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**Health Insurance and Health Services Utilisation:  
Evidence from the Employer-based Health Insurance  
in Malaysia**

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# Health Insurance and Health Services Utilisation: Evidence from the Employer-based Health Insurance in Malaysia<sup>1</sup>

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**Abstract.** As governments are facing increasing pressure to improve the efficiency and financial viability of the health care service delivery system, it needs to have careful planning for effective utilization of resources to ensure efficiency and financial sustainability of health care services. The Malaysian government had encouraged the growth of private sector in health which led to ballooning demand and utilization of private health services and increasing resort to health insurance. This study assesses the impact of private health insurance coverage on the use of health services. The findings of this study do not show that the behavior of the insured has resulted in the gradually increasing rate of service utilisation at registered hospitals for inpatient services.

## Introduction

In many developing countries, governments are facing increasing pressure to improve the efficiency and financial viability of the health care service delivery system. Effective utilization of resources can help in enhancing the efficiency and financial sustainability of health care services. In Malaysia, while health insurance continues to be mainly a private enterprise in this country, the government plays an increasingly significant role. Especially from the 1980s onwards, in line with the privatization policy, the Malaysian government had encouraged the growth of private sector in health. With that, there was an unprecedented growth in private health care, which led to ballooning demand and utilization of private health services and led to increasing resort to health insurance (Chee and Barraclough 2008). The government is also looking for an alternative health financing system and the inclination is towards some form of health insurance.

However, health insurance is complex and there are serious market-failure problems.<sup>4</sup> In any market-driven system, competitive environments take care that resources are used efficiently and with optimum

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<sup>1</sup> This paper was presented at the Conference on Health in Transitions, on 20 and 30 April 2009, organized by KANITA of University of Science, Malaysia, and Centre for Poverty Studies (CPDS), University of Malaya.

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outcomes; but in the health insurance markets there are inherent problems due to the demand and supply side imperfections.

This study aimed to present the patterns of health services utilisation among the insured persons, who are able to get free care, both in outpatient and inpatient, from their choice of registered hospitals or network clinics, if available. In general, they can also change the hospital on a yearly basis, or more often if they have valid reasons. This study assesses the impact of private health insurance coverage on the use of health services. Patterns of health services utilisation from various health care providers among insured and uninsured persons in Malaysia have not been studied, due to lack of available data.

The problems as experienced in Malaysia are certainly not peculiar to this country alone (Pauly 2006). Many other developing countries are also grappling with their health care financing system. Therefore this study hoped to shed some light on the impact of health insurance coverage on patterns of health services utilisation, and to inform government efforts and to guide policy makers as they strive to formulate a sound strategy within which the public and private sector in health can exist in a rational and effective manner.

This paper is organized as follows: In the following section, a brief discussion of the theory of the demand for health care and review of literature, followed by a description of some key dimensions of the Malaysian health system and the developments of private health insurance in the country. The next section describes the data and the methods of the study. Section four discusses the results and analysis of the findings. The final section provides some conclusions of the study.

### **Theory and review of the literature**

The theoretical base for the excess use of medical care services induced by health insurance is the so-called “moral hazard” problem. Moral hazard” is the result of maximizing behavior. Those who take out insurance may engage in risky behaviour, such as smoking and excessive alcohol consumption, which an otherwise sane person would not do. Moral hazard does not require that people intentionally cause the misfortune. If they simply take fewer measures to prevent misfortune, the same outcome occurs. Many studies conclude that insurance coverage increased the use of health care, including physician visits and

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<sup>4</sup> There is a considerable body of literature on market failures in health. See, for example, Flood (2000) on ‘Arguments in economics and justice for government intervention in health insurance and health service markets.’

admission to hospitals (Trevino et al., 1991; Stearns et al., 1992; Hanh, 1994, as compared to those uninsured (Saver and Peterfreund, 1993).

One must also recognize that both public and private health insurance will also suffer from ex-post moral hazard. This phenomenon is in essence the consequence of reduced prices for medical care. Since most insurance plans, whether public or private, reduce the out-of-pocket cost of medical care, the behavior of individuals will be affected by those reduced prices. The “moral hazard” problem arises because policyholders would like to take decisions and actions which maximise their own benefit and do not want to bear the full cost (Arrow, 1963; and Pauly 1968, 1974). Basically, people will tend to over-use medical care when the costs are low or when they do not have to pay. The moral hazard problem suggests that the insured or the policyholder does not consider the insurer’s costs and tend to demand more (consumer moral hazard). Another theory for the increase in medical care use is the supplier-induced demand (or utilization) – that providers have an incentive to induce the consumption of medical care than might be medically appropriate for their own benefits instead of the patients’ (Folland et al., 1993). And so taxes or premiums will be higher than the optimal amount. This inflation of taxes or premiums to cover the choices made under subsidized prices is what is termed ex-post moral hazard. The problem of moral hazard creates problems both for private insurance and the government. To cope with the problems of moral hazard, mechanisms and conditionalities such as co-payments or co-insurance, deductibles, or a reduced premium bonus for the future are adopted by insurance companies, which create a burden on policyholders (Sonderstrom, 1997; Jutting 1999).

Based on these theoretical underpinnings, the effect of health insurance on utilization and expenditures has been analyzed in different ways in the empirical literature. The best known health insurance study is the Rand Health Insurance Experiment (HIE) which study the effect of insurance on the health care seeking behavior of individuals. The RAND study finds, among other things, evidence for increased health spending when insurance coverage is complete, compared with incomplete coverage (Manning et al. 1987). In a study by Shou-Hsia Cheng<sup>2</sup> and Tung-Liang Chiang(1998) on the disparity of medical care utilization among different health insurance schemes in Taiwan, the findings revealed that: a. persons with different insurance plans had a similar higher probability of seeing a doctor than the uninsured, with the odds ratios ranged from 1.8 to 2.0;and b. the Labour Insurance and Farmer’s Insurance participants consumed 60–

73% more physician services than the uninsured, while the Government Employees Insurance enrollees utilized only 30% more physician services.

There is a dearth of studies on health insurance in Malaysia. A survey was conducted to determine the distribution of individuals with private insurance including medical and health insurance by socio-economic and demographic factors and the quantum of premium in Malaysia. However, the study does not include the third party payer, i.e the employer-based health insurance. The study findings show that 18.8% of the Malaysian population aged 18 and above had private insurance coverage either for medical and health, life insurance (LI) and/or other types of insurance related to health. The mean insurance premium was RM 1,227 (Davis et al. 2006).

A study by Nik Rosnah (2007) looks at health insurance regulations. The study concludes that there is no legislation to safeguard the interest of policyholders to ensure that insurers are able to meet their long-term obligations. There are also no provisions specifically governing the conduct of health insurance distributors and related distribution issues to ensure that information disclosed to consumers is sufficient for them to make an informed decision on the financial commitments that they are undertaking. Another study (Nik Rosnah and Ng 2009) which focuses on the operational aspects of the private health insurance, examines whether or not there is difference in charges between the insured and non-insured patients. Based on an exploratory study on hospital bills of two groups of private hospitals belonging to two different corporate bodies, the study presents the first empirical analysis to show that there is no difference in charges between the insured and the non-insured patients. Pearson correlation test result shows there was no significant relationship between hospital bill and insurance coverage based on the significant value of 0.327, where  $p > 0.05$ . This means that insurance coverage does not have influence on hospital charges. Result shows that average medical charges on insured customers were lower at RM 4219.88 as compared to self-paid customers at RM 5243.25. And that is due to discounts made for insured patients. The average duration of admission for self-paid and insured customer is 3 days and 2.66 days respectively. The findings also shows that the private sector has learned to work within the regulatory boundaries as both groups of hospitals adhere to the existing regulations on doctors' professional fee (Nik Rosnah and Ng 2009).

## Malaysian Health Care System

The public sector health care system in Malaysia encompasses the entire range of promotive, preventive, curative and rehabilitative services at the primary, secondary, and tertiary levels and is highly subsidized by the government at a minimum cost or free. The financing of public health care services has traditionally come mainly from the general taxation. The government also pays for free health care to civil servants. In contrast, the private health care which is mainly on curative care and rehabilitative, are financed through a combination of employee medical benefits, out-of pocket payments and insurance expenditure by the population. Most of the larger employers subscribe to medical reimbursement schemes for their workers and their families.

Since the 1980s the Malaysian government is seeking for an alternative scheme to finance the health services (Malaysia 1984:376), and numerous studies have been commissioned but to date there has been little conclusion. It made implicit encouragement for the private sector to share in the provision of health care services to cater for those who can afford, thus freeing public resources for those who cannot afford. Hence, private hospitals have been proliferating rapidly since then and are projected to contain half of all hospital beds by 2020 (Malaysia 1996: 540).

In the Seventh Malaysia Plan, the government announced its intention to set up a National Health Security Fund (NHSF), which would be a form of national health insurance. The NHSF is essentially to transform the Malaysian health care from a taxation-based system to a social insurance system. The proposed national health insurance will be a compulsory health insurance scheme to which employers, employees and the self-employed will contribute. The regular and fixed contributions will go into a collective pool and will be used to pay for most, if not all, of medical care expenditures in the public and private sectors. This will also serve as a social safety net for the poor and needy. There are also plans to set up a National Health Financing Authority (NHFA) to manage the fund. NHFA will be a non-profit making statutory body that is capable of funding itself while providing better health access for all citizens (*The Star*, 24 October 2002). However little is heard on the matter.

Citizen's Health Initiatives (CHI) a coalition of non-governmental organizations, re-iterates its stand for a single-payer publicly operated healthcare fund, the National Health (Insurance) Fund - a payroll-based

scheme (employer/employee contributions) with supplementary contributions from progressive taxation to extend its benefits to all citizens and residents that to ensure equitable, universal and cost-efficient coverage of all Malaysian. It also proposed that the fund to be implemented by a non-profit body.

In terms of health expenditure, Malaysia spent about 2.4 per cent of GDP in health. Public health expenditure is higher than the private share. From the estimates of World Health Organisation (WHO) the private share of Malaysia's total health expenditure was 48.4 per cent in 1998, and 46.2 per cent in 2002 (WHO 2005), in the form of direct medical expenses incurred by individuals as well as payments made by employers. From an unpublished study in 1983, private health expenditure was shown to be 24 per cent of the total health expenditure (total health expenditure was RM 1.8 billion or 2.8 per cent of GNP (Economic Planning Unit 1996). What should be noted also is that the study estimated that in 1983, the cost per admission in public hospitals was RM537, as compared to RM1,703 in private hospitals.

From the Second National Health Morbidity Survey (NHMS 2) (Public Health Institute 1999) which was conducted between mid-1995 – mid 1996, per capita out-of-pocket health expenditure was estimated to be RM180, which is 4.80 per cent of per capita annual income.<sup>5</sup> The NHMS 2 also reported that from 1989 to 1996 the out-of-pocket expenditure increased by 40 per cent, an estimate of RM3.82 billion in 1996, a total that is almost equivalent to the public sector expenditure of RM3.99 billion in the same year (Public Health Institute 1999: 103-4, 111). As such, in terms of GNP, in 1996, the out-of-pocket health expenditure constituted 1.35 per cent (or 1.28 per cent of GDP), whilst total public expenditure was 1.41 per cent of GNP (or 1.34 per cent of GDP). According to the survey, from the out-of-pocket expenditure, 71.67 per cent was on private health care facilities for ambulatory and curative care and 14.3 per cent for in-patient care. It should be noted that the NHMS 2 (Public Health Institute 1999: 102-3) estimate is confined to out-of-pocket expenditure only due to lack of data on expenditure by private sector companies and private health insurance. The study did not provide estimates for total private health expenditure, but cited that from a population study survey, 64 per cent financed their health care from out-of-pocket, of which, 17.8 per cent was paid by employers or by health insurance (4.5 per cent) (Public Health Institute 1999:76).

The NHMS2 indicated that 80% of the population sought inpatient care in government hospitals, and that public healthcare facilities were most utilized for maternity care and long-standing illnesses. The survey

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<sup>5</sup> The per capita annual income as reported by the NHMS 2 was calculated to be RM3,748.02 (MOH1977)

also indicated that about 50 million patients, equivalent to twice the national population, use the government health facilities annually.

In comparison with other developing countries, the recent data from WHO (WHO 2005), shows that Malaysia's GDP for medical expenditures paid out-of-pocket ranks one of the highest (Table 1).

**EXHIBIT 1**  
**Percentage Of Gross Domestic Product (GDP) For Medical Expenditures Paid Out Of Pocket In Selected Countries, 2002**

Country	Percent paid out of pocket <sup>a</sup>
Bangladesh	64
Cameroon	69
Côte d'Ivoire	73
Cyprus	57
Democratic Republic of Congo	70
Ecuador	57
Egypt	58
Georgia	80
Ghana	59
Guinea	84
India	78
Indonesia	48
Kenya	45
Malaysia	50
Nigeria	67
Pakistan	65
Philippines	47
Sri Lanka	49
United Republic of Tanzania	38
Venezuela	46
Vietnam	62

**SOURCE:** World Health Organization, *The World Health Report 2005: Make Every Mother and Child Count* (Geneva: WHO Press, 2005).

<sup>a</sup> Includes out-of-pocket payments for people covered by both public and private insurance.

Wagstaff et al. (2001) in their study on health payments in developing countries conclude that although the absolute level of out-of-pocket payments is higher at higher household income levels, the distribution of such payments spreads far down the scale of income. In general, the level of payment by the poorest of the

poor is quite low, but out-of-pocket payments by relatively low-income people constitute a large share of the total of such payments.

#### Private Health Insurance in Malaysia

Health insurance is voluntary in Malaysia. With the expansion of private health care beginning in the late 1980s, more and more Malaysians are turning to insurance protection to finance their health care requirements. The insurance industry, local as well as foreign, has an obvious interest, and this has led to the substantial expansion in medical and health insurance business. In 2000, about 15 per cent of the population had health insurance and the number is increasing.

The health care insurance market is growing at 25 per cent annually (*The Sun* April 2, 2000). In 2003, medical and health insurance accounts for more than 5 per cent of total premiums in the insurance industry (Zeti 2003). In the last five years, medical and health insurance premiums increased at an average annual rate of 16 percent to nearly RM1 billion in 2002. In 2006, 18.8% of the Malaysian population aged 18 and above had private insurance coverage either for (i) medical & health, (ii) life insurance (LI) and/or (iii) other types of insurance related to health. The total premium (weighted for the total population aged 18 and above) was estimated at RM2.99 billion (Davis et al. 2006). The total private insurance premium paid by the population was RM2.99 billion of which it was estimated that RM1.21 billion was paid specifically for the medical and health component (Davis et al. 2006).

The government had both initiated and responded to dynamics in health care through legislation and public policies. For example, the employer contributions to employee health benefits are exempt from taxation, which encouraged the growth of employment-based health coverage. Employers in private sector offers employer-based insurance schemes through their own employer-managed facilities by way of lump sum payments, reimbursement of employee's health expenditure for outpatient care and hospitalization, fixed medical allowance, monthly or annually, irrespective of actual expenses, or covering them under the group health insurance policy.

Besides the private sector, in the recent past, the Malaysian government too began various health insurance initiatives. For example, in 1994 a medical saving schemes was introduced through the Employees Provident Fund (EPF).<sup>6</sup> In 2000 it was announced that this account may be drawn for a risk-rated medical insurance scheme offered by the Life Insurers Association of Malaysia (LIAM) (*The Star* 18 January, 2000). The scheme would allow an estimated five million working and contributing EPF members and three million retired and non-working members to use their savings from EPF to sign up for a health insurance. This scheme allows EPF members to withdraw funds from Account III (health) to meet annual private health insurance premiums. Members can opt for a low-premium scheme covering 13 critical illnesses or for one covering 36 critical illnesses for a higher premium.

Cuepacs (Congress of Union of Employees in Public and civil Services) also launched the CuepacsCARE, a voluntary, private health insurance scheme, a joint venture with two private insurance companies. Both schemes are available to those aged 70 and below. The scheme gives government employees the option of seeking health care at private hospitals up to a maximum of RM60,000 per annum, with individual annual premiums of RM 87 and family premiums of RM 225. CuepacsCare subscribers pay a uniform premium regardless of age, but they need to enroll before the age of 60, and coverage ceases at age 65. The reimbursements are based on specified inpatient services, subject to a ceiling of a maximum of RM60,000 a year for individual subscribers. In the first year of subscription, it excludes those with congenital abnormalities, disabilities arising from wars or disorders, mental illness, eyesight deficiencies and visual aids, artificial limbs and prostheses, sexually transmitted diseases, quarrantineable infectious diseases, pregnancy and child delivery services, vaccinations, AIDS and related complications (such as diabetes, high blood pressure, kidney dysfunction, cardiovascular disease, cancer). Other employee unions are embarking along the same lines.

All private health insurance in Malaysia is risk-rated, which means that the premium charges would vary according to the risks taken on by the insurer. Benefits received for health insurance are usually limited to a specific amount for each individual service and often to an annual limit. The private health insurance covers

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<sup>6</sup> The EPF is the national social security organization. It has 10.23 million members of which half of it are active members. It operates a compulsory retirement savings scheme, to which employees contribute 11 per cent of their wages and employers 12 per cent. Under this arrangement 10 per cent goes into a separate account which could be drawn upon treatment of a list of critical, in either the public or private sectors. This allocation may also be used by family members- parents, spouse, children and siblings (EPF 2000).

part of the costs of being a private patient in a private hospital. This provides choice of doctor and hospital admission, so avoiding the waiting times associated with elective procedures in the public system. Insured patients may also elect to be treated as a private patient in a public hospital. The various health insurance products offered by these companies include hospitalization benefit,<sup>7</sup> surgical income<sup>8</sup>; and coverage on medical expenses<sup>9</sup>. These benefits also come under group coverage where companies purchase it under group hospitalization and surgical benefit or better known as GHS.

### *Group Hospitalization (GHS) and Surgical Benefit*

Based on the researcher's experience<sup>10</sup>, coverage on medical expenses incurred during hospitalization is perhaps one of the highly sought benefits by the society in view of the increasing medical cost. The benefits under the Group Hospitalization and Surgical plan include<sup>11</sup> hospital room and board which includes charges for, food and general nursing services, as well as confinement as a bed-patient in the ICU of the hospital; miscellaneous services such as X-ray, ECG, cat-scan, radiology, ultrasound, screen profile, laboratory tests, drugs, medicines, dressings, gas, solutions & blood; physical or drug therapy; operating theatre; medical reports and other necessary medical services equipment or supplies. It also includes fees for surgery, anaesthetic; in-hospital Doctor's Fees for the physician's daily visits and treatment of nonsurgical disability in the hospital during the insured person's confinement.

The benefits also includes pre-hospitalization services such as diagnostic, Specialist Consultation; medical expenses incurred during follow-up treatment; or the actual charges for a period not exceeding 31 - 90 days following discharge from hospital. Besides the hospitalization, the benefits covers emergency treatment, ambulance services; and also a daily cash allowance per each day of confinement at a government hospital provided the employee is confined in a ward that is lower than the employee insured limit, subject to plan maximum for reimbursement amount and number of days. This benefit is given to employees only.

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<sup>7</sup> Hospitalization benefit offers income payment according to the days of confinement in the hospital. The payment varies according to the type of plan purchased which ranges between RM 100 to RM 250 per confinement., which limits up 180 days per policy year and subject to terms, conditions under the benefit.

<sup>8</sup> Surgical Benefit refers to the indemnity benefit that the insured would be paid a fixed sum of payment according to the plan purchased when a surgery or procedure was performed. This payment is up to the life time limit according to the purchased plan.

<sup>9</sup> Besides covering for in-hospitalization charges, the benefit also covers for pre and post hospitalization charges up to a period depending on the coverage of the medical plan purchased. The period is normally at 30 days for pre-hospitalization and between 60 – 90 days for post hospitalization. The coverage also includes an emergency out-patient treatment due to accidental cause.

<sup>10</sup> The co-researcher was the claims personnel in the company that managed the group hospitalization and surgical claims submitted.

<sup>11</sup> This information is based on the policy contract of the insurer issued to policyholder ,i.e; the Employer.

The amount payable on each hospitalization and other treatments is also subjected to the terms, conditions and exclusions of the benefit. On top of that, each plan chosen by the customers would have its annual and life-time limit, where it would reduce whenever a claim has been paid out. Once the limits have been exhausted, no further claims would be paid.

The medical plan and limit offered to each employee would depend on the job level and structure of the respective company. Employers are also able to cater to their needs with add-on benefits by paying additional premiums. Under the benefit, insurers offer two facilities to customers: a. cashless facility and b. on reimbursement basis. All customers would be issued with medical card, which is applicable at most of the hospitals in Malaysia, that are either a panel with the insurers or an appointed Third Party Administrator (TPA). The appointed TPA is referred to an agency that makes the reimbursements for claims, rather than by the patient.<sup>12</sup> In the event that the hospital does not fall under the panel, then the customers would need to settle the expenses by himself and subsequently, to submit the claim to the insurer for reimbursement.

## **Methodology and Source of Data**

This paper examines the utilisation of health care services of the insured persons and their dependents who received the employee medical benefits from the employer-based health insurance. Data for this study was collected through health claims based on claims register of an insurance company in Malaysia. The insurance company is a joint venture between the one of Malaysia's largest banking group with one of the largest insurers in the world. It looks at the health claims made by employees and their dependents of ten companies that provide health insurance benefit to their employees, enrolled with the insurance company. For ethical purposes, and to protect the privacy and confidentiality of information that could be potentially damaging to the companies concerned, the researchers are compelled to uphold the anonymity of these companies as well as the insurance company. Therefore, the identity of these companies will not be revealed and the study companies will be referred to as Company A – Company J.

The profile of the study companies (Company A- Company J) is tabulated as follows:

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<sup>12</sup> Most insurers appoint Third Party Administrator (TPA) in managing the cashless facility as this facility is offered on 24-hour basis with no break throughout the year.

No.	Enrolled Company	Description	No. of insured
1.	A	one of the largest retailers in the world with a leading position in Malaysia selling household groceries.	5,719
2.	B	One of Malaysia's leading players in automotive industry. It focuses on automotive manufacturing, assembly and distribution with involvement in passenger cars and four-wheel drive vehicles.	1,378
3.	C	a company in charge of developing and maintaining a modern and efficient sewerage system in Malaysia.	9,107
4.	D	an investment holding company which promotes and coordinates the development to support one of the nation's biggest project in Johor.	248
5.	E	A driving force in shaping selected strategic industries in Malaysia, nurturing their development with the objective of pursuing the nation's long-term economic interests.	948
6.	F	A company that supports Malaysia's agriculture and food supply chain sector .	378
7.	G	A company that managed one of Malaysia's ports.	5,594
8.	H	An automotive manufacturing company	16,213
9.	I	Local municipal council	1,408
10.	J	A Local Municipal Council on the northern of Kuala Lumpur.	2,818
<b>Total</b>	<b>10</b>		<b>43,811</b>

From the claims register of the insurance company, the record shows that the highest number of insured come from Company H with 16,000 insured persons followed by Companies C with 9,107 and A with 5,719 insured persons. Company D has the lowest number of insured, 248. The above figures include both the employee members and their dependents. Segregation could not be done in view of incomplete data obtained.

The scope of this research was based on the admissions of the insured into hospital for a one-year period between from 1 January 2008 till 31 December 2008. Data was collected based on the claim record of the insurance company (henceforth will be referred as insurer) up to 31 December 2008. The study sample consisted of 43,811 insured persons from the ten study companies.

The study examines four factors in the utilisation of health services by the insured:

- a. the frequency of admissions;
- b. the amount of claims made;
- c. the types of hospitalization; and

#### d. Admission for critical illnesses versus non-critical illnesses

The frequency of admissions is examined in terms of the total number of admissions, the admissions according to month, average of admissions per month, and comparison on the number of admissions between employee and dependents. Whilst the amount of claims made is examined in terms of the average claims paid by company and by month. The types of hospitalization refers to whether it is in the private hospitals or the public hospitals, whilst the admission for critical illnesses and non-critical illnesses looks at the admissions based on the classification of the thirty six critical illnesses covered by the insurance industry in Malaysia. The admissions for critical illnesses included treatment for cancer and angioplasty while for non critical illnesses were mainly for acute and accidental conditions.

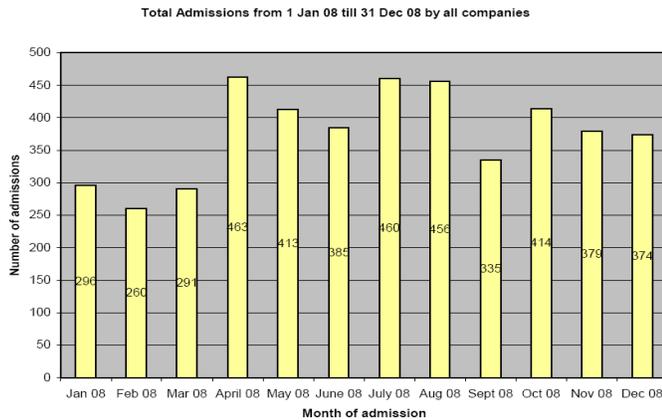
Besides those four factors, the researchers also interviewed the employers to gauge the opinion of the employer on the existing system, their future plan and strategy, if any on the system of their employee medical benefits.

All health insurance on Hospitalization and Surgical claims from these enrolled companies were serviced by a Third Party Administrator (TPA) appointed by the insurer. The TPA operates on 24-hour basis and 365 days. Under the policy contract of all these companies, no co-insurance and deductible were imposed. Nevertheless, this arrangement could be revised depending on the claim experience incurred for the respective company. Revision is possible because Group Hospitalization and Surgical benefit is renewable on a yearly basis.

### **Results and analysis**

#### a. The Frequency of Admissions

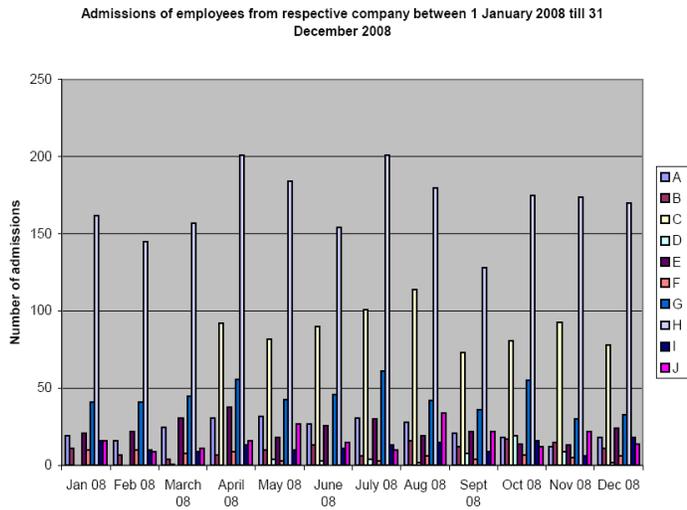
Table 1: Total Number of Admissions from 1 January 2008 till 31 December 2008 by all companies



The 10 study companies recorded a total of 4526 admissions for the year (Table 1). The highest number of admissions was in the month of April (463), followed by the months of July (460) and August (456). On average, the number of admissions is 452.6 for each company for a year.

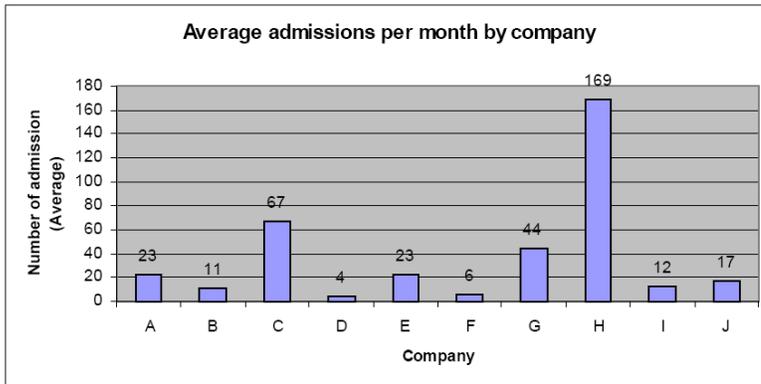
A lower number of admissions can be seen in the first quarter and the last quarter of the year. Based on claim experience, this was mainly attributed by the high number of public holidays during the first quarter of the year. Similar explanation was also noted for the last quarter of the year where the numbers of admission were lower as compared to the quarters two and three. Between Q1 and Q2 of 2008, there was an increased of 49% in admissions. Meanwhile, between Q2 and Q3 & Q3 and Q4, the number of admissions decreased by 1% and 7% respectively (Table 1).

Table 2. Number of admissions by companies according to month



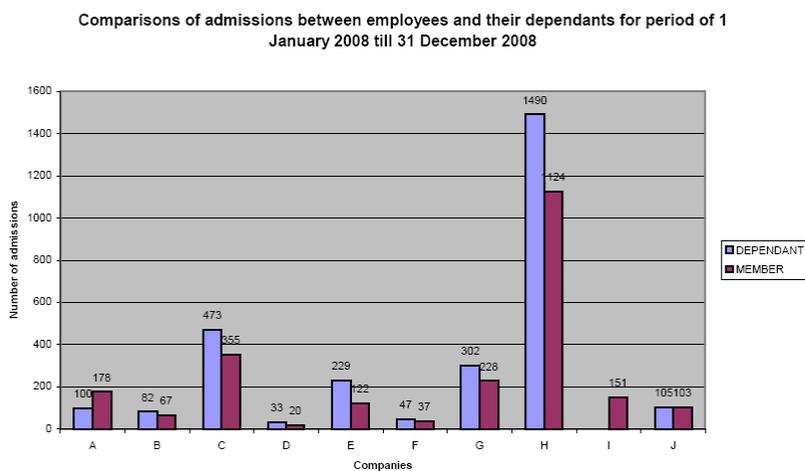
It is noted that Company H had the highest hospital admissions among its employees and their dependents. This can be justified since Company H had the highest number of insured in 2008. The second highest number of admissions attributed by Company C who was also among the high insured covered by the company. Hence, the trend is the higher number of insured will contribute to a higher number of hospital claims.

Table 3. Average admissions per month by company



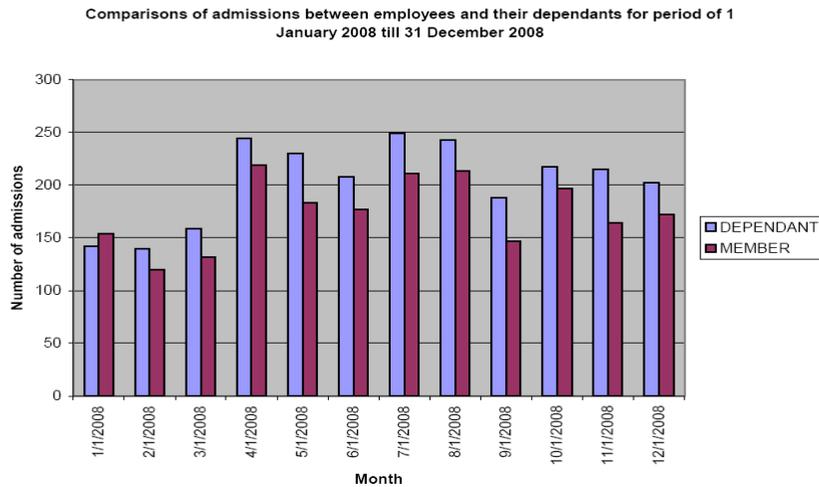
Company H had an average of 169 admissions per month followed by an average of 67 admissions in Company C. Company D with the least number of insured (248) recorded the lowest number of average admissions per month, i.e 4.

Table 4. Comparison between employees and their dependants by company



Except for two companies, Company A and Company I, the number of admissions of the dependents were higher compared to the number of admissions of employees in all the other 8 study companies (Table 4).

Table 5. Comparison between employees and their dependants by month



Throughout the 12 month period, the frequency of admissions for the dependents in all the study companies outnumbered that of the employee members in all the ten study companies (Table 5).

On average per month, dependants and employees recorded between 22 and 16 admissions respectively. In terms of percentage, dependants and employees constituted 57% and 43% respectively. Based on Tables 4 and 5 above, it shows that the dependents benefited the most from GHS plan that allow them to enjoy free medical coverage. However, in view that each employee would have at least one dependent, the figure for the dependents should not be considered as high.

For the above analysis, the identification between employee and dependents for claims can be distinguished in view that the claim register provided by TPA captured coverage by member type. However, the same could not be carried on the totality of the members covered under each respective company due to the insurer's member listing does not classify coverage by member type.

Table 6. Average days of admission by company

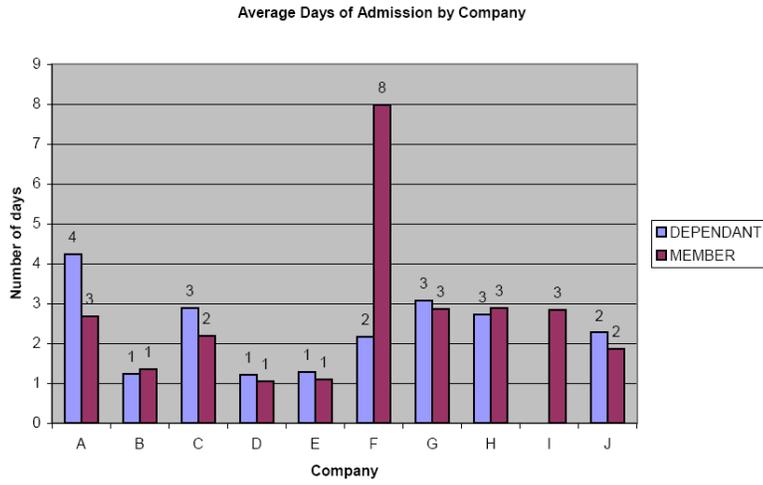
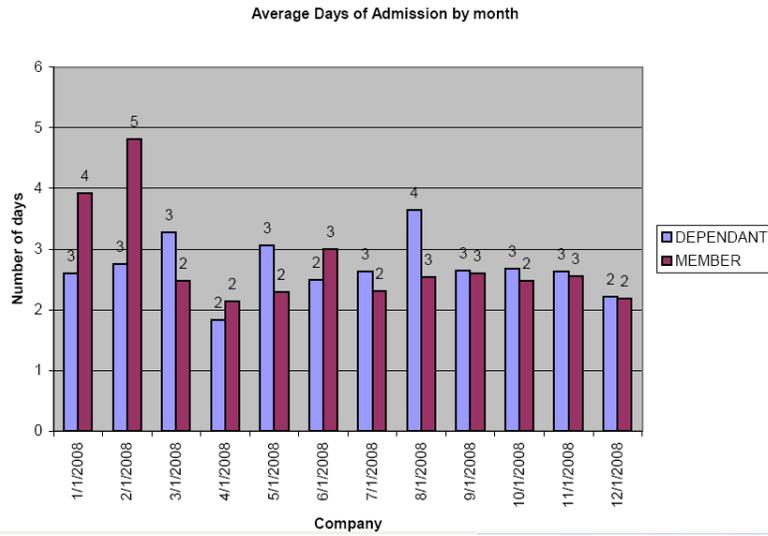


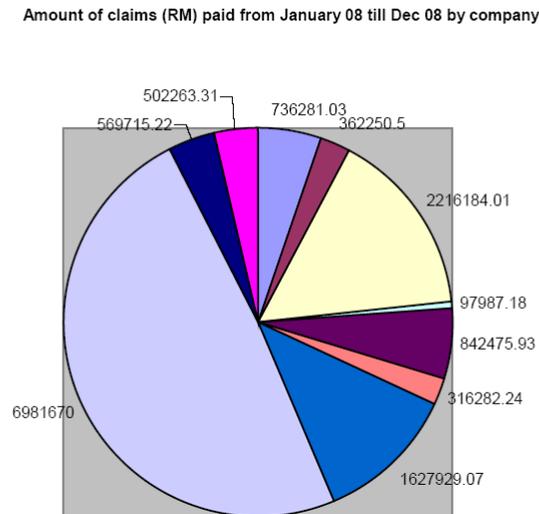
Table 7 Average days of admission by month



The average number of days of admission by company ranged between 1 to 8 days while the average days of admission by month ranged between 2 to 5 days (Table 7). The length of confinement depends on the nature of illness and its complications.<sup>13</sup>

b. *Amount of claims paid*

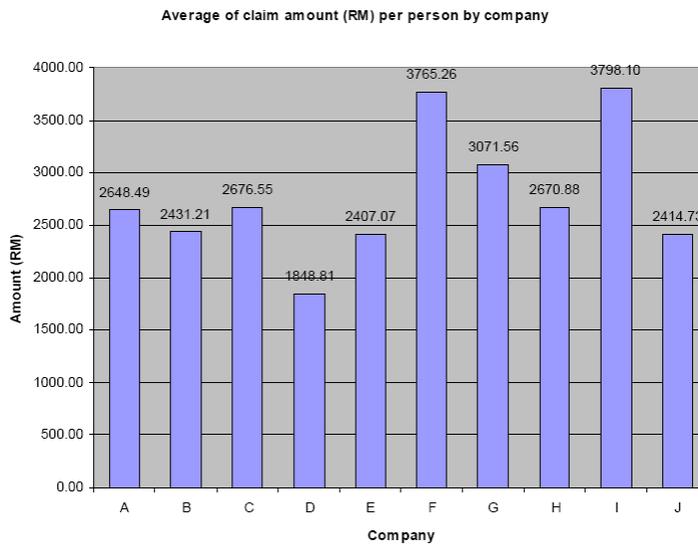
Table 8. Amount of claims paid (RM) from January 2008 till December 2008



The total amount of claims paid for admission for all ten companies based on the record of admission up to 31 Dec. 2008 was RM 14,253,338.49. Company H had the highest paid out on claim that totaled to RM 6,981,670.00. Company C was the second highest that paid out on claims with a total of RM 2,216,184.01, followed by Company G that paid out a total of RM1,627,929.07.

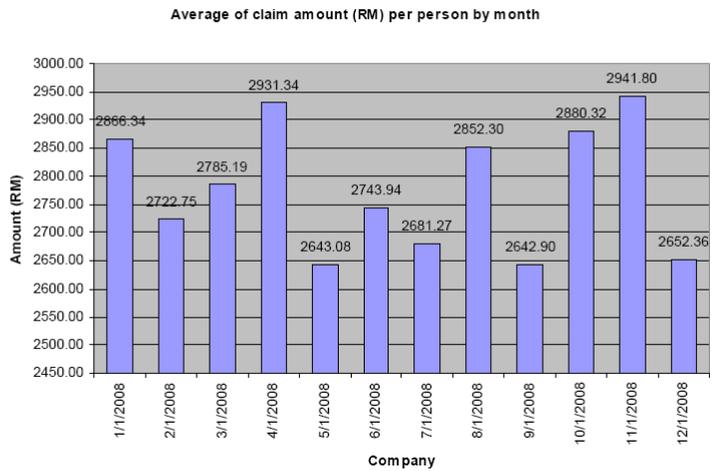
<sup>13</sup> Chronic diseases such as cancer and heart impairment as well as major accidental injuries would require a longer hospital confinement compare to acute conditions such as tonsillitis, gastritis and minor accidental injuries.

Table 9. Average claim amount paid by company from January 2008 till December 2008



The average claim of admission by company ranged between RM 1,848.81 and RM 3,796.10. Company D had the lowest average cost of admission while Company I with the highest (Table 9). It is interesting to note that whilst Company I recorded an average of 12 admissions per month (Table 3), one of the lowest average admissions per month, it paid out the highest amount of claims. On average, the claim amounts to RM3348.99 per admission, or RM325.33 per person per year.

Table 10. Average claim amount paid by month from January 2008 till December 2008.

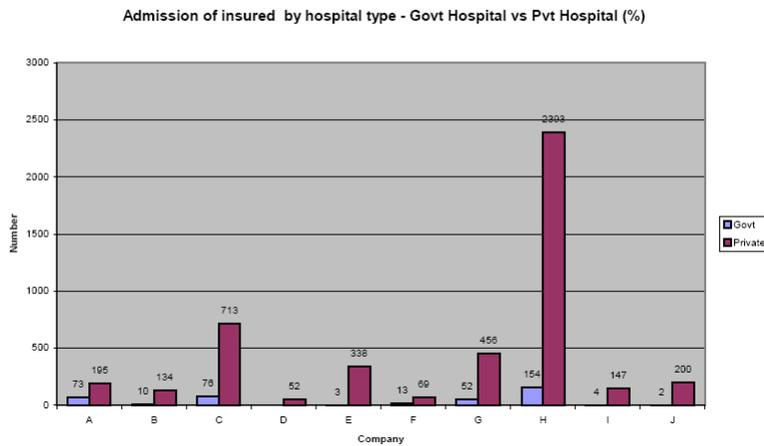


The claims amount incurred per person per month ranged between an average of RM 2642.90 to RM 2,941.80 (Table 10). The highest average amount occurred in Nov 2008 (RM 2,941.80) and the lowest average was in the month of September 2008 (RM 2642.90).

The total premium paid by the ten study companies was not made available. However, in terms of the insurance premium, this does not reflect positively on the company as GHS plan is a yearly renewable plan. Should the claim ratio exceeded the total premiums received from these companies, this means that a loss has been incurred and as such, the premium to be paid by these companies would be marked up during the renewal of the plan. The mark up rate could be by another 30 – 50 % depending on the loss ratio estimated by the Actuarial Department of the insurance company.

c. Hospitalization of insured – Government Hospital versus Private Hospital

Table 11. Admission of insured by hospital type



On the admission by hospital types, 92% of admissions were from private hospitals while only 8% from government hospitals (Table 11). It is clear that private hospital is by far the favourite option among those insured as compared to the government hospital in utilizing health care services or for treatment. This may be due to the efficient and quick services rendered by the former. As the hospital expenses were covered via insurance, it may not be of concern among the insured on the consideration of cost.

d. Admission of insured – Critical Illnesses versus Non Critical Illnesses

From the records of the insurer, it was noted that from the total admissions that took place in 2008, 97% of it were due to non-critical illnesses whilst a balance of 3% were due to critical illnesses.

In general, employers in Malaysia are paying the entire premium for the employer-based health insurance. This could be due to the reason that employer-based health insurance premiums are tax-free to the employee without limit. However, from interviews with the employers, many employers indicated that they do feel the pinch when the company's GHS plan is renewed in view of the increase in premiums as a result of high claim experience in the previous year.

Employers can impose a few measurements such as subsidizing on a quota basis with employees paying part of the hospital bills. Nonetheless, records show that the employers of the 10 study companies do not implement such approach. This is in view of the fact that that GHS plan is focus on the welfare of the employees and as such, the important of employees' welfare is being prioritized.

With high claims experience, as stated by the employers, the least an employer can do is to educate their employees in not abusing the GHS benefit. But this is not happening, not in any one of those study company. In this study, no specific strategy is being imposed by the study companies.

### **Conclusions and Policy Recommendations**

Generally, insurance is found to increase the intensity of utilisation. However, the findings of this study do not provide much evidence that confirms the literature that insurance in general significantly increased the utilization of health care services. The findings of this study do not show that the behavior of the insured has resulted in the gradually increasing rate of service utilisation at registered hospitals for inpatient services. More concrete evidence would be with time series data, which is not made available for the study.

This is a preliminary study on private health insurance in Malaysia, and it looks at the third party payer, or the employer-based insurance. The results from this study concerning the health services utilisation of the insured individuals are likely to have small external validity. However, the findings from this study provide some useful information for reforming a health care delivery system. In terms of policy, in looking for alternative ways to finance the country's health services, this study has highlighted the need for analysts and decision makers to be adamant of the efficiency and equity, and the implications of health insurance.

Private insurance in Malaysia is structured primarily to fill the gaps in the public system. However, the concern is that as a consequence, this system might raise the possibility of interactive effects with the public system. Another concern is the threat that private insurance will make greater inroads and start the slide towards a market-dominated health care system. As private health insurance cover private health care services, the government need to play its role to improve its regulations to ensure that private health insurance does not harm the public interest. Such regulations should ensure honest treatment of insured patients, and sensibly designed insurance such as one that has minimal exclusions for coverage.

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