoholic beverages and 25 per cent (4.4 million) of adults smoked tobacco products.⁴ Regular intake of alcoholic beverages and active smoking can increase the risk of being affected by non-communicable diseases. Furthermore, the latest findings from *The Lancet*, a British medical journal, showed that 49 per cent of women and 44 per cent of men in Malaysia were obese, and Malaysia was rated heavyweight with 45.3 per cent of its population obese, followed by South Korea (33.2%), Pakistan (30.7%) and China (28.3%).⁵

While the intention of the government in pursuit of a better healthcare system is applauded, this paper categorically rejects the proposal of the 1Care plan, on the basis that the model is unjustified and unsuitable for the present Malaysia. This paper aims to review the primary health care in Malaysia from the perspective of finance and provision. Apart from that, the paper will also seek to address concerns as to when the government should embark to resolve social health issues and identify whether the status quo of the domestic healthcare system is mired in serious problems.

The structure of the paper is as follows – section one presents the health status of Malaysians and the epidemiology transition experienced throughout the years, section two looks at primary health care in Malaysia by discussing fundamental matters related to public and private primary health care. Discussion in regard to finance and provision is presented in section three while the conclusion is presented in section four.

⁵ Non-communicable diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.

The development of primary health care in aspects of facilities, services, and personnel has considerable impacts on the impressive alleviation of Malaysian health conditions. Primary health care in Malaysia is provided by both public and private health institutions. Public clinics are fully-funded by the government while the provision of services at private clinics is on a fee-for-service basis. Nevertheless, there is no standard on how each country delivers primary health care. Some countries emphasise on a fundamental level of being the first point of contact for people seeking medical care while others extend their services to incorporate health prevention and promotion as an essential part of their services.⁶ In Malaysia, private primary health care usually caters for the first provision while public primary health care embraces the latter delivery of services.

Malaysia's healthcare has been widely recognised as one of the best in the world. The London School of Economics' study in 2007 has highlighted Malaysia's healthcare system relatively successful in providing equitable healthcare in terms of targeting public health subsidies towards the poor. On top of that, in 2014, Malaysia's healthcare system has also been ranked third best in the world in the American publication, International Living's Global Retirement Index. It is notable that Malaysia has out-ranked certain developed nations such as Italy, Ireland and Spain in the index. However, the domestic healthcare system⁶ is not free from problems and challenges. As noted by the 10th Malaysian Plan report, the demand for better quality healthcare treatments is growing in tandem with the growing per capita income of Malaysians. The public healthcare system is also met with increasing pressure due to the concentration of the private healthcare sector in urban areas and thus, the public healthcare system has been heavily subsidised by the government. Next, the workload in public hospitals are inevitably increasing, not forgetting the fact that the facilities are already stretched to full capacity.⁷ To address the challenges, the government sees fit for an overhaul in Malaysia's healthcare financing. Thus, the concept of 1Care was born. Commonly known as "social healthcare insurance" and has already been implemented in many sovereign states, albeit in different variants and mechanisms, 1Care seeks to provide healthcare financing through monthly contributions from individuals. One of the famous models abroad is the "Obamacare" in the United States. Although technically it does not mean "free healthcare", 1Care seeks to create a "buffer savings" for unforeseen health complications in the future. Not only that, Malaysians regardless of their income range, will be able to patronise the private clinics in times of need and hence, reducing the workload and "gruelling" waiting time in the public healthcare facilities.

Methodology

This paper employed qualitative research method and gathered relevant information predominantly from governmental reports pertaining to Malaysia's healthcare sector, as well as academic papers to garner more diversified views on the subject matter. As for official

⁶ A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health. This includes efforts to influence determinants of health as well as more direct health-improving activities.

governmental reports, the examples include data sourced from the Ministry of Health (MOH)'s library (including the virtual library), the Fourth Malaysian Plan, the MOH's National Health and Morbidity Survey 2011, the MOH's annual report of 1990 and vital information from the Department of Statistics Malaysia. Government documents such as the Malaysian Plan of various years and 1997-2011 Health Expenditure Report were also used to further analyse the healthcare system using time-series approach. This paper has also sourced data from academic papers to garner a diversified view on the subject matter. This approach also enables better understanding of the stand of the academicians and experts pertaining to the domestic healthcare system that may provide different insights in comparison to the views of the government. The study tried to find the most up to date reports and statistics. However, most of the available reports and statistics were for and before 2011.

Primary Health Care in Malaysia

Definitions

Primary health care is defined by the American Association of Family Physician as “*the care provided by doctors specifically trained for and skilled in comprehensive first contact and continuing care for persons with any undiagnosed sign, symptom, or health concern (the “undifferentiated” patient) not limited by problem origin (biological, behavioural, or social), organ system, or diagnosis.*”⁸ The term primary care is more widely used in the literature of developed countries than primary health care, which is favoured in developing countries. In some places, primary care indicates family doctor-type services, while primary health care includes individual patient care and public health functions.⁹

Public Primary Health Care

Public clinics are the main providers of public primary health care in Malaysia and the existence of public clinics is stemmed from the establishment of the Family Health Development Division. Family health service is among the oldest services endowed by the Ministry of Health initiated as early as 1900. This service begun with the maternal and child health service that had become the core of rural health care services. Now, it had developed to become comprehensive services at primary health care level. Maternal and child health care service was channelled through a three-tier system with midwife clinic being the first level facility – closest to the people and connected via solid referral system along with a health sub centre and main health centre. In 1970, the rural health service was transformed from a three-tier system (main health centre, health sub centre, and midwife clinics) to a two-tier system that comprises health clinics (public clinics) and community clinics. The service rendered at public clinics usually covered health promotion, disease prevention, early detection and treatment, acute disease care, disease limitation and rehabilitation, clinical support services and tele-primary care. As of 2011, there were 881 public clinics in Malaysia with Sarawak as the state with the highest number of public clinics i.e. 197 clinics (see Table 2).

Table 2:
Number of Public Clinics according to State, 2012

State	No. of Public Clinics*
Perlis	9
Penang	35
Kedah	62
Perak	92
Kuala Lumpur and Putrajaya	34
Selangor	78
Malacca	30
Negeri Sembilan	47
Johor	97
Kelantan	72
Terengganu	46
Pahang	85
Sabah**	117
Sarawak	221
Total	1,025

*includes maternal and child clinics

**includes Labuan

Source: Department of Statistics, Malaysia (2013)¹⁰

Private Primary Health Care

Private medical services in Malaysia are governed by the Private Healthcare Facilities and Services Act 1998. According to the act, a private medical clinic is stipulated as any premises, other than a government health care facility, used or intended to be used for the practice of medicine on an outpatient basis including -

- (a) the screening, diagnosis or treatment of any person suffering from, or believed to be suffering from, any disease, injury or disability of mind or body;
- (b) preventive or promotive health care services; and
- (c) the curing or alleviating of any abnormal condition of the human body by the application of any apparatus, equipment, instrument or device.

The motives behind the sanction of the Private Healthcare and Services Act 1998 were to increase access to health care, rectify the disparity in standards and quality of care, and rationalise medical fees in private healthcare sector to more reasonable levels. Besides, this act ensures equitable distribution of accredited facilities, and the employment of qualified health and allied health professionals. In 1980 and onwards, private medical practices included single and group practices. Maternity and nursing homes, and private hospitals grew and expanded rapidly. In 1981, there were 2,200 acute care hospital beds and by 1984, it increased to 3,470 beds. In 1984, 54 per cent of the total number of doctors in the country was in the private sector compared to 49.6 per cent in 1981. The number of private hospitals and their beds increased from 197 and 7,192 respectively in 1995 to 225 and 9,098 respectively in 1999,

compared to the public sector which had 127 hospitals and 34,000 beds in 1999. Private hospitals were also recognised for their provision of specialist services and state-of-art equipment including the latest diagnostic and imaging facilities.

In 1999, 23 out of 27 Magnetic Resonance Imaging (MRI) equipment, 67 over 86 Computerised Tomography (CT) Scanners, 67 per cent of physicians, 66 per cent of surgeons and 80 per cent of obstetricians and gynaecologists were in the private sector⁵. Private clinics outnumbered public clinics even after a decade and their numbers were almost eight times more than public clinics (see Table 3). Nevertheless, the growth of private clinics was mostly concentrated in urban areas and hence, causing duplications of services. In 2011, the majority of private clinics were clustered in urbanised and high income states such as Selangor (1,628), Kuala Lumpur and Putrajaya (983), and Johor (786).¹⁰ Based on the National Household Expenditure Survey (1996), private health care facilities were favoured to attain treatment for acute conditions despite the expensive charges. In contrast, for inpatient care, people, especially those from low income group, preferred to utilise public health care facilities.

Table 3:
Number of Clinics according to Sector, 2008-2012

Year	Sector	
	<i>Public*</i>	<i>Private</i>
2008	802	6,371
2009	808	6,672
2010	813	6,442
2011	985	6,589
2012	1,025	6,675

**Including maternal and child clinics*
 Source: Department of Statistics, Malaysia (2013)¹⁰

Discussion

Financing

Financing of primary health care at public clinics in Malaysia is not significant to be deliberated as it is provided with minimal price and in most cases, free of charge. The issue, nonetheless, is always raised with respect to private clinics which are often criticised because of the tendency to charge a higher price and render unnecessary services to impose additional costs to the people. People usually have to bear direct or indirect or both costs if they intend to enjoy primary health care services. Utilisation of medical resources, acquisition of inpatient and outpatient care, and consumption of pharmaceutical services and products featured within the system of health care delivery are the costs that are commonly linked with direct costs. Indirect costs, on the other hand, are the expenses incurred because of the morbidity and mortality due to a disease suffered by a person whose ordeal had caused his or her cessation or reduction of work productivity. Besides diminished productivity, indirect costs also appeared

in the form of wages or income loss, worker replacement, absence from work to undergo health care treatment or programme, and even work loss.¹¹

In Malaysia, the government is diligently playing its role to minimise the direct costs that have burdened its people especially the poor. Malaysian public health care is generally financed by various entities namely the Ministry of Health, the Ministry of Education and other federal agencies such as the National Heart Institute, local authorities, state governments, the Ministry of Defence, and Social Security Funds. In spite of that, the total health expenditure in public sector is primarily funded by the Ministry of Health which in 2011 constituted 85.15 per cent of the total expenditure or RM16.9 million. On the other hand, private health care source of financing is usually incurred from household out-of-pocket (OOP) expenditure, private corporations or companies (more than 90 per cent of the total labour force work in private sector and gain medical benefits through the private employer medical benefit scheme), private health insurance, non-governmental organisations, and managed care organisations.¹² In 2011, the Ministry of Health incurred 44.9 per cent from the total health expenditure in Malaysia, and this was followed by private household OOP with 37.7 per cent. Private insurance enterprises other than social insurance took the third highest spot with 6 per cent while other federal agencies including statutory bodies made up 3.56 per cent from the total percentage. The Ministry of Higher Education and all corporations (other than health insurance) were represented by 2.87 and 2.31 per cent respectively.¹³

As mentioned above, the cost of private primary health care is relatively higher than the cost of public primary health care and usually people have to incur their out-of-pocket expenses when getting treatment from private clinics especially when they are not covered by any insurance policy that they bought personally or provided by their employer. With reference to the previous figure, private household OOP is the second largest contributor to the total health expenditure in Malaysia and hence, the idea of acquiring an insurance policy will be advantageous and worthwhile to lessen the burden of paying the cost of health care service at private clinics. During a person's course of life, occurrence of unexpected situations are bound to happen and due to such life uncertainties, purchasing an insurance policy is believed to be a rational effort to shield or at least minimise the losses. Precautionary, life-cycle, bequest, and wealth accumulation or profit motives commonly mould the intention to purchase an insurance policy.¹⁴ Precautionary motive exists when people bought an insurance policy because of the fear of uncertainties and other risks such as life, health and disability risks. Life cycle motive involves preparing for major life cycle events and saving for future expenses, whereas bequest motive involves intentions of leaving an inheritance to the next of kin or dependents. Conserving more wealth when facing greater uncertainties such as potential fluctuations in future income and sudden out-of-pocket medical expenses is a factor in insurance ownership motivated by wealth accumulation. Malaysians normally take private health insurance on voluntary basis in order to settle private hospital costs as 70 per cent of health insurance expenditure is on hospital care. In 1990, the number of new policies was recorded to be only 496,338 while per capita insurance expenditure was merely RM92. However, the amount of per capita insurance expenditure in Malaysia escalated by 128 per cent from RM338 in 2000 to RM771 in 2010. Similarly, a 21 per cent rise was also noted for the registration of new life

insurance policies that elevated the number of policies from 1,174,517 in 2000 to 1,428,280 in 2010.¹⁵

Unlike Malaysia, a few countries in South East Asia such as Indonesia, the Philippines, Thailand, and Vietnam have introduced social insurance health schemes. The government announced the idea of a national health financing scheme and even commissioned five reviews on health financing beforehand with the thought of formulating a scheme underpinning social health insurance standards to assemble public and private funds and accommodate financial risk protection for the population. Yet, no decision was made and various impediments can be observed in addition to an absence of political will including the unwillingness of the formal sector to contribute to personal income tax while the views of the informal sector and the poor were disregarded. As private health insurance operators fear that this scheme would shrivel their profits, the Ministry of Health may have to relinquish its financing power to the authority in control of this scheme, and hurdle in collecting premium from the informal sector.¹⁶ Despite the non-existence of a national social health insurance, the government establishes two main social security bodies, namely, the Social Security Organisation (SOCSO) and Employee Provident Funds (EPF) that marginally coordinate health coverage for employees in the private sector.

1Care Social Health Insurance

The Malaysian Ministry of Health proposed a transformation package of health sector entitled 1Care for 1Malaysia or 1Care in 2009 which incorporated financial and governance restructuring. 1Care was suggested to be financed by a mixture of two sources – (i) an obligatory Social Health Insurance (SHI) contributed by the employer, employee and the government, and (b) a governmental contribution (attained from general taxation) that covers the Ministry of Health activities and the SHI premiums for citizens that were registered to be poor, disabled, elderly (over 60 years old), government retirees, and civil servants with more than five dependents. 1Care is generally a financing model that enables Malaysians to patronise nearest public or private clinics, and will not to be required to make payments at the counter. The presence of 1Care will facilitate the patients in getting medical treatment and reduce possibilities of unwell patients avoiding treatment due to high out-of-pocket payment.

However, 1Care does not cover all types of illness, only health complications relating to primary care. Not only that, the idea of implementing 1Care is considerably challenging as the public believed it will escalate the costs of health care and direct beneficiaries such as private hospitals, health management organisations and pharmaceutical firms are likely to earn profit handsomely from this scheme at the expense of the public. There have been very few data and evidence on the financial aspect of primary health care in Malaysia and thus, only a limited discussion can be made in regard to this matter. Further researches should be undertaken to determine additional and unprecedented facts and information.

Provision

The Ministry of Health's public clinics offer four components of primary health care: (i) curative, (ii) preventive, (iii) promotive, and (iv) rehabilitative services. Curative services available at public clinics include basic medical care, minor surgery, circumcision, care of chronic conditions, detection of malaria and tuberculosis, detection and early intervention of diabetes, cancer, sexually transmitted diseases and HIV. Preventive services comprise child development screening, women's health concerns such as pap smear and breast screening, thalassemia screening and cardiovascular risk factors screening for those 40 years old above, tobacco cessation programmes, blindness prevention, mental care services, adolescent and elderly programmes, premarital screening for HIV and school health services. These are preventive programmes offered at public clinics inclusive of all age groups. Communicable and vector-borne disease control as well as environmental sanitation are also considered as preventive programmes at community level and are usually under the responsibility of district health offices. On the other hand, health promotion programmes include health education and nutrition. Rehabilitation of special needs children is featured as a rehabilitative programme. Preventive care is deemed to be the niche of public clinics, in contrast to curative care which is the niche of private clinics (see Table 4). Patients' distinct preference towards services rendered by public and private clinics can be observed in Table 5 which shows that public clinics are more favoured by patients who are seeking treatments for chronic illnesses while private clinics are preferred in seeking remedy for acute illnesses.

Table 4:
Percentage of Types of Services Available by Sector 2012

Services	Sector (%)	
	<i>Public</i>	<i>Private</i>
Acute Illnesses	100.0	100.0
Chronic Diseases	98.5	96.7
Antenatal and Postnatal Care	91.2	67.5
Family Planning	94.1	84.2
Pap Smear	100.0	73.3
Minor Surgery	70.6	91.7
Laboratory Services	97.1	89.2
Clinical Breast Examination	98.5	74.2
Occupational Health	44.1	40.0
Smoking Cessation Programmes	75.0	16.7
Dispensing	0.0	100.0
Medical Check-up	89.7	98.3

Source: Ministry of Health Malaysia (2012).¹⁹

Table 5:
*Top 10 Reasons for Encounter in Clinics by Sector 2012*¹⁹

Public Clinics		Private Clinics	
<i>Reasons</i>	<i>Rate per 100 encounters</i>	<i>Reasons</i>	<i>Rate per 100 encounter</i>
Hypertension	30.8	Fever	24.6
Diabetes	20.0	Cough	24.5
Lipid Disorder	19.4	Abdominal Pain	10.2
Medical Examination, Pregnancy	18.0	Diarrhoea	7.2
Cough	15.7	Musculoskeletal symptom/complaint	6.1
Fever	11.6	Hypertension	5.2
Abdominal Pain	4.1	Throat symptom/complaint	4.6
Sneezing/nasal congestion	3.6	Headache	4.6
Musculoskeletal symptom/complaint	3.3	Vomiting	4.4
Medical Examination – General	2.6	Medical Examination - General	4.3

*Source: Ministry of health Malaysia (2012).*¹⁹

The increase in the use of public clinics is recorded almost every year as the total for new and repeated attendance rose consistently from 2008 until 2012.¹⁷ This condition may have been stimulated by longer operation hours in public clinics. As can be seen from Table 6, public clinics in Selangor and WP Putrajaya, WP Kuala Lumpur, Kuching, and Kota Kinabalu extend their operation hours while public clinics at Selangor and WP Putrajaya, and Kelantan lengthen their service hours including after-hours on-call. Despite being outnumbered in terms of quantity (as explained in the literature), public clinics are attending to more patients than private clinics (see Table 7). Although there are more doctors working in public clinics to accommodate the increasing number of patients, the doctors have less than five year of working experience in primary health care (see Table 8).

Table 6:
*Types of Operating Hours per day in Public Clinics by State/Region in 2012*¹⁹

State/Region	Office Hours	Office Hours + After Hours On-call	Office Hours + Extended Hours	Office Hours + Extended Hours + After Hours On-call
Selangor and Putrajaya	14.7	61.8	11.8	11.8
Kuala Lumpur	87.5	0.0	12.5	0.0
Kelantan	11.1	72.2	0.0	16.7
Kota Kinabalu	50.0	25.0	25.0	0.0
Kuching	50.0	25.0	25.0	0.0

*Source: Ministry of Health Malaysia (2012).*¹⁹

Table 7:
*Total Attendances and No. of Clinics by State/Region and Sector in 2011*¹⁹

State/Region	Sector	Attendances Per Day	
		No. of Clinics	Total Attendances Per Day
Selangor and Putrajaya	Public	34	12,174
	Private	52	2,265
Kuala Lumpur	Public	8	2,611
	Private	30	948
Kelantan	Public	18	3,271
	Private	25	1,006
Kota Kinabalu	Public	4	1,657
	Private	8	260
Kuching	Public	4	2,078
	Private	4	190

Source: Ministry of Health Malaysia (2012).¹⁹

Table 8:
*Distribution and Years of Experience of Medical Doctors by State/Region and Sector in 2012*¹⁹

State/Region	Sector		Total	Years of Experience	Sector	
	Public	Private			Public	Private
Selangor and Putrajaya	20	86	306	Less than 5 years	62.4	6.5
Kuala Lumpur	62	46	108	5 – 10 years	25.1	17.9
Kelantan	40	33	73			75.5
Kuching	20	6	26	More than 10 years	12.4	-
Total	370	184	554			

Source: Ministry of Health Malaysia (2012).¹⁹

In Malaysia, in general the people have good physical access to health care facilities as 92 per cent of the urban population and almost 69 per cent of the rural population live within 3 km of a health facility, although greater distances are recorded in Sabah and Sarawak. A study conducted in the east coast region of Malaysia found that many respondents (60 per cent) lived in areas which were close to clinics but unfortunately, far from hospitals. Accordingly, 59 per cent of the respondents were satisfied with the accessibility to clinics, while only 37 per cent of the respondents were satisfied with the accessibility to hospitals.¹⁸ There were 2.1 clinics per 1,000 people in Malaysia and WP Kuala Lumpur had the highest clinic density with 3.7 clinics for 1,000 people. Other urbanised states such as Selangor, Penang and Johor also recorded noteworthy density of 2.6, 2.5, and 2.2 respectively.¹⁹ In another study carried out in New England, United States, it was found that people who had to travel more than 10 miles (10.6 km) were less likely to visit their doctor compared to those who had to travel a shorter distance²⁰ and those who lived farther from the hospital were substantially less likely to be hospitalised for medical illness.²¹ Distance to regular care services was found to have a significant negative relationship with the number of regular care check-up visits in a study of rural North Carolina.²² Health care decisions were influenced by travel distance and the associated costs whereas time spent on travelling affected them physically and were a cause of stress. Distance also seems to prevent people with specific health care to get treatment. In New Jersey, the use of cardiac revascularisation services plunged as the distance to use the service increased²³ and insulin use also declined as patients lived farther from the source.²⁴

Accessibility, availability, accommodation, affordability, and acceptability are a set of elements usually employed to classify and gauge health care facilities.²⁵ Availability concerns the ability of a given service to meet the requirements of people. It also refers to the number of local service points from which a patient can choose. Accessibility refers to the ability of people to use healthcare facilities when and where they are required. It also refers to the distance and time between patient location and service points. Furthermore, it indicates the location of health care facilities with respect to the population. Accessibility and availability of primary healthcare are suggested to be considered simultaneously as both criteria have the capacity to influence health directly. The reduction of the use of health care system and the rise of area-based inequalities in health status are believed to be the outcome from the increased distance to health care services²⁶. There are quite a number of data pertaining to provision and utilisation of primary health care in Malaysia but the evidence with regards to accessibility is extensively lacking. More studies should be carried out to reveal more indications mainly in respect of the distance of the clinics, time taken to reach a clinic, the availability of transportation, and means of transport used by the public to reach a clinic.

Conclusion

Regardless of the difficulties, the government still succeeds in providing nearly free primary health care service to the citizens while charging minimal fee for secondary and tertiary health care facilities. Although private health care was introduced as a solution to overcome shortage of public health care facilities in urban areas, the people more often than not have to incur out-of-pocket money in order to utilise it and this situation is only convenient to the rich. Consequently, development of a two-tier system becomes visible with the urban regions being served by the private sector, while the public sector maintains its social equity mission, including primary care services for poor and rural populations. As for provision of public clinics, the government attempts to deliver the service without fail including extending the operation hours even it was counter challenged by several restrictions such as increased workload, long working hours, inadequate number of staff, abuse of system, cost implication, and customers' expectations. Likewise in aspect of financing, a number of researchers have demanded the government's genuine commitment in establishing national social health insurance by integrating the appropriate regulatory measures and institutions, standardising and extending the SOCSO and EPF programmes, and achieving political and civil support. Advancement and improvement of primary health care in Malaysia intricately hinge on the awareness and mastery of both financial and provision components of primary health care in Malaysia. All in all, Malaysia should emphasize in strengthening its current healthcare system by increasing the health expenditure to further provide better services. Introduction of a full-fledged social healthcare insurance is unwarranted at this time of moment or in the near future.

ACKNOWLEDGEMENT

This study is funded by University of Malaya Research Grant (UMRG) 2014 – 2017. We would like to thank the Institute of Research Management and Monitoring for approving our grant. Special thanks also to the Ministry of Health for providing supporting material and data.

REFERENCES

1. Population Distribution and Basic Demographic Characteristics. Kuala Lumpur: Department of Statistics Malaysia; 2010.
www.statistics.gov.my/portal/download_Population/files/census2010/Taburan_Penduduk_dan_Ciri-ciri_Asas_Demografi.pdf.
2. Economic Planning Unit. 1975 The Fourth Malaysia Plan 1975-1980. Kuala Lumpur: Prime Minister's Department, 1975.
3. Economic Planning Unit. Various Years. The Malaysia Plan. Kuala Lumpur: Economic Prime Minister's Department, Various Years.
4. Ministry of Health. 2011 National Health and Morbidity Survey. Available www.moh.gov.my, accessed 6 Jan, 2015.
5. Ng M, Fleming T, Robinson M, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2014;384(9945):766-781. doi:10.1016/S0140-6736(14)60460-8.
6. Kitreerawutiwong N, Kuruchittham V, Somrongthong R and Pongsupap Y. Seven Attributes of Primary Care in Thailand. *Asia Pacific Journal of Public Health* 2010; 22(3): 289 – 298.
7. Weiss Meredith L. *Routledge Handbook of Contemporary Malaysia*. New York: Routledge; 2015. <https://books.google.com/books?id=7fuAAAAAQBAJ&pgis=1>.
8. American Association of Family Physicians. Primary Care. Available at <http://www.aafp.org/about/policies/all/primary-care.html>, accessed 21 Jan, 2015.
9. Muldoon LK, Hogg, WE and Levitt M. Primary Care (PC) and Primary Health Care (PHC). What is the Difference? *Canadian Journal of Public Health* 2006; 97(5): 409 – 4011.
10. Department of Statistics (2012). *Social Statistics Bulletin Malaysia*. December 2012. Available at <http://www.statistics.gov.my>, accessed 19 Dec, 2014.
11. Ratcliffe J. The Measurement of Indirect Cost and Benefits in Health Care Evaluation: A Critical View. *Project Appraisal* 1995; 10(1): 13 – 18.
12. Ministry of Health. 2012 Out of Pocket (OOP) Sub-Account (1997-2009). Kuala Lumpur: Malaysia National Health Accounts, 2012.
13. Ministry of Health. 2013 Health Expenditure Report 1997-2011 (Revision). Kuala Lumpur: Malaysia National Health Accounts, 2012.
14. Nurul SM and Sarah MPV. The Determinants of Life Insurance Demand: A Focus on Saving Motives and Financial Literacy. *Asian Social Science* 2013; 9(5): 274 – 284.
15. Yiing JL, Goh YY. Purchase Decision of Life Insurance Policies among Malaysians. *International Journal of Social Science and Humanity* 2012; 2(5): 415- 420.
16. Tangcharoensathien V, Patcharanarumol W, Ir P, Aljunid SM, Mukti AG, Akkhavong K, Banzon E, Dang BH, Thabrany H, Mills A. Health Financing Reforms in Southeast Asia: Challenges in Achieving Universal Coverage. *Lancet* 2011; 377: 863–73.
17. Ministry of Health. 2012 Annual Reports. Kuala Lumpur: Ministry of Health, 2012.
18. Hasnah A, Arifin Z, Asmawati D, Mustafa O, Fatimah O, Mohd FMJ. Quality of Living and Accessibility to Basic Facilities at the East Coast Economic Region

- (ECER). Malaysia National Economic Conference. Driving Economic Growth within Volatile Global Condition. Volume 1 2009: 370-381.
19. Ministry of Health. 2012 National Healthcare Establishment & Workforce Statistics (Primary Care). Kuala Lumpur: National Healthcare Statistics Initiative, 2012.
 20. Nemet GF, Adrian JB. Distance and Health Care Utilization among the Rural Elderly. *Social Science and Medicine* 2000; 50: 1197-1208.
 21. Goodman DC, Fisher E, Stukel TA, Chang CH. The Distance to Community Medical Care and the Likelihood of Hospitalization: Is Closer Always Better? *American Journal of Public Health* 1997; 87 (7): 1144-1150.
 22. Arcury TA, Gesler WM, Preisser JS, Sherman J, Spencer J, Perin J. The Effects of Geography and Spatial Behavior on Health Care Utilization among the Residents of a Rural Region. *Health Services Record* 40 2005; 1: 135-155.
 23. Gregory PM, Malka ES, Kostis JB, Wilson AC, Arora JK, Rhoads GG. Impact of Geographic Proximity to Cardiac Revascularization Services on Service Utilization. *Medical Care* 2000; 38 (1): 45-57.
 24. Littenberg B, Strauss K, MacLean CD, Troy AR. The Use of Insulin Declines as Patients Live Farther from their Source of Care: Results of a Survey of adults with Type 2 Diabetes. *BMC Public Health* 2006; 6:198.
 25. Hawthorne TL, Kwan MP. Exploring the Unequal Landscapes of Healthcare Accessibility in Lower-Income Urban Neighbourhoods through Qualitative Inquiry. *Geoforum* 2013;50: 97-106.
 26. Bell S, Wilson K, Bissonnette L, Tayyab Shah. Access to Primary Health Care: Does Neighborhood of Residence Matter?, *Annals of the Association of American Geographers* 2013; 103(1): 85-105.