CHAPTER I

INTRODUCTION

1.1 Background and Significance

The socio-economic development in Bhutan started by launching of the first Five Year Plan during the reign of the third monarch during 1961-1965. Ever since the modern health care delivery system was introduced it has been gradually expanding throughout Bhutan. The health infrastructure has improved both in number and quality through the successive Five Year Plans and today a well-established infrastructure and service delivery network is in place.

The Department of Medical Services under the Ministry of Health has seen tremendous progress in the past four decades. It has also undergone rapid changes, both in terms of organizational structure and in terms of delivery of care, making the overall health system effective and efficient within the social sector development efforts of the country.

The country is divided into four Zones for administrative convenience and undertaking balanced development; East, West, Central and South. Each Zone has a regional Hospital that caters to Dzongkhag/District referrals and is equipped with basic specialized care services. The Health Services are delivered through a four-tired network consisting of (1) a National Referral Hospital, (2) Regional Referral Hospitals,

(3) District Hospitals and (4) Basic health Units. A Basic Health Unit is a primary level institution in the health care system and caters to about 1,500 to 5,000 population and is staffed by a Health Assistant, an Auxiliary Nurse Midwife and a Basic Health Worker. Each Basic Health Unit has an average of 3 to 6 Out Reach Clinics through which the services to the most distant villages are delivered. A grade-I Basic Health Unit is usually situated in a Dzongkhag/Dungkhag headquarters and has a Medical Officer in addition to Health Assistant, Auxiliary Nurse Midwife and Basic Health Worker. Districts/ Dzongkhags Hospitals are the first level of referral institutions and are equipped to provide first level gynae/obstetrics, minor surgical and medical services besides conducting curative, promotive, preventive and emergency services. Regional Referral hospitals are the second level referral facilities. These Hospitals take up operations of all types to some extent and undertake laboratory tests. A minimum number of specialties are posted and limited specialized care services are available. Mongar Hospital serves as Regional Referral Hospital for Eastern region of the Country where as Yebilaptsa Regional Referral Hospital caters to South Central region of the Country. Jigme Dorji Wangchuck National Referral Hospital, besides being the Regional Referral Hospital for the Western region provides some tertiary care services and is situated in capital city, Thimphu. This is the most advanced Hospital in terms of providing care services to patients (8^{th} National 5 Year Plan, Bhutan, 2002)

Primary, secondary and tertiary health services in Bhutan are provided free of charge for all citizens, including expatriates and their family members working for the Royal Government. The Royal Government of Bhutan besides providing Western modern medical facilities has also Institutes of Traditional Medical Services that are

part and parcel of the health services which are also available free of charge to those who prefer to use these services. These institutions are also well established in all Dzongkhags/Districts for the convenience of the patients.

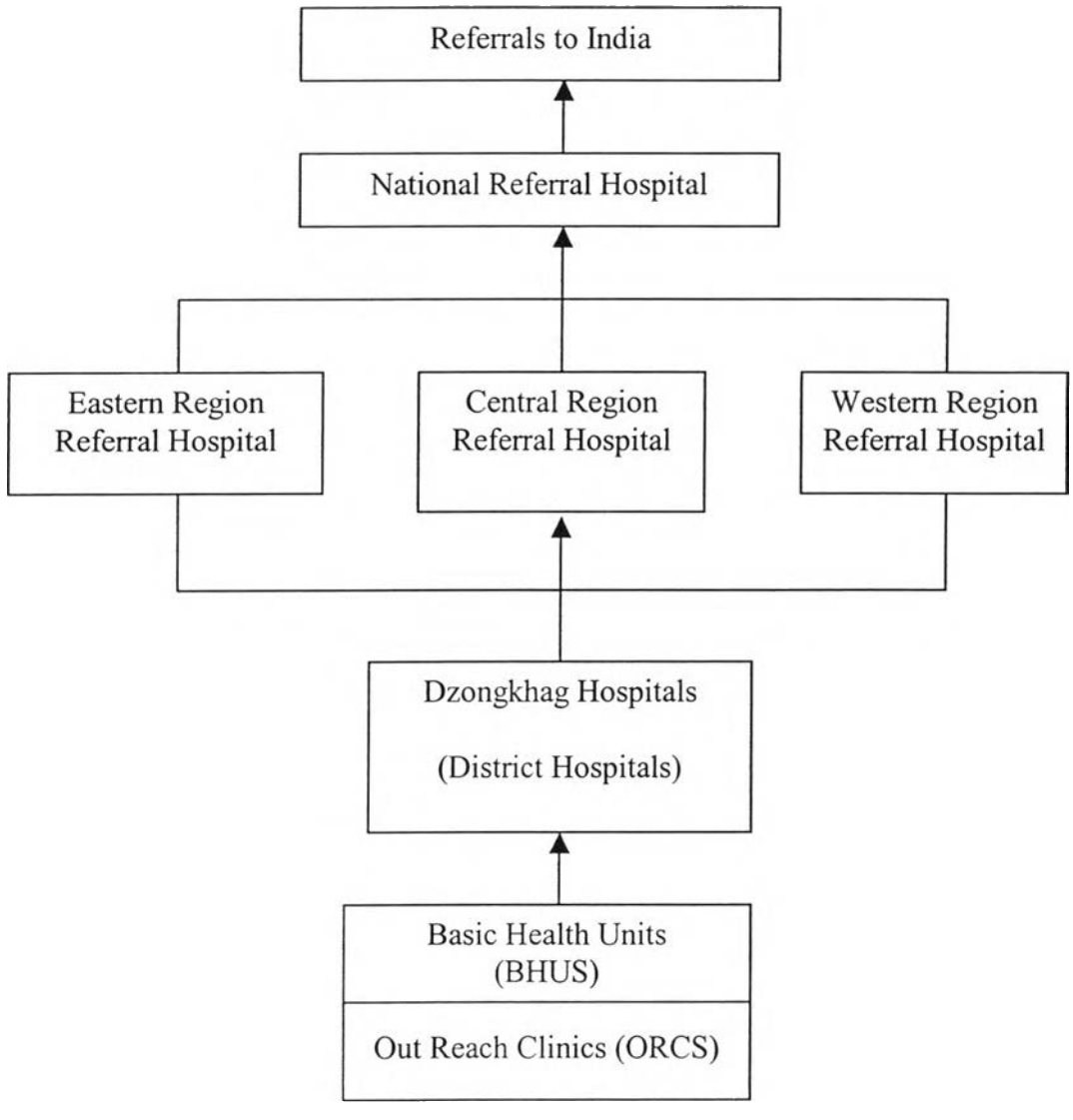

Figure 1.1: Decision Flow Chart on Free Referred Care to India

Bhutan is a small country in South Asia and facing limitations in health care services within the country both in terms of human resources, equipment and infrastructure. The practice till today has been referring patients for treatment to India

for which care services, (to some extent secondary and tertiary) are not available in the country. Any patient who is not able to get treatment in the country for lack of facilities is being referred to India at the expenditure of the Royal Government. The national policy on the referred case to India aims to be fair and just to all Bhutanese. Jigme Dorji Wangchuck National Referral Hospital as an apex hospital of the country has the facilities to provide limited tertiary care. However, cases that require specialized treatment are referred to India. The National Medical Referral Committee at Jigme Dorji Wangchuck Natioanl Referral Hospital makes such referrals by the Ministry of Health's terms of reference given in the "Guidelines for Patient Referral Outside the Country". The Referral Guidelines are meant to assist as a broad framework in the rational decision making processes related to referral for medical treatment abroad. It is in no way intended to be comprehensive and, therefore, restrictive. Often the nature of the disease process and circumstances may dictate decisions that are not envisioned at the time of laying the committee's guidelines.

The National Referral Committee consists of senior doctors from Jigme Dorji Wangchuck National Referral Hospital representing various medical specialties, with the Director, of the Department of Medical Services as Chairman, and the Director of Jigme Dorji Wangchuck National Referral Hospital as the Vice Chairman. The Referral Committee, whose functions are enumerated below, meets fortnightly to decide all elective referrals. In case of emergency an adhoc referral decision can be made with endorsement of a second specialist of the same specialty. Normally referrals need the approval of a minimum of five committee members with three members in the related areas of surgery or medicine to:-

- Decide which patients need what sort of treatment and where such facilities are available:- Calcutta, Vellore, Gauhati or Delhi. However, referrals to Delhi are made on the command of His Majesty the King only.
- Justify why referrals have to be made in context of the terms of reference provided in the referral guidelines.
- Review referral guidelines from time to time and make necessary amendments.
- Provide feedback to the Department of Medical Services about the status of the treatment centers in India in terms of quality care provided to patients referred, by visiting the treatment centers once every two years.
- Review the outcome of the treatment of referred patients.
- Decide whether patients follow-up.
- Similarly, the Referral Committee does not recommend the referral of following cases for medical treatment to India.
- Terminal cases that require palliative care such as advanced disseminated cancers and multi-organ failure.
- Patients with irreversible brain damage whose treatment is not possible or whose expected outcome is poor.
- Multiple valvular diseases in patients aged above 65 years old.
- Organ transplant, except kidney transplant cases whose age is below 65 years.
- Cosmetic surgeries that are of no functional benefit.

- Disease for which the treatment is in the experimental stage and its efficacy is yet to be established. (Patient Referral Guidelines, MOH, 2003)

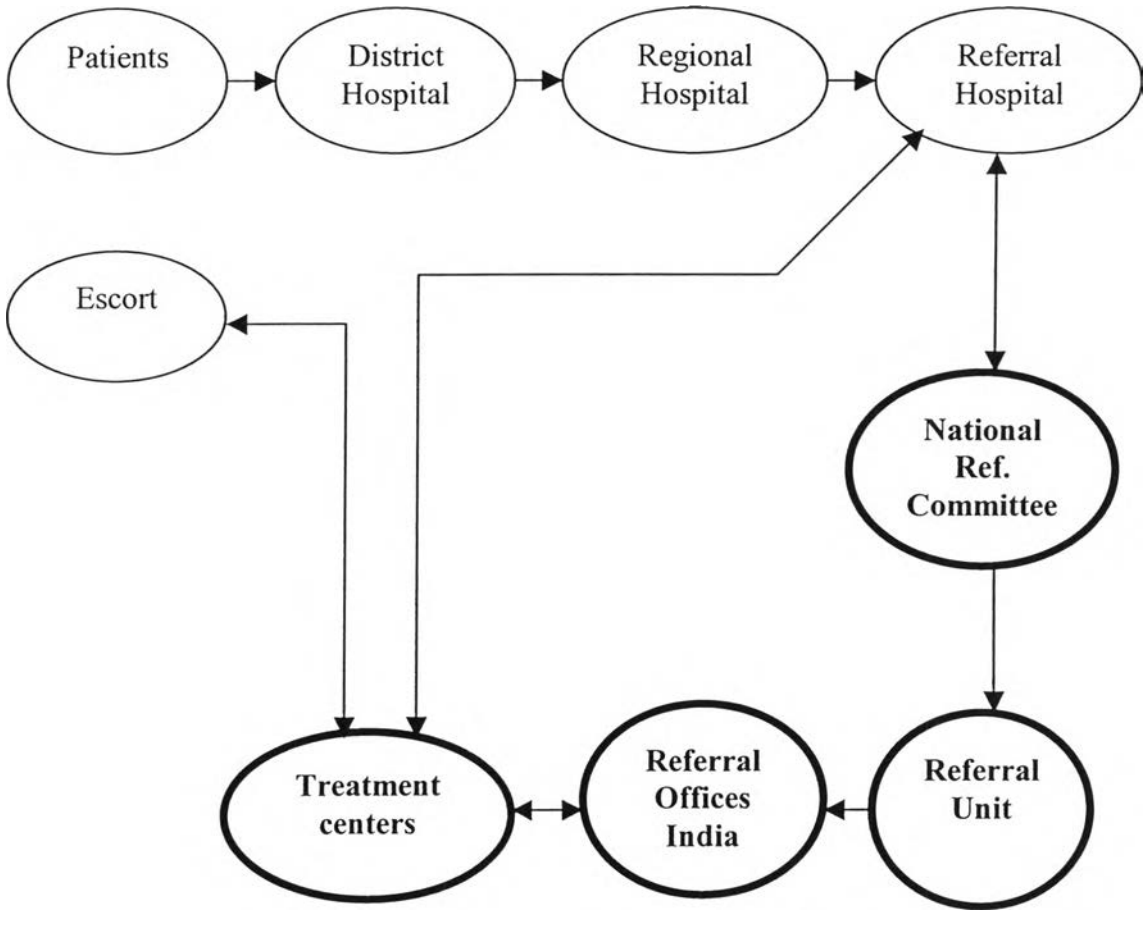

Figure 1.2: Flow Chart on the Referral Procedure

Budget allocations for referred case is allocated by the Department of Budget and Accounts, Ministry of Finance based on the previous year expenditure. The JDWNRH is obliged to submit detailed estimations with justifications for requirement of funds prior to commencement of each financial year. In case there is a shortage of funds during the fiscal year, a supplementary budget is sought from the Department of

Budget and Accounts and if the Royal Government is unable to provide extra funding the referrals are postponed for cases that can wait till the next financial year. The shortage of fund normally occurs during May and June of the financial year. However emergency cases continue to be referred to India for treatment and are billed on credit by the centers providing treatment as per the memorandum of understanding with Royal Government. A patient who is referred to India is entitled for travel provision such as journey fare and per diem at Nu 100/- (one hundred) per day per person and an escort for adult and both parents for children below four years. Per diem and transport fare are also paid to escorts. Further, the entire hospitalization and treatment expenditure is directly settled with the treatment centers by the Welfare Officers stationed at Calcutta and Vellore, India. Treatment expenditure at Gauhati is settled by the Jigme Dorji Wangchuck National Referral Hospital, Thimphu. Similarly, medical expenditure at Delhi is settled by the Royal Bhutanese Embassy with reimbursement made from the Jigme Dorji Wangchuck National Referral Hospital, Thimphu.

The duties of Welfare Officers are to receive patients and arrange treatment as per instruction received from the JDWNRH, issued through office orders. The travel provision for any citizen who is referred outside the country depends solely upon the nature of illness for which he/ she is referred. Evacuation of cases by air or land is based on the severity of illness. Cases evacuated by air are those cases that are either unconscious or stretcher bound or psychiatric cases admitted in the Referral Hospital. Return journey is strictly by land, but in case a terminal patient or a deceased patient he/ she is permitted to be repatriated by air on recommendation of the treating

physician for the terminal cases and on recommendation of Welfare Officer for the deceased.

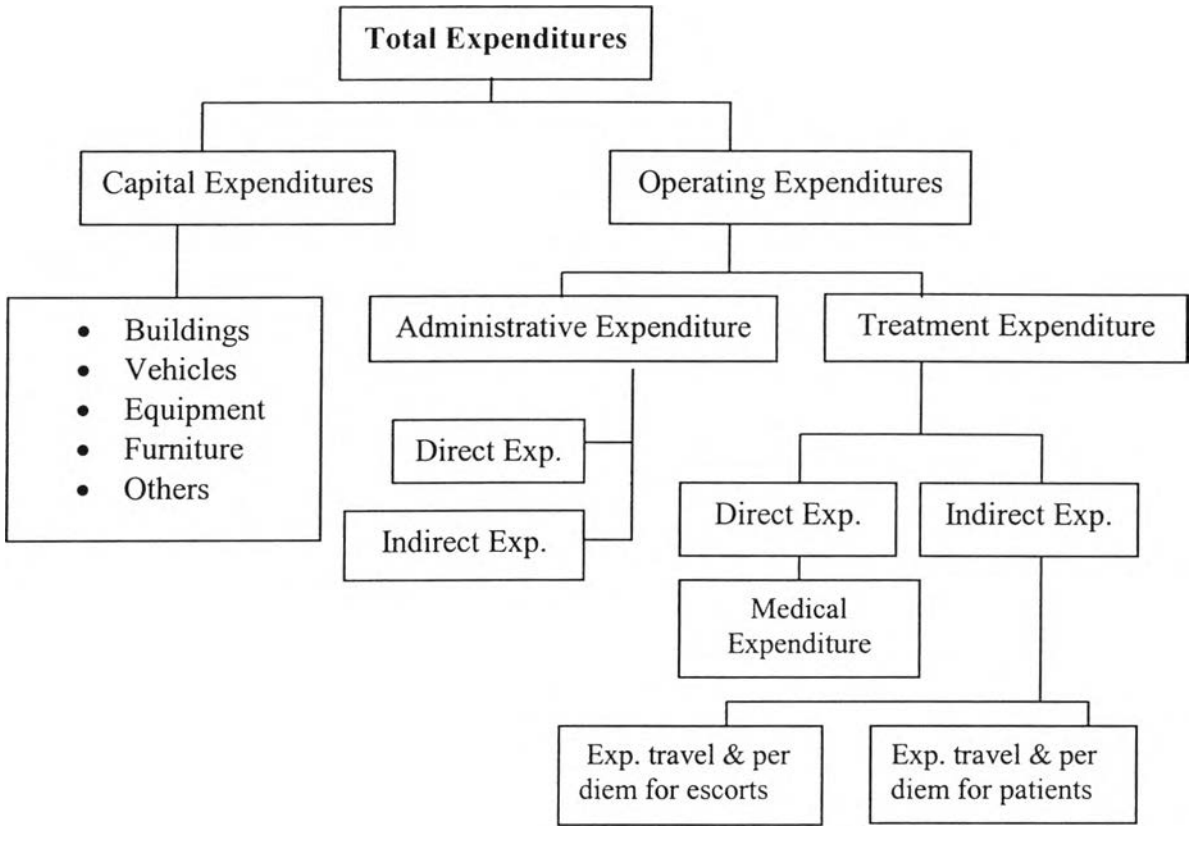

Figure 1.3: Administrative Structure

Total expenditures refer both capital and operating expenses incurred while providing treatment to patients in a financial year. Capital expenditures include expenses on building, vehicles, equipment, furniture and others. Operating expenditures are expenses on administration and treatment. Direct administrative expenditure referrers to welfare officers' salary, rent, utilities, transport and others. Indirect administrative expenditure refers to partial salary of medical referral committee and others at the JDWNRH. Direct treatment expenditure refers to medical expenditure incurred in the treatment centers, whereas indirect expenditure includes travel and per

diem paid to patients and escorts. Records on these expenditures are maintained for accounting purpose only and no data on monitoring and evaluation with criteria are systematically recorded.

Of late, the Royal Government has been facing pressure to control health care expenditure like other countries in the world. This is basically due to the free health services policy, the increasing level of health awareness in the general population and also increased monitoring and surveillance by health workers in detecting cases that require outside care to India. (MOH, Medical Services Department, 2001, 2002, 2003 & 2004)

Access to high quality care that is technically possible for all people is likely exceeding the level of costs sustainable for the Bhutanese Economy in the long run. Bhutan with an approximate population of 700,000 (seven hundred thousand) depends for 40% on assistance for its developmental activities from outside donors. It spent 7% of GDP on Health Sector costs and 20% of these costs were used for free referral care in India during 8th Five Year, 1998 to 2002. (8th National 5 Year Plan Bhutan, 2002) This trend of increase in both, expenditure and referrals is a serious concern to the Royal Government and calls for means of controlling it (MOH, Department of Medical Services, 2001, 2002, and 2003). The only hospital that is involved in providing certain tertiary care services to some extent in the country is the Jigme Dorji Wangchuck National Referral Hospital at Thimhu. A range of services and medical specialists are available in this hospital and it is the largest treatment center of the country. JDWNRH provides 30% of all out patient care, 26% of all inpatients of the total patient treated in

the country and also takes care of all tertiary care referral services. There are presently 29 hospitals, 163 Basic Health Units and 440 Out Reach Clinics (Annual Health Bulletin, MOH, Bhutan, 2001). Patients requiring care in India are initially referred to JDWNRH hospital form the Districts. The patients referred form the periphery are re-examined by the physicians and the diagnosis confirmed before being referred to India for treatment. Despite the check and balance being introduced to reduce the referral to India, the trend in expenditure and number has been increasing each year. This is due to the fact that a Bhutanese citizen has every right to ask for health care services to India if this service is not available in Bhutan (MOH, Referral Guidelines, Bhutan, 2003). Health care expenditures in Bhutan are no exception, compared to the international trend, since health care services are consuming 7% of the Gross Domestic Product and is purely funded by the Royal Government. This means that questions on sustainability may be raised if the expenditure continues to increase at the present rate.

Therefore, there is a need to provide information to decision makers who want to contain health care expenditure for sustaining future services. Any decision taken will have an impact on the health of individuals and the population as a whole.

This study was designed to provide policy makers and care providers with basic information as what has been the expenditure, what was the past trend and what are the broad outcomes of free referred care in India. Thus the study poses following evaluation questions.

1.2 Evaluation Questions

1.2.1 What are the Expenditures and past Trend for Referred Health Care in India?

1.2.2 What is the Outcome of Referred Health Care in India?

1.2.3 What is the Effectiveness of Referred Health Care in India

1.3 Objectives of the Study

1.3.1 General Objectives

To provide information on the expenditure for free referred care to India to policy makers and care providers in Bhutan.

1.3.2 Specific Objectives

i. To describe expenditures of health care referred to India.

ii. To describe outcome of health care referred to India.

iii. To describe effectiveness of health care referred to India.

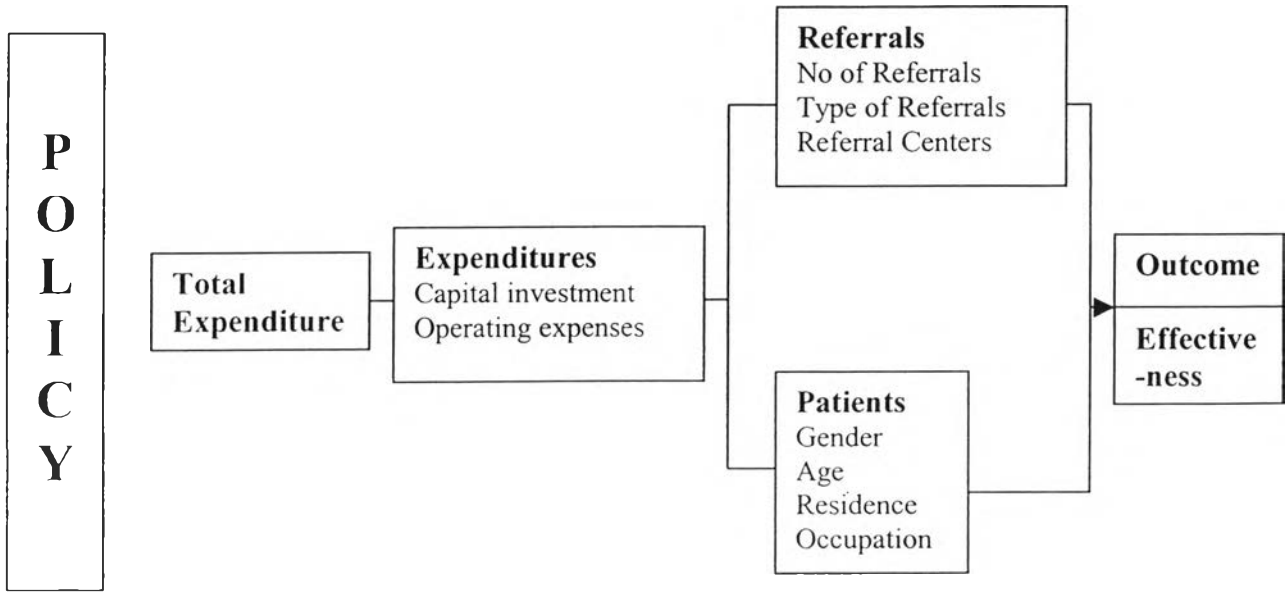

Figure1.4: Conceptual Framework of the Analysis

1.4 Scope of the Study

Based on available secondary data this study is limited to a descriptive analysis of expenditure and past trend on health care referred to India for the fiscal years 1999-2004.

1.5 Definitions of Variables Employed in the Study

Royal Government of Bhutan, free health care policy is referral of patients to Kalkota, Vellore, Gauhati and Delhi in India for which specialized services are not available in Bhutan and screened by a Medical Referral Committee before recommending treatment outside the country.

Health Care is defined as any indoor or outdoor specialized treatment of patients at Kalkota, Vellore, Gauhati and Delhi in India.

Referrals are number of referrals, type of referrals and referral centers in India.

Expenditures refer to both capital and operating expenditures invested in treatment of the patients in India and Bhutan.

Patient refers to gender, age, residence and occupation of any Bhutanese who goes for treatment to India.

Total expenditure is defined as aggregated expenses in rupees or ngultrum incurred for free care treatment at Calcutta, Vellore, Gauhati and Delhi including

capital investment and operating expenditures such as direct and indirect administrative and treatment expenditures.

Past trend refers to annual number of patients referred for free care services and related expenditures by center, by medical specialty and by demographic factors during the fiscal years July 1999 to June 2004

Outcome is broadly stated as (1) recovered, (2) improved, (3) status quo, (4) deteriorated and (5) death as defined below by a team of medical experts of Jigme Dorji Wangchuck National Referral Hospital, Thimphu.

Recovered: A referred patient with a well-defined disease condition who returned free of the disease and has regained his/her full functional aspects following medical management at the referral center.

Improved: A referred patient with a disease and defined pathology, following treatment at a referral center who shows partial or complete removal of pathology and has regained some previously lost functional capacity, but in absence of complete recovery.

Status quo: A referred patient who does not show improvement in function or disease condition following treatment at the referral center.

Deteriorated: A referred patient whose condition or functional condition worsens following initiation of treatment at the referral center.

Death: A referred patient who died during the treatment at the referral center.

Outcome standard: If 80% of the patients fall in the categories of recovered or improved it is stated that the investment made by the Royal Government was fruitful, as defined by the team of medical experts working at Jigme Dorji Wangchuck National Referral Hospital.

1.6 Key Words

Health care services, referrals, Bhutan, policy, expenditure analysis, effectiveness and treatment outcomes

1.7 Expected Benefits

It is expected that this study will be able to inform policy makers on expenditures, trends, outcomes and effectiveness of free health care referrals to India for five fiscal years commencing from July 1999 to June 2004.

To assist Hospital Administrators and Clinicians at Jigme Dorji Wangchuck National Referral Hospital in the efficient use of scarce resources in providing free health care services to patients.

To provide recommendations on strategic options as well as provide recommendations for both data recording and future studies.