CHAPTER 1

INTRODUCTION

1.1 Problems in Japan's Health Care System

1.1.1   Increasing Total Health and Total Long-term Care Expenditures

Since the World War II, Japanese health care system has aimed to provide all Japanese citizens equally with opportunities for receiving medical treatment. Under the universal medical care insurance system, all people are insured by one of the medical insurance systems. Through these systems, citizens can receive round-the-clock medical care at any medical care institutions. Additionally citizens benefit by having access to the latest medical technology. This has resulted in both an increase in the average life span, which is one of the longest in the world, as well as higher standards for health and medical care. (MoHLW, 2002)

In the meantime, the environment surrounding medical care in Japan is changing dramatically. Total Health Expenditures (THE hereafter) has been increasing annually due to the rapid aging of Japanese society, etc., reaching around 30 trillion yen[1] (8% of GDP) in 2000. In particular, the THE for elderly[2], which accounts for one third of the THE, is the most influential factor increasing the growth of national health expenditures. Currently, the problem of aging and the declining birth rate are occurring simultaneously; the total fertility rate fell to 1.36 in 2000. Elderly people utilize health care expenditures at a rate about five times that of younger generations. Such an increase in the THE significantly affects health insurance finances: Most of the health insurers are operating at a deficit. In addition, Total Long-term Care (LTC, = nursing care) expenditures for elderly (65 years old or over) amount to 4 trillion yen. Long-term care for the elderly was previously the responsibility of the multi-generation family. However, as a result of the increased nuclear family and increased female work outside the house, society now expects that the burden of long-term care for elderly should be shared by national solidarity.

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[1] $1= about 120 yen in February, 2003
[2] Elderly means people aged 70 or older and bed ridden people aged 65 – 69

1.1.2   Regional Disparities in THEE and TLTCE

The increase of Total Health Expenditure (THE) is a problem in Japan. In time series analysis, the reasons for the THE increase are considered to be innovation, diffusion of technology, systemic change, the increase of supply and demand, market failure and aging. If we analyze these expenditures by regions in Japan in the same year, the leading causes of increased health expenditure other than innovation would come out, because the technology level is similar in all areas in Japan. The regional disparity of elderly total health expenditures per capita is 1.6 times between the highest and lowest prefectures[3]. At the same time, the regional disparity of the per capita total long-term care expenditures is 2.4 times between the highest and lowest prefectures (Ministry of Health, Labour and Welfare 2002).[4] Furthermore, this influences the difference of the contribution of national health insurance: the disparity of the average premium (national health insurance tax) between the highest city and the lowest city is 6.7 times (Health Insurance System Study Group, 2002). Although the normative matter, such as how much disparity is acceptable among the municipalities, should be determined by the constituencies of these areas, the sensitive information is not disclosed.

1.1.3   Ambiguous Boundary between Health Care Services and LTC Services

A lot of elderly have been received nursing care at hospitals in Japan. The reasons for this are the lack of nursing facilities, to avoid the stigma of using welfare services, the difference of co-payment to name a few. Health care services for elderly and LTC services for the convalescence stage patients are substitute. However the extension of the care at medical facilities is an inefficient resource allocation, since hospitals are equipped with more intensive human and machinery resources. Certification of the need of care for elderly by the LTC insurance system clarified the inappropriate use of hospital resource. Now is the transition period, and providers can select which insurance should be applied for the elderly. The role of health care services and LTC service has not been separated completely yet. Therefore analysis of both THEE and TLTCE is necessary.

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[3] The disparity means the gap between per capita THEE in the highest prefecture and that in the lowest prefecture.
[4] The disparity means the gap between per capita TLTCE in the highest prefecture and that in the lowest prefecture.

1.2 Research Questions

1. What are the determinants of per capita THEE and per capita TLTCE ?
2. What are the major factors that differentiate the per capita THEE, per capita TLTCE and health status between the two groups which are separated by the mean of health status[5].
3. How should the national and local government control the determinants of THEE and TLTCE for cost containment and appropriate resource use?

1.3 Research Objectives

General Objective

The general objective of this study is to identify the determinants of the Total Health Expenditures for Elderly (THEE) and Total Long-term Care Expenditures (TLTCE) amongst prefectures in Japan for cost containment and the provision of the appropriate mix of health care and long-term care services.

Specific Objectives

1. To identify the determinants of the per capita THEE and TLTCE amongst prefectures.
2. To identify the difference of the determinants of the per capita THEE, per capita TLTCE according to the health status, examine the data classified into two groups according to mean of the health status.
3. To propose possible policy options for cost containment and for providing an appropriate mix of health care and long-term care services.

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[5] Life expectancy at 70 years of age for the average of male and female is used as the proxy for health status of elderly.

1.4 Scope of the Study

Currently, there are several studies on the determinants of per capita THEE and per capita TLTCE, however there are few studies that analyze both THEE and TLTC comprehensively. A key distinguishing feature of this study is to analyze both expenditures comprehensively. It is important because some parts of these expenditures are substitutes, and providers can select Health Insurance or Long-term Care Insurance for elderly patients during the transition period of Long-term Care Insurance implementation. In addition to the analysis of the factors of supply and demand, socio-economic and environmental factors are used as the determinants of these expenditures.

Prefectures are used as a unit of the region among the possible units including municipalities, the Secondary Medical Areas[6] and prefectures. Municipalities are better for the analysis of small area variations (SAV)[7]. However, the data for dependent variables does not available for this analysis sufficiently. In addition, the people living in small municipalities utilize health facilities in other municipalities, especially for inpatient cases. The Secondary Medical Area is a good unit for the analysis of the expenditure for inpatient care; however, this unit has also the problem about the availability of dependent variables. Furthermore, the population in these areas has large variance. Prefectures are not appropriate for the analysis of SAV but there is a variety of data used for dependent variables. Therefore prefectures are selected as a unit of the analysis.

1.5 Expected Benefit

This study clarifies the determinants of per capita THEE and per capita TLTCE and major factor that differentiate the higher health status group and the lower health status group amongst prefectures. It endeavors to assist the central and local government to plan cost containment and appropriate resource allocation of health care and long-term care services. The results could also assist insured people by alleviating the increase of premiums.

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[6] It is the region that secondary care is recommended to be provided within the region. Each prefecture has set this regions since 1986. There are 340 Secondary Medical Areas in Japan.
[7] For SAV, see Folland and Stano (1989)