Chapter 5

Design for contracting out

From the discussed problems of THC it is obvious that under utilization of IPD is the main problem of health care delivery system and that hampers the objectives of National health goal. It is also clear that people like to use private care rather that public care. Therefore, if public provider can arrange private provider in its own capacity then hopefully the situation will changed and under utilization problem to some extent removed. On this ground the study identified **contracting hour** as a remedial measure for under utilization of Thana Health Complex's inpatient department. As there is no social security or other type of insurance, the contracting arrangement will not be the usual contracting out of providing care by private providers and financing by public funds. The study intended to make an appropriate design for contracting out that will be feasible in Bangladeshi context.

The study has proposed two types of models of contracting out for Cataract surgery after situational analysis of Cataract care in Bangladesh. The designs for contracting out are sketched considering the real situation of Cataract care. Under two heading the models of contracting out can be described. One is **Purchasing model** and another is **Leasing model**. Figure 5.1 shows the purchasing model and figure 5.2 shows the leasing model. Detail discussion is done in following sections according to headings:

5.1 Types of models
5.2 Required information for model designing
5.3 Design of the models
5.4 compare and contrast between two models

5.1 Types of models

5.1.1 Purchasing model

In this study the purchasing model is described as process of contracting out between THC and private eye surgeons of the locality for doing surgical treatment of Cataract patients at THC facilities. That means the provider of care is private but management and part of financing by public (THC) and Part of finance by the patients themselves. Here the public management will first buy or purchase the service from private sector and will pay the private provider for given service according to agreement and that's why it is named " **purchasing model**".

5.1.2 Leasing model

In this model, public (THC) will give its facilities of Operation Theater for lease to private providers or NGOs to perform the surgical procedure for Cataract patients. In that case the public will responsible for maintaining its character by proper agreement and monitoring that NGOs or private providers will not distort the public character of THC. The public has no responsibilities for financial arrangement between doctors and patients. Therefore, the role of THC will change in that case from providing care to monitoring care.

5.2 Required information for model designing

Before preparing any action it need consider carefully some of the important information. To make an efficient design the study has to know the following information:

5.2.1 information for purchasing model

i) information about patients
ii) information about contractor or provider
iii) information about additional cost
iv) information about potential benefit

Information about patients

To know the information about patients the first question is how to collect data about patient or how patient will come to THC for service. Most of the Cataract patients are elderly and some of them have no good support. Therefore, to provide them proper care it is necessary to know, total number of Cataract patient within a THC and their family background. Are they able to pay or not is the important issue. Among the total number of patient how many are really unable to pay for treatment. According to economic status they can divide in to four groups, rich, middle class, poor and very poor. But the question is how to inform them about new service? Who will sent them at THC for Cataract surgery? Another question is who will pay for the poor who are not able to pay? What will be the role of THC in that case? Their distance from THC is another question. How much distance are they able to travel? Table 5.1 shows the information indicators for Cataract patients that can be collected for purchasing model. Example of record form for Cataract patients is placed in Appendix (Table A.10).

Table 5.1 Example of collecting information about patients

Indicator	Data source	Method
Prevalence rate of Cataract patient 1000 population/year	Bangladesh Bureau of Statistics	Review Data Sheet
No. of reported case/ year at particular THC	Hospital records	Review record
No of reported case at private doctors with in locality(particular THC)	i)Private providers record ii)Household	Survey
No of unreported case in the locality (particular THC)	Household	Survey Questionnaire
Ability to pay per 1000 case(particular THC)	Household	Survey Questionnaire

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From the above table it can say that to design for contracting out for Cataract patient it is very important to collecting data by survey with in household and private providers of the particular THC. Outpatient department's record of THC is also an important source of information collection.

Information about provider

For Cataract surgery eye specialist is needed but it is not necessarily that they should be very high ranking. Medium ranking eye specialist is enough to perform the jobs. But to make contract with private eye surgeon some information are necessary to know that how many eye specialists are in the locality and out of them how many are able to come in THC. How many operations he/she can do in a day? What is the preferable time for the contractor, office hour or after hour? Is the provider full time private practitioner or part time? What is the expected remuneration for the provider? How much does the provider earn if he/she operate in a private clinic or own provision? What is his/her role to serve the poor who do not have ability to pay? To get all these information the provider can fill questionnaire form. THC can maintain a separate record form (Appendix, Table A.11 and Table A.12).

Information about additional cost

Some facilities are already there in THC. There is an Operation Theater with equipment. But for Cataract surgery some additional equipment are needed and some of them will go in heading of capital cost and some will go for recurrent cost. Extra administrative cost is mandatory. Extra cost for staff should be considered. Table 5.2 will give the idea for additional cost.

Information about potential benefit

If contracting arrangement will settle what will the potential benefit is the vital question. Efficiency of THC will improve or not, under utilization problem will be solved or

reduced or not. Productivity of THC will improve or not. The patients will be benefited or not. Accessibility, quality of care will improve or not. Therefore, survey and questionnaire is needed to monitor the whole system and get information about potential benefit. Table 5.3 provides how to get information about potential benefit.

Table 5.2 Expected additional cost items for contracting arrangement.

Capital cost	Recurrent cost
Microscope	Intra-ocular lens & others
Slit lamp	Personnel- Doctor & staff payment
	Supplies (Drugs & anesthesia)
	Utilities (electricity, water)
	Administration Meeting, Telecommunication, Survey,Questionnaire

Table 5.3 Information about potential benefit after contracting out

Benefit indicator	Data source	Method
THC Benefit a) Increase accessibility b) Increase productivity c) IPD utilization rate d) Increase personnel involvement e) Increase economics of scale f) Increase competition g) Increase quality of care	a) Particular THC record b) Household c) Personnel d) Patients	a) Review of record sheet of THC b) Survey c) Questionnaire d) Interview
Patient's benefit a) Reduce treatment cost b) Reduce travel cost c) Reduce opportunity cost	Patients	Interviewing both type of patients who operated in private clinic and who operated in THC

5.2.2 Required information about leasing model

According to definition of leasing model it deals with those type of providers who are able to take lease the Operation Theater of THC and to provide care with their own responsibilities. Therefore, following information are required to design leasing model.

i) Information about private providers and/or NGOs with in locality

ii) Market price for leasing Operation Theater

iii) Additional cost for leasing

iv) Potential benefit after leasing

Information about private providers with in locality

In Bangladeshi context at Thana level very small number of private providers has capability to take lease Operation Theater for time being because most of the provider also not rich and they are risk averse. But jointly as one group some private providers can do this. NGOs has regular flow of fund by donor agency therefore; NGOs can take lease the Operation Theater of THC. However, Table 5.4 shows the type of information with source of data regarding the providers.

Income or revenue is important to know before going to leasing process for avoiding fraught and ensuring regular earning by THC. Besides this, their type of service is also important to know to understand their interest for taking lease. In reality at a small Thana this model will not work at all.

Information about Market price for leasing

This information can be obtained from survey in big cities where this system is actually working. In Bangladesh there are very few example of leasing system all over the country and it is a new experimental concept. Therefore, market price can be estimated from private clinic Operation Theater charge for operating patient. But private clinics and

hospitals are very tight to flash their real charge due to income tax. Income tax office can help to get some information

Table 5.4 Information about providers for leasing model

Indicator	Source of Data	Method
No. of private provider with in locality	Thana Administrative Office	Review of Thana Administrative Office record book
No. of NGO with in locality	Thana Administrative Office	Review of Thana Administrative Office record book
Annual income of private providers	Income Tax Office	Reviewing income tax office records
Revenue earned/year by NGO	Bangladesh NGO Bureau	Reviewing Record
Type of service given by private providers	Private providers	Survey and interviewing
Type of service given by NGOs	NGO Office	Survey

Information about additional cost for leasing by tenants

Here the additional cost can be divided in to two broad heading: 1) Fixed cost and 2) Variable cost. The fixed cost by the tenant's is to take rent the Operation Theater of THC and renting the equipment also. The variable cost accounts for mainly administrative cost, maintenance cost, treatment cost, and supplies, utilities and personnel cost. Table 5.5 enumerates the type of additional cost for leasing. It is obvious that if tenant's income is more from providing care, fixed cost will be reduced gradually.

Table 5.5 Additional cost for leasing by tenants

Fixed cost	Source of Data	Variable cost	Source of Data
Space (O.T.)	THC record	Administrative cost	Tenant's records
Equipment	THC record	Treatment cost Lens, Drugs,	"
		Supplies	"
		Utilities	"

Information about potential benefit after leasing

The intention behind leasing or the rationale behind leasing is to generate revenue and best use of scare resource like expensive Operation Theater of THC. Therefore, potential benefit after leasing deals with increase productivity because the tenants will try to maximize their activities to get profit, increase revenue as well as better quality of care as leasing leads to competition among providers to get lease from THC. Table 5.6 shows the benefit indicator and source of data for Leasing model.

But potential benefit in terms of equity, efficiency, quality of care and patient's satisfaction should consider cautiously. Equity will consider here in terms of accessibility and getting care. Efficiency deals with increase utilization rate, increase number of operation, and increase productivity and staff involvement. Leasing also leads to competition among providers to get lease if equity and efficiency will achieved satisfactorily.

Table 5.6 Potential benefit after leasing for Cataract surgery

Benefit indicator	Source of Data	Method
Increase % of productivity i)No of case operated/ month iv) Bed occupancy rate Iii) Increase accessibility	Tenant's records. NGO or private provider	i) Reviewing record book
Patient's satisfaction (Quality of care)	Patient	Interviewing/ questionnaire
Staff's satisfaction (better earning from over time)	Staff	Interviewing/ questionnaire

5.3 Designs for Contracting out at THC for Cataract surgery

The designs for contracting out at THC for Cataract surgery either **Purchasing model** or **Leasing model** need to keep in mind the information regarding patients and providers and additional cost. However, the study describes the design for purchasing model first and then leasing model.

5.3.1 Description of Purchasing model

In this model THC will buy service from private provider and will give them payment per case basis. THC will select the patient by self; patient will participate in recurrent cost.

Patient selection-as almost all the Cataract patients are elderly, and some of them have not good support in terms of money and relatives. They do not travel more as transportation facilities also limited. Therefore it is necessary to select the patients prior to operation. In THC village health workers works at grass root level and they know the

local people. It is easy to collect information about Cataract patient from them. They are also able to register name of the patients. Firstly, name of all patients can be listed gradually, secondly according to number of patients "first list first serve basis" they will selected for operation at least 5 patient per day. Patients do not need to come twice in THC. Health workers can convey the massage to them that when they are going to operate. Additional two volunteers need to employ for that purpose that they will conduct the system accurately. From village masque (religious meeting place for villagers) by the religious leader the massage can convey to the rural people that the process is going on. At rural level religious leaders has special importance[2]. To establish any good and seamless procedure community involvement is mandatory.

Another important way of patient involvement is **referral system**. Firstly, From OPD of THC where first contact of patient begins can be referred to IPD or proper channel if Cataract is diagnosed. Secondly, private doctors can **refer** the Cataract patients if they diagnose their personal provision. Therefore, a network between private providers and THC should establish to operate the contracting activities. For referring patients the private providers can get some incentives it can be from small percentage of patient's charge.

Doctor selection-in Bangladesh like other developing countries specialist doctors reside in cities and do private practice after-hour though publicly-employed. At Thana level there might not be any eye specialist but every district has more than one-eye specialists some of them travel Thana level to avoid competition and better earning do. But at Thana level they serve only out patient care. From reviewed situation it is clear that those doctors who used to come at Thana level are willing to do surgical treatment at government facilities, as they do not have own equipment. Their charge is relatively cheaper than famous surgeon is. Not necessarily the surgeon need to come everyday at THC but according to list of patients the doctor can come once or twice in a week as bed

[2] In Thailand Monks (priest) do these types of social activities. In health sector they have many

capacity of THC is limited. Everyday operation will make a crisis for bed as other than eye, some patients can come. Again THC management needs to provide or to maintain the relation between THC and the contractor doctor about patient list and bed capacity through telecommunication or other means after that suitable schedule for surgical operation can be made. But the first condition is the doctor must be an eye specialist and willing to travel[3].

Agreement-for first time agreement can be made for short time and as per case basis. For post operative care no need for the same doctor's service. The doctor who is responsible for routine inpatient care can take care the eye patient also. This will also ensure the existing man power involvement but for any post operative complication the eye surgeon should take the responsibility for treating the patient appropriately. The doctor can come office hour or after-hour but the fee will be same for the doctor and patient but for other staff it can vary as over time. The agreement will encourage performing the operation during office hour. For other necessary staffs like nurse and word boy, during office hour they will not get any extra allowance as they are salary-paid but for after-hour they will also get fee per case basis.

Financial arrangement

Payment mechanism- per case method that means the doctor will get payment per case or per operation. Doctor will get 40% of total charge received from the patient. Other than this payment doctors will not get any extra allowance for travel or refreshment charge. But for those doctors who will referrer patients from private provision to THC will get incentives 5% (estimated) of patient charge.

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contribution.

[3] Many doctors in Bangladesh even travel one whole day for next two days earning from big cities to small cities. When people know, doctor from big cities available, they show extra interest to meet the doctor.

Purchasing model design

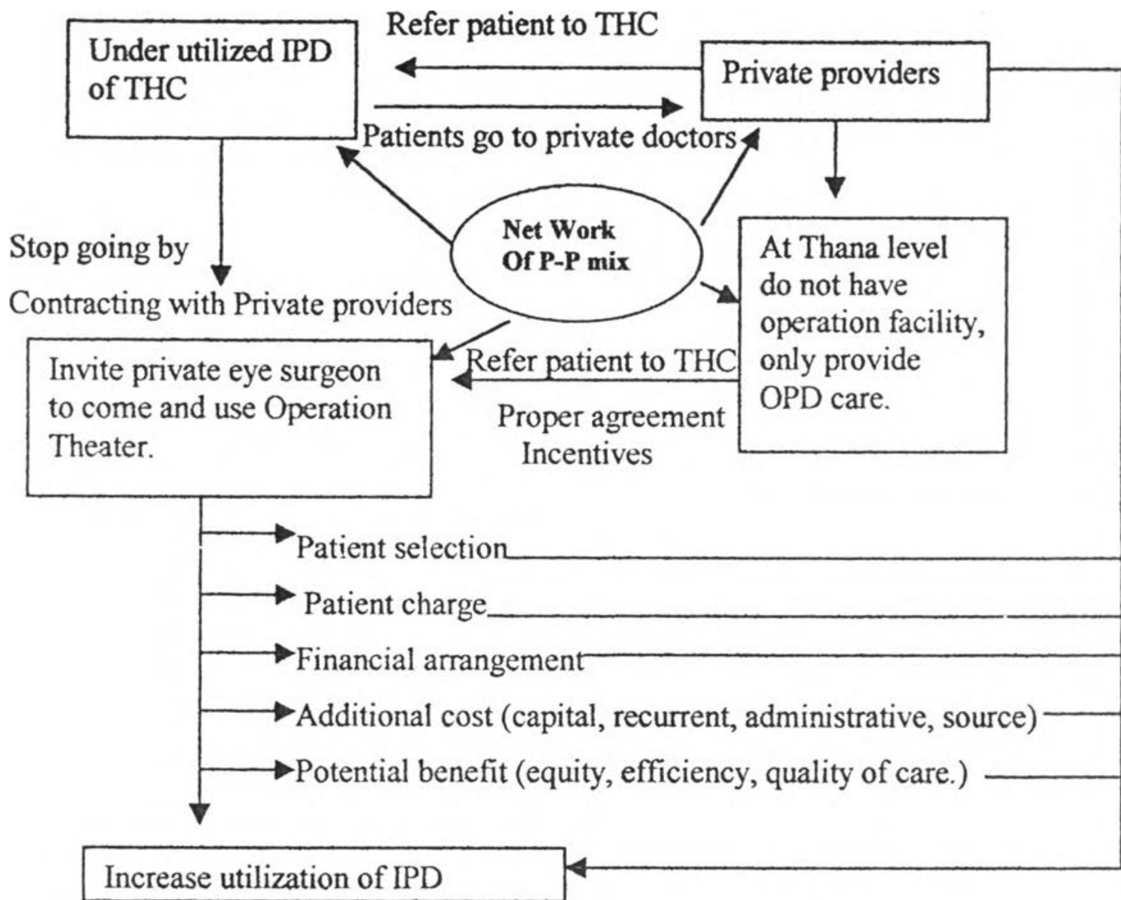

Figure 5.1 Design of **purchasing model**

Patient's charge- patient will be charged for only recurrent cost or operating cost including lens and spectacles. Postoperative bed will free of charge. Drugs and food will be provided by the THC. As post operative bed includes food and drugs. Capital cost should be excluded and that should be provided by developmental budget of MOH. Patient will not bear any extra fee for after-hour as they are available during office hour and it is the agreement between THC and doctor. Estimated patient's charge is lesser than any other private clinics because most of the private clinics are run by famous eye surgeons who charge more than 1000 Taka per operation and usually they use more

expensive equipment for profit maximization. Therefore, operating or recurrent cost is higher in private clinic.

Staff payment-no extra staff is needed. Existing staff pattern can do the service as IPD and Operation Theater is under utilized. During office time staff should not be get any extra allowance as they are salary-paid by government and usually they sit idle but for after-hour they should get over time allowance per case that could be 10% for nurse and 5% for other staff from patients charge. Therefore, during office hour operation procedure should be encouraged, as THC has to pay more in after-hour.

Patient who unable to pay- it should handle very carefully. The THC has some fund to provide other type of surgical care and gynecological care but utilization rate is low that means some budget is unused. This money can be used for those who unable to pay. In equity issue it is important to provide care all therefore alternative should be thought. 2%-5% of patient's charge can be saved per case who able to pay and can be used for them who unable to pay and the providers should motivate to treat one patient free out of five patient per day.

Additional cost- it can be divide capital cost and recurrent cost and administrative cost. For capital cost one microscope and one slit lamp for doing operation are needed other items already exist in Operation Theater of THC. For recurrent cost including lens and spectacles and personnel fee following items are necessary (Table 5.7). Postoperative bed should provide free as the objective is to improve utilization of IPD up to full capacity. For administrative cost, it includes the additional cost for managing the total process. One manager is necessary to make list for patient and to make time schedule for operation and keep contact with the contractor doctor. To volunteers for door visit to inform patient about the service initially, later on patient's relative can do this task after adaptation of new system. Though administrative costs are type of recurrent cost but for easy calculation it is taken into different heading as the manager and volunteers will be salary-

paid per month. It is also possible that one staff with in existing structure will do managerial jobs who already salary-paid but will get over time for extra jobs and that will be more enthusiastic for the staff to get extra money.

Source of additional cost-from patient charge doctor's fee will cover. Lens and two or three necessary items will be paid by the patient. Rest of the fund will come from THC developmental budget that is provided by ministry of health. Therefore, it is necessary to reallocate government budget. Beside this each THC can try to collect some money in transparent manner from the richer part of the community as "disability remove project". Every locality has some richer people who can help the poorer part of the community.

Table 5.7 Estimated cost structure (inTaka) of Cataract surgery in THC after-hour

Capital cost (Taka)		Operating cost per operation	
Item	Value	Item	Value
• Microscope	150,000 (additional)	Intra-ocular lens[P]	800
• Slit lamp	50,000 (additional)	Suture[P]	100
Autoclave	50,000	Visco-elastic[P]	100
Operating table & others	100,000	Doctor	500
Over head light	50,000	Anaesthesia & other drugs	200
Air cooler	50,000	Nurse[*]	150
		Assistant nurse[*]	100
		Orderly[*]	50
		Miscellaneous	50
		Overhead cost	200
Total	450,000 Taka	Total	2250 Taka

Source- Estimated from current market price with out profit of THC.

[P] patient's charge
[P] same
[P] same
[*] During office hour this cost will be excluded.
[*] same

Potential benefit

- **Social benefit**-to reduce the number of eye disable is the key social benefit. It is obvious that if number of total disability reduced, social burden will be reduced not in economic ground but total health situation ground also. Besides this it will increase the productivity at national level as idle doctors and staffs has to work for contracting arrangement and increase economics of scale. Utilization of limited resources like hospital beds and Operation Theater will be maximized. Therefore, total efficiency of THC will increase. Social benefit can not be measured in money term that reduces family burden, community burden as well as national burden.

- **Patient's benefit**- in this type of contracting arrangement patient need to come once in THC for operation because health volunteers and managerial part will do the pre-operation procedure which set the time schedule for operation and register patient. Therefore, travel cost will be minimum and opportunity cost of accompanying any relative will be negligible. On the other hand free from disability has enormous social, familial and personal benefit. Estimated patient charge of course lesser than private clinics because for private clinic before operation patient first need to visit OPD to register and to get operation schedule and according to schedule the patient needs to go for operation.

- **Provider's benefit**-at Thana level poor setting of private surgeries (office) the providers sometime they get very few number of patients per day and not able to practice operative treatment due to lack of own facilities. If they get opportunity to practice operative treatment with good facilities of THC and get payment accordingly it will be an extra benefit for them and it will become extra source of income for them that helps to increase productivity and economics of scale of the provider. Quality of care will increase over all as the provider will work on their own interest other wise

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* same

contract may be terminated. To get some incentives for referring patients to THC will be enthusiastic for the providers.

- **THC benefit**-the objective of THC is to utilize its capacity at fullest extent, increase accessibility, administrative efficiency, allocative efficiency that is potential benefit will exceed additional cost as well as operational efficiency that best use of scare will be ensured. Accessibility of patients will increase for mentioned measure. Therefore, to improve the utilization by contracting out and to improve the problem of under utilization is the potential benefit. As a role player of utilizing the existing resources (both human and physical) contracting out increases the productivity of THC and increases the economics of scale. As a role player of reducing visual disability it maximize social welfare and efficiency of THC.

5.3.2 Description of Leasing Model

In this type of contracting out the Operation Theater of THC will give for lease to the private providers or NGOs who will perform the Cataract operation in THC premises. In that case post operative beds and drugs and other necessary things will be provided by the private providers or NGO. In that case some more extra information is needed along with same type of information stated before. This is an extreme solution to solve the problem of under utilization of THC as after leasing the public character of health care may be changed. THC can be given to the private provider or NGO for leasing to operate the whole process where government fails to perform its function. The possible design is drawn in figure 5.2

Leasing is not a good alternative in sense of welfare though there are some example of that in China and other country (WHO, 1990). In Bangladesh as monitoring and information system is very weak therefore, by leasing public character of THC might be distorted by extra charging to the patient. In that case quality of care might be better but accessibility of patients reduced but the role of THC can be changed to do the monitoring function and keep it character undistorted. As public provision is the last resort for poor therefore, Leasing model can serve those THC where government is by no means improve its efficiency.

Design for Leasing model

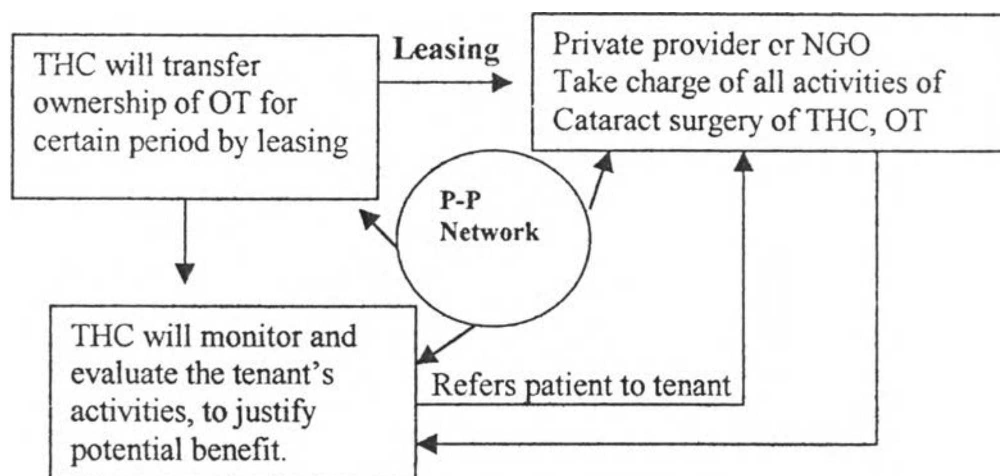

Figure 5.2-Design of leasing model.

5.4 compare and contrast between Purchasing model and Leasing model

To compare and contrast between Purchasing and Leasing model the key issues are management, financial arrangement, efficiency, equity and quality of care. Table 5.8 describes those things.

Table 5.8 compares and contrast between purchasing and leasing model

Purchasing model	**Leasing model**
1. Public management: THC will manage the whole procedure of contracting out.	1. Private management: THC will give lease the O.T and the tenant will do other procedures.
2.Total financial dealings by public regarding patient care and provider payment.	2. Except taking the lease money all financial dealings by the private providers or tenant.
3. THC (public) will incur some additional cost due to new capital cost and recurrent cost.	3.THC will get some revenue from leasing the O.T to private provider. Private provider has some fixed cost and variable cost.
4.More administrative efficiency, more productivity by public as THC will manage the whole procedure.	4. Public has no role in terms of efficiency as private provider will manage the whole procedure. Increase efficiency by private.
5. Patient will share part of recurrent cost.	5. Patient needs to pay more for treatment than purchasing model.
6. Quality of care-increase.	6. Quality of care-increase
7. P-P network can contribute better role in motivating patient and referring patient to THC.	7. P-P network can contribute same role like purchasing model.
8.THC role should not be changed in terms of delivering care.	8. THC role can be changed from delivering care to monitoring care.

As both the models are experimental and explorative the study thinks efficiency and quality of care for both models more or less similar but the question is about patient's charge. If the patient needs more charge in Leasing model than Purchasing model then it will affect their choice.