CHAPTER V

DISCUSION AND CONCLUSIONS

Based on the findings, this chapter presents the discussion, conclusions and recommendations of this study within the context of the research questions. This study was a retrospective descriptive analysis of expenditure for health care referred to India, conducted at the Jigme Dorji Wangchuck National Referral Hospital.

The study used available records and data and, therefore, faced certain limitations. For example no records were available on capital investment or depreciation of investment cost for fixed assets and no detailed data on expenditure ie utilities, stationery, transport, salary and other benefits. There was no monthly or quarterly financial data available. There were also no details on treatment, hospitalization, drugs, inpatients and outpatients. Similarly no records were maintained on treatment outcomes and no effectiveness standard was pre defined and the cases were classified by crude medical specialties instead of diagnosis. The study therefore had to be limited to operating expenditure incurred by the Hospital in catering care in India for a period of 5 years commencing form July 1999 to June 2004. Operating expenditure incurred saw a total of 3,020 patients referred at an expenditure of Nu 274.027 million. Other data, did not offer sufficient details to develop more in-depth analysis, such as patient's demographic characteristics as well as medical details. Discussion on methods to define outcomes and effectiveness was done in consultation

with a medical team in Bhutan who represented a large chunk of patients and had experience on treatment outcomes and effectiveness. It is acknowledged, that outcomes and effectiveness were classified into very broadly defined categories, solely for the purpose of this study. There is no literature to support such classification or the arbitrary standard of 80% as a targeted cumulative outcome (i.e recovered or improved status) as a good investment. However the literature (Japan, MHLW, 2004) simply states that criteria could be set by a panel of three medical experts, if no standards are available. Similarly, broad classification into medical specialties was solely designed, based on available data for policy makers and planners and not for medical purposes. It is also recognized that trend in expenditure only represents "past expenditure" showing a trend during the past 5 years and not a projected future.

The study at this juncture is unable to tell which center is more effective in terms of outcomes. This is due lack of diagnosis specifics and lack of detailed study data to substantiate these differences.

Treatment outcomes and effectiveness could not be analyzed for the entire period of 5 years as the recorded diagnoses were not always reliable. This mainly occurred due to untrained non- medical personnel handling medical records in the past.

Other studies have shown that calculation of expenditure is often done for over a period of ten years. The expenditure analysis in this study is done for five years only, as no data were maintained for more than five years.

No assessment of the outcomes and effectiveness for patients referred to Delhi and Gauhati could be made due to very limited numbers, making a comparison not meaningful.

The operating expenditures and number of referrals for care to India over past five years have been on constant rise posing problems for future sustainability. This finding is consistent with overall increasing health care cost worldwide (Japan, MHLW,2004).

The medical specialty with a large number of patients happened to consume the maximum expenditure over the five years followed by surgery and pediatrics.The intention to carryout a cost effectiveness analysis could not be materialized since retrospective data were too inadequate. It is realized such study requires a pre determined goal so that the data are recorded and collected on an ongoing basis to meet the set goal.

The study revealed that more and more patients were referred to Kalkota each year. This could be because the center is nearer to Bhutan and is more convenient for patients to travel to and avail timely and adequate treatment. However, Vellore continued to receive patients who required sophisticated treatment like renal transplant, heart surgery and hip joint replacement.

The cumulative outcomes of recovered or, improved appeared to remain at 86.1% of the standard set for all specialties except gynaecology that was at 77.8%. This

could be because more of cancer patients were referred by gynaecology whose outcomes were poor. Similarly the effectiveness of treatment outcomes (standard set at 80%) also remained over 100% for all medical specialties except gynaecology at 97.2%. This raises the question of whether the outcome standard was set too low?

5.1 Recommendations

The medical records lacked detail information on patients' medical history, treatment given, treatment outcomes and international classifications of diagnosis. The financial records also lacked breakdown by budget lines for categories such as medical and travel expenditures. Further capital investment and depreciation were not available at the time of collection of data. Although it is commonly accepted that record keeping related to health care services referred to India should support (1) medical case management, (2) financial accountability within the RGOB and (3) accountability and transparency on decisions made by the Medical Referral Committee; record keeping should also fully support monitoring and evaluation of these medical referrals. Therefore, it is recommended that a consultative team of medical, health economics, accounting and information technology experts review the current recording systems and suggest on improvements to be made, so that future monitoring and evaluation efforts are better facilitated.

The findings did not allow a detailed analysis, however it is clear that there is an increasing trend for health care service referrals to India in the number of referrals, the overall expenditure as well as the average expenditure per case.

Medical follow-up, in Bhutan, of referred cases proved to be problematic. Referral for health care services to India all undergo screening with scrutiny, however follow-up of these referrals is often overlooked. Enforcement mechanisms need to be developed to ensure careful follow-up of referral cases not only to ensure proper medical management but also allowing proper evaluation of treatment outcomes.

Although in general the treatment outcome for these referrals seem to be satisfactory (exceeding 80%), there are for various specialties up to 20% unsatisfactory outcomes, which could eventually be reduced by a more thoroughly medical screening prior to referral. Similarly treatment effectiveness remained over 100% for all medical specialties except for gynecology at 97.2%.

It might be more cost effective for certain medical problems to organize periodically treatment camps in Thimpu with Indian medical experts.

Further analysis may allow identification of certain cases within medical specialties that could be taken care of in Bhutan over time, given it would be feasible, desirable and sustainable to invest in medical human resources. For example dermatology, dentistry and psychiatry could be specialties that would justify local capacity building. However, even within the "medical cases" there could be sub-specialties that offer justification for local capacity building.

Provided that required data become available following future studies might be considered:

Further assessment of existing outcomes that are more or less than 20%. Further assessment of effectiveness of health care services that appeared quite high in this study.

Cost Effectiveness Analysis for referred care to India with pre determined goals. Specific analysis of expenditure within specialties on accepted classifications of the medical diagnosis.