CHAPTER 2
LITERATURE REVIEW

The overall literature review of the study covers four topics as follows: 1) old age and health welfare, 2) the concept of equity, 3) health care financing, and 4) a review of health welfare programs for the elderly in Thailand and other countries.

2.1 Old Age and Health Welfare

The definition of old age in purely chronological terms has always been debatable (Sen, Kalache, and Coombes, 1993). Thereafter, Coleman, Bond, and Peace (1993) stated that other cultures have used not only the above mentioned terms but also define old age using very different criteria such as grandparenthood and physical fitness. Furthermore, it is important to emphasize the variability in the association between chronological age and disability, an association which is also dependent on factors in earlier life that may influence the health of individuals in later life. However, for practical purposes, the age of 60 years has been commonly adopted as a cut-off point. Although the definition of old age does vary across countries, cultures and time (Sen et al.,1993).

Wilkin and Hughes (1986) have stated that a common assumption, apparent in both social policy and many literary references to old age, is that it is a time of inevitable deterioration in health with consequent problems for the individual and society. In general, it is seen as a time of decline, loneliness, loss and futility, and people, in particular the very old, have come to be identified as a major social problem.

Chow (1996) has stated that the first problem posed by population aging is usually the increasing demand for social services, especially health care. He also suggested that governments should attempt to preserve the family's traditional role as

caregivers for the elderly, but at the same time provide the support services and program families need for this role.

The World Health Organization has defined the health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (World Health Organization 1948 cited by Mooney, 1992).

Regarding health care, Chang (1996) has stated that because older persons are disproportionately represented among the poor, this has important implications for their nutritional status, access to adequate medical care and their physical well-being. He also stated that the rising cost of health care and the fact that many older persons are unable to support themselves or to be supported by family, and because of massive rural-to-urban migration and change in family structure, many families find it difficult to care for their own elderly.

Nath (1973) has interpreted the word 'welfare' as well-being or happiness. In addition, some economists have claimed that the term 'welfare' can be regarded as a merely descriptive term. The claim cannot be granted simply because welfare commonly connotes something desirable. When economists say that a certain policy would contribute most to the welfare of a society, they mean to recommend that policy to that society.

The commitment of the welfare states of Western Europe to well-being has been important for their older citizens. This commitment is somewhat more advanced than that of the United States, where the individual's responsibility for his or for her own welfare, including old age, remains an important social value. The general trend in the welfare states of the West will force a financial crisis in paying for old age benefits in the future (Cockerham, 1997).

Bose (1996) has described the various forms of assistance governments have begun to provide welfare for the elderly. State responses in providing care for the elderly include: forming a national policy on aging; providing social security benefits; requiring industry to provide retirement benefits; provision of health, housing and welfare services for the elderly; and charging the elderly lower fees for public utilities. In developed countries, programs now help the elderly maintain their health and physical abilities and care for them when they are ill, but in developing countries, public health services are usually overcrowded and lack the necessary funds equipment, medicine and personnel. Also distance from clinics and hospitals is a problem. The poor countries and the developing countries have given very little attention to this kind of care. In the case of poverty on a mass scale a formal social welfare system might not be sufficient.

2.2 Health Care Financing

Hsiao (1998) has used the term 'health care financing' to mean the approaches to mobilize funds for health care. According to this definition, health care financing is a means to an end; an instrument chosen to achieve specific societal goals. When a nation adopts a particular financing approach, it alters the economic incentives for patients and the providers, changes the access of health care for particular population groups, and frequently transforms the organization of health care delivery.

As mentioned earlier, an aging population brings many challenges, and even more when the number of elderly is increasing rapidly. Dramatic demographic changes have implications for the health care sector. Demand for health care is likely to rise when there is a larger number of elderly people, an older population will involve greater government (and private) expenditure on medical services. van der Gaag and Preker (1998) have suggested that one way to formulae a health care plan is to design a health care financing system explicitly for it.

Hsiao (1995a) has stated that all developing countries face three major health policy questions; how to mobilize sufficient funds to finance health care, how to allocate those funds and organize health care delivery to produce health benefits, and how to control the costs of that care. Therefore, the government must establish a health care financing policy to address these questions.

Hsiao also stated that there are several methods of financing health care, each of which has its own strengths and weakness. The method that a nation chooses to employ depends greatly on its history, culture, and current institutions and on the trade-off in objectives that the nation is willing to make. The major methods of financing are; government revenue, social and private insurance, user fees, and community financing. Various organizations of health care delivery are usually combined with each financing method. In addition, Hsiao (1998) has suggested that the criteria a nation uses to select the appropriate method of health care financing tends to be focused on the ability of a particular method to achieve six key objectives: capacity to generate revenue, equity, risk pooling, efficiency, quality and sustainability. The policy choice depends on the social values embraced by the public and the political power structure and processes in the nation. However, he has pointed out that studied on equity in the finance of health care without exception begin with the premise that health care ought to be financed according to ability to pay.

2.3 Concept of Equity

There are several criteria to define equity in the field of health services. Equity is generally accepted to be associated with social justice and so with distributive fairness (Gilson,1988). In this circumstance, equity is selected to imply the equality of health needs which should be distributed fairly (Pereira 1989 cited by Pannarunothai, 1993). However, two central goals of policy-making are equity and efficiency, although the balance between the two various considerably. The balance between equity and

efficiency, is determined by the underlying theory that prevails within a country (Barr, 1987).

Hurley et al. (1998) has stated that equity, or fairness, is an important concern that health economists and other policy analysts must often address. However, decision makers do not always easily agree on what it means to be 'fair', either in principle or in practice . The principles that health analysts use to ensure and assess equity derive from a variety of fields; philosophy, ethics, law, and political science, as well as economics.

Hurley et al. have also stated, in terms of economics, that horizontal equity is often used to refer to the distribution of equal amounts of a good among recipients who are similarly-situated according to relevant aspects of their situations. Therefore, the funding formula similarly attempts to ensure that those with similar needs and costs receive similar per capita amounts. In contrast, vertical equity refers to the imperative to distribute unequal amounts among differently-situated recipients in proportion to the degree that they are differently situated. Therefore, the formula similarly attempts to ensure that those districts with greater health needs receive a greater share of the budget.

Equity can be argued from egalitarian as well as from utilitarian philosophies. From the egalitarian perspective, every person has certain positive rights. Health care is a fundamental necessity for human well-being. A just and fair society has the responsibility to provide sufficient funds to ensure that everyone has equal access to adequate health care. The egalitarian philosophy dictates that the government take primary responsibility for developing the most effective and efficient approach to mobilize the necessary funds for every citizen's health care. In contrast, utilitarian does not believe that citizens have positive rights to health care. Utilitarian view health care in the context of how health care contributes to health and how much health affects a

nation's welfare. Good health is considered a social good which must be traded-off with other human wants, as opposed to a fundamental right (Hurley et al., 1998).

Hsiao has stated that philosophy aside, studies on equity in health care usually focus on three components; equity in the financing of health care, equity in provision and equity of outcome.

For the purpose of equitable health sector policy planning, health care goods may be divided into various categories. Mooney (1992) has attempted to suggest seven possible definitions of equity in health as follows:

1. Equality of expenditure per capita
2. Equality of inputs per capita
3. Equality of inputs of equal need
4. Equality of access for equal need
5. Equality of utilization for equal need
6. Equality of marginal met need
7. Equality of health

Moreover, Knowles and Leighton (1997) have also defined the concept of equity as it relates to health systems in that it may refer to differences in health status, utilization, or access among different income, socio-economic, demographic, ethnic, and / or gender groups.

It is important to specify what health policy should attempt to achieve as an equity goal. Also, the World Health Organization appears to be primarily concerned with health as the equity goal in its targets for health for all.

2.4 A Review of Health Welfare Programs for the Elderly in Thailand and Other Countries

The continued decline in fertility coupled with a low infant mortality rate and an ever increasing life expectancy will transform the world from a young to an aging population. The world population has seen the growth in the numbers and in the proportions of older people. In 1980, only 6% of the developing countries populations were over 60 years of age; by the year 2025 the proportion will have almost doubled to 11.5% (United Nations, Division for Social Policy and Development, 1998b). This demographic change will occur at a time when the population and society will be experiencing dramatic social changes, declining in household cohort size, and rapid nuclearization of the family. These demographic trend will have significant effects on society. Countries should recognize and take into account their demographic trends in order to optimize their development. There are lessons that can be learned from the experience of industrial societies which are already facing quite similar problems associated with their aging populations. This is true even though many differences in social customs and culture influence the development of health welfare policies and programs, such as Singapore , Japan , and the United States.

The overall review in this study is considered under the following themes; 1) demographic trends, 2) policies and legislation on social and health welfare for the elderly, and 3) health care financing.

2.4.1 The Thailand Experience

Demographic Trends

Demographic trends in Thailand during the past 20 years indicate an aging of the population. People age 60 and over have almost doubled in number, and the growth has been faster than the rapid increase in the population as a whole. During the same

period, the infant mortality rate has declined by 40 percent and the population growth rate has more than halved. The age structure of the population has shifted away from those under 15 years of age to an increasing number of those over 60 years of age. However ,the life expectancy is not as good as that for other Asian countries that spend less per capita on health (Donaldson, Pannarunothai and Tangcharoensathien, 1998).

Policies and Legislation on Social and Health Welfare for the Elderly

Thailand established a pension plan for the retired civil servants in 1951. Government employees and their dependent spouse, and the father and mother of government employees aged 60 and over are covered by free medical services under the Civil Servant Medical Benefits Scheme (CSMBS).

In 1990, the Social Security Law was enacted. This law propelled the social security system for private sector employees in Thailand. This included medical benefits for non-work related illness or injuries, maternal benefits, invalidity benefits, and death benefits. In December 1998, the Social Security Scheme was expanded to cover pension (benefits will cover 15 years or 180 months after payroll). However, the scheme does not cover health care benefits for pensioners.

In 1982, the Thai Government established a National Committee in order to carry out the Long-Term National Plan for Aging. The plan established an action plan to cover 20 years (1982-2001). At the same time, the policies and program on welfare and health of the elderly population in Thailand ware reflected in the five-year National Economic and Social Development Plan (1982-1986). The policy encourages the participation of the private sector in the provision of social welfare services for the elderly. It also emphasized that the family, as the basic social unit, should be strengthened and enabled to take care of its own elderly members more adequately.

For the purpose of special concern on policies for the elderly, in 1992 the Thai Government set up the Long-Term Policies (1992-2011), comprising 5 aspects as follows; 1) health services and nutrition 2) social security 3) working and income 4) social, education, and culture 5) research and development.

Social Welfare

Thailand established the first governmental welfare institution for the elderly in Bang-Kae, Bangkok, in 1953. At present, the Department of Public Welfare, Ministry of Labor and Social Welfare, operates 16 homes for the elderly. The primary objective of these institutions is to provide residential care for the elderly (for females over 60 and for males over 65) who are poor, neglected, or who have no relative to live with or who are unable to live happily with their own families. The provision of the services includes lodging and food, clothing, personal living effects, religious services, hobbies, recreation, physical rehabilitation, vocational therapeutic activities, medical services etc. The number of cases has increased dramatically. Therefore, the Department of Public Welfare, Ministry of Labor and Social Welfare, also set up 13 elderly centers which provide day care services, emergency shelter services and mobile services for the elderly in communities. These services provide day care, creation, home visiting, family assistance and counseling, therapeutic and rehabilitative services. Moreover, the Department of Public Welfare set up a welfare fund which provides 200 Baht per month for the elderly poor in 1993. Jitapunkul and Bunnag (1998) have stated that the main problem of the social welfare system is a lack of adequate co-operation between the Department of Public Welfare, Ministry of Labor and Social Welfare and the Ministry of Public Health.

The community services are rather inadequate due to limitations of personnel and financial resources. The Thai government has tried to encourage and promote the participation of the private sector, especially in the form of subsidies, technical

assistance, and psychological support. The private sector has long been playing a very active role, both on an individual basis and in such organized forms as charity organizations, clubs, foundations and associations (Sangsingkeo et al., 1988).

Health Services and Health Welfare

In 1963, the first geriatric clinic was opened in the Neurological Hospital in Bangkok. Several programs were aimed at health care for the aged, which include training for health personnel to provide geriatric clinics in general hospital throughout the country.

For the development of health care for the aging population, the government through the Ministry of Public Health has set up a five year National Heath Care Plan for the elderly to be implemented during1982-1986. In this plan, emphasis was placed on several important aspects of health care for the elderly. Health care for the aging was integrated through primary health care strategy in the rural areas to achieve the target 'Health for All by the Year 2000'.

The United Nation, has announced the year 1999 as "the International Year of older Persons" (United Nations, 1998). The Thai Government simultaneously announced the Declaration on Thailand's Older Persons. Article 5 notes that:

> "Older persons should learn how to take care of their own health. An equal access to comprehensive health care services should be ensured for older persons. They should also be provided with due care till the end of their lives when they may rest in peace according to their beliefs" (Welfare Assistance Division, Ministry of Labour and Social Welfare,1999).

In 1992, the Thai Government announced free medical care for the elderly (persons aged sixty and over) to guarantee that all of the elderly can have access to

medical care without financial barriers. This program is the under Public Assistance Scheme, Ministry of Public Health, which was initiated in 1975 and implemented in 1981. In the beginning the scheme was classified as social assistance for low income households and was later expanded to assist various groups of people i.e. children 0-12, the disabled, veterans, monks and the elderly.

Chayovan and Knodel (1997) have reported the percentage distribution according to the usual places for treatment for the elderly in Thailand as follows:

Place of Treatment	Residence		
	Bangkok	Provincial Urban	Rural
Does nothing	9.6	9.2	7.2
Buys medicine	54.3	45.3	47.6
Health center	3.2	3.1	28.4
Govemment hospital	7.0	8.7	10.5
Private hospital	4.2	3.3	0.5
Private clinic	20.5	30.1	5.1
Folk healer	1.1	0.3	0.6

The data show the difference in using health services among the elderly who live both in rural and urban areas. The use of health services depends on the availability and the accessibility of health care resources. Regarding purchased medication, the data shown that the elderly are more likely to buy over-the-counter drugs than to go to see a physician.

Chayovan and Knodel also reveal the percentage of the elderly who have heard about the free medical care program to be more than 84 percent. Wiriyawechakul et al. (1997) have reported the percentage of the elderly in the central region who have heard

about the free medical care program to be about 92.3 percentage. At the same time, 66.6 percent of the elderly have made use of the free medical care provided by this scheme.

In addition, Jitapunkul et al. (1998) have studied the factors associated with state hospital utilization among the Thai elderly who had illnesses which required hospitalization. They found that offspring took 60 percent of the responsibility for the hospital expenses of the elderly who used private hospitals or both state and private hospitals, which indicated that the offspring had an important role in taking care of their parents. They have also found that long distances between residences in rural areas and private hospitals, which are usually located in the city, and the financial status of the family may affect the decision of selecting a hospital to deal with serious illness.

Health Care Financing

National spending on health care in Thailand has been rising significantly during the past decade. As a percentage of GDP, the national health expenditure increased from 3.4 in 1978 to 5.9 in 1992. The level of spending is projected to reach 8.1 percent of GDP in the year 2000 .The household is the major source of health care spending as the people by drugs from pharmacies for self-care. Household spending accounted for 66.7 percent of all health care expenditure in 1978, rose to 74.7 percent in 1988, and then dropped to 73.7 percent in 1992. As the Government pays more attention to the expansion of health insurance coverage, free care for the poor and the underprivileged, trend of household spending is downward while the trend of public sector health spending is upward (Ministry of Public Health, Bureau of Health Policy and Plan, 1997).

Population coverage of health insurance and welfare schemes in Thailand can be classified into four major groupings:

1) Public Assistance Scheme

2) Health Welfare For State Employees
   Civil Servant Medical Benefits Scheme
   Public Enterprise
3) Compulsory Health Insurance
   Social Security Scheme
   Workmen Compensation Fund
4) Voluntary Health Insurance
   Health Card Project
   Private Health Insurance

The elderly who make payment for health services come into at least three groups: the Public Assistance Scheme, the Civil Servant Medical Benefits Scheme and self-payment. The Public Assistance Scheme provides free health care for the elderly in Thailand. This scheme is financed through general tax revenue and a budget is allocated through provincial health offices. Donaldson, Pannarunothai and Tangcharoensathien (1998) have stated that the widespread distribution of this scheme is severely under-funded with an allocation of only 253 Baht per capita. Over time, the allocation formulas to determine the level of funding to any specific province/region have changed, and this has resulted in less or greater equity of distribution on a per capita basis between poor regions (such as the Northeast) and more prosperous areas (such as the Central region).

The other scheme which entitles the elderly to receive free medical services is the Civil Servant Medical Benefits Scheme (CSMBS). The elderly who are covered include such groups as retired civil servants and employees of state enterprises (and their spouses) and their fathers and mothers. The CSMBS is totally financed by general tax revenue and the Ministry of Finance (MOF) holds a central budget for this purpose. This CSMBS is operating under a fee-for-service reimbursement model. There is almost no co-payment for outpatient services and inpatient services from the public sector, but

approximately about 50 percent co-payment for inpatient care in the private sector. There is no program to screen claims for fraud, and no beneficiary database. In real terms expenditure increased by about 14 percent per annum up through 1997. As a consequence of the economic crisis the MOF adopted some demand-side cost control measures such as co-payments and the elimination of the option to be reimbursed for care from private providers (Donaldson, Pannarunothai and Tangcharoensathien, 1998). At present, the reform of the CSMBS is not yet complete.

Jitapunkul et al. (1998) have found that the Thai elderly consume a large amount of health resources. This population needs 26,038 beds every day or 28 percent of the available hospital- beds throughout the country.

The Department of Public Welfare has set up a welfare fund which provides 200 Baht per month to the elderly poor. The number of the elderly who receive this form of welfare increased from 20,000 in 1993 to 291,970 in 1997. The amount of the budget also increased dramatically (Jitapunkul and Bunnage, 1997).

As a consequence, the issue of financing retirement and health care expenses for the elderly has received considerable attention in recent years and will receive even more in the future. Thailand must determine how the country will deal with a rapidly growing aged population. Lessons on how to deal with the problem be learned from other countries. It is the task of the researcher to address this interesting question.

2.4.2 The Singapore Experience

Demographic Trends

Singapore is a well- developed, modem city state with 3.3 million people (Hsiao, 1995b). The population structure of Singapore has undergone substantial change in the last three decades. The elderly population in Singapore is projected to grow by about

3.8 percent a year between now and 2010. Between 2010 and 2025 this growth will exceed 5 percent a year, compared with overall population growth of 0.5 percent. By 2040 the elderly will account for 23.6 percent of Singapore's population more than 11 times the 1965 level. Life expectancy has increased by13 years over the last three and a half decades. Thus, while the increasing population of old people has so far been accompanied by an increasing population of working age adults, after 2010 the effects of an aging population will likely become more noticeable. These dramatic demographic changes have important economic implications-for savings, labor supply, and pensions, among other concerns (van der Gaag and Preker, 1998).

Policies and Legislation on Social and Health Welfare for the Elderly

Following 140 years of colonialism, Singapore achieved complete independence in 1965. With no natural resources other than a hardworking and tolerant population, this tiny nation has in three decades built one of the most robust economies in the world. In 1993, Singapore had a per capita income of S$ 27,864 or $18,116 in United States dollars. Its foreign reserve account is the fifth largest in the world after those of Japan, Taiwan, Germany and the U.S.

Singapore provides comprehensive social security but it is not a welfare state. In Western countries, such as the United States, social security is the most prevalent source of income for aged people. However, generalized old age pension or social security schemes do not operate in Singapore. Instead, for the majority of Singaporeans, children provide the major source of financial support for seniors combined with the provident fund usually known as CPF or "Central Provident Fund" (Central Provident Fund Broad, 1997).

Singapore's Central Provident Fund (CPF) was established by the colonial government in 1955 as a mechanism to provide Singaporeans with financial security in old age. Since its inception, the CPF has evolved into a savings system that "changes

the whole concept of social security from provision for retirement to provision for life" (Choon and Low 1998). It remains a mandatory savings scheme for all employees and employers in Singapore. The basic purpose of the CPF is to help members meet primary needs, such as housing, food, clothing and health services, in their old age or when they are no longer able to work. Members can withdraw savings for retirement, permanent disablement, home ownership, and medical care. The amount available depends on how much the member has saved in his/her CPF (Central Provident Fund Broad, 1997).

Before 1984, medical services were provided mainly by the public sector and financed through general taxes. Medical services generally are provided free or at a nominal charge. In 1970, Singapore experienced rapid health care cost inflation. The government was pressed to address the problem of how to finance the increasing cost of its public hospitals (Hsiao, 1995b). In 1983, the National Health Plan considered this problem and came up with a plan's key proposal, the Medisave Scheme. This scheme attempted to impose compulsory saving and to restructure the system of medical care financing. The plan's main objective are to secure a healthy, fit and productive population through active preventive care and the promotion of healthy lifestyles, and at the same time to make health services more cost-efficient. In addition to promoting individual responsibility for maintaining good health, the plan aims for members to build up financial resources to create the means to pay for medical care during illness, especially in old age (Phua and Teng, 1998).

Subsequently, in 1984 the government of Singapore extended its program of forced savings to require that a certain portion of CPF. Contributions be put into a Medisave account to fund hospitalization both during a person's working life and during retirement (Asher, 1995). In 1992, Medisave was extended to self-employed persons who are Singaporeans/ Permanents . In 1995, the government introduced the Pre-Medisave Top-Up Scheme to recognize the valuable contributions of older Singaporeans who retired before the Medisave Scheme began in 1984 because they

did not have any Medisave savings. This scheme helps them build up their Medisave (Central Provident Fund Broad, 1997).

While most Singaporean citizens can use their Medisave funds to cover small health care expenditure, most accounts are not large enough to cover a catastrophic illness. In response, the government created Medishild in 1990 as a catastrophic insurance program. While Medisave is compulsory, Medishild is voluntary, but every Medisave member is automatically enrolled unless the member requests otherwise (Massaro and Wong, 1996).

In addition, some health care expenses are covered by the endowment fund known as Medifund, which is a government-funded program. Medifund was established in 1993 to provide financial assistance to the poor whose Medisave accounts are low and who have few resources to pay the difference out-of-pocket. Support is given more to the elderly who have no or low Medisave accounts because the scheme was introduced too late for them to build up funds (Prescott and Nichols, 1998; Singapore, Ministry of Public Health, 1999).

The delivery system in Singapore is a mix of private and public services. Eighty percent of hospital care is delivered in public facilities, and 75 percent of ambulatory service is provided by private practitioners. The government maintains a presence in the primary care market to provide subsidized services for those who cannot afford private-sector charges, as well as to force the private sector to reduce its charges to compete with the public sector. The government operates polyclinics (similar as community health centers in the United States), located in the more populated areas of Singapore, which provide curative outpatient medical treatment, health screening, immunization, diagnostic testing and pharmacy services for those who use the less-expensive public sector. All services are subsidized; patients generally pay about 50 percent of the cost. Children and the elderly (aged over 60) pay only 25 percent of the cost. Even though

these clinics are subsidized, they charge for most services, reflecting the philosophy that health care should not be free (Massaro and Wong, 1996). Within public hospitals, patients have a choice of classes of accommodation upon admission. Equity and equal access to basic medical services are assured in Singapore by the subsidies and classes of hospital beds. Class C (open ward) is heavily subsidized by the government, patients pay only 20 percent of the hospital costs, and the government subsidizes the remaining 80 percent. For class B2(6 beds per room) patients pay 35 percent of the cost and for class B1 (3-4 beds per room) patients pay 80 percent. Patients in class A pay 100 percent of the cost (Hsiao, 1995).

Wee-Jin (1997) has stated that the majority of elderly Singaporeans use public sector hospital services with payment via Medisave account. Moreover, the Ministry of Health is working on developing services as a regional network-west, central and east. Each network or sector will have a hospital based geriatric medicine department and a community hospital linked to the other community-based health services as well as the sheltered housing, residential and nursing homes. This is to encourage easier and more efficient identification of needs as well as to facilitate the vital communication that is needed between the different services. The majority of the elderly in Singapore live with their families. The policy is to emphasize individual responsibility, as well as family and community involvement. The strategy is to encourage voluntary welfare organizations to be the main service providers for elder care services, with the government assisting in the funding and in other areas. The government with the participation of the voluntary welfare organizations aim to help the lower income household and services are provided at a substantially subsidized rate.

Health Care Financing

Unlike most countries in the world today, which finance their security systems on a pay-as-you-go basis, Singapore requires people to save for their own retirement. The institution through which the saving takes place is the CPF. All compulsory savings,

members maintain three accounts with the CPF which are Ordinary accounts, Medisave accounts and Special accounts. The CPF plays a very import role in the economic and social life of Singapore. Although the deposits are made by both employee and employer (mandatory payroll deduction), the account belongs to the individual employee. In 1997, required deposits equaled 40 percent of wages up to S$6,000 per month, with 20 percent each coming from employer and employee (Asher, 1995; Central Provident Fund Broad, 1997).

Among these three, the total contribution of 40 percent is credited as follows;

- 30 percentage points go to the Ordinary account, which can be used for approved investments, certain types of insurance, loans for college education expenses and topping up parents' retirement accounts.
- Between 6 and 8 percentage points , depending on age, go to the Medisave account for hospitalization and certain other medical expenses.
- 4 percentage points go to the Special account for old age retirement and contingencies.

Health care financing in Singapore is based on individual responsibility, coupled with government subsidies to keep basic health care affordable. To avoid the pitfall of free medical services stimulating insatiable demand, patients must pay directly for part of the cost of any medical services which they use, and pay more when they demand a higher level of services. This principle of co-payment applies even to the most heavily subsidized wards or services. For this purpose, the government has introduced the three-tier package of the 3Ms-namely, Medisave, Medishield, and Medifund in order to help Singaporeans in the co-payment for hospitalization expenses which aims at lowering the net cost of medical care to users of public services. The Medisave program covers inpatient care and certain outpatient treatments, Medishild helps to meet the high medical costs of prolonged or serious illnesses, while individuals pay for most outpatient care out of pocket (Singapore, Ministry of Public Health, 1999).

The Medisave Program

As mentioned above, Medisave was created in 1984 as a compulsory national health care savings program that operates under the umbrella of the CPF. Singapore was the first country to implement them fully integrated with the country's health care financing structure. Medisave helps individuals put aside part of their income in Medical savings accounts to meet their personal or immediate family's hospitalization expenses, especially after retirement. Singapore has adopted this system of individually owned accounts which can be used to pay for many of the health care expenditures which in the United States would normally be covered by health insurance. Massare and Wong (1996) have stated that Singapore's people spend their own money rather than that of a third-party insurer. This system has helped to curtail Singapore's health care costs, which are about 3.2 percent of GDP in 1995 (Prescott and Nichols, 1998). Even with these low expenditures, the income of Singaporean doctors is about the same, in relation to average wages, as the income of physicians in the United States, and patients have easy access to such technology as CAT scans, organ transplants and bypass surgery.

A portion of a member's CPF contribution is deposited into his monthly Medisave account. Contributions begin at 6 percent of monthly salary, rise to 7 percent at age 35 and to 8 percent at 45. Self-employed persons(e.g. sole-proprietors, taxi drivers, hawkers, etc) earning more than S$2,400 per year need to contribute a percentage of their net trade income to a Medisave account. Self-employed persons without income tax reference numbers also need to contribute to a Medisave account. (The amount of contributions is based on S$6,000 the yearly average income of self-employed persons who do not pay income tax). When an individual's account balance reaches S$ 22,000, any amount in excess of this limit will be transferred into that person's CPF Ordinary account. Once the CPF member reaches 55, that person can apply to withdraw his/her CPF. If a person chooses not to do so at 55, a withdrawal can

still be made later. Retirees are required to keep S$ 117,000 of the actual Medisave balance, whichever is lower in the account. The money in the member's Medisave account belongs to the individual. On the member's death it goes to a nominated beneficiaries. If there is no nomination, the money is distributed by the Public Trustee to beneficiaries according to the law. Medisave can be used for certain dependents of members, for example, their spouse, children, parents and grandparents. Grandparents must be Singaporeans or permanent residents to qualify. Medisave may be used at all government or restructured hospitals and approved medical institutions. It covers up to S$300 per day for dairy hospital charges, which include a maximum of $50 for doctor's daily attendance fees, and between S$150 to S$5,000 per surgery procedure (including surgeon, anesthesiologist and facility fee), base on its complexity. They must pay the rest of their expenses, if any, out-of-pocket. Medisave also provides up to S$150 per day for psychiatric treatment (to a maximum of S$3,000 per year). For Senior Citizens Healthcare Centers managed by the Home Nursing Foundation, Medisave can be used to cover up to S$20 per day for Day Care charges, subject to a maximum of S$1,500 per year. In the outpatient setting, Only a few relatively expensive treatments are covered e.g. hepatitis-B vaccinations, renal dialysis, radiotherapy, chemotherapy, AZT treatment, Gamma knife treatment and assisted conception procedures (Central Provident Fund Board, 1999).

The 1995 national survey of senior citizens in Singapore found that Medisave was the most important mechanism for those aged 55 and over to finance their health care. More than half (55 percent) of senior citizens depended on their offspring's Medisave to pay for their medical expenses, while 18 percent depended on their own Medisave, and 2 percent depended on their spouse's Medisave (Phua and Teng, 1998).

The Medishield/ Medishield Plus Program

For low-income workers and others without large fund balances, a Medisave account alone may be insufficient to cover a serious or prolonged illness. For that

reason, Medishield was established in 1990 as a low-cost, catastrophic illness insurance program to help Medisave members meet the medical expenses from prolonged or serious illnesses. The definition of "catastrophic" is a major or prolonged illness.

Medishield Plus is similar, but the benefits and premiums are higher. It provides higher coverage for members who wish enjoy staying in higher class wards and are willing to pay the additional premium. Medishield Plus is targeted at those using private hospitals or class A and B1 ward (private wards) in the public sector. Medishield Plus offers a two-tier plan (Plan A and Plan B) on a voluntary opt-in basis.

With Medishield and Medishield Plus, CPF members and their dependents (spouse, children, parents and grandparents) are eligible for cover up to the age of 75, as long as they are not permanently disabled or suffering from serious illness before the start of the insurance cover. However, each member can be covered by only one plan-Medishield, Medishield Plus Plan A or Plan B.

Medishield is also managed under the CPF umbrella. The annual premium is deducted automatically from the member's Medisave account, unless he or she decides not to be insured. Medishield annual premiums range from S$12 to S$132, Medishield Plus Plan A, range from S$60 to S$660,and Medishield Plus Plan B, range from S$36 to S$396. The benefits are paid out when the hospital bill exceeds a certain amount called the "deductible", and Medishild will pay 80 percent of this claimable amount. The insured has to pay the remaining 20 percent above the claimable amount which is known as "co-insurance". The insured can pay the deductible and coinsurance from Medisave. There is, however, no-deductible for kidney dialysis, chemotherapy, or radioterapy. Medishield has a claimable limit of S$120 per day which is adequate for class B2 and C hospitalization. Medishield Plus Plan A's claim limit is S$500 per day with a deductible of S$4,000, while Medishield Plus Plan B's claim limit is S$300 per day with a deductible of S$2,500 per policy year (Singapore, Ministry of Public Health, 1999).

There is a complicated list of deductibles, coinsurance, and claimable limits in order to reduce moral hazard.

Medifund

Medifund is an endowment fund set up by the Government in 1993, specially to . help poor and needy Singaporeans to pay their hospital bills at government and restructured hospitals. Only the interest income from the endowment fund is used to pay the hospital bills of the poor. The interest income is distributed to the public sector hospitals. Every public sector hospital has a hospital Medifund committee appointed by the Government to consider the applications and to allocate the funds. Patients who are unable to pay their hospital bills can apply for help from the respective Hospital Medifund Committees (Low and Choon ,1998; Prescott and Nichols, 1998).

2.4.3 The Japan Experience

Demographic Trends

After World War II, public health in Japan improved dramatically, and medical science and technology also made rapid strides. These factors have facilitated the control of infectious diseases and other illnesses and contributed to a drop in the infant mortality rate as well as in mortality rates for all other age groups. The average life expectancy increased markedly: in 1935, the average life expectancy of Japanese men and women were 46.92 and 49.63 respectively; in 1993, the average life expectancy of Japanese men and women were 76.36 and 82.84 respectively, making Japan first in the world in terms of the longest life expectancy. The population has been aging at rapid rate as life expectancy has increased. In 1995, the proportion of population aged 65 and above was 14.8 percent, and it is predicted that the percentage of elderly persons will be more than 25.5 percent by the year 2020 (Japan Insight, 1999; Japan, Ministry of Health and Welfare, 1999a,1999b).

The transformation of the family after the World War II has had the greatest impact on the elderly. The Social Insurance Agency of the Japanese Government (1995) has stated that the number of elderly depending on the population index (the elderly population divided by the working-age population or those between the ages of 15 and 64) rose from 10 percent in 1970 to 17 percent in 1990. This is expected to reach 43 percent in 2020, which means that approximately every 2.3 people in the working population will be supporting an elderly person. Moreover, the Japan, Ministry of Health and Welfare (1999a) has also stated that society in Japan has gown increasingly oriented toward nuclear families and that the percentage of households where children and the elderly live under the same roof has been steadily decreasing. Attitudes toward supporting elderly parents have also changed significantly, and it is becoming increasingly difficult to expect that the families will provide support. Therefore; the problem of illness and long-term care is the greatest concern of the elderly.

Policies and Legislation on Social and Health Welfare for the Elderly

Social Welfare

Japan has established a social security system at as high level as in any western country through various developments. As a social insurance system, the public pension system goes back to the Seamen's Insurance System, established in 1933, followed by the establishment of the Workers Pension Insurance System in 1942 (renamed the Employee's Pension Insurance System in 1944). After the end of World War II, the Employees' Pension Scheme was reestablished in the social confusion. In 1961, the goal of a universal pension was achieved with the full implementation of the National Pension Law, which covered only those who were not insured under the Employee's Pension System (self-employed workers).

With the 1985 reform, the new system consists of a basic pension covering the whole population, and the National Pension expanded to cover all Japanese citizens.

People between age 20 and 59 (including students) will be provided with the basic pension for old age, disability and insurance accident. In 1991, the National Pension Fund was established as a public supplementary pension system for the self-employed, with the aim of meeting various needs. In the National Pension Fund, there are community-type funds established in each of the prefectures, and occupation-type funds established in each work place.

The employee's pension has several sub-systems co-existing with each other such as the Employees' Pension Insurance for private sector employees, the National Government Employees' Mutual Aid Association, the Local Government Employees' Mutual Aid Association, and the Private School Teachers' and Employees' Mutual Aid Association (Japan, Ministry of Health and Welfare, 1999b).

Health welfare

The medical insurance system in Japan is roughly divided into two categories namely: 1) insurance schemes organized at work places for employed persons (this is further subdivided into various types, such as the Employees' Health Insurance Association, Government-Managed Health Insurance for employees of small and medium sized companies with no insurance society, Mutual Aid Associations for National and Local Government's employees, Mutual Aid Associations for private school teachers and staff), and 2) the National Health Insurance that is based on geographical regions. In addition, for those who are over 70 years old in each of the above schemes, and bedridden persons aged 65 or above are entitled to the medical service benefits provided by the Health and Medical Services Law for the Elderly.

Medical insurance in Japan was first introduced with the promulgation of the Health Insurance Law of 1922 and enacted in 1927. Prior to this introduction, there existed mutual aid associations which were voluntarily set up at a small number of private companies, and employees' assistance at work for their injuries and illness as

stipulated by the Factory Act. In the early 1920s, the Health Insurance Law was enacted as legislation to protect workers in the country. The system received a devastating shock during World War II (1941-1945) which put it on the verge of total collapse. However, after the war, the recovering economy redirected the system toward universal medical care insurance and pension systems. Japan has a system of universal health coverage, achieved in 1961, whereby most of the population is enrolled in some form of medical insurance system and everyone is thus required to pay insurance premiums. In 1967, the Health Insurance Special Law was enacted which established partial cost sharing for patients for drugs, subsequently patients' drug cost sharing was eliminated in the Employees' Health Insurance Scheme.

In 1973, medical services for the elderly were made free, as co-payment for the elderly was publicly funded. After that, health expenditure for the elderly increased dramatically. This had a direct impact on, and worsened the financial situation of the National Health Insurance which covers elderly people. As a result, in 1983, the Health and Medical Service Law for the Elderly was enacted, and various health services from disease prevention to functional training were initiated. So as to fairly share the burden among various medical insurance programs, it was decided that each program should make financial contributions to fund the medical expenses for the elderly. Co-payment was determined to enhance awareness for maintaining the health of the elderly and to achieve proper levels of medical service expenses. Moreover, in order to ensure a medical care delivery system which responds to the characteristics of the elderly, the Health and Medical Service Law for the Elderly was revised in 1986. The medical fees schedule for the elderly was made separate. Health care services facilities for the elderly as intermediate entities between homes, facilities, hospitals and special nursing homes for the elderly were established, and institutional health care services for the elderly were started.

In 1989, the Ten-Year Strategy to promote Health care and Welfare for the Elderly (the Golden Plan) was established. This plan aim to promote measures related to in-home welfare services in municipalities (i.e. Home Helper, Short Stay, Day Service Center and In-home Care Support Center). It was decided to enhance in-home and institutional welfare services as well as to prevent bedridden elderly. In 1990, welfare services administration was shifted to municipalities, and the establishment of the Local Health and Welfare Plan for the Elderly became mandatory. Later, in 1994, in order to meet the expanded needs after the Golden Plan had been implemented, the New Golden Plan was established, under the foundation of elderly long-term care services. The campaign to "Reduce the Number of Bedridden Elderly People to Zero" was also set up. Furthermore, the Long-term Care Insurance was established in 1997 with the aim of responding to society's major concern about aging, the care problem, whereby citizens can be assured that they will receive care and be supported by society as a whole. The Long-term Care Insurance was separated from Medical Care Insurance.

Under the Health and Medical Service Law for the Elderly health services (such as health examinations for those over 40 years old) were institutionalized as a municipal responsibility. With the demand for a new role of making and supporting the autonomous municipalities, the Community Health Law which was designed to promote comprehensive community health was enacted.

The medical care system in Japan has two special features: 1) Freedom to set up a practice and to choose a place of treatment. Any doctor or dentist can establish a medical institution anywhere, and patients may choose freely among medical facilities. Thus there is competition among medical facilities which, in turn, improves the quality of services. 2) A Fee-for-Services Payment System. Compensation for medical care is paid by medical insurance for the service, and full medical attention can be provided to each patient as he or she requires, and some new advanced medical techniques can be introduced. However, it is pointed out that a system of this type lends itself to excessive

and unnecessary treatment because the more services doctors provide, the more they are paid (Japan International Corporation of Welfare Services, 1998; Jpma, 1999; Social Insurance Agency Japanese Government, 1995).

Health Care Financing

Along with the achievement of universal medical insurance in Japan, aid measures were implemented for developing medical care facilities to meet the increasing demand for medical care. Japan' total medical expenditure has been growing by about 5 percent every year to a total of 28.5 trillion yen in 1996 or about 7.27 percent of national income, or 217,000 yen per capita per year. Put another way, it has continued to grow at the rate of about 1 trillion yen annually, or 10,000 per person per year. This trend continued in the 1990s, as expenditure was 20.6 trillion yen, 27.2 trillion yen in 1995, and 28.5 trillion yen in 1996. In particular, health expenditure those for aged 70 and older (health expenditure for the elderly) is growing faster than overall national health expenditure, and the Ministry of Health and Welfare accounted for more than 30 percent of national health expenditure in 1993. It is expected that by the year 2025, when the elderly population reaches its first peak, this percentage will be 50 percent (Japan International Corporation of Welfare Services, 1998; Social Insurance Agency Japanese Government, 1995).

The medical insurance system in Japan is in principle financed by insurance premiums, but there is also a system of public support, such as operating expenses being paid by national and local government. Public funding is supplied depending on the financial state of the system. Insurance premiums vary among systems. The premium of insurance schemes organized at work places for employed persons, is calculated by multiplying the contribution rate by the monthly standard remuneration of the insured person, and is in principal shared by the employer and the insured person in equal proportion at approximately 6.6 - 9.1 percent of the employees' total income in

1994. The amount of medical insurance contributions is increased in proportion to the income of the insured person, in other words, it is based on the policyholder's ability to pay. The National Health Insurance Scheme depends on the health insurance contribution from the insured person for its source of funding., In the case municipal governments, such as cities, towns and villages, there are two ways of financing the scheme, Municipal governments can choose to collect either the insurance premium or the National Health Insurance Tax (NHI Tax). There are more than 90 percent that chose the latter. The National Health Insurance taxation is easy to collect and can be used to increase financial contributions. The householder is responsible for payment of premiums (or NHI Tax) for himself/herself and his/her dependents. The amount of premiums or (or NHI Tax) is set determined by 1) income, 2) property, 3) the number of people insured, and 4) the number of households covered by the scheme.

The method of calculating the level of contributions is similar for both the National Health Insurance premium and the National Health Insurance Tax. Firstly the aggregate amount of the insurance which is considered to be necessary to support the National Health Insurance Scheme is determined by respective municipal governments. For example, the national subsidy shared about 50%, the prefecture subsidy shared about 25 percent and the contribution of municipalities about 25 %. Then, the aggregate amount which is to be shared by all of the insured persons is determined, the municipal government can choose one of three methods for the allotment of the amount shared by each insured person: 1) the contribution based on the income, property, the number of insured, and the number of households covered by the scheme accounts for 40 %,10 %, 35 % and 15 %(standard rate) respectively, 2) income, the number of insured, and the number of households covered by the scheme which accounts for 50 %,10 %, 35 % and 15 %(standard rate) respectively, or 3) income and the number of insured which accounts for 50 % and 50 %(standard rate) respectively.

Under the insurance system, any medical institution is required to offer medical services to the insured of any of the other medical insurance schemes. The fee-for service system operates under the minutely defined price schedule set by the government, through assessment and payment organizations. The patients have to pay amount of partial cost-sharing at the medical institution. The coinsurance rate for the insured individual is 20 percent, for both inpatient and outpatient care while for their dependents the rate is 20 percent for inpatient care and 30 percent for outpatient care (Jpma, 1999).

The Health and Medical Services Law for the Elderly is financed by joint contributions from all health insurance systems with the purpose of fair sharing of necessary costs by all Japanese. The medical costs for the elderly consist of three components; co-payment, public costs, and contributions from respective insurers of Medical Care Insurance systems. The ratio between public costs and contributions from insurers are 30 percent (public costs) and 70percent (contributions). Public costs are shared by the national government (2/3), prefecture government (1/6), and municipal government (1/6). The elderly have to bear certain partial cost and co-payment is paid by the elderly. The co-payment for outpatients is 500 yen/consultation/institution (maximum 2,000 yen/month). For inpatients it is 1,100 yen per day, and 500 yen per day for the low-income elderly. This co-payment system is the major reason that the elderly are more likely to stay at hospitals rather than at nursing homes or at their own home (Japan International Corporation of Welfare Services, 1998; Social Insurance Agency Japanese Government, 1995).

2.4.4 The United States Experience

Demographic Trends

The aging of the population is one of the greatest challenges facing the health care system in the United States. Between 1950 and 1987 the proportion of the United

States population aged 60 years and over increased from 8 percent to 12 percent (van der Gaag and Preker , 1998). By the year 2000, it is projected that the number of people 65 years and over will rise to 35 million, accounting for 13 percent of the population. That proportion is expected to climb to as high as 23 percent by the year 2040. Life expectancy at birth increased from 75.4 years to 75.8 years between 1990 and 1995. Most significant, however, is the rapid growth of the population aged 85 years and over, whose numbers are expected to rise to 4.6 million by the year 2000 (Pan American Sanitary Bureau, 1998).

Policies and Legislation on Social and Health Welfare for the Elderly

Among western nations, the United States was rather late in enacting comprehensive federal pension legislation for old people. The American emphasis on individualism in the economic and political arenas, the belief in market forces, and the consequent reluctance to permit government to intervene in people's lives were the main causes of this delay and limited the development of a social welfare policy in the United States. This has strongly affected the structure of social security in that country.

In 1920, the Civil Service Retirement Act provided a retirement system for many government employees. The social security program was enacted in 1935, and the act concentrated on Old Age Insurance; survivor benefits were added in 1939; and disablement benefits in 1956 (Barr, 1998). Congress passed legislation in 1965 establishing the Medicare and Medicaid programs as part of the Social Security Act. Medicare was established in response to the specific medical care needs of the elderly (and in 1973, the severely disabled and certain persons with kidney disease). Medicaid was established in response to the widely perceived inadequacy of "welfare medical care" under public assistance. In 1977, the Health Care Financing Administration (HCFA) was established under the Department of Health and Human Services to administer the Medicare and Medical programs.

The Federal Government has offered funds for social welfare services for the elderly (for example, information services, meal services, disease prevention services, legal consultations, homemaker help for people needing care, safety checks and day care) based on the Older American Act (signed into law in 1965), but the budget amount is every small. Therefore, services for the elderly are centered on Medicare and Medicaid. In addition, the organizations that provide services, the particular contents and the expenses involved differ among states. It is very expensive to enter nursing homes, so informal care by families and friends is widely provided. About 70 percent of people needing care depend solely on informal care. In-home medical care, such as visiting nurse services and physical therapy, are provided as a home health care program by Medicare (Japan, Ministry of Public Health,1999b). Since 1991, almost all nursing homes in the United states have been obliged to comply with the MDS-RAPs system, which is a long-term care system. MDS (Minimal Data Set) is the "minimum items necessary" to identify and assess the conditions of residents of nursing homes from a variety of angles. RAPs (Resident Assessment Protocols) are guidelines for preparing appropriate care plans based on the information contained in the MDS and for providing care for old people according to their needs.

National health expenditure in the United States is one of the highest in the world both in per capita terms and as a proportion of GNP. Currently, medical and welfare reforms are the biggest political issues in the United States. President Clinton and Congress are in a state of serious confrontation. In 1997, the United States implemented a medical saving account demonstration project. The political economy and goal of the medical savings accounts in the United States are cost containment as the overriding health policy problem in the United States is cost control, not resource mobilization or equity as in Singapore (Prescott and Nichols, 1998). The Balanced Budget Act of 1997 (BBA) ushered in a similar medical saving account experiment for the main publicly funded health care program for the elderly. This legislation introduced the most significant changes to the Medicare and Medicaid Programs since their inception 30

years ago. These changes such as the extension to the life time of the Medicare Trust Fund and the reduction in Medicare spending, have increased the health care options available to America seniors. At the same time the changes, fight Medicare fraud and abuses, and look at ways to help Medicare work well in the future (Prescott and Nichols, 1998; Health Care Financing Administration, 1999). In June 1999, President Clinton unveiled his plan to modernize and strengthen the Medicare program to prepare for the health, demographic, and financing challenges it faces in the 21st century (National Economic Council and Domestic Policy Council, 1999).

The American hospital sector is a mixture of publicly and privately owned facilities. Private, for-profit hospitals account for only about 10 percent of all short-term stay hospitals and psychiatric hospitals. The great majority of American hospitals are either government-owned or privately-owned not-for-profit entities. The average length of stay per case in short-term acute-care American hospitals is low as compared with other nations, being between 12 and 24 days, which is one of the reasons why there are many nursing homes and related facilities for the aged. Close to 80 percent of these nursing homes and skilled nursing facilities are private owned, for-profit entities. Another 18 percent are private, not-for profit entities, and the remainder are publicly-owned (Reinhardt, 1995).

Health Care Financing

Americans have historically viewed private health insurance as the main financial cornerstone of their health system. Sixty-five percent of the citizens purchase private medical insurance, and employers often purchase medical insurance for their employees as part of employee benefits and welfare packages with the workplace as a unit. Health care is funded through a variety of private-payer and public programs. Private Funding includes individuals' out-of-pocket expenditure, private health insurance, philanthropy and non patient revenue (for example, gift shops and parking

lots), as well as health services that are provided in an industrial setting. Public medical security programs are Medicare and Medicaid. Medicare covers beneficiaries of old-age pensions, disability pensions and patients with kidney disease. Medicaid cover the beneficiaries of other public assistance programs.

The United States spending stabilized from 1993-1996 at 13.6 percent of GDP on health, although this was the highest percentage in the world. The average expenditure for health care was $3,759 per person. In 1996, Medicare and Medicaid financed $351 billion in health care services, more than one-third of the nation's total health care bill and almost three-quarters of all public spending on health care. In 1997, Medicare grew to account for 42 percent of public spending on health. During the late 1960s, public per capita health care expenditures for the elderly grew an incredible 21.8 percent a year. The rapid growth in public health expenditure for the elderly coincided with the introduction of Medicare and Medicaid. This development also explains the corresponding decline in private expenditure. Total spending on Medicare rose from $1.7 billion to $89 billion between 1966 and 1988. Medicare spending is expected to grow from $178 billion in 1995 to $345 billion in 2002. In the United States health expenditure per capita for the elderly is more than four times that for the none-elderly. The aged themselves still cover an average of close to one-third of their own health care expenditures with their own resources either through private Medigap insurance or out-of-pocket at the time of service (Reinhardt 1995; The Twentieth Century Fund, 1995; van der Gaag and Preker , 1998).

The Medicare Program

The United States Medicare system was established in 1965 as an amendment to the Social Security Act. Its original aim was to reduce dependency in old age. When first implemented, Medicare covered only persons aged 65 and over. In 1973, other groups became eligible for Medicare benefits, such as persons who are entitled to Social Security or Railroad Retirement disability benefits, for at least 24 months, and

persons with end-stage renal disease requiring continuing dialysis or kidney transplant. Currently, almost all Americans aged 65 and over (about 33 million people) are insured by Medicare (Waid, 1998).

Medicare consists of two primary parts: Hospital Insurance (HI), also known as "Part A," and Supplementary Medical Insurance (SMI), also known as "Part B". Medicare Part A provides coverage of inpatient hospital services, skilled nursing facilities care, home health services and hospice care. Medicare Part B helps pay for the cost of physician services, outpatient hospital services, medical equipment, laboratory tests, blood and home health care. Part B also covers some preventive services such as mammograms and flu shots. Medicare does not cover all medical services. Another option which was established in 1998 by the Balanced Budget Act of 1997, is Medicare+Choice. Medicare beneficiaries who have both Part A and Part B can choose to receive their benefits through a variety of risk-based plans known as "Part C". Medicare+Choice expands the Medicare health plan option to include a broader range of plans. The types of Medicare+Choice plans are the Original Medicare Plan, Medicare managed care plans, Private-fee-for-service Plans and Medicare Medical Savings Accounts.

All financial operations for Medicare work through trust funds, which are special accounts in the United States Treasury. The Medicare Part A program (HI) financing is primarily through a mandatory payroll deduction. Almost all employees and self-employed workers in the United States covered by the Medicare HI program and taxes to support the cost of benefits for aged and disabled beneficiaries. The payroll tax is 1.45 percent of earnings (paid by both employee and by the employer equally), and it is 2.90 percent for self-employed persons. There are no premiums for the HI portion of Medicare for most people aged 65 and over. Eligibility for HI is generally earned through the work experience of the beneficiary or that of the spouse. However, in 1994, the average Medical care cost per enrollee of the hospital trust fund was about $ 2,900

while the average payroll tax revenue per beneficiary was about $2,600. The $300 shortfall is expected to grow wider, mainly because health care costs are expected to continue to climb more rapidly than wages subject to the payroll tax.

The Medicare Part B program (SMI), is financed through: 1) premium payments ($43.80 per month in 1998) which are usually deducted from the monthly Social Security benefit checks of those who are enrolled in the SMI program, and 2) contributions from general revenue of the U.S. Treasury. SMI benefits may be bought for persons by a third party directly paying the monthly premium on behalf of the enrollee.

The Medicare Part C program (Medicare+Choice) financing depends upon the plan which is chosen. The funding comes from the HI and SMI trust funds in proportion to the relative weights of HI and SMI benefits to the total benefits paid by the Medicare program.

Medicare does not cover all medical services. There are many private insurance companies which sell Medicare supplemental insurance policies (Medigap or Medicare selection). Coverage may be available to retirees through an employer or union provided group health plan. Seventy –five percent of the Medicare insured take out a Medigap insurance plan to cover remaining co-payment, coinsurance and deductibles.

In 1998, the beneficiary's share of payment for hospital care covered under HI, deductible $764 per each benefit period ,co-payment $191 a day for the 61st through the 90th day per benefit period, Medicare paid nothing after the 90th day unless the beneficiary elected to use "lifetime reverse" day for which there was a co-payment of $382 per day. For the skilled nursing facility covered under HI, the first 20 days of care were fully covered, but for days 21 through 100 of the benefit period, there was a co-payment of $95.50 per day. Home health care had no deductible or co-payment. For SMI, the beneficiary's payment share was one annual deductible ($100 per year). The

beneficiary's payment share for Part C was based upon the cost-sharing structure of the specific Medicare+Choice plan selected by the beneficiary, as each plan has its own requirements.

Prior to 1983, Medicare payments to the vendor were made on a "reasonable cost" basis. Currently, Medicare payments for most inpatient hospital care were paid under the Prospective Payment System (PPA). Under the PPS, a hospital is paid a predetermined amount, based upon the patient's diagnosis within a "diagnosis related groups"(DRGs) Payments for inpatient rehabilitation, psychiatric, home health, hospice and for skilled nursing care cover, continue to be paid under the reasonable cost methodology, with each service having some restrictions and limitations. Under SMI, payments for physicians, durable medical equipment and clinical laboratory services are based on free schedule. Hospital outpatient services and Home Health Agencies are currently reimbursed on a reasonable cost basis. However, the BBA has provided for the implementation of a prospective Payment System for these services (The Twenties Century Fund, 1995; Waid, 1998).

In 1997, the United States implemented a Medical Savings Account demonstration project. The Medical Savings Accounts (MSAs) plan allows beneficiaries (only a limited number for the first five years) to enroll in a plan with a high-deductible (maximum for 1999 + $6,000). Prescott and Nichols (1998) stated that MSAs in the United States are not only a reaction to the cost control problem itself, but also are a managed health care plan. The political economy of MSAs in the United States has been forged by the paramount need for cost containment. MSAs have been introduced into the Medicare program for the elderly which is financed by the same intergenerational tax transfer that pays for Medicare in the first place. It gives individuals a new way to pay for health care. Singapore linked MSAs to a strongly pro-poor price discrimination strategy in the public hospitals that serve the majority of the people, and this helps to absorb the growing pressure on public subsidies, the remaining subsidies being consciously

targeted where they are needed most. In contrast, the U.S. approach to MSAs does not incorporate any features favoring equitable access to medical care.

Medicare beneficiaries who have low incomes and limited resources may also receive help from the Medicaid program. For the Medicare beneficiaries who are fully eligible for Medicaid, the Medicare coverage is supplemented by health care services that are available under the state's Medicaid program. If a person is a Medicare beneficiary, payments for any services are covered by the Medicaid program. Medicaid is always the " payer of last resort". Some Medicare beneficiaries may receive help through their state Medicare program, such as Qualified Medicare Beneficiaries (QMBs) and Specified Low- Income Medicare Beneficiaries" (SLMBs). The QMBs are those Medicare beneficiaries who have no resources at or below twice the allowed under the Social Security Income program, and incomes below 100 percent of the Federal Poverty Level (FPL). For QMBs, the state pays the HI and SMI premiums and the Medicare co-payment and deductibles. For SLMBs, with resources like the QMBs but incomes which are higher (still less than 120 percent of the FPL), the Medicaid program only pays the SMI premiums (HCFA the Medicare and Medicaid Agency, 1997; The Twenties Century Fund, 1995).

Health care costs are rising in the United States, about 95 percent of all hospital bills and 83 percent of physicians' fees are paid by the private and public third-party payers. The United States is engaged in difficult and complex policy debates. The Twentieth Century Fund has stated that the United States health care reform has shifted the political focus to Medicare and Medicaid. But because the public and private insurance system are so interconnected, attempting to control health care inflation by tinkering only with public programs has failed in the past.