PART II –Chapter 1

Dissertation on "Comparative Study on Public and Private Healthcare Organizations in Haryana"

INTRODUCTION

This study deals with various aspects of service delivery in field of healthcare. It ranges from basics of management in hospitals, to operational indicators such as average OPD load and waiting time for registration or consultation to quality of services received by patients in various institutes such as a district hospital, private clinic and a private/corporate hospital.

The intention of this study is to highlight different working system in the given hospitals of Haryana, where establishment of standardization of quality of care is still to be achieved for the masses of country.

A brief overview of health industry in India :

The rural healthcare sector is on an upsurge. The Rural Health Survey Report 2009, released by the Ministry of Health, stated that during the last five years rural health sector has been added with around 15,000 health sub-centres and 28,000 nurses and midwives. A WHO report further states that the number of primary health centres have increased by 84 per cent, taking the number to 22, 370 as on Mar 2007. [2]

The Indian healthcare sector is expected to become a US$ 280 billion industry by 2020 with spending on health estimated to grow 14 per cent annually, according to a report by an industry body(1). "Healthcare has emerged as one of the most progressive and largest service sectors in India with an expected GDP spend of 8 per cent by 2012 from 5.5 per cent in 2009. It is believed to be the next big thing after IT and predicted to become a US$ 280 billion industry by 2020," the report said.

At present the sector is estimated to be around US$ 40 billion and will grow to US$ 78.6 billion by 2012 [2].

As per a study by an industry body and Ernst & Young, India would require another 1.75 million beds by the end of 2025. The public sector however is likely to contribute only

around 15-20 per cent of the required US$ 86 billion investment. The corporate India is therefore, leveraging on this business potential and various health care brands have started aggressive expansion in the country [2]. Some of the companies that plan to increase their footprints include Anil Ambani's Reliance Health, the Hindujas, Sahara Group, Emami, Apollo Tyres and the Panacea Group.

" Quality" remains a buzz word in today's world in near about everything around us, yet when we talk of healthcare, "quality" is a forte that is limited to private healthcare sectors such as Apollo, Fortis or Max, when primary health care provided by city and district hospitals and rural primary health centre's (PHCs). These hospitals provide treatment free of cost. Primary care is focused on immunization, prevention of malnutrition, pregnancy, child birth, postnatal care, and treatment of common illnesses, Government hospitals, some of which are among the best hospitals in India, provide treatment at taxpayer expense. Most essential drugs are offered free of charge in these hospitals. Government hospitals provide treatment either free or at minimal charges.[3] In-hospital treatment costs depend on financial condition of the patient and facilities utilized by him but are usually much less than the private sector. For instance, a patient is waived treatment costs if he is below poverty line. Another patient may seek for an air-conditioned room if he is willing to pay extra for it. However, the government sector is understaffed and underfinanced; poor services at state-run hospitals force many people to visit private medical practitioners. Since the public services and especially public health services, affect most of us, it is essential to find out the root causes of their deficiency and try to deal with them.

According to Dr. Shriniwas Kashalikar [8], the causes of degeneration of ***quality of public health services*** in public hospitals in India; is the prevalence of the two concepts on which these institutions work. These concepts are

1. Free medical care and
2. Economic dependence of these institutions on the government revenue and donations.

Free Medical Care

a) The free medical care gives rise to parasitism, beggarly tendency, meekness and irresponsibility towards personal and public health amongst the patients.
b) The free medical care creates a special and extremely favorable situation and golden opportunity for the powerful, rich and famous individuals to exploit the government revenue and tax payers' money.
c) The free medical care leads to zero returns and subsequent deterioration in the facilities given to patients and employees.
d) The free medical care associated with perpetual absence of returns leads to unjustifiably low salaries, delay in filling the vacancies, excessive working hours and duties, and delay in promotions.
e) This state of affairs demoralizes the sincere and dedicated employees and promotes irresponsibility, lethargy, absenteeism, corruption etc.

Economic Dependence Of These Institutions On The Government Revenue And Donations

a) The public hospitals are not self-sufficient and do not have any productive/commercial projects to support them. Naturally since there are no returns either from patients or from any other source, for what is spent, the public hospitals are always in loss.
b) This has lead to inadequate progress in terms of inadequate facilities, inadequate salaries and inadequate employment in terms of number of employees in almost every category, protracted duty hours, worsening working conditions, worsening of staying conditions for the employees and crowding of patients due to huge patients/employee ratio.
c) All these factors have lead to deterioration of the quality of medical care. In fact because of this a large number of lower middle class and even poor patients turn to private practitioners, consultants and hospitals.

This deterioration can be overcome by trying to make the public hospitals self-sufficient. For this, the concept of free medical care has to be replaced by more just system of payment. This would bring adequate revenue to ensure progress in terms of adequate facilities, adequate salaries, appropriate employment which could ensure normal duty hours, improvement in working conditions, improvement in staying conditions for the employees

and preventing excessive and many times [because the services are free] unnecessary crowding of patients.

One may raise the objection that this is difficult to implement in case of very poor, helpless, unsupported patients

Exceptions and a separate arrangement can be made for them. But in most other cases the problem can be overcome by making provision for payment through "services" or soft loans.

Another way to make the public hospitals self-sufficient is by buttressing them with productive / commercial projects. One can think of more innovative plans as well.

According to Crossby "Quality comes from **prevention"**. Vaccination is the way to prevent organizational disease. Prevention comes from training, discipline, example, leadership, and so forth"

Quality in healthcare industry had come into existence way before in 1860s when Florence Nightingale, A British nurse lay foundation of quality healthcare assurance programs, by advocating the need for a uniform system for collection and evaluation of hospital related statistics. It was her collection and evaluation of hospital related data that showed mortality rates varied quite significantly from one hospital to another. In 1914 in U.S., E.A. Codman studied results of healthcare with respect to quality and emphasized the issues, when examining the quality of care, such as accreditation of institutions, licensure and certification of providers. He created his own "End Result Hospital" in Boston, Massachusetts, 1911–1917 where errors in diagnosis and treatment were recorded for every patient, all patients were followed years after discharge to evaluate the end results of care, and all this was publicly reported in the hospital's annual report.[22]

Over the years many other people have contributed to the field of quality in healthcare. Such as according to **Donabedian** identified the need in healthcare to look at 3 key elements [9]

- STRUCTURE- Human, physical and financial **resources** such as building, staff, equipment and policies e.g. ward secretaries, discharge summary, requisite documents.
- PROCESS – Set of **activities** and the **discreet steps** such as procedure e.g. improvement in discharge procedure.
- OUTCOME – Occurs a result of a service or intervention. It looks at the **end result** of care and service e.g. Decreased LOS, increased patient satisfaction, decreased Morbidity & Mortality**{a}**

Yet the current practices are that there is no standardizations till 2011 for how much should be minimum waiting time etc. and thus discrepancies.
I would also like to highlight that though there has been an IPHS standard for infrastructural and manpower and minimum services that should be provided according to number of population, which lately has been corrected to according to population density. But still there is no data specifying "population density" to set up the required norms.

For the given study a private healthcare institution, a public healthcare organization and an unorganized private sector institute providing healthcare was to be selected for measuring and comparing operational /quality indicators. Importance of each of the indicators will be discussed latter.

The study is carried out in district 'Panchkula' of Haryana. It is a planned city of the state shares seamless border with Mohali district in Punjab. The prestigious Chandimandir Cantonment Headquarters of the Indian Army Western Command is also located in Panchkula city. There are five towns in the Panchkula district, Pinjore, Kalka, Barwala, Morni and Raipur Rani. Morni is the only Hill station in Haryana. The estimated population of Panchkula city, in 2006, was 200,000. Panchkula and Mohali (in Punjab) are two satellite cities of Chandigarh. These three cities are collectively known as Chandigarh tri city.

For the status of private healthcare scenario, **The Alchemist** [10], a renowned private sector 100 bedded hospital was chosen in the same district of Haryana where a district hospital that is 150 bedded is also there.

According to the management there- The Alchemist philosophy of 'Care, not just cure' attained a more humane form with the setting up of the Alchemist Multi-Specialty hospital, offering the best in health care.

Alchemist Hospital is a world class healthcare facility based in Panchkula, a major urban centre in Haryana. Built to international standards, the hospital prescribes and adheres to the most exacting and verifiable certifications. At the core of the Alchemist's mission is a belief that a patient needs attention. Hospital continuously works to simplify this complex process,

successfully. An indigenous operation, Alchemist Hospital has been the labour of love of some of the country's finest medicine men and women, making it an institution that not only aims to cure a patient but stand apart as a research centre engaged in finding cutting-edge cures.

This hospital is equipped with the finest instruments, scanners, operation theatres and machines. We have developed a pathological and imaging unit which is forever alert to find the most appropriate diagnosis and cure for the patient. A highly skilled operating theatre is backed by the most sterilized sub-systems leading to speedy recovery. The highly trained and experienced team of doctors works hard to find the most effective cure. More importantly they have formed a strong foundation consisting of thorough front-line professionals backed by an equally skilled support staff. Alchemist is designed to be a solution, a temple for hard work, positive results and healing

Alchemist's sense of aesthetics is directly connected with the cleanliness of an enclosed area. A multi-specialty hospital needs to be sterile 24/7. There cleaning staff works round the clock to maintain a spotless hospital. They also ensure a prescribed segregation of waste material so that an effective and ecologically friendly waste management system is followed. The high end equipment, OTs, Labs, they all need specialised cleaning attention. Hospitals often remind people of unpleasant things and places. It is strived to maintain a facility which works hard to ease the anxieties of people visiting it.

The **District hospital** in Panchkula, sector 6 is multispecialty hospital having a line of specialist and various staff to deal with heavy load of OPD. Patients come here not only from Panchkula but also adjoining blocks of Barwala, Pinjore, Rajpurrani and Morni. At a first glance we can definitely make out a congested environment due heavy rush of patients not only occupying the hospital beds but also the stretchers, wheelchairs. Patients are seen to be very cooperative and well aware of their non ability to pay hiked fees of private doctors, and thus compromising with such situations come easy. Doctors and nurses and rest all the staff is selected to state government, but the well aware people would not nullify possibilities of few, if not many to get jobs here through other means as well. Yet dedication of staff here cannot be ignored at all providing devoted and committed services to masses. Although

charts of how segregation of wastes is done for its disposal are displayed near most of dustbins.

Like most other government hospitals, it does not have any certification. Construction at one end of the building and overburdening rush of patient ignores factors of cleanliness

Most of the diagnostic tests and lately a separate wing of radiology department has also come into being.

These hospitals provide treatment free of cost. Primary care is focused on immunization, prevention of malnutrition, pregnancy, child birth, postnatal care, and treatment of common illnesses. Patients who receive specialized care or have complicated illnesses are referred to secondary (often located in district and taluk headquarters) and tertiary care hospitals (located in district and state headquarters or those that are teaching hospitals).

Chapter 2- PROBLEM STATEMENT

DESPITE THE BEST EFFORTS of doctors, nurses, and management there is lack of total patient satisfaction. In a district like Panchkula which is considered to be the most advanced town of Haryana state, there too is a log jam in providing quality of healthcare services .That 'causes' need to be studied, that too from the nearby places to observe the best practices and what can be changed for improvement in both the sectors.

- To measure and analyze the given measurable operational and quality indicators in a private hospital and public hospital individually
- To compare the output of the measured indicators from public and private healthcare sector so as explore the existing gap amongst both of them.
- To make possible practical recommendations for closing the existing gap.

REVIEW OF LITERATURE

An assessment of Indian health care reveals poor performance on the key dimensions of coverage, purchasing and delivery. "Despite India being the largest exporter of generics, most people have never seen a tablet," said Rajiv Gulati, director of India-China strategy at Eli Lilly. "Patients from the U.S. and the UK come to India for treatment, but approximately 70% of Indian patients have never seen a doctor."

But everything starts somewhere, and "despite the woefully inadequate infrastructure, the health care sector is growing at a compound annual growth rate of 15%, which is a good and sustainable growth rate due to the ever-widening gap between demand and supply," said Suneeta Reddy, finance director at Apollo Hospital Enterprises, a network of 41 hospitals with a combined 8,000 beds.

A lot of studies have been done in recent past on comparative study of public and private healthcare sector mainly outside India, that are based on comparison of treatment guidelines in public and private sector.

Studies like "Where Do People Go for Treatment of Sexually Transmitted Diseases?" [4] which enlists the health care utilization patterns for STD treatment in the United States are complex and the way it is used. Another study" Effective utilization of human resource management- A comparative study of public and private hospital in Sindh" [5] that stresses on human resources management policies and practices of two state owned and two private hospitals in Karachi and Hyderabad to determine the range of utilization of HRM and level of attainment of organizational objectives.

"Comparison of services of public, private and foreign hospitals from the perspective of Bangladeshi patients" [6] has also been done that compares the quality of healthcare services by different types of institutions, i.e. public and private hospitals, from the perspective of Bangladeshi patients to identify the relevant areas for development. The results gave an overview of the perspectives of Bangladeshi patients on the quality of service in three types of hospitals. The quality of service in private hospitals scored higher than that in public hospitals for nursing care, tangible hospital matters, i.e. cleanliness, supply of utilities, and

availability of drugs. The overall quality of service was better in the foreign hospitals compared to that in the private hospitals in Bangladesh in all factors, even the 'perceived cost' factor. This paper provides insights into the specific factors of the quality of hospital services that need to be addressed to meet the needs of Bangladeshi patients

A closely related study is “Ambulatory health service users' experience of waiting time and expenditure and factors associated with the perception of low quality of care in Mexico” [7] which recognizes that principal reason for low use of public health care services is the perception of inferior quality of care. Studying health service user (HSU) experiences with their care and their perception of health service quality is critical to understanding health service utilization.

There is increasing evidence to suggest that patient's satisfaction is usually correlated with effectiveness of treatment. Recognizing the need for operations research to continuously improve quality of service, hospitals and health care organizations are increasingly turning to measurement of patients' satisfaction [11].

A patient satisfaction survey was conducted in 25 District or Area Hospitals managed by the Andhra Pradesh Vaidya Vidhana Parishad (APVVP). The study obtained feedback from patients and, in case the patient could not be interviewed, the attendant was interviewed with few modifications in questionnaires. The key messages delivered through this study was that “corruption” by all categories of staff was the greatest cause for dissatisfaction, followed by general cleanliness, poor utilities etc. Secondly a significantly high level of dissatisfaction was also noted regarding patients' assessment of technical quality of doctor's work and time spent by doctor and thirdly that such patient satisfaction surveys form an important tool for any managerial interventions.

The aim of another study was to compare data of patients submitted to appendectomy for acute appendicitis at a public hospital and at a private hospital whose results were such as Ultra sonography was performed more frequently on patients of the public hospital than of the private hospital [12]. Length of hospital stay was longer at the public hospital than at the private hospital. Postoperative complications were more frequent at the public hospital than

at the private hospital. Time to resume routine activities was longer for the public hospital than for the private hospital.

Thus Monitoring and improving the quality of care has become a priority issue for policymakers, along with ensuring appropriate access to care and controlling cost. Both egregious incidents of poor practice and systematic evidence across many countries that the quality of care is often much lower than optimal have raised questions about the underlying causes of deficient care and changed ideas about accountability [1]. As a consequence, many countries have begun to introduce reforms in the area of quality monitoring and improvement with the goal of making health care predictably safer and more effective. These reforms have gained momentum because of concerns about the high cost of medical care for individuals and the impact on national economies. Although it is still controversial, many have argued that well-selected and effectively implemented quality improvement interventions can reduce costs by making the delivery of care more efficient.

Two recent conference panels, one at Wharton and the other at Harvard University [13], explored the state of India's health care system. Among the conclusions: Government and industry need to increase health care investment and employment and make high-quality care more affordable and available to all.

But none of the studies so far compares a list operational/ quality indicators in public and private healthcare sector especially in India so as to focus on key areas to improve hospital services and maximum patient welfare.

DATA AND METHODS

This is a two tier study. The first part of it included taking information from the public and private hospital. A major portion of the study duration was spent in taking permissions and formal procedures for the study to take place at each of the institutions.

Study area: data for public and private hospital was collected from hospitals of the same district to avoid biases. Ex. as demographic statistics of Palwal would not be same as Panchkula, hence it was necessary to select both public and private hospitals from the same district.

Data was collected from respective area of investigation such as pharmacy department, diagnostics department, general IPD, nursing and training cell in District hospital;

Data in private hospital was collected mainly from management staff of various departments and from private and general wards in IPD.

Study duration: 2 months 10 days, 2nd Feb – 12th. Apr 2011

Data Source: In depth interviews with concerned officials was carried out in department like OPD, Pharmacy, Diagnostic services, delivery suites etc in both public and private hospitals of Haryana.

Study population: Information was collected by:

Alchemist hospital

Chief operating officer (COO)

Senior executive officer (Operations)

Assistant Nursing Superintendant

Patient Care Counselor

Patients

District hospital

Civil Surgeon

Hospital Administrator

Head of Pharmacy

Assistant Nursing Superintendant

Nursing Head- Nirmal Department (Gynae and Obs Department)

Patients

Tools and techniques

-Observations,

-Records,

-Unstructured Interview of staff, on the lines of data specified to be collected

-Structured face to face interview of patient based on questionnaire given.

Sample size: the sample size for patient satisfaction survey was 20 per hospital/ clinic adding up to a total of 60 sample size

Sampling Technique for the patient satisfaction survey: patients were selected on random basis. Patients admitted in the hospital at the time of the visit were selected randomly for structured interview. In cases where the approached patients were not interested in participating in the survey, the data collectors moved to another patient on the list.

Method: a previously piloted questionnaire by Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) was used by slightly modifying it by adding and omitting a few questions to suit it to Indian hospital scenario.

The intent of the HCAHPS initiative is to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives on hospital care [14]. While many hospitals have collected information on patient satisfaction, prior to HCAHPS there was no standard for collecting or publicly reporting patients' perspectives of care information that would enable valid comparisons to be made across all hospitals. In order to make "apples to apples" comparisons to support consumer choice, HCAHPS is a core set of questions that can be combined with a broader, customized set of hospital-specific items. HCAHPS survey items complement the data hospitals currently collect to support improvements in internal customer services and quality related activities

Data analysis: was done using Microsoft Office Excel 2007 and SPSS 12.0

Study design: Descriptive and analytical in nature

CHAPTER 3-RESULTS AND FINDING

An *operational indicator* is one that can be used to gauge how successfully an organization is adhering to its work plan [15]. The performance efficiency of the hospitals is being judged through performance indicators like Bed occupancy rate, turnover rate, average length of stay etc. The *Quality Indicators* are a set of measures that provide a perspective on hospital quality of care using hospital administrative data [16]. These indicators reflect quality of care inside hospitals and include inpatient mortality for certain procedures and medical conditions; utilization of procedures for which there are questions of overuse, underuse, and misuse; and volume of procedures for which there is some evidence that a higher volume of procedures is associated with lower mortality.

Quality monitoring is critical for maintaining appropriate checks and balances as financial and organizational mechanisms for controlling rising health care costs continue to affect the delivery of services. Financial and organizational strategies can be blunt and clinically insensitive in their application, meaning that both needed and unneeded cares generally are eliminated as cost controls are introduced. While no one (at least in theory) supports paying for services that do not produce health benefits, in the absence of routine monitoring it is impossible to determine whether this is occurring and to prevent it before it happens.

After deciding the list of indicators to be studied and compared at both the private and public hospitals in Haryana, procedure of taking permission for study was on track.

1. Out of the total list of indicators, firstly in Out Patient Department, ***average OPD load*** was calculated for each of institutions that show the amount of facility utilization.
   It was found that in 100 bedded private hospital OPD LOAD was 125 patients per day compared to district hospital that is 150m bedded which in turn dealt with 1700 patient per day, which is approximately 14 times more OPD load despite same primary catchment area for both the hospitals.

It was found that according to IPHS that each district hospital should ideally serve population up to 10,00,000. However, as the population of the district varies a lot, it would be prudent to prescribe norms by grading the size of the hospitals as per the number of beds.

Grade I	District hospitals	norms for 500 beds
Grade II	District hospitals	norms for 300 beds
Grade III	District hospitals	norms for 200 beds
Grade IV	District hospital	norms for 100 beds

The number of beds required for a district having a population of 10 lakhs will be around 300 beds. Thus for a district of approximately 5 lakhs (4,68,411) 150 bedded hospital should suffice, expecting that the hospital bed occupancy rate be at least 80% (according to IPHS), whereas the existing condition is that ***bed occupancy rate*** is 128% in this hospital.

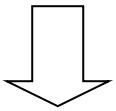
Thus either there is lack of proper management or less number of beds. Both can be worked out for the improvement of quality of care given to the patients.

Bed occupancy rate in private hospital varies from 55% to 65% in a year depending upon time of the year.

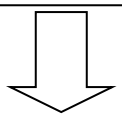
THE WORKFLOW of OPD

IN PRIVATE HOSPITAL

PATIENT ARRIVES AT THE RECEPTION/HELP DESK/ REGISTRATION COUNTE

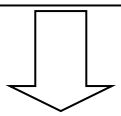


PATIENT IS GIVEN A FORM TO BE FILLED (that includes details like name, age, D.O.B, sex, address, marital status, religion, etc.

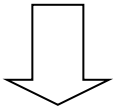


THE SAME INFORMATION IS THEN ENTERED IN COMPUTER BY THE RECEPTIONIST AND APATIENT OPD FILE IS MADE AND HANDED OVER TO PATIENT

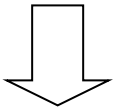
PATIENT REGISTRATION COMPLETED



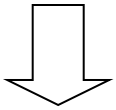
BILLING/CONSULTATION FEE IS PAID AND RECIEPT IS GIVEN TO PATIENT



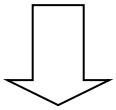
PATIENT MOVES TO THE CONCERNED OPD WAITING AREA



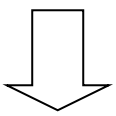
VITALS MAY OR MAY NOT BE CHECKED



SAME INFORMATION IS THEN AGAIN ENTERED MANUALLY IN A REGISTER AT



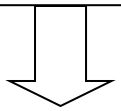
PATIENT MAY WAIT IN WAITING AREA



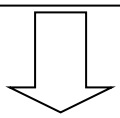
PATIENT ENTERS THE DOCTOR'S CHAMBER

IN DISTRICT HOSPITAL

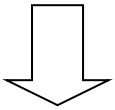
PATIENT ARRIVES AT THE REGISTRATION COUNTER



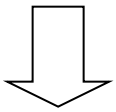
PATIENT IS VERBALLY ASKED BASIC DETAILS AND SIMULTANEOULY ENTERED BY RECEPTIONIST (that includes details like name, age, sex, address, s/o, w/o, CR.no., income, gen/sc/st, Annexure attached)
COUNTER 2



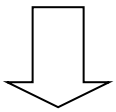
In case of BPL or Antenatal or TB patients or Family planning, which is cost free, are directed to counter 2 for registration.



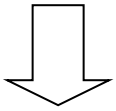
Patient pays a nominal fee of Rs 5,



Yellow card is issued for BPL patients, Pink card is given for antenatal cases and



Old patients are also to reregister themselves at counter 2 which handled manually



PATIENT REGISTRATION COMPLETED

1. Thus OPD process is slightly longer and repetitive in Private hospital

   Where as in case of an unorganized private clinic, it was simple procedure of patient going to a counter, tells patient name age address and sex and pays fees and goes ahead in the consultation room.
2. From the above information, it is almost clear that ***waiting time for registration*** *is lesser in public hospital and private clinic* which is approximately 2min and 2.5 minutes respectively compared to 5.5 minutes in private hospital
3. ***Patient complaints***: were properly documented and looked into each case by the top management itself. There was reporting of at least 5% of such complaints of the total IPD cases in the private hospital, whereas such cases were not documented in district hospital though there were suggestion boxes at each floor outside the department. At private clinics, at the most even if such cases are reported, they were supposedly dealt with, on one to one basis but not documented for further improvement.
4. Yet, *average* ***waiting time for consultation*** *is much more in public hospital that is* 1hour or more than in private hospital that is 15 minutes only whereas in private clinic it was 10 minutes or less

   Average waiting time relates to Indicator of swiftness of processes and adequacy of resources. This might be attributed to

   - Respective patient load at each institution.
   - Shortage of staff to deal with such heavy rush of patients.

   It was also observed that though OPD in district hospital was also there in the evenings, peak timings for OPD were in mornings only till 1pm in afternoon. Thus clearly *distribution of the OPD according to doctors,* or increase in number of doctors in morning would serve the purpose of decreasing waiting time for consultation.

5. ***Consultation Fees*** at Private hospital was Rs 450 that covered OPD charges for next 5 days as well, compared to Rs 5 at District hospital for one time registration.

There was no concessional fees for other categories of patient except for empanelment with ECHS that too only if it referred by the ECHS clinic else an ECHS patient would not be entertained for any concessions etc.

6. ***Fraction of BPL Patients entertained*** in district hospital was not more than 3% (Refer to table no. 6) of the entire OPD in one of the busiest month of the year (according to statistician),

   In case of private clinic registration and consultation fees were Rs 250 in clinic 1 and Rs 50 in clinic 2 with different rates for emergency duties depending upon the time services are required. Eg. After 10pm charges are higher and after 12 in night it is even more. Although there is no specified details of the concession for BPL or other patients, but in case a patient is not able to pay that amount free medicine are accommodated in the fees of patient.

   That further explains that not only lower income population but even a middle income patient would prefer to go to district hospital (If there is no constraint of time) or clinic for consultation. Though the availability of clinical specialties in both public and private hospital is nearly same. (*See table 4)*

   Corresponding to IPHS standards, in a private clinic, had all the services that could be provided by a PHC and private hospital and public hospital had 14 and 15 specialties out of 17 in total.

7. ***Pharmacy department***, this is an important revenue generating department. To the management the efficiency of pharmacy services means no expiry/redundancy /deterioration or pilferage, minimum inventory holding without stock outs,.

Thus measuring percentage of drugs available and ***drugs stock out*** were two most important indicators that we took into account in the respective institution of health.

It was found that percentage of availability of drugs was 100% in private institute (according to the sources), whereas in district hospital it was close to 75% of drugs that should be available in 100 tertiary care hospital according to IPHS standard. The list of drugs that were taken as mandatory for both the institutes is attached in Table. It should be noted that though

in public hospital it was 75% most of drugs that were not available could be substituted by some other drug.

Whereas Drugs stock out days that indicate inventory management practices could not be found, as according to private hospitals they are never out of drugs, or had some substitute. Where as in public hospital there was a lack of such data.

8. ***Diagnostic service*** is the one that takes largest share of total capital investment and also single highest revenue earner among all the departments. One out every 4-5 patients required to utilize this service making a direct impact on quality of treatment provided to patient by hospital.

   Number of lab test available is an indicator of availability of diagnostic services which were almost 100% (89/100) in private hospital, because of their powerful tie up with other labs, 90% in district hospital, and 20% in private clinic which were good enough in cases of emergency. List of the test and services available in each institution is given in table 5.

   Thus after the availability, it is vital to know how often is it utilized by patients there. It was found that in month of January 2206 tests were done giving an OPD: Lab ratio of 1.5:1.that means out of 2 patients coming to hospital one of them would definitely need or be prescribed lab tests. Whereas in district hospital the same ratio was 18:1, that is only one in 18 patients would require diagnostic services. Private clinics more or less had a midway to follow with 5:2 ratios or 5:8 ratios in two different clinics.

   This could either mean that

- Private hospitals are much more careful in diagnosing patients and validate their finding more often than in public hospital setting, or
- Private hospitals simply over prescribe to diagnostic test to make more revenue.
- In public hospitals doctors often avoid prescribing such tests as they know that it would put even more financial burden on the patients.
- But only availability and prescribing test is not all, for quality care there should be regular ***cross validation of test reports***, which means there should be a proper documentation of number of sample cases that do not confirm external reports.

Both the institutions had their own way of external quality checks. In public hospital, samples were selected by systematic random sampling and sent to State Lab for cross checking. But this was not done on a daily basis whereas it was on daily basis in private hospital.

In both the hospitals there was no case that did not confirm with external validation. In private clinics, no such method was adopted to cross check or validate any report nor was there any documentation.

9. ***Nursing services***: is very significant component of human resources in a hospital. Depending upon the type of hospital, they constitute about 25- 35 percent of the total manpower in a hospital [9]. A nurse is an extremely important member of the patient management team and has crucial role such as an assistant to the treating physician, in provision of nursing care, and in hospitality of the patient.

Adherence to its staffing norms makes is very important in providing quality care, which was as follows

NORMS	**PRIVATE HOSPITAL**	**DISTRICT HOSPITAL**	**PRIVATE CLINIC**
1 nurse for 6 beds for General Ward	NO(1:5)	NO	YES
1 Nurse for 4 beds Special ward	YES	NO	YES
1 Nurse for 1 bed for IC	YES	YES	NO
2 Nurse for one major OT Table	YES	YES	NO

A related indicator to nursing services would be ***Nurse: Bed Ratio*** in each of the hospital/clinic. It was found to be best in private with 175 nurses for 100 beds, district hospital having the ratio less than 1 that is 95 nurses for 150 beds. Whereas in private clinic it was even less as due to smaller area of clinic it was easy for them to do multitasking and taking care of patients. Nevertheless, shortage of staff was definitely felt sometimes.

10. ***Delivery suite***: is room where the expecting mothers may take labour and give birth to child.

    In district hospital it was named as Nirmal Department and the staffs appointed in this section were called as "Nirmal staff". In private hospital like any other hospital, it is under Gynecology and Obstetrics department.

    Caesarean rate was found to be highest in private clinic which is appx. 33%, followed by private hospitals, and least in district hospital that is 21%. (The possible reasoning for this pattern is discussed later.) while the Maternal mortality rate is almost negligible in private hospital to 1% in district hospital and again 0% in private clinic: Neonatal mortality rate is also negligible in both public and private hospital, while in private clinic, the authorities there said that it would be zero as no such case of mortality is reported so far.

    Deliveries per table was 3:1 in a district hospital whereas in a private clinic was 12:1, which is four times higher.

11. ***Hospital performance Indicator***:

    The availability of hospital bed has always been a problem in developing countries. The availability of beds is perhaps the most important single factor in determination of the hospital utilization in country [17]. In India, shortage of hospital beds in a huge problem, the average bed population ratio being 6.8 / 10,000 [18].

Various indices are utilized in the assessment of hospital utilization. Hospital bed utilization indices will provide trends and pattern of hospital utilization. Davis and Macula (1996) have described various indices which are [18]:

- Indices related to the hospital

- Average length of stay (ALS)
- Bed occupancy rate (BOR)
- Bed turnover interval (BTI)

Bed Occupancy Rate:

Bed occupancy should be kept below 85% to help keep a grip on hospital infections, such as MRSA [19].

According to Nigel Edwards, director of policy at the NHS Confederation "It is very important that bed occupancy rates are kept within the parameters of what is safe to reduce the likelihood of infection for those patients that have to stay in hospital."

According to data collected, district hospital had highest B.OR. of all the three organizations that is 128%, followed by BOR at private hospital of 65% then private clinic. On the other hand it was also found that BOR of private clinic 2 could reach 83% as well.

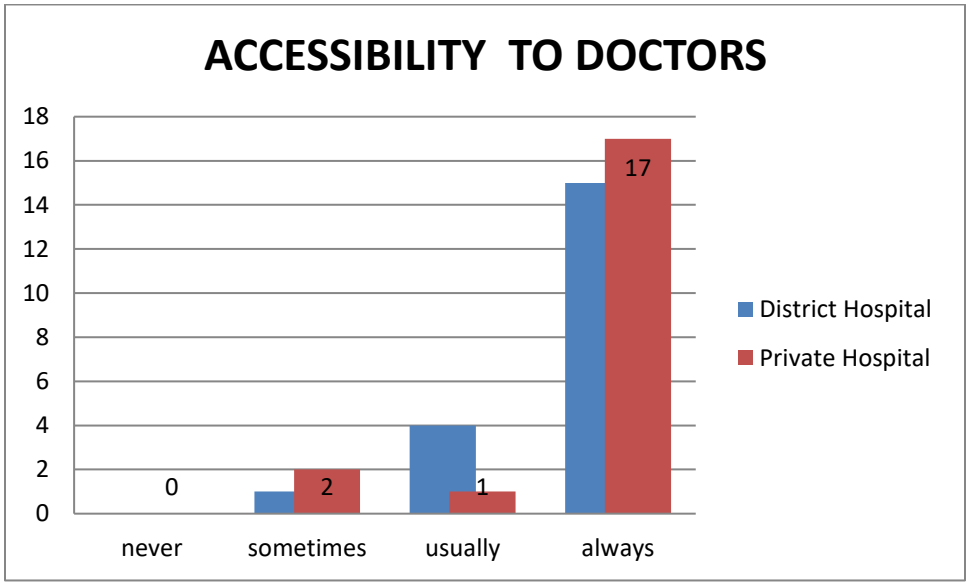
12. ***Average Length of Stay*** was lengthiest at private hospital which is 7days. According to various studies average length of stay should ideally be around 5 days, in district hospital ALOS was 3 days for Nirmal department (Gyne and Obs Department). At private clinic too it was 3 days for similar cases, and in case of emergencies patient were only kept till they were stabilized and then referred elsewhere in case of condition of patient persist or worsen.

13. ***Patient Satisfaction Survey***: deals with another important part of study that gives us a direct overview of what patients experience was in each of the organization, and whether the patients' expectations were met.

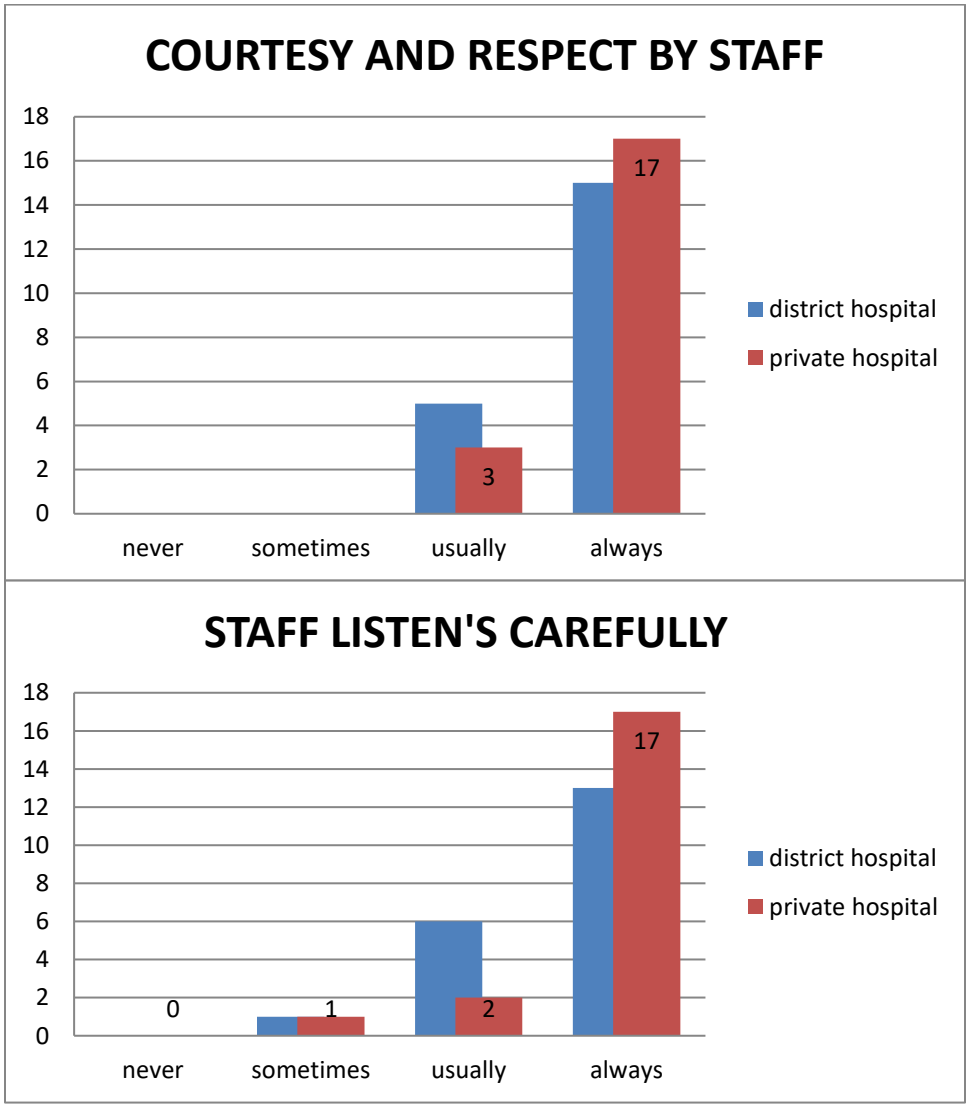
- The noteworthy points are:

a) **ACCESSIBILITY**: of the private hospital (85%) was slightly better than district hospital (70%), the accessibility of doctors in private hospital was 85% compared to 75% in district hospital.

Refer Table No.1

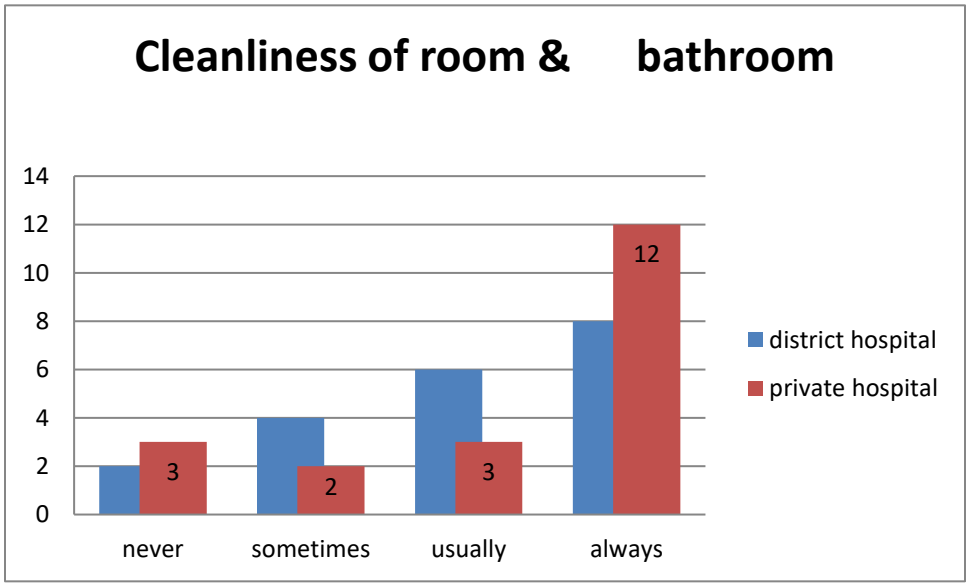


b) **CARE FROM DOCTORS AND NURSES**: the courtesy level were also 15% higher at private hospital, substantiated from the next finding that 85% doctors at private hospital listened carefully to patients whereas 65% of doctors at public hospital listened carefully to patients. Though when asked from patients about "how often did Doctors/nurses or pharmacist explain things in a way you could understand?", according to them competency level of staff at both hospitals were nearly the same.



Refer to Table No;-2,5,6

c) **HOSPITAL ENVIRONMENT**: plays a crucial part in patient satisfaction level. The survey revealed that only 40% of the times patient reported their rooms or bathroom to be clean, compared to 60% at private hospital. But hidden fact here is that most of the patient coming to district hospital are either BPL patients or majorly those with a monthly income around Rs.10,000. Thus they generally understate their condition due to unawareness of what is their right, or feel that they should adjust themselves in the given conditions. Thus very few out of them would complain or even nag about it. Whereas that isn't the case in private hospital, patients here are well aware of what they should get and what they want and few adjust with the given substandard performances. So even if 60% of times patient room and bathroom were clean, the subjectivity of "what is clean" varied widely amongst the two comparable groups.



Refer to TABLE NO:-7

d) **EXPERIENCES IN HOSPITAL**: includes safety and security at the hospital, help in using bathroom or bedpan, efficiency to relieve pain, appropriate information regarding the drugs that are being administered to the patient.

Safety and security in a private hospital was provided in all possible spheres such as physical safety against fall from bed using support barriers on both sides, infection safety by appropriate policies and confidentialities for HIV patients, and of course security deployment across various departments. According to the respective patients in each hospital, safety and security, help in using bathroom and efficiency to relieve pain collectively accounts for 88.33% in a private hospital compared to 81.66% in public hospital.

But where both the hospitals seem to lag is information given to patients, such that only 65% of them usually or always had information regarding the medication they are taking. And only 15% in district hospital and 5% private hospital patients were informed about side effects of the drugs they are taking. This information given was limited to drastic side effects that the patients could notice themselves e.g. orange colored urine after taking medicine.

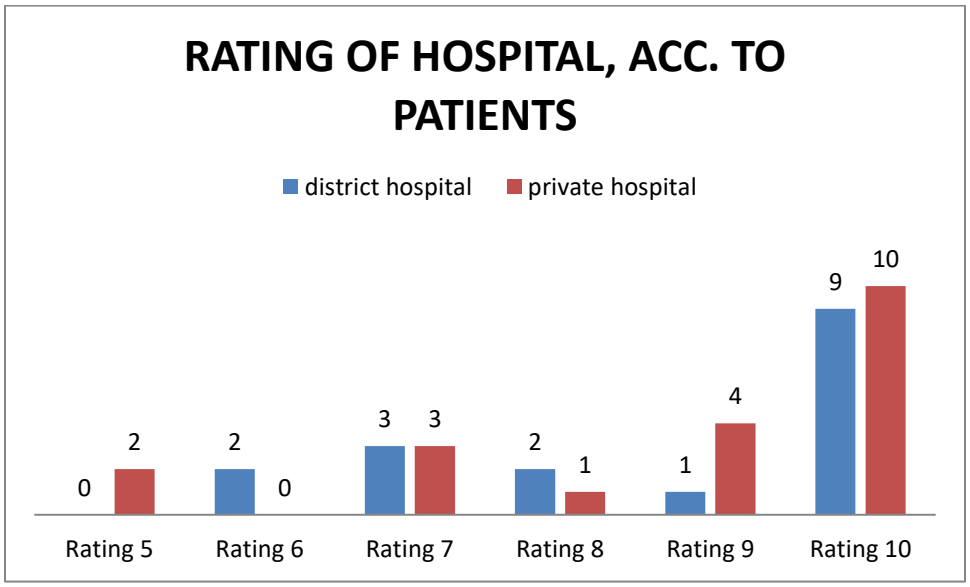
After covering the experience and other data results, next question rightly expressed views of respective patients in each hospital.

"Would you recommend this hospital to your family or friends?" 90% patient interviewed at private hospital and 70% at district hospital said "Definitely Yes". In all 95% at district hospital and 100% at private hospital were positive for recommending.

e) **OUT OF POCKET EXPENDITURE**: was exorbitant according to 15% of patients at private hospital, and 40% felt it was costly. Whereas 45% at district hospital felt it was slightly costly and 55% felt it was reasonable. A striking observation was that 45% of patients at private hospital also felt that out of pocket expenditure was reasonable.

Maximum money from out of pocket expenditure in private hospital was spent in "lab tests" whereas in district hospital maximum money was spent on "other payments" which included transportation and food.

f) **RATING OF THE HOSPITAL**: patients were asked to rate the hospital on a scale of 1 to 10 where 10 is the best hospital they have ever visited and 1 is the worst hospital. The results of patient opinion were, as depicted in graph below



The response rate of district hospital in this question was 85% as rest of the respondents were illiterate and could not count till 10 or understand this question.

g) **INVOICE OF RESPONDENT**- suggestion by the respondents for improvement of hospital were more enthusiastically given by patients of private hospital because of their well awareness. Patients in district hospital though were evidently not in a better condition but did not complain or see scope of much improvement, and would like to adjust amongst themselves (adjacent patients and relatives) rather ask for help from the nurse, helper etc.

Despite this some of the suggestions given are: “Timely food service”, “early discharges”, “better food should be provided to relatives too”, cleaner bathroom and rooms”, ”increase in facilities like wheelchairs”, “tests for emergency patients should be done on priority basis and more fast” and “ less noise at night”.

Chapter 4- DISCUSSION

In doing the comparative study there were a number of notable differences as far as the overall working of the hospital processes followed are concerned.

Initially the basic hospital processes of two hospitals were mapped . This gave a fair amount of idea about the basic working of the two hospitals.

A diagrammatic representation of it helped to identify the various steps involved in the whole process and thus the differences associated with them.

Even though both the hospitals were judged on the same parameters, there were notable differences in a number of aspects. This is again because of the difference in infrastructure, working style, culture, staff, clients etc that both the organizations are dealing with.

According to a study, in order to make the study more refined the challenges to be addressed are the following [20].

Six challenges must be addressed for such a comparative study

(1) Identify and balance the competing perspectives of the major participants in the health care delivery system;

(2) develop an accountability framework;

(3) establish the explicit criteria by which health system performance will be judged;

(4) select a subset of indicators for routine reporting;

(5) minimize the conflict between financial and nonfinancial incentives and quality-of-care objectives; and

(6) facilitate the development of information systems necessary to support quality monitoring.

The first two challenges address the framework within which quality assessment should be conducted. The third and fourth challenges define the quality measurement work plan. The fifth and sixth challenges identify factors that now inhibit progress in improving and assessing performance.

OPENNESS TO TRANSPARENCY:

It was striking that collection of data from a public hospital was more of a tedious task despite approvals from highest authority in hospital, and method of 'Red Tapism' seems to be also followed here. Whereas in case of private hospital, there was a well defined way of business. Such as who deals with which sort of affairs is well defined, thus after receiving consent from COO, it was very easy to obtain data, though some of the information that they felt was confidential was withheld.

Whereas in case of unorganized public sector, a number of clinics had to be contacted due to various reasons:

- No documentation of various procedures at clinics
- Reluctance to show transparency in their day to day working
- No interest/openness towards such studies to be conducted, and consider such activities as waste of time

Whatever information is collected from such clinics is from the main owner/consultant of the clinic. However, this information is not very systematically documented. Procedures/ facilities run here are, more or less, a one man show.

A public/private partnership will be essential to solving these challenges

- **Out Patient Department**, ***average OPD load*** was calculated for each of institutions that show the amount of facility utilization. It was found that in 100 bedded private hospital OPD LOAD was 125 patients per day compared to district hospital that is 150 bedded which in turn dealt with 1700 patient per day, which is approximately 14 times more OPD load despite same primary catchment area for both the hospital.
- **Bed Occupancy Rate** is 128% in district hospital. Thus either there is lack of proper management or less number of beds. Both can be worked out for the improvement of quality of care given to the patients. Bed occupancy rate in private hospital varies from 55% to 65% in a year depending upon time of the year.

India faces a huge need gap in terms of availability of number of hospital beds per 1000 population. With a world average of 3.96 hospital beds per 1000 population India stands just a little over 0.7 hospital beds per 1000 population[7]. Moreover, India faces a shortage of doctors, nurses and paramedics that are needed to propel the growing healthcare industry. This picture is straightforwardly presented by public hospital scenario as well.

- **Consultation fees:** Proponents of user fees in the health sector in poor countries cite a number of often interrelated rationales, relating inter alia to cost recovery, improved equity and greater efficiency [21]. Opponents argue that dramatic and sustained decreases in service utilization follow the introduction of user fees, highlighting evidence that user fees reduce service utilization when they fail to result in improved quality of care and/or when services are priced higher than those charged by private health care providers. Yet the difference in consultation fees ranges to Rs 450 at private hospital that covered OPD charges for next 5 days as well, compared to Rs 5 at district hospital for one time registration

- **Delivery suite:** services at private sector seem to show better indicator such as maternal mortality indicator etc. because of various reasons.
    1. Awareness Levels :- The patient reporting at private hospital were the one who were more aware of the nutritional status, health status and thus avoiding any life threatening situations.
    2. Affordability:- The patient at private hospital could afford regular check ups and thus affording medicines is not problematic for them. Though medicines and check ups are free for the patients at district hospital, often the patients here cannot afford to lose a working day for check ups.
    3. Life Styles :- As these patients reporting at private hospital have better awareness levels, maternal patients at private hospital seldom appear with emergency situations whereas in public hospital the maternal mortality cases that were reported were either bought dead cases or those who had limited time, with poor conditions

Thus for all the different parameters there is a notable difference between the two types of hospitals.

LIMITATION OF THE STUDY

1. RESISTANCE/RELUCTANCE

   Resistance to change or reflection of weakness at the clinic/hospital kept few informational aspects unopened.

2. ILLITERACY

   During the face to face questionnaire, when asked to rate the hospital, few of them were unable to do so, as they could not count till 5 or ten.

3. LACK OF COMPLETE DOCUMENTATION AT PRIVATE CLINIC
   Resulted in data conveyed verbally by owner of the clinic, hence the authenticity of data could not be cross checked at all times.

4. UNAWARENESS

   Of what is good, best or bad amongst the patients leaves them to live with the given situation. Even when asked “how would they like to improve the situation”, though the patients might be suffering a number a problems are unable to answer the above question.

Conclusion and Recommendations

1. It is today that we as customers are paying cost of not bringing quality as one of the foundation stones in healthcare and thus watch such huge differences of medical services in same district for same population differentiating only on capacity to pay.
2. Quality and efficiency are interrelated. It should strike to everyone from public and private sector.
3. Quality is introduced to reduce cost and increase benefits, for not only the patient but for all the stakeholders. Increasing cost for better quality of service or reducing quality of service in lieu of reduced cost would not help anyone in long run.
4. It was noted that till now concept of "quality manager" has hardly arrived in public hospital. It is the Medical superintendant, who is multi tasking various roles of administrator, and a single hospital administrator running the whole show. Whereas in private hospital, though management spends each and every penny wisely have employed highly competent management staff with special address to "quality".
5. Private providers tend to offer better quality services. They should expand their policies to reduce the gap. For example, they can offer "special OPDs" at subsidized rates to cater to lower or middle income groups. They can also work on models like that of Narayana Hridulaya, where patients are admitted a few hours before the surgery. This would help them to increase the bed occupancy rate, increase their marketing and business, while sharing the health care burden.
6. Regular audits in best of hospital and smallest of clinics should be done, for documentation to improve transparency of situation in state healthcare.

7. Better marketing of healthcare as a whole rather than marketing of a hospital or a clinic is recommended by the state.
8. Private public partnership through better and wider empanelment can easily solve the purpose of targeted population for the private sector and better customer care/patient care at public health sector.

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Annexure A

Patient Satisfaction Index

Name (Optional): …….. Age: ……

Occupation: …… …… Sex…….

Annual/Monthly Income (Please mention): ……...

Hospital visited-Corporate Hospital/District Hospital/Clinic……..

ACCESSIBILITY

1. **Could you easily locate this hospital/ clinic**

☐ Never ☐ Sometimes ☐ Usually ☐ Always

2. **If you have a medical question, could you reach a doctor for help without any problem**

☐ Never ☐ Sometimes ☐ Usually ☐ Always

YOUR CARE FROM DOCTORS/NURSES

3. **During your hospital stay/visit, how often did Doctors/nurses treat you with <u>courtesy and respect</u>?**

☐ Never ☐ Sometimes ☐ Usually ☐ Always

4. **During this hospital stay, how often did Doctors/nurses <u>listen carefully to you</u>?**

☐ Never ☐ Sometimes ☐ Usually ☐ Always

5. **During this hospital stay, how often did Doctors/nurses or pharmacist <u>explain things</u> in a way you could understand?(Competency Level)**

☐ Never ☐ Sometimes ☐ Usually ☐ Always

THE HOSPITAL ENVIRONMENT

6. **During this hospital stay, how often were your room and bathroom kept clean?**

☐ Never ☐ Sometimes ☐ Usually ☐ Always

7. During this hospital stay, how often was the area around your room quiet at night?

☐ Never ☐ Sometimes ☐ Usually ☐ Always

YOU'RE EXPERIENCES IN THIS HOSPITAL

8. During this hospital stay, did you feel safe and secure at all times?

☐ Never ☐ Sometimes ☐ Usually ☐ Always

9. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?

☐ Never ☐ Sometimes ☐ Usually ☐ Always

10. During this hospital stay, how efficient was the hospital staffs to do everything they could to help you with your pain?

☐ Never ☐ Sometimes ☐ Usually ☐ Always

11. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

☐ Never ☐ Sometimes ☐ Usually ☐ Always

12. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

☐ Never ☐ Sometimes ☐ Usually ☐ Always

WHEN YOU LEFT THE HOSPITAL

13. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

☐ Yes ☐ No

14. Would you recommend this hospital to your friends and family?

☐ Definitely no ☐ Probably no ☐ Probably yes ☐ Definitely yes

15. The out of pocket expenditure on your treatment in this hospital/ clinic

☐ Reasonable ☐ nable ☐ y ☐ Exo nt

16. Where did you have to spend maximum money in relation to your treatment in respective hospital/clinic

☐ Registration/Consultation ☐ Lab Tests ☐ Medicines ☐ Other payments

17. Was your doctor late to arrive in hospital/clinic? If yes please mention how much late in minutes?

☐ Yes ☐ No

18. Did the doctor leave earlier than scheduled timings? If yes, please mention how much early?

☐ Yes ☐ No

……

19. How much was your waiting time (approximately in minutes)?

……..

……

OVERALL RATING OF HOSPITAL

20. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

☐ 0 Worst hospital possible
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 Best hospital possible

21. Any suggestions to improve the medical services provided to you by hospital/clinic

……
……
……
……..

THANK YOU

Annexure B

MANPOWER REQUIREMENTS_-IPHS REQUIREMENT

MAN POWER – DOCTORS

S. No	Staff	Essential + Desirable
1)	Hospital Superintendent	1
2)	Medical Specialist	3 +1
3)	Surgery Specialists	2 +2
4)	O&G specialist	4 +2
5)	Psychiatrist	1
6)	Dermatologist /Venereologist	1
7)	Paediatrician	3 +1
8)	Anesthetist (Regular /trained)	4 +1
9)	ENT Surgeon	1
10)	Opthalmologist	2
11)	Orthopedic Surgeon	2
12)	Radiologist	2
13)	Radiotherapist*	1
14)	PMR specialist	1
15)	Medical Physicist*	
16)	Microbiologist	1
17)	Pathologist cum Blood Bank	
18)	In-charge	1
19)	General Duty Doctors	16 +4
20)	Dental Surgeon	2
21)	Forensic Expert	1
22)	Public Health Manager[1]	1
23)	AYUSH Physician[2]	2
24)	Pathologists	1 +1
25)	Clinical psychologist	1
	Total	51or 67

Note :

[1] May be a Public Health Specialist or management specialist trained in public health

[2] Provided there is no AYUSH hospital / dispensary in the district headquarter

* Where-ever Radiotherapy Unit is available

IPHS STANDARD For Nursing(Revised Draft)

OLD ONE

Nursing Services
Various clinics under Ambulatory Care Area require nursing facilities in common which include dressing room, side laboratory, injection room, social service and treatment rooms, etc.

Nursing Station: On an average, one nursing station per ward will be provided. However, it should be ensured that nursing station caters to about 40-45 beds. Out of these half will be for acute patients and chronic patients.

Staff Nurse* 75 to 100

- = 1 Staff Nurse for every eight beds with 25% reserve.
- 1 One may from AYUSH

Matron 1

Assistant Matron 2

OT

	Emergency OT	General OT
Staff Nurse	8	1
Blood bank	Blood Bank	blood storage
Staff nurse	3	1

According to REVISED DRAFT

Nursing Services
Various clinics under Ambulatory Care Area require nursing facilities in common

which include dressing room, side laboratory, injection room, social service and treatment rooms, etc.

Nursing Station: Need based space required for Nursing Station in OPD for dispensing nursing services. (Based on OPD load of patient)

The Nurse:Bed shall be 1:3 (as per Nursing Council of India regulations)

	Essential	Desirable
Staff Nurse*	75 (one psychiatric nurse and 3 for immunization)	+5

* 1 Staff Nurse for every eight beds with 25% reserve.
1 One may from AYUSH

Note **General HR and Bed norms for Obstetric Cases**

No of Deliveries in a month	**HR requirement Staff Nurses**
100	4 for Labour Rooms 5 for ANC/PNC Wards

OT

	Emergency OT	General OT
Staff Nurse	6	6

Blood bank	Blood Bank	blood storage
Staff nurse	3	1

MANPOWER REQUIREMENT FOR A 12 BED SPECIAL NEWBORN

CARE UNIT:

Staff Nurse

- 21 for 12 SNCU beds and 6 Step Down Unit beds

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- For SNCU -Nurse-baby ratio:1:3-4 in each shift
- For Step Down Unit- Nurse-baby ratio:1:6-8 in each shift
- To cover day off, leave, sickness 30% extra.

3. Nurse-in charge/Nursing Supervisors

- Preferably should have experience in accredited Level II unit.
- Should have good managerial skills.
- Should be clinically sound so as to take care of the neonates in the absence of doctor.
- There should 1 for every shift with 1 extra to cover day off, leave, sickness etc.

4. Designated Nurse

- For conducting in- service trainings

5. Public Health Nurse

- One should be exclusively attached to the unit.

6. Additional Staff Nurse

- This should be mandatory for providing care to the neonates at birth, neonates in the postnatal wards and Pediatric ward where the neonates are not looked after properly.