

CHAPTER II LITERATURE REVIEW

2.1 Introduction

The efficient provision of healthcare has always been a subject of debate among economists since the earlier years. Neoclassical economists argue that healthcare can best be allocated by the market mechanism while evolutionary economists argue that healthcare is not a normal economic service that must reach those who 'need' rather than 'demand' it, hence is best allocated through a state-controlled governance mechanism.

The supporters of the state's role in health, such as Arrow (1963), Titmus (1967), Evans (1984), Baumol (1980, 1988), Weisbrod (1988), North (1990), Bennett (1997) and Leonard (1999) argue that healthcare processes characteristics which require either the modification or replacement of the market mechanisms, and that the conditions for markets to work optimally do not exist in healthcare practice. This is due to the special characteristics of healthcare as stated below:

- a. Elements of risk and uncertainty of incidence of illness. At the point of need, healthcare costs can be very high and most people are risk adverse. Therefore, there is an imperfect market for risk (Arrow, 1969).
- b. Healthcare has a merit good characteristic. People are concerned about the healthcare of others because it may affect their own welfare. The consumption of such goods will always be less than socially optimal unless they are subsidised (Bennett, 1997).

- c. Certain forms of healthcare such as the prevention or treatment of infectious diseases have positive externalities (Russo, 1994).
- d. There is “asymmetric information” between patient and the provider (Arrow, 1963).
- e. Due to such informational problems, there are high transaction costs in the health sector (North, 1990).

Those who advocate the market mechanism, such as, Friedman (1962) and Hayek (1966) claim that these characteristics do not in themselves mean that healthcare cannot be treated in the same way as other commodities, and that such characteristics are not strange to healthcare. Like any other commodity, it is scarce and therefore, requires institutions to organise this allocation. The argument is simply that markets are efficient mechanisms for the automatic coordination of a large number of activities. The claims for the superiority of market mechanisms are usually made with reference to “perfect competition” (Nik Rosnah, 2005).

According to Flood (2000), it is broadly accepted that markets in healthcare are subject to failures, and the ‘healthcare market’ is therefore a theoretical anomaly. Evans (1997) and Light (2000) remarked that even though the problems of ‘healthcare market’ is acknowledged, the ‘market solutions’ and privatisation in healthcare continue to be pursued by economists and policy makers. The belief is that market competition will lead to greater cost-effectiveness and efficiency, while state involvement is fraught with inefficiencies and lack of responsiveness to users, besides not allowing for consumer choice (Chee & Barraclough, 2007).

In light of the conflicting arguments on the forces best suited in providing healthcare, the chapter examines the existing theories and evidence on healthcare policy.

2.2 Leading Theories

There are four main theories that enjoy traction in explaining the provision of healthcare services; namely neoclassical, evolutionary, heterodox and human capital.

2.2.1 Neoclassical Theory

The neoclassical theory of healthcare consumption arguably is the most influential theory and it is the basis of many neoclassical analyses of health care markets. One of the essential principles of neoclassical economics is that, in an optimally functioning market, competitive forces will lead to a more efficient allocation of resources, Pareto-optimal competitive equilibrium than nonmarket solutions. According to this model, when there are many firms and consumers, prices are allowed to respond to the forces of supply and demand, and competition will result in an equilibrium situation where it is impossible to make someone better off without making someone else worse off. This will result in a welfare-maximizing situation (Preker & Harding, 2000).

The neoclassical model classifies goods and services as private, mixed or public. Private goods show excludability (consumption by one individual prevents consumption by another; there are no positive or negative externalities), rivalry (there is competition among goods based on price), and rejectability (individuals can choose to forgo consumption). True public goods have significant elements of non-excludability, non-

rivalry, and non-rejectability. Mixed goods have some but not all of the characteristics of private goods.

According to neoclassical theory a breakdown occurs in both efficiency and equity when public goods or services with significant externalities are allocated through competitive markets. Even public goods can be sold in private markets but usually this leads to suboptimal quantity, quality or price, thereby creating a strong justification for collective action. Similarly, significant problems occur in efficiency and equity when private goods are produced or provided by a public sector monopoly (Preker, Harding & Travis, 2000).

Leading mainstream health economists suggest that health care has special features that make it different from other domains of application, posing limitations on the suitability of some neoclassical assumptions (Hodgson, 2009). A social good like healthcare is demand inelastic, no matter the cost, individuals in need of the services. People do not have option rather than paying whatever may be required, or refrain and suffer the concomitant effects as a consequence of its unaffordability (Rasiah, Nik Rosnah & Makmor, 2011).

2.2.2 Evolutionary Theory

Evolutionary economics tend to be progressive, assuming that there is a path of improvement upon which evolution travels and this is contrast with the evolutionary thinking of institutional economists that takes the focus away from individual market transactions and looks at the evolution of economics in the context of historical, cultural and social forces. Preker and Harding (2000) argue that the developments in most

understanding different arrangements for service delivery derive from new institutional economics. The new institutional economists address the role of institution, including coordination modes in transactional allocations but consider that markets are always the superior institution in achieving the most optimal outcomes (Rasiah et.al. 2011).

There have been massive on-going changes in the nature and distribution of healthcare needs around the world. These processes have created changing demands on healthcare system. In evolutionary theory, there is an assessment of the process of change; with the view to understanding what kind of efficacious interventions are possible in a complex, evolving system and involving unforeseen outcomes. In general policy terms, evolutionary economists have argued for flexible institutional structures, which can accommodate sufficient variety to withstand shocks and fuel the evolutionary process (Hodgson, 1984). The ideas above have major implications for the system of provision of healthcare services, particularly concerning the respective roles of the state and the market. Policy solutions are not straightforward, as there is strong evidence that innovation is best fostered by a combination of state regulation and market mechanisms (Moreau, 2004).

The unique properties of healthcare services that must reach those in need and the significance of non market modes of management rationalize the use of evolutionary theory in the provision of healthcare.

2.2.3 Heterodox Theory

Heterodox economics is categorised as an institutions-history-social-structure nexus (with production as an additional sphere). This nexus offers the potential for a more

lucrative explanation of healthcare provisioning issues, and in explicitly recognising the importance of social embeddedness and deontology in the provisioning of healthcare. By contrast according, to Davis (2006), the nexus of mainstream economics is typified as rationality-individualism-equilibrium.

Heterodox theory consists of methods and theories outside from the mainstream economics. Heterodox economists believe that any explanation or theory of the social provisioning process must be grounded in the real world of actual historical events, must incorporate radical uncertainty and social individuals, and must tell a causal analytical story. Majority of heterodox economists reject the method of theory creation and development utilized by mainstream economists which is based on positivism, empirical realism, and deductivism (Lee, 2012).

2.2.4 Human Capital Theory

Movement of human capital plays a critical role in market economies, because the job of any market is to promote voluntary exchange, society relies on the free movement of workers among employers to allocate labour in a way that achieves maximum satisfaction for both workers and consumers (Kaufman, 1988). This situation is also applies in the movement of doctor and nurses in the healthcare sector.

Human capital theory predicts that the domestic migration or international migration will flow from areas of relatively poor earnings possibilities to places where opportunities are better. The pull of good opportunities in the areas of destination is stronger than the push of poor opportunities in the areas of origin. In other words, while people are more attracted to places where earnings are expected to be better, they do not

necessarily come from areas where opportunities are poorest (Rigoli, F.& Dussault, G. 2003).

Human capital theory predicts that, other things equal, a given worker will have a greater probability of quitting a low wage job than a higher paying one. This workers employed at lower wages than they could obtain elsewhere are the most likely to quit.

Another implication of human capital theory is that workers will have a higher probability of quitting when it is relatively easy for them to obtain a better job quickly. Thus, when labour market are tight (jobs are more plentiful relative to job seekers), one would expect the quit rate to be higher than when labour market are loose (few jobs are available and many workers are being laid off) (Rigoli, F.& Dussault, G. 2003).

Leaving healthcare to the market will increase the movement of health professionals from public hospitals to private hospitals and human capital theory is suitable for the explanation of more trained doctors in private hospitals compared to public hospitals.

2.3 Past Studies on Healthcare Services

While the ground theories reviewed earlier provide insights on our understanding of governance mechanisms focusing on production and delivery, and demand and supply of healthcare services, the policy of the services globally have raised peculiar issues. Hence, it will be important to review arguments over the policies of healthcare services globally before focusing on Malaysia specifically.

The World Development Report 1993 entitled “Investing in Health” had identified four main problems of the health system namely misallocation of resources, inequity, inefficiency and exploding costs. The report argues that ‘as the world health spending is huge, there is potential for misallocation, waste and inequitable distribution of resources’. It was estimated that in 1990 the world spending on health reached a total of about US\$1,700 billion or 8% of the global income. Of this, governments expended more for nearly 60%, and the private sector the remaining 40%. Of the US \$170 billion spent on healthcare in the developing countries of Africa, Asia and Latin America, government spent half of the total amount, or 2% of those regions’ GNP.

In the developing countries as a whole, public financing of health in constant prices from domestic sources increased by nearly 100% from 1995 to 2006. Overall, this increase was the product of rising GDP and increases in the share of government spending on health. At the national level, while the share of government expenditure to health has increased in many regions, they decreased in many sub-Saharan African Countries (Lu, et.al, 2010).

The high private healthcare expenditures are also a cause of concern because most of these expenditures are out-of-pocket payments, with insurance schemes covering only a small segment of the population. Provider payment systems are primarily based on fee-for-services. The professional regulation and accountability systems on healthcare are weak and non-functional in most developing countries. According to Arredondo and Najera (2005), in the middle-income countries, out of pocket payments by consumers of health services have become an important public health issue. Such payments can have catastrophic economic effects on individuals and their approach to healthcare, which has implications for strategies for healthcare reform.

2.3.1 Growth of Private Healthcare

Obuobi, et al. (1999) explored the contribution of private healthcare providers to healthcare delivery in Ghana. The study used primary and secondary data, including a series of questionnaires to private practitioners, pharmacists, traditional health providers and midwives. The key findings showed that all socio-economic groups patronize private healthcare services and the clients' perception of services provided by private practitioners was generally more favourable than of services provided by public providers.

Kaufman & Fang (2002) reported some of the results of a study undertaken in 1994-96 to examine the impact of privatisation on financing, provision and use of reproductive health services by women in two rural areas in Yunan Province, China. Questionnaires were distributed to the province that is relatively poor and has a per capita income below the national average. The results indicated that the rural health system was in crisis, where health-seeking women for all reproductive health problems were rated very low. Rural women's reproductive health needs were inadequately attended to in rural health services following market reforms.

Tu Jiong (2010) examined the privatisation of China's healthcare since 1980s, using private clinics as research objects; including a brief historical description of healthcare evolution and the existing healthcare system in China. Empirical data was collected through field work to provide the current picture of privatisation and the problems that have emerged in private medical sector was discussed. The private healthcare sector in China is still small and yet forms a mature market, but despite the problems, it is expected the private healthcare is expanding rapidly.

Tountas, Karnaki, Pavi & Souliotis (2005) analysed the situation which existed in the private health sector in Greece. The study focused on the growth of the private sector and discussed the reasons for this phenomenon in relation to privatisation trends in other European Countries. This study basically used interpretive approach, evaluated trend critically. The results showed that to the provision of inadequate and low quality public health services have caused widespread dissatisfaction among the general public which led to the increased private diagnostics centres.

Maarse (2006) examined the recent changes in the public-private mix in and healthcare in eight European countries. He used a broad conceptualisation of privatisation. The evidence showed that healthcare in Europe has become somewhat more private. The growth of the public fraction in healthcare spending came to an end since 1980s. The evidence also showed a shift from public to private in health provision, notably in Germany, U.K and Poland. Furthermore, there were signs of privatisation in healthcare management and operations as well as investments.

Holden (2005) reviewed existing sources of data on the levels of private provision across advanced capitalist countries, countries in transition from Soviet-type systems and developing countries, and highlighted processes of change that are likely to increase such provision. The result showed that private provision is growing slowly but steadily in most countries. Meanwhile levels of international trade in health services are difficult to ascertain, the interaction between national processes of liberalisation is likely to increase such trade.

Naylor (1988) evaluated the private medicine and the privatisation of healthcare in South Africa. He used interpretive method; analysing the trend critically. Exponents of

privatisation claimed that private medicine will permit differentiation by income to supplant discrimination by race. The direct links between disposable income and race, the rapidly rising costs of private insurance and the still-limited extend of private coverage among the black majority, indicated that privatisation is likely to co-opt a comparatively small proportion of the total black population.

Rosenthal (1992) discussed the growth of private medical care in Sweden using documented reports such as government statistics, private insurance sales, media sources, membership growth in the private doctors association, purchase of private risk insurance, growth of private healthcare organisations and services and public sector private contracting. Explanations range from increasing criticism of poor service orientation in the public system, long waiting lists and the reduced rate of public spending, to a general atmosphere that asserts more individual choice. The result showed that Swedish healthcare delivery is experiencing a new diversity. The small private medical sector now is growing at a vigorous rate.

Takian, et al. (2011) identified the facilitators and barriers in implementation of family medicine in Iran. The data were collected through semi-structured interviews at national, provincial and local levels and also through a purposive document analysis. The data was interpreted using an interpretative framework. The interpretative framework links the concept of outreach to the poor and enhanced the equity to rationing health services at a particularly opportune moment in Iran.

Hanson & Berman (1998) reported some results of private healthcare provision in developing countries focusing on the determinants of the size of private provision sector. The data for analysis was assembled from available published and unpublished

sources. The analysis reflected that less attention has been paid to the growth and structure of public and private provision in terms of aggregate numbers of healthcare providers, large share of private providers, quality and out-of pocket.

Huang, Liang, Chu, Rutherford & Geng (2009) analysed the role of private healthcare provision in China and discussed the implication of increasing private-sector development for improving health system performance. The study was based on an extensive literature review, secondary data analysis and the results of previous studies by the authors to highlight the current situation of private healthcare provision of China. The results indicated that government-owned hospitals form the backbone of the healthcare system and account the most healthcare provision. However, there were many problems in the system such as limited access, low efficiency, poor quality, cost inflation and low patient satisfaction. Private hospitals were rare, even though it is an important component of healthcare system in China. This showed private healthcare has received little policy attention in China.

2.3.2 Healthcare Expenditure in Public and Private Practices

Chungling et al. (2010) had used all data sources available for government spending on health in developing countries to describe trends in public financing of health and test the extent to which they were related to changes in GDP, government size, HIV prevalence, debt relief and development assistance for health to governmental and non-governmental sectors. They used a systematic analysis of all sources available. Panel regression methods were used to estimate the association between government domestic spending on health and GDP, government size, HIV prevalence, debt relief and DAH disbursed to governmental and non-governmental sectors. In all developing countries,

public financing of health increased nearly 100%. Their results showed that development assistance for health to non-governmental sector had a positive and significant effect on domestic government health spending.

Siskou, Kaitelidou, Papakonstantinou & Liaropoulos (2008) analysed private health payments by provider and type of services in order to bring to light the reasons for and the nature of extraordinary private expenditure in Greece. They used regression analysis to determine the extent to which social and economic household characteristics influence the frequent use of certain health services and the size of household payments for such services. The result showed that the rise in private health expenditure and the development of the private sector during the last 20 years in Greece was associated with under financing by the public sector. The gap was filled by the private sector through increased investment, mostly in upgraded amenities and new technology.

Zijun (2009) used forecasting models to investigate whether the current equity market captures useful information on the growth of future healthcare expenditure. The results showed that the market performance of three healthcare related industry portfolios, the aggregate health sector, health services and durable medical equipment, had some predictive power for their corresponding health expenditure components at one-year horizon.

Bordignon & Turati (2008) used natural experiment, the fiscal adjustment of Italy in the 1990s to meet the Maastricht criteria, to test a simple model of soft budget constraint that closely resemble the intergovernmental relationships in the Italian public healthcare sector. The healthcare expenditure by regions was stronger when regional expectations of future bail outs were presumably lower. More fiscally autonomous regions were

more financially responsible and that a political ‘alignment’ effect was present, with ‘friendly’ regional governments controlling more expenditure than unfriendly ones.

Hartwig (2008) revisited Baumol’s model of ‘unbalanced growth’, showing that the latter offers a ready explanation for the observed inexorable rise in healthcare expenditure. The main implication of Baumol’s model in this context was that healthcare expenditure was driven by wage increases in excess of productivity growth. Baumol’s model of ‘unbalanced growth’ was revisited and recognised as a possible theoretical basis for the explanation of health expenditure growth. Baumol’s model identifies nominal wage growth in excess of productivity growth as the main determinant of the rise in healthcare expenditure.

Jacobs et al. (2008) measured total public and private expenditures on mental health in each province in Canada. Data for expenditures on mental health services were collected and interpreted. Canadian public mental health spending was lower than most developed countries and a little below the minimum acceptable amount (5%) stated by the European mental health economics network.

Mark et al. (2007) had determined spending on mental health treatment in the United States over-time by provider and payer relative to all health spending. The estimates were developed to be consistent with the National Health Expenditure Accounts. Numerous public data sources were used. The data was analysed using interpretive approach. Spending on mental health treatment had increased over past decade, reflecting increase in the number of individuals receiving mental health treatment, particularly prescription drugs and outpatient treatment.

Chen et al. (2012) used qualitative study to explore Taiwanese patients' decision making process to access healthcare and how the cost issues impacts patients' access to healthcare and explore patients' cost-saving strategies. Focus group discussion was used to collect relevant information. The results showed that the current out-of pocket payment is affordable for hypertension patients receiving regular treatments but it fails to reduce the demand of healthcare.

Sharpe, Fan, & Gong (2001) examined household out-of-pocket expenditure trends for health insurance, medical services, prescription, drugs and medical supplies using the data from 1980 to 1995. The study used trend analyses, analysing the data critically. Out-of-pocket expenditures for medical services had declined. Older consumers spent more in constant dollars compared to younger consumers.

Jankauskiene, Zemquliene, & Gaizauskiene (2002) analysed the tendencies of public and private healthcare expenditure in Luthania during 1994-1999 by critically analysing the trend. The result showed that healthcare spending per capita is largely determined by the GDP. Healthcare spending in Luthania had risen twice faster than GDP. The development of private healthcare led to increase healthcare expenditure in total and also had influenced changes in public-private spending proportions. The tendency of increasing private spending showed the evidence, that households were facing more financial risk of purchasing healthcare.

2.3.3 Health Professionals for Healthcare in Public and Private Practices

Increasing demand and more financial incentives in the private sector have resulted in the outflow of human resources. According to Pannarunothai et al. (1998), the income

gap between private and public health personnel was highest among doctors and hence, the highest outflow. This out-flow fluctuates with the economic situation.

Similarly, Wibulpolprasert et al. (2004) claimed that the mushrooming of private hospitals had created a large demand for human resources. With income about 5-10 times higher in the private sector, the internal migration of rural doctors to urban private hospitals began in the late 1980s in Thailand. The bed-doctor ratio of rural district hospitals increased from 7.1 beds per doctor in 1988 to 15.3 per doctor in 1998. The internal brain drain was due partly to rapid economic growth, as well as, the opening of free international financial trade in Thailand. Demand at private hospitals ward in urban areas has also risen sharply from foreign patients seeking treatment from Cambodia, Laos and Myanmar.

Richards (2001) addressed the problem of physician recruitment and retention, potential shortages and possible distribution or utilisation in Ontario. He discussed the challenges facing health planners as they search for causes and solutions. The problems of shortages, utilisation, supply and demand were discussed from a monopolistic medical model and a competitive market model irrespective. Different physicians' payment methods and their effect on utilisation/distribution, supply/demand were also examined. The Ontario government need to show leadership and provide direction in solving these problems if all Ontarians is to receive accessible, affordable and quality healthcare.

Cooper (2002) critiqued the long-standing belief that there will be too many physicians, particularly specialists, a view put forth by the Bureau of Health Professions and the Council on Graduate Medical Education in the 1990s and held by many medical organisations, including the Association of American Medical Colleges. He commented

that most previous workforce studies were handicapped by their use-of micro-quantitative models. His research had been structured around four broad trends; economic, expansion physician work-effort, the provision of physicians' services by non-physicians clinicians and the growth of the U.S population. It is the intertwining of these four major trends that revealed the impending shortages of physicians.

Kankaaranta et al. (2007) conducted his study based on a unique data set for the years 1988-2003 and used structural equation models to examine the impact of job satisfaction and job dissatisfaction on physical intention to switch from public to private sector work. Results indicated that private practice statistically effect on the intention to switch sector. Job satisfaction decreases a physicians' intention to switch sector. Financial and non-pecuniary factors were related to physicians' intention to change their sector of work from public to private.

Harrison (1998) analysed the migration and mobility of female physicians through the life course in provincial Mexico. She examined the factors that control and structure female physician's migration in childhood, during their training and career development. The study used quantitative method and questionnaires were distributed. The results indicated that female physicians in Provincial Mexico were not highly mobile. A lack of mobility was due to the constraining factors of education, gender, institutional structures and family and household imperatives.

Midttun (2006) analysed the likelihood of medical specialists working in private sector. The theoretical framework was embedded in work values theory and the results suggested that a work value was important predictors of sector choice. Analyses were based on postal questionnaire survey of medical specialists working in private contract

practices and for profit hospitals and a control group of specialists selected from the Norwegians Medical Associations member register. The result indicated that while autonomy values impacted positively on the propensity for allocating any time at all to the private sector, professional values had a negative effect. The relationship between work values and sector choice should, therefore be regarded as association rather than causality links.

Dussault & Dubois (2003) discussed on component of health policies. He brought up three arguments for modernizing the ways in which human resources for health were managed; the central role of the workforce in the health sector, the various challenges thrown by the health workforce arising from various macroscopic social trends impinging on health systems. He stressed that the absence of appropriate human resources policies was responsible in many countries, for a chronic imbalance with multifaceted effects on the health workforce. The study basically used qualitative method. The development of explicit human resources policies was a crucial link in health policies and was needed both to address the imbalances of the health workforce and to foster implementation of the health services reform.

Zurn, Poz, Stilwell & Adams (2004) studied the issue related to imbalances through a critical review of its definition and nature and also to the development of an analytical framework. Significant disparities in human resources for health between occupation, regions, gender or health services were recognised as classic problems of imbalance.

Wibulpolprasert, Pachanee, Pitayarngsarit and Hempisut (2004) analysed the impact of international service trade of the healthcare system, particularly in terms of human resources for health. This study used Thailand as a case study. The study was conducted using qualitative method, literature review, semi-structured interviews and

brainstorming session. The result showed that international trade is growing rapidly. Trade in services was growing faster than trade in goods especially trade in health services. The growing international trade in health services had created several negative implications for healthcare systems. It promoted commercialisation of healthcare and enhances the existing tiered healthcare system. It stimulated external and internal migration of health workforces, both of which resulted in increasing inequity of healthcare access.

Since the 1980's until the economic crisis of 1997-98, government in South East Asia invested in many private hospitals. In Thailand for example, private hospital beds increased from 8,066 in 1982 to 21, 297 in 1992 and 34, 973 in 1996. However, the movement of doctors to private hospitals led to a shortage in the public sector, pressuring the government to train more doctors. The culture of free enterprise, increasing size of the middle class, the inclusion of hospital insurance in salary packages, and tax incentives for private healthcare industry provided strong inducements for investments in private hospitals, which in turn led to the migration of leading specialists from the public to the private sector (see Amorn et al., 2001).

Apart from bureaucratic tardiness, the main explanation for brain drain of doctors from public to private hospitals related to salaries. A survey by the Thai Medical Council in 1990 showed that a private hospitals doctor's earning per hour of work was four to five times than of a public hospital doctor's earnings. It is customary that public hospital doctors work for the private sector after office hours to gain a rate of four to five times additional pay to their office hour's earnings. In summary, in order to get about a half of a private hospital doctor's pay, public hospital doctors have to work 77 hours a week both

in the public and the private sectors, while private doctors worked only 54 hours a week (Chunharas et al. 1992).

A rapid reversed brain drain was also apparent as the number of district hospital doctors increased from 1,653 in 1997 to 2,725 in 2001 and the bed to doctor ratio dropped from 15:3 in 1998 to 10.6 in 2000 because of the financial crisis. The differences between the doctor to population ratios of the poorest north-eastern region and Bangkok also dropped from 13.8 times in 1996 to 10.5 times in 2001. The proportion of net loss of doctors also declined greatly, and in 1999 there was a 12% net gain in addition to new entrants. However, economic recovery and the influx of foreign patients, as well as, demand for continuing education seemed to have pressured a new round of internal brain drain since 2002. Table 2.1 shows the push and pull factors that leads to the health professionals brain drain (Wibulpolprasert & Pengpaiboon, 2003).

Table 2.1 Push and Pull Factors

Pull Factors	Push Factors
Better living standards	Lower living standards
Specialisation training	Lower social recognition/career path
Better income	Poor facilities/logistic
Higher social recognition	Lower income
Job satisfaction / career	Low opportunity for training

(Sources : Wibulpolprasert & Pengpaiboon, 2003)

Wongwatcharapaiboon et al. (1998) argued that the rapid expansion of private health facilities that increased opportunities for specialty training since late 1980s during the economic boom resulted in internal brain drain with many contracted doctors breaking their contracts and moving to the private sector in Thailand. Although they had to pay

\$US 10,000-15,000 penalties, it was not viewed as a problem as they could recover earning that amount in six months of work in the private sector.

The internal brain drain problem peaked in early 1997, before the economic crisis, when 126 (22%) of the newly contracted medical graduates from families who resided in or around the capital and those who graduated from central medical schools resigned from public service in large numbers in Thailand. Telephone interviews showed that three factors contributed more or less equally to their resignations i.e mismanagement of human resources, desire for specialty training and family reasons. In this study, pay was not the main reason for the doctors to leave the public hospitals in Thailand (Wongwatcharapaiboon et al., 1998).

According to Pannarunothai et al. (1998), the income gap between private and public health personnel was the highest among doctors, and hence, the highest exodus in Thailand. The outflow has fluctuated with the economic situation. It has improved during periods of economic recession (1980-1988) but has worsened during economic booms (1988-1997) due the expansion of the large urban private hospitals. After the economic crisis in 1997 the situation improved again. Since 2002, because of the improving economy and the influx of foreign patients, the human resources distribution has worsened.

2.3.4 Urban and Rural Bias in Healthcare

Adkoli (2006) said that excessive migration of doctors from rural to urban areas was a disturbing trend noticed in South Asian countries. This was because tertiary care hospitals were mainly situated in cities, which have better facilities and living

conditions. Even the talented youth coming from remote areas were reluctant to go back, and thus, settling down in cities, causing the rich to get richer and the poor become poorer. Internal migration was propelled by factors such as difficult geographical terrain, ethnic problems, political instability and insecurity and economic prosperity in the cities.

The increasing demand and much higher financial incentives from urban private providers had attracted health personnel, particularly medical doctors, from rural public health facilities. Responding to this increasing demand and internal brain drain, Thai government approved the increased production of medical doctors in mid-2004 by 10 678 in the following 15 years. Many financial incentives had also been introduced, though, the immediate shortage of human resource still needs to be addressed competently and urgently (Pachanee et al., 2006).

Thailand faced brain drain within the nation from the rural district and provincial hospitals to the rapidly growing urban private hospitals since the 1980s. The share of private hospital doctors rose from 10% in 1986 to 25% in 1995. While the number of beds in the district hospitals kept increasing since 1990, the numbers of doctors at first increased slightly but have subsequently been falling. At the same time, the number of beds in private hospitals increased. Doctors in private hospital increased from less than 1,000 in 1985 to more than 3,000 in 1995, a threefold increase in 10 years. The problem was so severe that 21 district hospitals were without doctors in 1996. The situation was reversed during the 1997-98 financial crises, which was caused by decline in private hospital beds and doctors due to a shortfall in demand (Wibulpolprasert, 1999).

Costa et al. (2007) empirically demonstrated the size and composition of the health sector in one of India's largest province, Madhya Pradesh. The distribution of health care providers in the province with regard to the sector of work (public/private), rural urban location, qualification, commercial orientation and institutional set up showed that 75.6% of them work in the private sector while 80% of private physicians were located in the urban areas.

LaSala (2000) explored the distribution of registered nurses in rural and urban healthcare settings, examined recruitment and retention strategies and barriers; and analysed relationship between distribution of nurses and recruitment and retention. Quantitative method was used to analyse the survey results from urban and rural nursing administrators. Result revealed that rural healthcare settings had the lowest vacancies; however when major vacancies exist; it was greater in rural settings. Salaries, local economies and major changes in nursing allocations had both negative and positive effect on rural and urban healthcare settings.

Mathew & Edwards (2004) examined the urban, semi-urban and rural differences in characteristics of adults in Newfoundlanders who did and did not have a regular doctor. The study used Chi square tests and logistic regression to analyse data from randomly selected households in Newfoundlanders. Rural residents were more likely not to have a regular doctor than residents of either urban or semi-urban communities.

Ebuehi & Campbell (2011) conducted a study on the determinant factors that attracted and retained rural and urban health workers in rural Nigerian Communities. A cross-sectional survey was used to measure healthcare work experience, satisfaction, reasons for undertaking the current work and the reasons for leaving a work location. The

results reflected that the rural health workers wish to leave their current job due to poor job satisfaction resulting from poor working and living conditions and the lack of career advancement opportunities.

Steinhaeuser, Joos, Szecseny & Miksch (2011) explored if working time, number of treated patients per week or proportions of privately insured patients vary between rural and urban areas in Germany using questionnaire survey. Overall, the result identified few differences between urban and rural primary care physician working conditions. Among the differences were proportion of privately insured patients and number of patients seen per week.

Dussault & Franceschini (2006) focused on the geographical dimension of access and one of its critical determinants was the availability of qualified personnel of healthcare. The study used qualitative method by reviewing recent literature on determinant, barriers and the effects of strategies that attempted to correct geographical imbalances specifically on empirical studies from developing and developed countries. The result indicated that interventions which attempt to alter basic economic, political and social structures were likely to achieve long-term sustainable result, but they were much more complex and take longer to produce results. Ultimately, only equitable socioeconomic conditions for rural compared to urban areas, adequate investment in human resources and stable and legitimate political institutions were the basis for achieving a balanced distribution of the health workforce.

Wibulpolprasert & Pengpaiboon (2003) summarized strategies to solve inequitable distribution of human resources for health between urban and rural areas by using four decades of experience in Thailand as a case study for analysis. They discussed push and

pull factors and the remedies that they suggested to solve this problem are development of rural infrastructure, education and social & financial.

Inoue, Matsumoto, Toyokawa & Kobayashi (2009) evaluated long term transition in the geographic distribution of physicians, and to reveal which rural physicians characteristics predict their retention in rural areas after 22 years. Trend analysis using interpretative approach was used to analyse the data. The rapid increase of physicians between 1980 and 2002 had substantially affected their geographic distribution. Primary care discipline and male physicians were found to be predictors of rural practice after 22 years.

De Vries & Marincowitz (2004) focused on describing and understanding the perceptions of woman doctors in rural hospitals in South Africa about their work. This study used qualitative method using semi-structured interviews. A rural woman doctor had to deal with different issues, including household and responsibilities at work. Rural woman doctor were far more connected with their family. The female doctors seem to find the rural hospital setting is a good place to learn new skills.

The unbalanced distribution of health personnel within countries were a worldwide, longstanding and serious problem. All countries, rich and poor, report a higher proportion of health personnel in urban and wealthier areas. The unbalanced distribution of health personnel can contribute to great disparities in health outcomes between the rural and urban population. Urban areas were more attractive to healthcare professionals because of their comparative advantage in the availability of social, cultural and professional services, as well as, the availability of fee paying patients (Pannarunothai et al. 1998).

Urban areas offer more opportunities for career and educational advancement, better employment prospects for health professionals and their family, easier access to private practice and lifestyle-related services and amenities, and better access to education opportunities for their children. In addition, the low status often conferred to those working in rural and remote areas further contributes to health professionals' preference for settling in urban areas, where positions are perceived as more prestigious.

2.3.5 Poor Seeks Treatment in Private / Public Hospitals

In low income countries, poor people used preventive and curative public healthcare services far less than the well-off. User fees, a widely used strategy to supplement governmental resources has aggravated the situation. One barrier to healthcare for the poor is the cost; any reduction in the price of healthcare will increase demand provided there is adequate supply capacity (MarMeessen et al., 2006).

According to Saksena et al. (2012) individuals in the richest quintile were more likely to use private facilities than those in the lowest quintile income group. However, the use of the private sector was not limited to the elite. Even in the poorest quintile, private facilities were occupied by more than 20 per cent of outpatient visits in the majority of countries. This result is in line with previous studies that have also noted a considerable use of private health services by the poor (Bhatia & Cleland (2001); Prata et al. (2005); Loevinsohn & Harding (2005); World Bank 2011).

Jay (1987) noted that large public hospitals in some areas of the United States were losing millions of dollars in revenues because they were required to give priority to patients who cannot pay for their treatment. This put some hospitals in the strange

position of turning away or transferring out their patients who have Medicare or private insurance coverage, in order to make room for poor patients on whom they lose money.

Kiefe et al. (1996) noted that health care services were provided to the low-income urban population in United States by a system of country run public clinics. This study used cross-sectional interview survey of a random sample of subjects applying for or renewing eligibility to use the public system was conducted. The setting was a public system consisting of inner-city community health centres and hospital-based clinics delivering primary care. Access to health care was measured in three ways: physician contact during year prior to survey and answers to two separate questions concerning delaying needed medical care because it cost too much, and delayed care because it would take too long to be seen. Although 80% of subjects had seen a physician at least once, 46% had stayed away sometime during the year due to financial reasons and 24% had stayed away because of waiting time. This study has demonstrated financial barriers to access, while showing substantial private sector contact, even by low-income subjects that was already using the public sector.

2.4 Past Studies on Healthcare Services in Malaysia

The issue of escalating costs and the need to identify the most appropriate and acceptable healthcare financing model had been identified as key issues by the government of Malaysia. This phenomenon can be attributed to factors, such as, the unnecessary usage of an ever-expanding array of sophisticated and costly technologies for diagnostic tests and surgical procedures, the open-ended fees for service compensation for health providers, which have encouraged the development of new equipment, drugs and procedures of increasing costs because neither providers nor

patients have strong incentives to minimize utilization and spending (Nabilla, 2002, Rasiah, et al. 2009).

In Malaysia, “rising health care costs” in the public sector are largely reflected by absolute increases in the size of Ministry of Health budget allocations, whether in nominal or constant Ringgit Malaysia, whilst government health spending as a proportion of the total national budget have remained relatively constant. The total healthcare expenditure of public and private sectors combined, however, has been rising steadily in the five years between 1997 and 2001, both in per capita terms, as well as, a percentage of GDP. A major contributor to the rising healthcare costs in Malaysia is the inadequately regulated introduction and proliferation of expensive new medical technology in the private sector (Phua, 2007).

Chai, Whynes and Sach (2007) comprehensively assessed the equity of healthcare financing in Malaysia using quantitative methods. They evaluated each of the five financing sources (direct taxes, Employee Provident Fund (EPF), private insurance and out-of pocket payments) independently and subsequently combined the financing sources to evaluate the whole financing system. Result showed that private insurance and out-of-pocket payment are private finance sources in Malaysia. Private finance sources can be seen to constitute a high proportion of total expenditure in Malaysia. Notwithstanding, the progressive nature of private sources in Malaysia, a growing share of private finance sources without sufficient supports from public funding is likely to undermine equity.

In 2005, the Malaysian government spent just 2.2% of its gross domestic product on healthcare, while 1.6% of the healthcare expenditure came from the private sector

(UNDP, 2006). Private insurance and out-of-pocket payment have progressively increased in Malaysia. The WHO (2006) estimated that the total private finance sources accounted for 4.1% of total health expenditure in Malaysia. Generally, private financing of healthcare is seen to be undesirable from an equity point of view. The World Health Report 2000 stated that a high proportion of private financial sources is likely to affect the equity of financing because private health payments might impose disproportionate financial burden on households.

Due to the rise in healthcare costs and subsequent concerns over its ability to cover the entire population, the government has been searching for new and alternative methods to support national healthcare. The government's Seventh Malaysia Plan (1996-2000), for example, initiated healthcare reform and cost-cutting through corporatization – gradually running state hospitals like companies, while maintaining government control of those institutions (Gross, 1999). The University Hospital is one of the government hospitals that has been corporatized.

The hospital support services of the Ministry of Health were privatised in 1996. Cleaning services, linen and laundry, clinical waste management, biomedical engineering maintenance of the MOH'S general, district and nucleus hospitals and other facilities (accounting for 14% of MOH's budget) were contracted out in what has been described as the largest privatization exercise ever in hospital support services (Chan, 2000).

Despite corporatisation and privatisation, however, medical costs have continued to escalate. Thus, many Malaysians, particularly the poor and average wage earners, have been denied free access to healthcare. For example, since the corporatisation of the

University Hospital, the costs of basic diagnostics, such as, blood tests and x-rays have shot up by as much as 150-200% since the 1997-98 financial crisis (Gross, 1999).

Susila, M & Osman-Rani (2010) explored the diverging trend of public and private healthcare sectors and their emerging differences. The study focused on the differences in price and performance between public and private hospitals by examining the case of ultrasound and mammogram machines. The finding shows that the waiting time in public hospital is significantly longer compared to private hospitals and the patient charges are substantially lower in public hospitals.

In the 1980s, non-medical business interests, mainly the corporate private sector, viewed healthcare as a sunrise industry. As a result, more private hospitals were built and owned by businesses and run jointly by doctors and businessmen. These hospitals were set up solely for profit. This trend was soon followed by other corporate entities. A number of large Malaysian conglomerate corporations and companies were formed by medical specialists, including some which involved foreign investors who have invested in private hospitals with government encouragement (Barraclough, 1997).

The unprecedented growth of the private medical sector can be seen by the increase in the number of hospitals and private clinics in recent years from 50 in 1980 to 192 in 1990 (EPU 1995:5). In the private sector the proportion of first class and second class beds to third class was approximately 2 to 1, as compared to 80 per cent of beds in the public sector, which were in the third class. A high proportion of first class and second class beds in the private sector indicated the objective to meet the demands of the comparatively affluent consumers in the community (Muhamad, 1996). Hence, the

proportion of civil servants and fee paying private dwellers only accounted for a small share of beds in public hospitals.

Government failure and poor staff morale in a number of public hospitals in the face of an expanding middle class created the demand for profit-driven hospitals in the 1970s. The share of private healthcare operators in total healthcare operators subsequently grew strongly from the 1980s. Although public expenditure in total health expenditure still accounted for 69.4% of total healthcare expenditure, the number of doctors and dentists in public service fall to 54.4% and 45.9%, respectively, in 2005 (Rasiah, et al. 2009).

Private hospitals provide services for the rich segment and middle class of the population and are not financed by the government, and thus, have no restrictions when it comes to procurement of equipment. The fact that the private hospitals do not have restrictions when it comes to payment also means that the doctors at the private hospitals are paid much more than those at the public hospitals, which had created a shortage of medical professionals in the public sector. Although 8,118 out of the 18,191 doctors in Malaysia are working in the private sector, which corresponds to 45%, there are only 9,000 beds in private hospitals compared to 39,450 beds in public hospitals in the country, which corresponds to only 18.6% of the total (Gan, 2007).

The growth in private hospitals had provided an attractive alternative for public sector healthcare workers, exacerbating the exodus of medical specialists, physicians, nursing personnel and other allied health staff from the public sector. The government health services have had to resort to several strategies to ameliorate the problem, including

through the recruitment of foreign doctors and, since the 1990s, through the purchase of specialist services from the private sector (Chee & Barraclough, 2007).

Barnett, Namasivagam & Narudin (2010) describes and critically reviewed steps taken to address the nursing workforce shortages in Malaysia. They have used secondary data such as government reports, policy documents and ministerial statements and published journals for the study. An escalation in student numbers and unprecedented number of new graduates entering the workforce has placed a strain on more experienced clinical nurses and nurse educators. Nursing shortages should not be tackled by increasing the supply of new graduates alone.

Rural healthcare services have expanded, and the availability of doctors in rural areas increased at a faster pace than population growth. The overall doctor: population ratio improved from 1:7,352 in 1957 to 1:4,855 in 1968, and then to 1:4,132 in 1976 (Malaysian Medical Association, 1980), and from 1980 (1:3,800) to 2003 (1:1,377), the improvement was by about three times.

However, according to Kamil and Cheong (2002) differentials in health continue to exist between urban and rural Malaysian communities. Diseases such as malaria, tuberculosis, leprosy, mild and moderate forms of maldistribution, pregnancy-related problems, obstructive airway disease, injuries and psychiatric illness were still issues of concerns to rural healthcare providers. Outbreaks of infectious diseases like typhoid and cholera do occur sporadically. The dengue fever remained a significant problem both in urban and rural areas.

The fundamental public-private gap appears to be between urban and rural areas, which can be seen in the differences between the more urbanized west coast states, such as, Penang, Selangor, Melaka, Negeri Sembilan, Johor and the Federal Territory of Kuala Lumpur and the more rural states such as Kelantan, Perlis, Terengganu, Kedah, Sabah and Sarawak.

Urban-rural disparities are common in most if not all Third World countries. They are characteristic of unplanned economies and stem historically from uneven development, which neglects the rural areas. In most cases, the marketing and administrative centres are in the urban areas where the ruling elite, the professionals, and the business sector are dominant. The rural population is often unable to make its needs heard (Chee, 1990).

Meerman (1979) had pointed out that private healthcare services are used more by higher income groups than the lower income groups. Hence, a rapidly growing private sector will have a negative impact on equity as it pulls healthcare resources, in particular, highly skilled medical personnel away from the public sector, to the disadvantage of the lower income groups and rural people.

Ong (2001) argued that health and health-related services that were made available to the elderly in the urban areas through private organizations were not available to the rural elderly (where purchasing power is low). Hence, in the rural areas, elderly people were seen as out-patients in health centres, with referrals made to hospitals for cases with more serious health problems. While the geographical divide in health care for the elderly has been problematic, the income differential between the wealthy and the poor remained a serious obstacle in achieving accessibility for all.

2.5 Towards a Theoretical Framework

Healthcare is not an ordinary commodity but more like a public utility which should be financed using a regulated public utility model. The public utility model of healthcare is receiving a considerable attention in many countries. It emphasized cost stabilisation through regulatory rate setting. The most important reason that this model is receiving attention is that it is recognised that healthcare system must be affordable. However, the analogy between healthcare and public utility is not exact. This causes many hospitals executives feel that they should not adopt the utility concept. Healthcare as a public utility is prone to market failure.

A market that meets all necessary conditions for efficient resource allocation is an ideal in economic theory, but a rarity in the real world. Market fails because necessary conditions for perfect or free markets are rarely met in healthcare. When the necessary conditions of the ideal free market are not met, there can be market failures some of which are not easily corrected by the market and therefore require interventions from outside the market (Mwachofi & Al-Assaf, 2011). This is where policy and intervention of government take part in determining the healthcare system performance.

Healthcare system can be seen as an interaction between supply and demand. Interaction between these two parts of the system can improve the reproductive health needs of users. The laws of supply and demand that underlie the nation's economy also apply to the provision of healthcare services. Demand side are focused on utilisation and financial access meanwhile supply side focusses on availability and quality. The supply and demand of healthcare determines the healthcare system performance.

Healthcare system performance is determined by the healthcare delivery. According WHO (2001) the entire health system is often identified with just service delivery. Basically, healthcare delivery in most of the developing countries is divided into two sectors; government sectors and private sectors. Government healthcare sector are access for all meanwhile the private healthcare sector are only for those who are affordable.

Government healthcare refers to government funding healthcare services via direct payments to doctors, hospitals and other providers. Effectiveness and equity are values implicit in the goal of health for all, endorsed by all nations and governments, which offer such a basis.

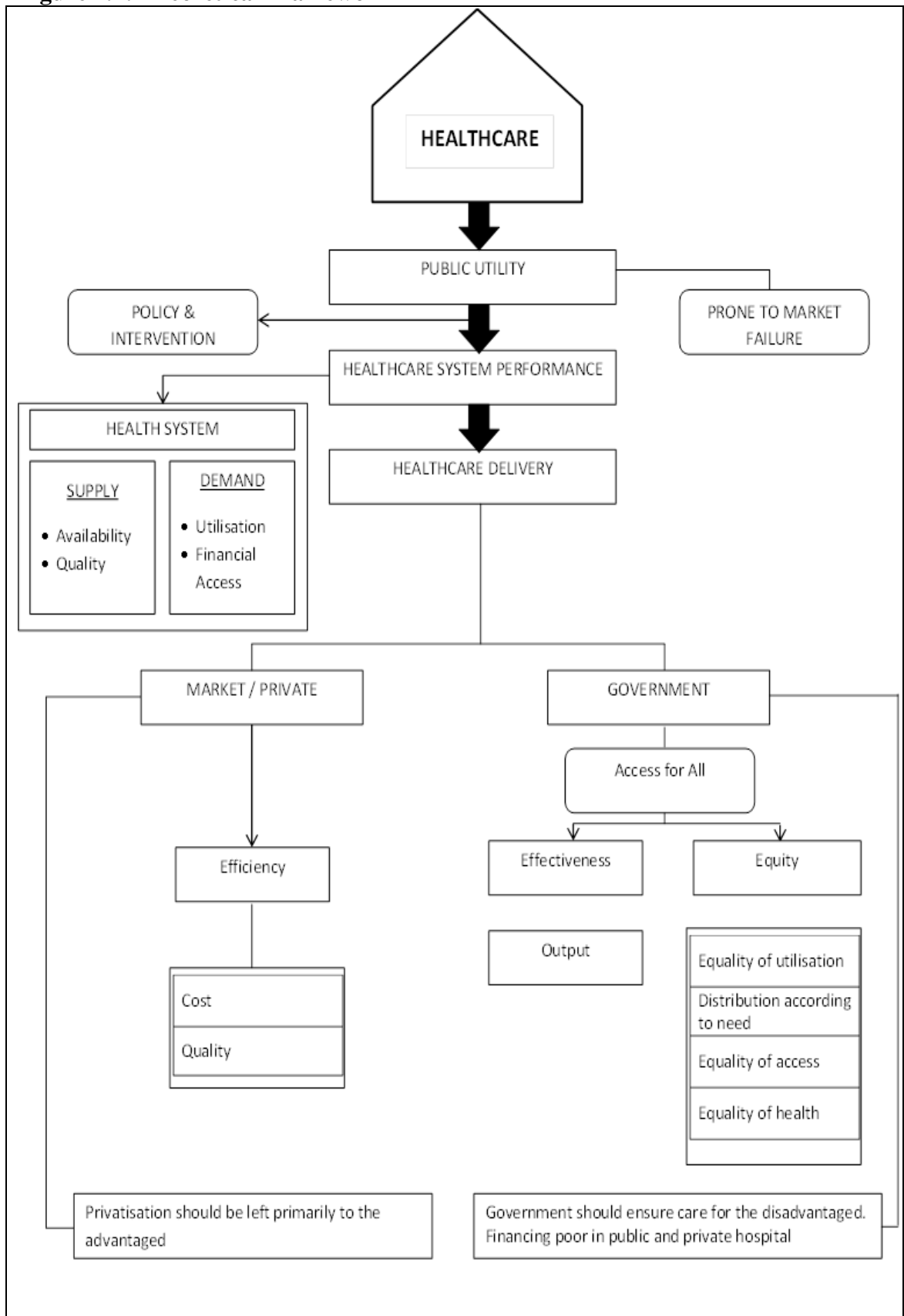
All health policy-makers and health care providers concerned with the health reform process must give urgent attention to the containment of cost without compromising effectiveness in health care. Cost-effective health care systems are those that have the greatest positive impact on the health of a society while making the best use of its resources.

The main goal of WHO Global Strategy for Health for All is that all people receive at least such a level of health that they are capable of working productively and of participating actively in the social life of the community in which they live. To attain such a level of health, every individual should have access to primary health care and through it to all levels of a comprehensive health system. Equity means that people's needs, rather than social privileges, guide the distribution of opportunities for well-being (Boelen, 2010). Equity can be observed in four dimensions; equity of utilization, distributing according to the need, equity of access and equity of health.

The value that market or private healthcare could bring are efficiency. In a market environment people can demonstrate their preferences for different goods and services by exercising choice. These both generate highly precise information about their preferences, so providers are motivated to supply the services people want. Efficiency in the private healthcare can be divided into two perspectives; cost and quality.

Looking into the policy implication, the government should ensure care for the disadvantaged since the government healthcare is accessible for all. The government should finance the poor not only in public hospital but also in private practices. Meanwhile private healthcare should be targeted primarily to the advantaged group.

Figure 2.1: Theoretical Framework



Source: Author.

2.6 Summary

It is broadly accepted that markets in healthcare are subject to failures. Even though the problems of health market are acknowledged, privatisation continues to be pursued by economists and policy makers. There are four identified problems in the healthcare system in developing countries, namely; misallocation of resources, inequity, inefficiency and exploding costs.

The evidence is clear that healthcare expenditure had increased tremendously in most of the countries. The main reason of the increase is because of technological development in the private sectors and also due to the insurance schemes. The government could not afford to support the increase of the healthcare budget.

The increased privatisation of healthcare has led to the movement of health professionals from public to private hospitals. The increase in better wage paying private hospitals increased the demand for the health professionals and this led to the shortage of doctors and nurses in lower wage paying public hospitals. Public hospitals doctors and nurses could not keep pace with the demand and patient had to wait longer periods of time to get treated. The evidence in Thailand showed that the movement of doctors from public to private hospitals, and from rural public to urban hospitals rose during economic booms and falls during economic crises.

Poor patients tend to use public hospitals more than the private hospitals. However, the use of private hospitals is not limited to the elite. Most of the poor patients were in rural areas and the demand for doctors in public hospitals in rural areas had increased over the years. Increasing waiting times and the falling quality of treatment in public

hospitals had forced the poor patients to seek private practices (Damme, Leemput, Por, Hardeman & Meessen, 2004). This makes them in-debt since they have to pay out-of-pocket to the doctors in private practices. It was identified that the doctors were lacking in public hospital in rural areas due to the pull factor in the urban and private hospitals.