

**Internship
at
Paras Hospital, Gurgaon**

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1. Introduction

Healthcare is a very important part of our society & it is imperative for healthcare providers to do their jobs in an effective & efficient manner, HIS help them manage all their medical & administrative information.

When we joined the hospital phase II HIS implementation was going on in various department of the hospital like blood bank, O.T., CSSD etc. I was assigned the work of HIS implementation in Operation Theatres. Hospital has a tie up with an external software agency who designed the basic software for the departments, I was asked to coordinate with the staff of the Operation Theatre & software agency to implement the changes in the software according to the functional requirement of dept.

Once all the changes were being made training was given to the staff for the effective & efficient use of software. All the problems encountered while using the software were enlisted in the form of an issue tracker to keep the records.

Software makes the work lot easier for the staff & enhances their efficiency. Periodic review was done to make sure the proper functioning of the software

2. Organisation Profile

1.1 Hospital

Paras Hospital Gurgaon is a NABH Accredited 250 bedded super specialty hospital. It was the first hospital in Gurgaon region to get NABH accreditation. Since its inception it has aimed to be a preferred health care provider for all. Its expertise in advanced medical and surgical treatments helped thousands of patients receive world class quality treatment of affordable cost.

Paras is equipped with one of the leading Neuro- Sciences centers in the region which boast of all facilities needed for research and surgery in the field of Neurosciences. Besides this it has 55 specialty departments which include medicine, minimal invasive surgery, gynecology, oncology, ophthalmology, dermatology, cosmetic surgery, plastic surgery etc.

In its mission to provide affordable health care services to all people, it has taken a step ahead to start two major projects in state of Bihar, *Paras HMRI hospital, Patna* has a capacity of 350 beds while *Paras global hospital, Darbhanga* has a capacity of 100 beds. The multi-disciplinary facilities provided by Paras hospital at its Patna and Darbhanga hospitals make it one of the largest health care providers in Bihar.

Paras hospital is also renowned globally for its specialized international patient services. Patient from all across the globe visit Paras frequently for health checkups. Customized treatments and surgery are designed to benefit international patients.

Vision

- To become preferred healthcare provider for all.
- Partnership in caring and curing.
- Providing excellent medical care to customers through faith in values, integrity, respect, teamwork and innovation to achieve complete patient satisfaction.

Mission

- To provide competitive, innovative and accessible medical care to the patients.

- To facilitate improving the health of patient by providing quality service through professionals that is affordable and delivered-
 - *Compassionately*
 - *Appropriately*
 - *Responsibly*
 - *Efficiently*

Quality Policy

Paras Hospitals believe in partnership with the communities they serve.

- Paras Hospitals provide uniform patient treatment and care, use of evidence based medicine and excellence in clinical outcomes.
- Knowledge enhancement for staff, clinicians and patients.
- Delivering superior customer service and complying with statutory regulations

Accreditations

National accreditation board for hospital and healthcare providers (NABH) accreditation-

Paras are the first multispecialty hospital in Gurgaon to receive this accreditation. Primarily focusing on patient care, safety, continuous quality improvement and innovation, NABH (Accredited by ISQ - International Society for Quality in Health Care) has been set up to bring the world's best Health care quality standards to India. This accreditation is testimony to the fact that Paras care pathways are protocol driven reflect global practices and ensure that patients consistently receive Quality care.

Paras diagnostics is accredited by NABL, India's leading accreditation body pathology services. This reiterates Paras diagnostics position as a premier provider of pathology services in India. With a team of highly experienced and efficient staff, it provides services strictly adhering to International Quality standards. Its well organized sample management practices and state of the art automated equipments ensure that patients receive quick and accurate results.

3. Services provided by hospital

Paras Hospitals, Gurgaon

- 250 - bedded Multi super specialty hospital, spread over 3 Acres with covered area approx 2.1 Lac sq. ft. spread over 7 stories
- 6 State of the art Operation Theaters
- 70 critical care beds
- Region's most Advanced Neurosciences & Trauma Center
- Flat Panel Cath Lab
- 24 Hr ER forms backbone of the hospital services
- Round the Clock three Cardiac ambulances with all the life-saving equipment.
- Advanced Mother & Child Care Unit with Level III Neo – Natal ICU
- Fully automated Blood Bank with component facilities and advanced facilities for collection & processing

Floor wise Facility Distribution

Fourth Floor

- Nurse Stations
- 4A = Neurosurgery Ward (All Room Categories)
- 4B = Surgery Ward (All Room Categories)
- Dormitory – 9 beds
- 4C = General Ward
- PICU

Third Floor

- Patients' Rooms & Wards
- Labor Room (The Bliss), NICU
- Nursing Stations A, B, C and D.
- VIP Suite
- Deluxe Rooms
- LDR Suites
- Single bedded Rooms
- Double bedded Rooms

- Four bedded Rooms

First Floor

- Operation Theaters
- Neuro ICU
- Medical ICU
- Surgical ICU
- CCU
- CTVSICU
- Post Operative Recovery Room
- Cath Lab

Ground Floor

- Emergency Room with Minor OT
- Radiology & Imaging
- Pharmacy
- Dialysis Room
- Endoscopy Suite
- Doctors' Consultation Rooms
- OPD

1st Basement

- Kitchen
- Staff Cafeteria
- Visitors' Cafeteria
- Physiotherapy
- IT
- Marketing
- Office- Administration
- Laboratory
- Blood Bank
- Dermatology
- Dentistry

- PHP
- Attendance M/C

2nd Basement

- Attendance Swiping Machine
- CSSD
- MRD
- Engineering
- Purchase & Commercial
- BME
- Morgue
- Parking
- Store

Services at Paras Hospital

- Anesthesiology
- Cardiac sciences
- Dental Surgery
- Dermatology
- Dietetics and Nutrition
- Emergency and Trauma centre
- Endocrinology
- Geriatrics
- Gynecology
- Hematology
- Head and Neck Oncosurgery
- Internal Medicine
- Laparoscopic, Gastrointestinal and Bariatric Surgery
- Mother and Child
- Neuro Sciences
- Neuro, Vascular and Non vascular intervention
- Obstetrics

- Ophthalmology
- Orthopedics and Joint Replacement
- Pediatrics
- Physiotherapy and Rehabilitation
- Plastic and Reconstructive Surgery
- Preventive Health Checkups
- Psychiatry and Psychology
- Pulmonary and Critical care
- Radiology
- Renal sciences and Urology
- Rheumatology

4. Departments visited/worked

3.1 Operation Theatre Complex

Operation Theatre Complex in Paras Hospital is located on 1st floor with the restricted area for outside visitors to minimize the traffic and to maintain the sterility. Nobody is allowed inside the Complex without the Management's or Doctor's permission. It is also necessary to wear shoe-covers before entering the OT Complex.

OT Complex is divided into different areas:

1. PAC Room
2. PACU
3. CTVS ICU
4. Catheterization Lab
5. Female Doctor changing room
6. Changing room for OT Technicians
7. Common Room for Doctors
8. OT pharmacy

9. 7 OTs
10. 2 scrub stations
11. 1 room for flash sterilization
12. Dirty utility room
13. OT Store Rooms

1) PAC Room

PAC Room in OT Complex is meant for Pre-Operative Evaluation of patients on OPD basis by Anesthetists to check if the patient is fit for surgery. This room is also used by surgeons to examine the OPD patients in case the surgeon is in OT.

2) PACU (Post Anesthetic Care Unit)

This unit accommodates the patients before and after surgery. There are 6 beds in PACU. Patients to be operated are shifted from wards to PACU around 15-30 minutes before. Nursing staff in this unit check the vitals of the patients and check that the medicines have been given to the patients or not. After the surgery is over, the patient is brought to PACU with the objective to monitor the patients post-surgery. The patients' vitals are monitored every half an hour and if the patient is found stable based on Aldrete scoring mechanism (score should be more than 12 out of 14), the patient is shifted to the ward after the evaluation by anesthetist. Critical patients are directly shifted from OT to ICU for monitoring. Cardiac and Neuro surgery patients are shifted from OT to CTVS ICU and NSICU respectively.

Manpower in PACU:

1 Area In charge

3 staff nurse

1 trainee

Shifts:

Morning 7:00-3:30 (1staff nurse)

General shift (G1) 8:00-4:30 (1 Area In charge)

General shift (G2)12:00-8:00 (2 staff nurse)

Maintaining sterility in PACU:

- 1) The floor is cleaned every four hours with sodium hypochlorite.
- 2) For spillage, spill kit is used having PPS (Personal Protective Equipment). PPS includes goggles, scoop, sodium hypochlorite, shoe cover, mask, apron, etc.
- 3) Fumigation with Lonzagard every Saturday night. Fumigation takes 30 minutes for the process, after that PACU is closed for the whole night.
- 4) Carbolization of all the beds every morning.

3) Catheterization Lab

It comes under the cardiology department. Major procedure taking place within the cath lab are CAG and Percutaneous thrombo coronary angioplasty (PTCA). There are overall 24 procedures taking place inside the Cath Lab. Cath Lab is divided into console room, procedure room and store rooms.

4) Operation theatres

There are 6 operation theatres in OT Complex. Based on specialties they are classified as follows:

OT1&4: General surgery but urology cases are preferred to be done in OT1

OT 2: Dedicated to Orthopedic and Spine cases

OT5: Dedicated to Cardiac surgeries

OT 6&7: Dedicated to only Neurology cases

These OTs differ based on different machines and hence different areas. Super specialty branches such as Cardiology and Neurosurgery have almost an area of approximately 20*20 sq. feet. The other OTs are dimensioned around 18*18 sq. feet.

Equipments in OT:

- High Electronic Operation Tables in each OT which can be tilted to 12 positions.
Along with this, in OT 2 Ortho Table is used whose lower half is detachable and can be connected to Fracture Table in cases such as DHS, etc. In OT 3&5, head end of OT Table is detached and horse shoe is attached to it which supports the head.
- Anesthesia machine (1 for each OT).
- Laparoscopy machine-1

- 6 Microscopes. 2 are used in Neuro, 1 in spine, 1 in ENT and 2 for eye surgeries.
- Single Pendant in OT 1, 2 & 4 whereas double pendant in OT 3, 5 & 6.
- Instruments-14 large sized and 8 medium sized.
- Shadow less ceiling lamps (2 in each OT) except Cardiac OT where these are 3 in number.
- 3 Patient warmer, used for long cases or if patient is critical. It maintains the body temperature in the range of 35-40 degree Celsius.
- 15 Syringe pumps
- 3 C-Arm Fluoroscopy Machine
- 16 lead aprons and Thyroid shields used with C-Arm Fluoroscopy.
- FM radio in OT 3&6
- Debrider- 1
- Crash Cart in OT 1&2
- Sterilizer, used in cases when Fogging could not be done. It uses the UV light to sterilize the environment in 15-20 minutes.
- Suction Apparatus, one in each OT.
- Apple recording system: OT 2 & 6
- Patient shifting trolley, 3 in number :
 - in OT-2
 - in Recovery-1

For OTs which is devoted to specialties some machines are different which are stated below:

- Urology:
 - Lithotripsy: Used to break stones with the help of laser.
 - Stabilizer used to operate Lithotripsy.
- Spine and Ortho:
 - DVT pump: used in spine surgeries.
 - Tourniquet machine: To stop arterial supply mainly used in joint replacement surgeries
 - Electro diathermy (unipolar & bipolar)
 - Navigation machine
- Neurosurgery:

- Cusa machine: Used to take out the tumor by vibrating and then aspirating it.
- Neuro power drill: Used to drill the skull
- 2 Monitor: To see live surgeries
- Neuro specific microscope
- 3 Electro surgical generator: used for cutting and coagulation
- Air curtain: Supposed to be for sterilization
- Navigation machine: to locate the tumor
- Ultrasound machine, attached to navigator to see the tumor after going up to the dura mater.
- Surgi stool-2
- Intra-operative machine, to know the nerve conductivity used in surgeries on brachial plexus and CP (cerebello pontine) angle tumor.
- Cardiac Surgery:
 - Heart and Lung machine: to keep the blood circulation in the body normal.
 - Thermostat
 - Defibrillator
- Eye Surgeries
 - PHACO machine
 - Microscope

Each OT has its own inventory of medicines, injectables, IV fluids, dressing materials, etc. which if used during the surgery, is replaced by the OT Pharmacy.

Outside every OT, except OT 6 there is an alarm called “alarm annunciator” which comprises of four blocks i.e. oxygen, nitrous oxide, medical air, vacuum. If there is any fall in pressure for any of these supplies the alarm goes off. For OT 6 the alarm is connected to the OT 5. Each gas supply has a different color coding:

- 1) Oxygen: White
- 2) Nitrous oxide: Blue
- 3) Vacuum: Yellow
- 4) Medical Air or compressed air –Black

Each OT has 4 HEPA (High efficiency particulate air) filters and laminar flow is maintained inside the OT. Each OT has uninterrupted Power Supply to support the life saving machines and temperature

and humidity monitor to keep track on the required levels in OT. The Normal level for the temperature in OT is 18-22 degree Celsius and humidity is maintained in 45%-55%.

If there is a highly infectious patient whose surgery is taking place? In that case, disposable mattress, double gloves, face shield mask, eye covered with transparent film and only disposable linen are used. Then after the surgery, Operation Theatre is fumigated.

Manpower:

1. Head of Department
2. Anaesthetists-5
3. DNB students-3
4. Nursing staff (assisting surgeons)- 21+2trainees
5. Technicians (assisting anesthetists)- 15+3trainees
6. Housekeeping or cleaning staff - 4 (2 inside, 2 outside)
7. GDA- 4 (2 inside, 2 outside)

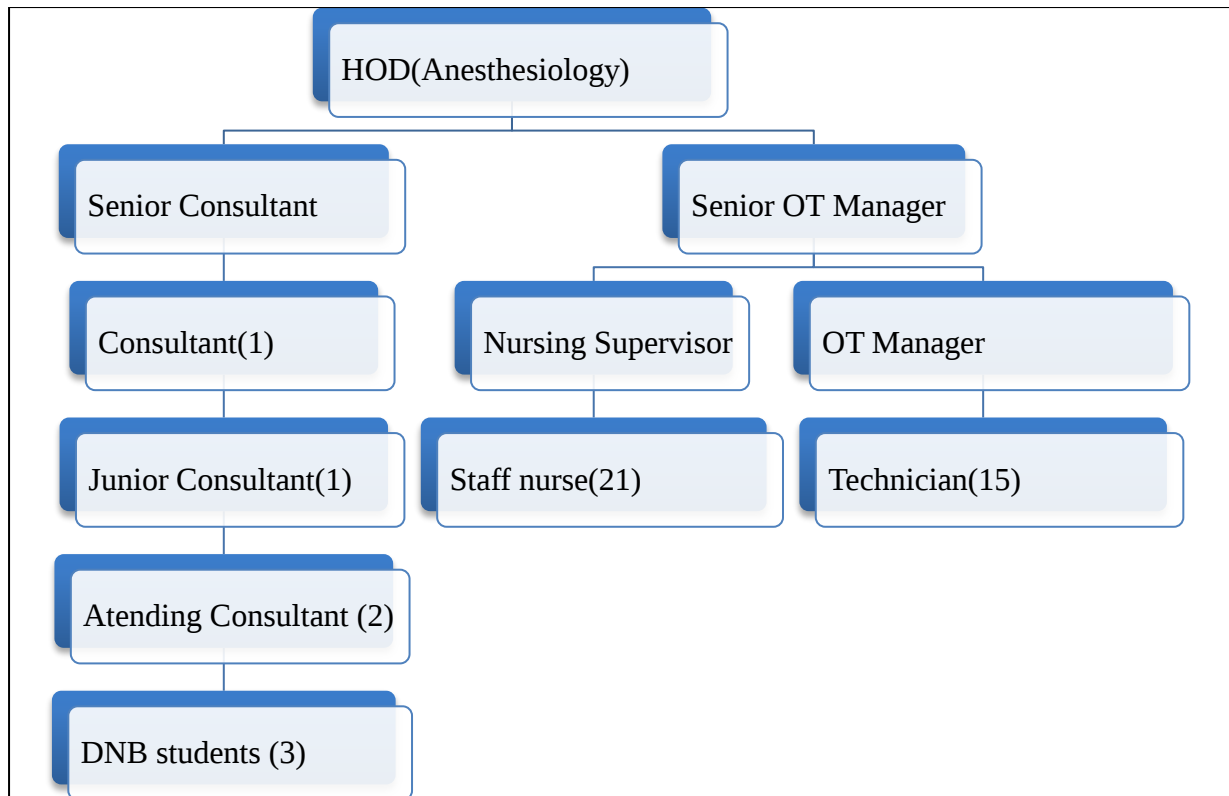


Figure 1-OTC Organogram

For each OT except Neuro and Cardiac OT, there is a requirement of 1 technician to assist anesthetist and 2 staff nurses to assist surgeons (1 scrub nurse and 1 circulation nurse). For Neuro OT-3 staff nurse and 1 Technician and for Cardiac OT, 3 staff Nurse and 2 Technicians is required.

Shifts (same for Technicians and Nurses):

General shift G1: 8:00am -4:00 pm (13 nurses and 8 Technicians)

General shift G2: 12:00pm-8:00pm (2 nurses and 1 technician)

Shifting duty: 2:00pm-8:00pm (2 nurses and 2 technicians)

Night: 8:00pm-8:00am (1 nurse and 2 technicians)

Sterilization in OT-

- a. After every surgery cleaning of floor is done by sodium hypochlorite and bags of the bins are changed.
- b. Different sets of instruments are there for different surgeries. After the surgery, used instruments are washed with 3M and then after drying them they are wrapped in double sheet and sent to CSSD department for sterilization. TAT for unused instrument is 72 hours. In case of any emergency they are sterilized in autoclave in flash sterilization room. The process for sterilization takes 20-30 minutes. Sterilization indicators are being used to check, if sterilization has been done properly or not. Color of indicator changes after sterilization; color changes from green to black for instruments being autoclaved. ETO objects are also sent to CSSD department after use. TAT for unused is 6months.
- c. If during surgery, surgical instruments fall down on the floor and the same instrument is not available, then for quick sterilization it is dipped in Disinfection Soaking Tray containing CIDEX.
- d. The Laparoscopic instruments are dipped in Disinfection Soaking Tray containing CIDEX(2% Glutaraldehyde) solution for 20 minutes to sterilize them in case those are needed for the next surgery otherwise they are stored in the Formalin chamber with Formalin tablets. For sterilization of Laparoscopic instruments in the Formalin chamber, 30 minutes are the least required.
- e. Once week fumigation is done with Lonzagard. Microbial sample is collected before fumigation & is sent to lab and same procedure is performed after fumigation has been done & comparison is done to see the effect of it. Usual timings of fumigation are 45min but once in a week OT has been kept closed for a night. One OT is kept operational in case there is an emergency.

PROCESS FLOW:

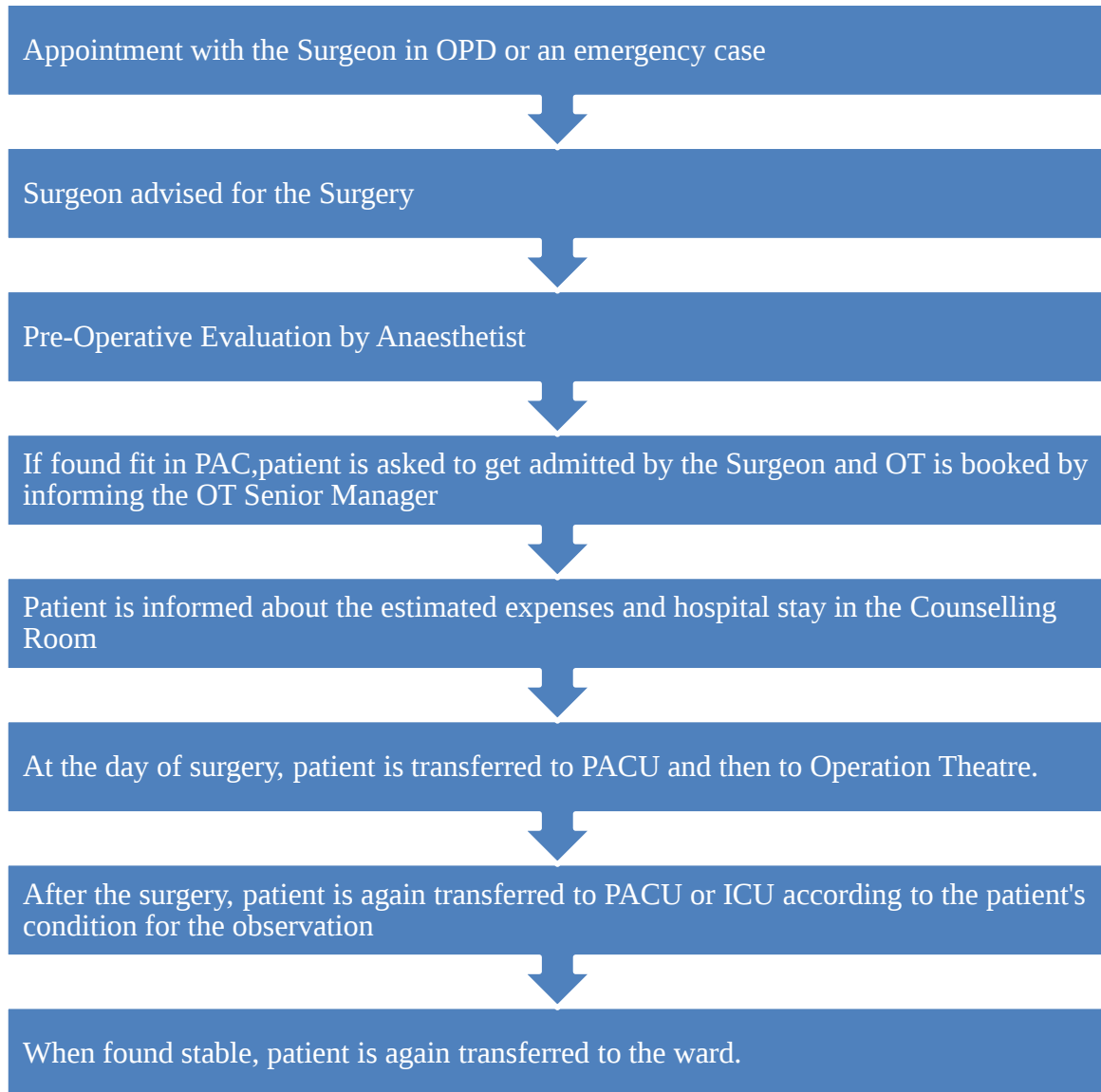


Figure 2-Process flow chart for surgeries

- f. Different slippers are used inside the OT area. Only for Neuro OT slippers are specific. Some OTs such as Neuro and Urology where liquid losses are high gum boots are used.
- g. Instrument trolleys are carbolized after each surgery.
- h. Patient trolleys are carbolized in case it goes out of the OT Complex.

5) Scrub stations

Two scrub stations are there. Each scrub station has three taps, one is to take out 10% Butadiene and the other two are for water supply (one manual elbow tap and one automatic).

6) Utility room

Utility Room is for-

- 1) Washing soiled linen with sodium hypochlorite.
- 2) Washing soiled instruments 3M solution.
- 3) Collecting Biomedical waste in different bins according to the color coding:

Blue - Unbroken Glass

Red - Infected Plastics: IV sets, gloves, tubings, catheters, urobags, etc.

Yellow - Anatomical and Pathological waste: cotton gauze, etc. contaminated with blood or other body fluids.

Black - General waste.

After collection of biomedical waste inside the utility room it is taken in the containers to the main garbage disposal from where it is sent for incineration. In case of an amputated body part, it is packed in the Yellow bag with patient details attached to it and then sent for incineration.

Broken glass pieces are sent after double wrapping it in paper and then writing over it- 'BROKEN GLASS'.

7) Store rooms:

3 store rooms are there. One store room is for Cardiac OT gen and neuro OT store

- For Neuro OT,
- For Cardiac OT, and
- For General OT.

8) OT pharmacy

OT has its separate pharmacy with the total manpower of 4. OT Pharmacy has been given the list of items needed for each surgery which ease the process. According to the surgeries pharmacy gets all the required medicines and surgical items ready in a very short period of time. Once the operation is

over, the nurse or technician provides the list of instruments and medicines used, which are then added to the patients bills, rest of the medicines are returned.

The inventory in OT Pharmacy is maintained by the HIS and reorder through the ROL (Re order level) based on moving medicines and instruments. Near 20th -25th of every month, the pharmacy looks for medicines which are closing expiry(3 months) and surgical items(6months) then deposits it to the IP pharmacy, so that it can be returned to the vendor for credit. Implants are taken on credit from vendors. If these implants are used, the vendor is asked to provide the bill which then included into the patient's bill or else it is returned to the vendor. Every Saturday the OT pharmacy files its indent and maintains the optimum number of medicines and surgical items.

9) OT billing

After each surgery, OT charge slip is filled by the circulation nurse and at the end of the day; all the slips are sent to the IP Billing Department. The list of medicines, injectables and other surgical items used in the surgery are provided by the nurses and technicians to the OT Pharmacy where Billing for all these items is done.

10) OT Scheduling

OT Scheduling is done by Senior OT Manager. A patient take appointment from doctors & according to the convenience of patients & doctors, date & time of surgery is decided and this way scheduling of OT is done.

3.2 I T Department

Table 1- Scope of IT Services

SCOPE OF IT SERVICES	
To provide IT support to the Organization (Hardware/ Software) & ensure smooth working of HIS	
1	To ensure the installation, recording and management of IT Assets
2	To ensure that organization data is backed up, stored in secured manner & is retrievable at time of disaster or failure for business continuity
3	To ensure efficient Implementation & Maintenance of HIS and to train the users.
4	Complaint Management and resolution- Providing support to the users and to ensure resolution of hardware & software calls or problems/ complaints in stipulated timelines
5	To ensure the proper implementation of IT Security and Maintain Database Integrity

Organogram as shown below is the hierarchy followed in the department.

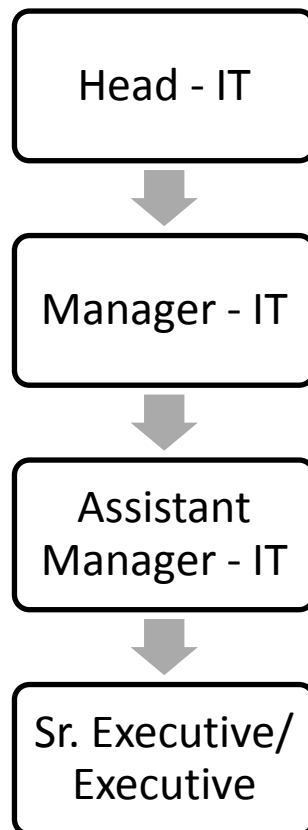


Figure 3-Organogram Of IT Department

Functioning and Policies of the Department

Background:-

Hospital's administrative and patient related data is being captured in the HIS hence it becomes the backbone for the hospital which is precious.

Almost all the department is dependent on the data stored in the HIS to meet the day to day requirement of their department as well as Hospital. It becomes mandatory that the backup should be taken on regular interval to avoid any data loss.

The purpose of data backup is to establish business continuity in disaster situations in least times e.g. Fire, Flood, Server failure etc

Key Definitions: -

HIS: Hospital Information system is software which is installed at various departments to automate different processes and MIS purposes. It is also synonymously used with word HMS – Hospital Management System

Database: It is collection of tables or files which contains the captured information from various departments or processes.

Backup Media: the media which is used to store the backup e.g., DVDs, Tapes etc

Database Server: The main computer where the actual physical database reside

Table 2-Policy Guidelines

S no	Category	Guidelines	Back Media	Record
1	Daily Backup Schedule	➤ The Backup of HIS Database will be taken based on the following schedule: ○ 5AM, 9 AM, 7PM through Auto Backup plan.	Hard disk of backup computer.	Back Up tracking sheet – Date, Time, Data type, Size
3	Archival of Backup	➤ Bimonthly backup is archived for future references ○ 1st day of the month ○ 16th of every month	CD or DVD back up data is identified with date & dbase name	Back Up tracking sheet – Date, Time, Data type, Size
4	User Data	➤ The backup of User specific data on each PC will be taken by the user itself for which the IT shall provide the Technical support. ➤ For HOD levels Back up CD with pass protection maintained at IT for all HOD on monthly basis	User CD OR DVD	CD or DVD back up data is identified with date & dbase
5	Data Protection in case of natural disaster	➤ The Backup of HIS Database is taken on media on daily basis (2 sets – Organization Head & IT Head) & taken every day outside the premises to avoid the data loss in the event of natural disaster	CD or DVD back up data is identified with date & dbase name	CD or DVD back up data is identified with date & dbase

Generic guidelines

- Back up data is checked on random basis for accuracy , integrity & restorability and log maintained in back up tracking sheet
- The data backup policy applies to all USERS who use who process or store critical data
- All data, operating systems and utility files must be adequately and systematically backed up - patches, fixes and update
- The backup media must be precisely labeled and accurate records must be maintained of back-ups done and to which back-up set they belong.
- 2 Copies of the back-up media, together with the back-up record, is be stored safely in a remote location, at a sufficient distance away to escape any damage from a disaster at the main site.
- Regular tests of restoring data/software from the backup copies are undertaken, to ensure that they can be relied upon for use in an Event of data failure.

.3.3 HMIS

Healthcare is a very important part of our society and it is imperative for healthcare providers to do their jobs in an efficient and effective manner. Each day hundreds of thousands of patients enter healthcare facilities challenging the administration to run the show smoothly. The employees have to manage and integrate clinical, financial and operational information that grows with the practice.

Previously, this data was organized manually, which was time consuming and failed to deliver the desired level of efficiency. Most professionally run hospitals and clinics now rely on hospital information systems (HIS) that help them manage all their medical and administrative information.

A hospital information system (HIS) is essentially a computer system that can manage all the information to allow health care providers to do their jobs effectively. These systems have been around since they were first introduced in the 1960s and have evolved with time and the modernization of healthcare facilities. The computers were not as fast in those days and they were not able to provide information in real time as they do today. The staff used them primarily for managing billing and hospital inventory. All this has changed now, and today hospital information systems include the integration of all clinical, financial and administrative applications.

Modern HIS includes many applications addressing the needs of various departments in a hospital. A centralized information system can be customized according to the specific requirements of a hospital. A hospital can tell the solution provider its needs and the applications can then be molded to deliver exactly what was demanded. For instance, you can demand a solution that is based on RDBMS for easy retrieval of information. You can also ask the vendor for a HIS that has user friendly features and a multilingual interface that can be used by a diverse workforce.

5. Problems and issues in each department

Inter department communication – While implementing software , there were many discrepancies in between departments as process flow followed was slightly different than basic software installed by external agency.

Like every new implementation, there were problems like , the Operation theatre staff and billing department were not communicating properly , as all staff were not fully trained initially. Their communication barriers were removed and they were trained and asked by us to communicate telephonically to I.T. Department and billing department staff for easy clearance of balance in bills and get *O.T. clearance* on time.

- **Unavailability and delayed deployment of changes** by External Agency – External agency were delaying deployment of software errors and modifications. Their staff was only communicating via telephonic conversation and online access of our systems of our hospital system from their office. Issue Tracker sent with corrections to be done was most of the times delayed and their office remain closed during weekends while hospital was still operational on Saturdays.

Time schedules were matched later on and agency staff was requested to appoint staff and make changes sent in Issue Tracker on time and weekly renewal of software were done.

- **Untrained staff** – Staff needed to be trained personally about data entry and report generation. Skilled staff is very essential to make system effective and efficient. The staff was trained and was supplied with User Manual to make system User-friendly. Early involvement of employees/staff leads higher level of user acceptance , and makes system more effective and efficient.

6. Observations/Learning

A good level of acceptance and awareness towards the system is required in the hospital for its successful implementation. The hospital required HIS Phase 2 implementation in departments like- Blood bank, OT, CSSD, Linen and Laundry, MRD, EHR, Equipment maintenance, Housekeeping departments. . For this external agency provided basis set-up for software. Due to the discrepancies in software and pattern of record maintenance in the department, changes were made. It is very crucial to have a consideration to the resistance that is still occurred during early phase. Department raised issues while recording the data related to patient and report generation, and the changes to be made were recorded in Issue Tracker. The changes were made and implemented and staff was trained and was supplied with User Manual to make system User-friendly. Early involvement of employees/staff leads higher level of user acceptance. The factor of system design of user interface should not be overlooked as it is one of the factors that leads to successful of the system implementation Hence the data entry system helped to make workflow easy, effective and efficient.

- HIS successful implementation requires two way approach i.e. both financial investment and management and changing software according to process flow, making software efficient and user-friendly.
- Evolutionary approach need to be taken to train staff in HIS. They should be part of software implementation from early stage. Employees need to be regularly updated about the software that is to be implemented and regular updates need to be taken from them to change software according to the need of department in hospital.
- Inter-department coordination: Billing department and Operation theatre staff should coordinate well to get bills cleared and patient admission a smooth process.
- System errors and failures in between need to be given priority and it should be solved on emergency basis , without delay.
- Supervision – Entries of the patient data made should be reviewed on regular basis and correct training is to be provided to new staff employed in the department.
- Regular report generation – Reports should be generated monthly or weekly basis to evaluate and check efficiency of system.

7. Any projects undertaken other than dissertation

During Dissertation, I also got the opportunity to work on Feasibility analysis of Cities In India.

Paras group of Hospitals ,are planning to open new centres and hospitals in various parts of country , hence they needed , Feasibility analysis report , to assess pros and cons in investing in particular area.

The analysis done , stated with collection of data for each city like population as per 2011 census , projected population growth in 2015 , District Literacy Rate , Socioeconomic Information (i.e. Medical colleges , total hospitals , schools and colleges , shopping malls , GDP/Capita of State) and Hospitals in organized private Sector.

Each Criteria were scored according to the key developed to estimate location feasibility.

Table 3-Key 1 - Scoring of Criteriae

	Weightage	5	4	3	2	1
District Population	20	>20 L	15-20 L	10-15 L	10-15 L	< 10 L
Hospitals Beds/ 1000 population in Organized Sector in that City	20	< 0.5	0.50-0.75	0.75-1	1-1.25	>1.25
Medical College in City and around 50 Km	15	> 2 Medical College	2 Medical Colleges	1 Government Medical College	1 Private Medical College	None
Integration with Our Units and Planned System	15	Within 150 Km of Existing Units	Within 150-250 Km of Existing Units	Within 150 Km of Planned Units	Within 150-250 Km of Planned Units	Beyond 250 Km of any existing and Planned System
Availability of Doctors	10	Very High	High	Medium	Low	Very Low
Socio Economic Status GDP/Capita (Ref 2013-14)	10	>Rs. 75000	Rs. 60-75000	Rs. 40-60000	Rs. 20-40000	<Rs. 2000
Insurance Coverage	5	>40% of Population	30-40% of population	20-30% of Population	10-20% of Population	< 10% of Population
District Literacy	5	>75% of Population	60-75% of population	45-60% of Population	30-45% of Population	< 30 % of Population

After scoring each criteria , total score were weighted and city was categorized.

Table 4-Key 2-Average weighted score of City

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

Following are the Cities and their Feasibility Analysis:

1. LUCKNOW

Lucknow District is a district of the state of Uttar Pradesh in Northern India. A major metropolitan city of India, Lucknow is the administrative headquarters of the eponymous District and Division. It is the 8th most populous city of India and the largest in Uttar Pradesh. Lucknow District has an area of 2,528 square kilometers.

Population:

As per Census 2011

City - 2,815,601

District - 4,589,838

Growth Rate - 25.82 percent

Projected Population (March 2015)

City- 3,106,396

District - 5,063,876

District Literacy Level: 77.29%

Socio Economic Information:

- Medical Colleges – 6 (2 Govt and 4 Private)
- Total Hospitals – 130 Total (Govt and Private)
- Universities - 10 (1 Govt , 9 private)
- Schools & Colleges - 90 schools and 90 colleges
- Shopping Malls and Complexes – 18
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

1. Eye Q Vision Pvt. Ltd - 50
2. King's George Medical University – 232
3. Ram Manohar Lohia Combined Hospital, Lucknow - 140
4. Sahara Hospital - 378
5. Ramakrishna Mission Sevashrama - 165

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	4,589,838	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.310	20%	✓					5	1
Medical College in City and around 50 Km	6	15%	✓					5	0.75
Integration with Our Units and Planned System	>500 Km from Gurgaon Unit	15%					✓	1	0.15
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	37,630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.1
District Literacy	77.29%	5%	✓					5	0.25
Total		100%							3.95

Recommendation: Good Location

2. KOTA

Kota District is a district of the [state](#) of [Rajasthan](#) in western [India](#). The city of [Kota](#) is the administrative headquarters of the district. Kota District has an area of 318 km².

Population:

As per Census 2011

- City - 1,001,365
- District - 1,951,014
- Growth Rate - 24.39 percent

Projected Population (March 2015)

City- 1,099,058

District - 2,141,355

District Literacy Level: 83.65 percent

Socio Economic Information:

- Medical Colleges – 1 (1 Govt)
- Total Hospitals – 36 Total
- Universities - 3
- Schools & Colleges - 103 schools and 15 colleges
- Shopping Malls and Complexes -4
- GDP/Capita of State - Rs. 65098

Hospitals in Private Organized Sector:

1. Kota Heart Institute & Multi Speciality Hospital - 200
2. Sudha Hospital & Medical Research Centre-150
3. Chandni Hospital-50
4. Aatmik Child Healthcare Clinic-50

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	2,141,355	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.40	20%	✓						1
Medical College in City and around 50 Km	1	15%			✓			3	0.45
Integration with Our Units and Planned System	489 Km from Gurgaon Unit	15%					✓	1	0.15
Availability of Doctors	Medium	10%			✓			3	0.30
Socio Economic Status	65098	10%		✓				4	0.40
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	83.65%	5%	✓					5	0.25
Total		100%							3.6

Recommendation: Good Location

3. Bhopal

Bhopal is the capital of the Indian state of Madhya Pradesh and the administrative headquarters of Bhopal district and Bhopal division. Bhopal is the 14th largest city in India and 131st largest city in the world. The city was the capital of the former Bhopal State. Bhopal District has an area of 697.2 km².

Population:

As per Census 2011

City - 1,795,648

District - 2,371,061

Growth Rate - 28.62 percent

Projected Population (March 2015)

City- 2,001,214

District - 2,642,500

District Literacy Level: 80.37 %

Socio Economic Information:

- Medical Colleges – 5
- Total Hospitals – 38 Total (6 Govt. and 32 Private & others)
- Universities - 7
- Schools & Colleges - 299 schools and 179 colleges
- Shopping Malls and Complexes - 6
- GDP/Capita of State- Rs. 54030

Hospitals in Private Organized Sector:

1. Bansal Hospital - 200
2. Peoples Hospital -1155
3. Chirayu Medical College & Hospital - 530
4. Bhopal Charitable Hospital - 200
6. Bhopal MEMORIAL Hospital - 350

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	2,642,500	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	1.21	20%				✓			0.4
Medical College in City and around 50 Km	5	15%	✓					5	0.75
Integration with Our Units and Planned System	788 Km from Delhi Unit	15%					✓	1	0.15
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	54030	10%			✓			4	0.30
Insurance Coverage	2%	5%					✓	1	0.05
District Literacy	80.37 %	5%	✓					5	0.25
Total		100%							3.4

Recommendation: Average to FAIR

4. Ludhiana

Ludhiana is a city and a municipal corporation in Ludhiana district in the Indian state of Punjab, and is the largest city, north of New Delhi. It is the largest city in the state. It has an area of about **310 km²**. The city stands on the Sutlej River's old bank, 13 km south of its present course. It is a major industrial centre of northern India, and was referred to as India's Manchester by the BBC

Population:

As per Census 2011

City - 1,613,878

District - 3,498,739

Growth Rate - 0.00

Projected Population (March 2015)

City - 1,613,878

District - 3,498,739

District Literacy Level: 82.20%

Socio Economic Information:

- Medical Colleges – 4
- Total hospitals - 117
- Universities - 1(Punjab Agricultural University)
- Schools & Colleges - 567, 60 in Ludhiana east and west and 134 colleges
- Shopping Malls and Complexes - 24
- GDP/Capita of State - Rs. 92638
-

Hospitals in Private Organized Sector:

1. Apollo Hospital - 350
2. CMC Ludhiana - 775

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	3,498,739	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.69	20%		✓					0.8
Medical College in City and around 50 Km	4	15%		✓				5	0.6
Integration with Our Units and Planned System	322 Km from Gurgaon Unit	15%					✓	1	0.15
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	Rs. 92,638	10%	✓					5	0.50
Insurance Coverage	12%	5%				✓		2	0.10
District Literacy	82.20%	5%	✓					5	0.25
Total		100%							3.9

Recommendation: Good Location

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

5. Ranchi:

is the capital of the Indian state of Jharkhand, and its third most populous city. Ranchi was the centre of the Jharkhand movement, which called for a separate state for the tribal regions of South Bihar, northern Orissa, western West Bengal & the eastern area of what is present-day Chhattisgarh. The Jharkhand state was formed on 15 November 2000 by carving out the Bihar divisions of Chota Nagpur and Santhal Parganas. Ranchi has an area of **175 km²**

Population:

As per Census 2011

City - 1,073,440

District - 2,914,253

Growth Rate - 23.98

Projected Population (March 2015)

City - 1,176,404

District - 3,193,788

District Literacy Level: 77.13%

Socio Economic Information:

- Medical Colleges – 1
- Total Hospitals – 20 Total (3 Govt and 17 Private)
- Universities - 1
- Schools & Colleges - govt. primary 1268, govt. middle 378, minority primary 123, minority middle 91, high school 128, CBSE high 31, ICSE high 09 & training college 04, constituent college 11, affiliated college 16, medical college 1
- Shopping Malls and Complexes - >5
- GDP/Capita of State - Rs14,990

Hospitals in Private Organized Sector:

1. Sadar Hospital , Apollo Hospitals Group - 500
2. Bharati Hospital (Main Hospital)-200
3. C.C.L. Hospital - 200
4. E. S. I. Hospital-200
5. Army Hospital-200
6. Rajender Medical College Hospital-1500
7. Government Vaccine Institute-100
8. Municipal Hospital-200
9. Ramakrishna Mission Tuberculosis Sanatorium-150

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	3,193,788	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	2.76	20%						1	0.2
Medical College in City and around 50 Km	1	15%			✓			3	0.45
Integration with Our Units and Planned System	1208 Km from Delhi Unit	15%					✓	1	0.15
Availability of Doctors	Low	10%				✓		2	0.20
Socio Economic Status	Rs14,990	10%				✓		2	0.20
Insurance Coverage	16 %	5%				✓		2	0.10
District Literacy	77.13%	5%	✓					5	0.25
Total		100%							2.55

Recommendation: Avoid

6. Dehradun:

is the [capital](#) city of the [state](#) of [Uttarakhand](#) in the [northern](#) part of [India](#). Located in the [Garhwal region](#), it is 236 km north of India's capital [New Delhi](#) and is one of the "[Counter Magnets](#)" of the [National Capital Region](#) (NCR) being developed as an alternative centre of growth to help ease the migration and population explosion in the [Delhi](#) metropolitan area. The Municipal Corporation of Dehradun is locally known as Nagar Nigam Dehradun. he district has 6 tehsils, 6 community development blocks, 17 towns and 764 inhabited villages, and 18 unpopulated villages. As of 2011 it is the second most populous district of Uttarakhand (out of [13](#)), after Haridwar. Dehradun District has an area of 300 km²

Population:

As per Census 2011

City - 578,420

District - 1,696,694

Growth Rate - 32.33%

Projected Population (March 2015)

City - 653,221

District - 1,916,110

District Literacy Level: 89.32 %

Socio Economic Information:

- Medical Colleges –13 (1 Govt and 12 Private)
- Universities - 5
- Schools & College - 90 schools and 37 colleges
- Shopping Malls and Complexes - 8
- GDP/Capita of State - Rs. 103349

Hospitals in Private Organized Sector:

1. Max Super Speciality Hospital - 200
2. Synergy Institute of Medical Sciences - 140
3. Ashirwad Hospital - 100
4. City Hospital, Dehradun-250

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	1,916,110	20 %		✓				4	0.8
Hospitals Beds in Organized Sector in that City	1.05	20%				✓		2	0.4
Medical College in City and around 50 Km	13	15%	✓					5	0.75
Integration with Our Units and Planned System	247 Km from Delhi Unit	15%					✓	5	0.15
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	Rs. 1,03,349	10%	✓					5	0.50
Insurance Coverage	15 %	5%				✓		2	0.10
District Literacy	89.32 %	5%	✓					5	0.25
Total		100%							3.35

Recommendation: Strong Reason to Explore

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

7. Ghaziabad:

is a city in the [Indian](#) state of [Uttar Pradesh](#), sometimes referred to as the "Gateway of UP" because it neighbours [New Delhi](#) and is the main route to Uttar Pradesh.^[1] It is a part of the [National Capital Region](#) of [Delhi](#).^[2] It is a large and planned industrial city, well connected by roads and railways, and is the administrative headquarters of [Ghaziabad District](#) as well as being the primary commercial, industrial and educational centre of [western Uttar Pradesh](#) and a major rail junction for [North India](#). Ghaziabad District has an area of **1,933.3 km²**.

Population:

As per Census 2011

City - 1,636,068

District - 4,681,645

Growth Rate - 42.27

Projected Population (March 2015)

City - 653,221

District - 1,916,110

District Literacy Level: 85 %

Socio Economic Information:

- Medical Colleges – 11
- Universities - 4
- Schools & Colleges - 259 schools and 48 colleges
- Shopping Malls and Complexes - 34
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

1. Yashoda Superspeciality Hospitals – 310+100
2. Columbia Asia - 250
3. Narender Mohan - 150
4. Pushpanjali Crosslay Hospitals - 350
5. Shanti Gopal Hospital - 200
6. Brij Medical Centre – 250

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	19,16,110	20 %		✓				4	0.8
Hospitals Beds in Organized Sector in that City	1.89	20%					✓	1	0.1
Medical College in City and around 50 Km	11	15%	✓					5	0.75
Integration with Our Units and Planned System	30 Km from Delhi Unit	15%	✓					5	0.75
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	Rs. 37,630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	85 %	5%	✓					5	0.25
Total		100%							3.45

Recommendation: **Average to fair**

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

8. Kanpur:

is a city in the state of [Uttar Pradesh](#) in [India](#). It is the 5th largest city in India by land area and 10th most populous urban agglomeration. It is the second largest industrial city of the [Hindi](#) belt in North [India](#). It is the administrative headquarters of [Kanpur Nagar district](#) and [Kanpur division](#) and is known as *Leather City* of the world as it contains some of the largest and finest tanneries in the world. Kanpur is one of North India's main commercial and industrial centers. Kanpur District has an area of 3,029 km²

Population:

As per Census 2011

City - 2,767,031

District - 4,572,951

Growth Rate - 9.92

Projected Population (March 2015)

City - 2,876,827

District - 4,754,406

District Literacy Level: 81.31%

Socio Economic Information:

- Medical Colleges – 3
- Universities - 3
- Schools & Colleges - 70 schools and 50 colleges
- Shopping Malls and Complexes - 12
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

1. Bhargava Hospital - 64
2. Escorts Heart Centre(A Unit Of Escorts Heart Institute & Research Center, New Delhi) - 150
3. Laxmi Devi Kishan Chand Memorial Hospital P Ltd - 150
4. Regency Hospital Limited - 10
5. Tulsi Hospital Limited - 50

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	47,54,406	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.147	20%	✓					5	1
Medical College in City and around 50 Km	3	15%	✓					5	0.75
Integration with Our Units and Planned System	468 Km from Delhi Unit	15%					✓	1	0.15
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	Rs. 37,630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	81.31 %	5%	✓					5	0.25
Total		100%							3.95

Recommendation: Good LOCATION

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

9. Jaipur:

Jaipur District is a district of the [state](#) of [Rajasthan](#) in Northern [India](#). The city of [Jaipur](#), which is Rajasthan's capital and largest city, is the district headquarters. It is the tenth most populous district in India. Jaipur District has an area of 11,152 km² .

Population:

As per Census 2011

City - 3,073,350

District - 6,626,178

Growth Rate - 26.19

Projected Population (March 2015)

City- 3,395,314.15

District - 7,320,336.41

District Literacy Level: 75.51%

Socio Economic Information:

- Medical Colleges – 3 (1 Govt and 2 Private)
- Universities - 5 (1 Govt , 4 private)
- Schools & Colleges - 186 schools and 70 colleges
- Shopping Malls and Complexes - > 10
- GDP/Capita of State - Rs. 65098

Hospitals in Private Organized Sector:

1. Fortis Hospital - 200 Beds
2. Narayan Hridulayay - 200 Beds
3. SDM Hospital - 250 Beds
4. Soni Hospital - 250 Beds
5. Monilek Hospital - 75 Beds
6. Apex Hospital - 80 Beds
7. BM Cancer Hospital - 150 beds
8. Rungta Hospital - 70 Bed

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	66 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.27	20%	✓					5	1
Medical College in City and around 50 Km	3	15%	✓					5	0.75
Integration with Our Units and Planned System	200 Km from Gurgaon Unit	15%		✓				4	0.60
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	65098	10%		✓				4	0.40
Insurance Coverage	3%	5%					✓	1	0.05

District Literacy	75.5%	5%	✓					5	0.25
Total		100%							4.55

Recommendation: Strong Reason to Explore

10. Gwalior

Gwalior district is one of the 50 [districts](#) of [Madhya Pradesh](#) state in [central India](#). The historic city of [Gwalior](#) is its administrative headquarters. The district has an area of 5,214 km². According to the [2011 census](#) Gwalior district has a [population](#) of 2,030,543, roughly equal to the nation of [Slovenia](#).

Population:

As per census 2011

City – 1053505

District – 2032036

Growth rate – 24.50

Projected population (March 2015):

City – 1156748.5

District – 2231175.5

District literacy level – 76.65

Socioeconomic information:

- Medical Colleges – 1 (private)
- Universities - 3(2 private & 1 public)
- Schools & Colleges - 92 schools and 155 colleges
- Shopping Malls and Complexes - >10
- GDP/Capita of State - Rs. 54030

Hospital in private organized sector:

- Birla institute of medical research – 250 beds
- Mascot hospital- 100 beds
- Kalyan memorial hospital – 55 beds
- Suyash research centre&hospital- 50 beds
- S M hospital – 30 beds
- Chandak hospital – 30 beds
- Sanjeevani hospital- 25 beds
- Parivar hospital & multispecialty research centre – 50 beds
- Sahara hospital – 20 beds

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	22 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.52	20%		✓				4	.80
Medical College in City and around 50 Km	1	15%				✓		2	0.30
Integration with Our Units and Planned System	320 Km from Gurgaon Unit	15%					✓	1	0.15
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	54030	10%			✓			3	0.30
Insurance Coverage	2%	5%					✓	1	0.05
District Literacy	76.65%	5%	✓					5	0.25
Total		100%							3.25

Recommendation: average to fair

11. Hisar

Hisar district is one of the 21 [districts](#) of [Haryana](#) state, [India](#). [Hisar](#) city serves as the district headquarters. As of 2011 it is the second most populous of the [21](#) districts of Haryana, after [Faridabad](#).

Population:

As per census 2011-

District- 1743931

City- 301249

Growth rate – 13.45

Projected population (March 2015)

District- 1837754.5

City- 317456.20

District Literacy level – 72.89

Socio economic information-

- Medical colleges- 1(public)
- Universities-3(3public)
- Schools & colleges-97 schools &62 colleges
- Shopping malls & complexes->10
- GDP/per capita of state-Rs. 132089

Hospitals in Private Organized sector:

- Jindal institute of medical sciences – 600 beds
- CMC Hospital – 120 beds
- Life line Institute Of Medical Sciences – 100 beds
- Metro hospital – 70 beds
- DrKalrasarvodaya multispecialty hospital- 60 beds
- SewakSabha Hospital – 50 beds
- Holy help hospital – 50 beds
- Sukhda hospital – 42 beds

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	18Lakh	20 %		✓				4	0.80
Hospitals Beds in Organized Sector in that City	3.4	20%					✓	1	0.20
Medical College in City and around 50 Km	1	15%			✓			3	0.45
Integration with Our Units and Planned System	181 Km from Gurgaon Unit	15%		✓				4	0.60
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	132089	10%	✓					5	0.50
Insurance Coverage	17%	5%				✓		2	0.10
District Literacy	72.89%	5%		✓				4	0.20
Total		100%							3.25

Recommendation: average to fair

12. Meerut

It is a city in the [Indian state](#) of [Uttar Pradesh](#).^[3] It is an ancient city with settlements dating back to the [Indus Valley civilization](#) having been found in and around the area. The city lies 70 km (43 mi) northeast of the national capital [New Delhi](#), and 453 km (281 mi) northwest of the state capital, [Lucknow](#).^[4] It is the second largest city in the [National Capital Region of India](#) (the largest being [Delhi](#)), and as of 2011 the 33rd most populous urban agglomeration and the 26th most populous city in India.

Area

- Metropolitan City 141.89 km² (54.78 sq mi)
- Metro 177.57 km² (68.56 sq mi)

Population:

As per Census 2011

City - 1,309,023

District - 3,443,689

Growth Rate - 14.89 percent

Projected Population (March 2015)

City- 1,386,988

District - 3,648,795

District Literacy Level: 72.84 %

Socio Economic Information:

- Medical Colleges – 4 (2 Govt and 2 Private)
- Total Hospitals – 25
- Universities - 4
- Schools & Colleges - 154 schools and 75 colleges
- Shopping Malls and Complexes – 14
- GDP/Capita of State - Rs 37630

Hospitals in Private Organized Sector:

1. KMC Hospital and Research Centre-200
2. Lokpriya Hospital-200
3. Jaswant Rai Specialty Hospital-150

4. Metro Hospitals & Heart Institutes-100 beds

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	3,648,795	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.540	20%		✓				4	0.8
Medical College in City and around 50 Km	4	15%	✓					5	0.75
Integration with Our Units and Planned System	80 Km from Delhi Unit	15%	✓					1	0.75
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	37,630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.1
District Literacy	72.84 %	5%		✓				4	0.20
Total		100%							4.2

Recommendation: Strong Reason to explore

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

13. Jodhpur

Jodhpur District

Jodhpur is a district of the [state](#) of [Rajasthan](#) in western [India](#). The city of [Jodhpur](#) is the administrative headquarters of the district. As of 2011 it is the second most populous district of Rajasthan (out of [33](#)), after [Jaipur](#).

Population:

As per census 2011

City- 1,033,918

District-3,685,681,

Growth rate- 27.69%

Projected population-(March 2015)

City- 1148063

District- 4092580

District literacy rate- 65.94%

Socio economic information:

- Medical colleges- 6(2 Govt and 4 private)
- Universities- 6(1 govt and 5 private)
- School & colleges- 146 school and 74 colleges
- Shopping malls and complexes- >10
- GDP/ Capita of state- Rs. 65098

Hospitals in private organized sector:

1. Rajdadisa hospital – 74 beds
2. Loksewa hospital and- 60 beds
3. Satyam hospital- 50 beds
4. Jeevan jyoti nursing home- 40 beds
5. Kamla nagar hospital- 30 beds
6. Kothari hospital-25 bed

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	40 Lakh	20 %	✓					5	1

Hospitals Beds in Organized Sector in that City	0.24	20%	✓					5	1
Medical College in City and around 50 Km	6	15%	✓					5	0.75
Integration with Our Units and Planned System	563.8 Km from Gurgaon Unit	15%					✓	1	0.15
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	65098	10%		✓				4	0.40
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	65.94%	5%		✓				4	0.2
Total		100%							4.1

Recommendation: Strong Reason to Explore

14. Moradabad

Moradabad district is a district in the Indian state of Uttar Pradesh. Moradabad is situated at a distance of 167 km from national capital (Delhi) and 344 km from state capital Lucknow. The Moradabad city is known as Pital Nagri for its famous brass handicrafts industry.

POPULATION

As per census 2011

City - 889810

District - 47,72,006

Growth Rate - 25.22

PROJECTED POPULATION (MARCH 2015)

City - 979574

District - 52,53,406

District literacy rate - 56.77 %

Socio Economic Information:

- Medical Colleges – 1 (Private)
- Universities - 3 (private)
- Schools & Colleges - 67 schools and 13 colleges

- Shopping Malls and Complexes - > 10
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

- | | |
|--|------------|
| 9. Teerthankar mahaveer medical hospital | - 850 Beds |
| 10. Fortis vivekanand hospital | - 150 Beds |
| 11. Sri sai Hospital | - 140Beds |
| 12. Cosmos Hospital | - 120 Beds |
| 13. C.L Gupta eye institute | - 25 beds |

riteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	47 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	1.31	20%					✓	1	.20
Medical College in City and around 50 Km	1	15%						2	0.30
Integration with Our Units and Planned System	153.8 Km from delhi Unit	15%		✓				4	0.60
Availability of Doctors	high	10%		✓				4	0.40
Socio Economic Status	37630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	56.77%	5%			✓			3	0.15
Total		100%							2.95

Recommendation: Strong Reason to Explore

15. Noida

Noida, short for the New Okhla Industrial Development Authority, is a city in India under the management of the New Okhla Industrial Development Authority (also called NOIDA). It is a department of the government of Uttar Pradesh in Gautam Buddh nagar district, India. As per provisional reports of Census India, population of Noida in 2011 is 642,381 of which male and female are 352,577 and 289,804 respectively.

Population:

City -642,381

District(Gautam Buddha Nagar)- 1,648,115

Growth rate(district) -39.32%

Projected population(2015)

City-743414.7

District-1907331

District Literacy Level -82.2%.

Socio Economic Information:

- Medical Colleges – 0
- Universities - 6
- Schools & Colleges - 45 schools & 24 college
- Shopping Malls and Complexes - <10
- GDP/Capita of State - 37630

Hospitals in Private Organized Sector:

- | | |
|--------------------------------------|----------|
| 1. Fortis Hospital | 191 bed |
| 2. Max | 30 bed |
| 3. Apollo | 150 bed |
| 4. Indo gulf hospital and diagnostic | 50 beds |
| 5. Jaypee | 500 beds |
| 6. Vinayak | 150 beds |
| - | |

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	19 Lakh	20 %		✓				4	.80

Hospitals Beds in Organized Sector in that City	0.27	20%	✓					5	1
Medical College in City and around 50 Km	0(Noida)	15%					✓	0	0
Integration with Our Units and Planned System	17 Km from delhi Unit	15%	✓					5	0.75
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	37630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	82.2%	5%	✓					5	0.25
Total		100%							3.5

Recommendation: good location Dwarka is spelled **Dwarika**, and **Dwaraka**, is a city and a municipality of [Devbhoomi Dwarka district](#) in the [Gujarat state](#) of India. Dwarka is one of the foremost [Chardham](#) four sacred Hindu pilgrimage sites, and is one of the [Sapta Puri](#) seven most ancient religious cities in the country. Dwarka is a Municipality city in district of Jamnagar, Gujarat. The Dwarka city is divided into 5 wards for which elections are held every 5 years..

Population:

City - 38,873

District(JAMNAGAR)- 529,308

Growth rate(district) – 13.44 %

Projected population(2015)

City-40,963

District-557,764

District Literacy Level -82.2%.

Socio Economic Information:

- Medical Colleges – 1
- Universities - 1
- Schools & Colleges - 15 schools & 2 college
- Shopping Malls and Complexes - 1
- GDP/Capita of State - 96976(year 2012-2013)

Hospitals in Private Organized Sector:

1. Deep Hospital - 200
2. Dwarkesh General Hospital – 400 beds

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	557,764	20 %					✓	1	.20
Hospitals Beds in Organized Sector in that City	14.64	20%					✓	1	1
Medical College in City and around 50 Km	1	15%					✓	1	0.15
Integration with Our Units and Planned System	1300 Km from delhi Unit	15%					✓	1	0.15
Availability of Doctors	Medium	10%			✓			3	0.30
Socio Economic Status	96976	10%				✓		2	0.20
Insurance Coverage	17%	5%				✓		2	0.10
District Literacy	75.94 %	5%	✓					5	0.25
Total		100%							2.35

Recommendation: Avoid

17. Allahabad:

Allahabad, is a city in the [north Indian](#) state of [Uttar Pradesh](#) and the administrative headquarters of the [Allahabad District](#). As of 2011, Allahabad is the [seventh most-populous city](#) in the state, most populous district of the state, twelfth most populous district in India and [thirty-sixth most-populous city](#) in India. Located in southern Uttar Pradesh, the Allahabad district area covers 5,482 km²

Population:**As per Census 2011**

City - 1,117,094

District - 5,954,391

Growth Rate - 20.63%

Projected Population (March 2015)

City- 1209276.59

District - 6445747.34

District Literacy Level: 72.32**Socio Economic Information:**

- Medical Colleges – 3 Govt
- Universities - 7
- Schools & Colleges - (60 Schools and 42 Colleges)
- Shopping Malls and Complexes - <10
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

1	Saket Hospital	150
2	Nazareth Hospital	250
3	Anand Hospital	250
4	Alka Hospital	300
5	Bhola Hospital	50
6	Heartline Cardiac Care Hospital	50
9	Jeevan Jyoti Hospital	500
10	Parvati Hospital	101
11	Sushruta Hospital	105
12	Vatsalya Hospital	110
13	Guru Kripa Jagrati Hospital & Research Centre Pvt.Ltd	100
14	Yashlok Hospital & Research Centre	50
15	Kamla Nehru Hospital	376

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	59 Lakhs	20 %	✓					5	1

Hospitals Beds in Organized Sector in that City	2.82	20%					✓	1	0.20
Medical College in City and around 50 Km	3 govt	15%	✓					5	0.75
Integration with Our Units and Planned System	Allahabad & Varanasi distance is less than 150 Km	15%			✓			3	0.45
Availability of Doctors	Very high	10%	✓					5	0.50
Socio Economic Status	Rs. 37630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	72.32	5%		✓				4	0.20
Total		100%							3.4

Average to fair location

18. Jabalpur:

Jabalpur is the administrative headquarters of both the [Jabalpur district](#) (the [second most populous district of Madhya Pradesh](#)) and the [Jabalpur division](#). It is one of the major cities of [Madhya Pradesh](#) state in [India](#). It is the third largest urban agglomeration in [Madhya Pradesh](#) and the [26th largest urban agglomeration](#) in India as per the 2011 census statistics. Jabalpur district has an area of 6,160 km².

Population:

As per Census 2011

City - 1,054,336

District - 2,463,289

Growth Rate - 14.51%

Projected Population (March 2015)

City- 1115529.66

District - 2606258.29

District Literacy Level: 81.07

Socio Economic Information:

- Medical Colleges – 5 (2 Govt and 3 Private)
- Universities - 6 (4 Govt and 1 private)
- Schools & Colleges - 59 Schools and 80 Colleges

- Shopping Malls and Complexes - >5 & < 10
- GDP/Capita of State - Rs. 54030

Hospitals in Private Organized Sector:

1 Mahakoshal Hospital	100
2 City Hospital	200
3 Jamdar Hospital	200
4 Bombay Hospital & Research Center	100
5 Jabalpur Hospital & Research Centre	250
6 Metro Hospital	130
7 Aditya Super specialty	100

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	24 Lakhs	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.97	20%			✓			3	0.60
Medical College in City and around 50 Km	2 govt and 3 private	15%	✓					5	0.75
Integration with Our Units and Planned System	All planned and existing units are >250 KM	15%					✓	1	0.15
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	Rs. 54030	10%			✓			3	0.30
Insurance Coverage	2%	5%					✓	1	0.05
District Literacy	81.07	5%	✓					5	0.25
Total		100%							3.5

Average to fair location

19. Panchkula:

Panchkula is a planned city in [Panchkula district](#), [Haryana](#), [India](#). Panchkula district has an area of 816 km².

Panchkula is surrounded by [Himachal Pradesh](#) in the north and east, [Punjab](#) and [Chandigarh](#) Union Territory in the west(distance 0 km) and by [Ambala district](#) in the south and east(distance approx 40 km). Panchkula district shares borders with Chandigarh, [Ajitgarh](#), [Solan](#) and [Ambala](#) districts.

Population:

As per Census 2011

City - 210,175

District - 561,293

Growth Rate - 19.83%

Projected Population (March 2015)

City- 226846.08

District - 605814.76

District Literacy Level: 81.88

Socio Economic Information:

- Medical Colleges – 3 Dental Colleges
- Universities - 1 Private
- Schools & Colleges - 24 Schools and 11 Colleges
- Shopping Malls and Complexes - >10
- GDP/Capita of State - Rs132089

Hospitals in Private Organized Sector:

1	Raffels Hospital	30
2	Dhawan Hospital	40
3	Alchemist	200
4	Childrens Hospital	36

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted
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									Average Score
District Population	5.6Lakh	20 %					✓	1	0.20
Hospitals Beds in Organized Sector in that City	1.34	20%					✓	1	0.20
Medical College in City and around 50 Km	No MBBS college(3 dental)	15%					✓	1	0.15
Integration with Our Units and Planned System	Distance between Jalandhar-Panchkula is 160 KM	15%				✓		2	0.30
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	Rs132089	10%	✓					5	0.50
Insurance Coverage	17%	5%				✓		2	0.10
District Literacy	81.88	5%	✓					5	0.25
Total		100%							2.2

Avoid this location

20. Jalandhar:

Jalandhar is a city in the northwestern [India state](#) of [Punjab](#). Jalandhar district is one of the 22 districts in the state of [Punjab](#) in North-West [Republic of India](#). The district has an area of 2,632 km².

Population:

As per Census 2011

City - 862,196

District - 2,193,590

Growth Rate - 0.00%

Projected Population (March 2015)

City- 862,196

District – 2,193,590

District Literacy Level: 82.48

Socio Economic Information:

- Medical Colleges – 1 Private
- Universities - 1
- Schools & Colleges - 186 schools and 28 Colleges
- Shopping Malls and Complexes – >10
- GDP/Capita of State – Rs. 92638

Private Hospitals

1	SGL-Charitable Hospital	250
2	Satyam Hospital	48
3	Tagore Hospital & Heart Care Centre	100
4	Patel Hospital	150
5	Apex Hospital	60
6	BBC heart care pruthi hospital	300
7	Jammu Hospital	100
8	Ruby Nelson Memorial Hospital	120
9	Vasal Hospital	70
10	Joshi Hospital & Trauma Center	15
11	Doaba Hospital	80
12	Shri Ram Cardiac centre	100
13	Oxford Hospital	200
14	Mangat Hospital	50
15	Guru Nanak Mission Charitable Hospital,	150
16	Mann Mediciti	150
17	Sacred Heart Hospital	170
18	Capitol hospital	300

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	21.9Lakhs	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	2.79	20%					✓	1	0.20
Medical College in City and around 50 Km	1Private	15%				✓		2	0.30
Integration with Our Units and Planned System	Distance between Jalandhar-Panchkula is 160 KM	15%				✓		2	0.30
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	Rs. 92638	10%	✓					5	0.50
Insurance Coverage	12%	5%				✓		2	0.10
District Literacy	82.48	5%	✓					5	0.25

Total		100%							3.15
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Average to fair location

21. Ajmer:

Ajmer is the 5th largest city in [Rajasthan](#) and is the centre of the eponymous [Ajmer District](#) and is located 135 kilometers (84 mi) west of [Jaipur](#), the state capital, 190 km from [Kota](#), 274 km from [Udaipur](#), 439 km from Jaisalmer, and 391 km from Delhi. Ajmer District has an area of 8,481 km².

Population:

As per Census 2011

City - 542,580

District - 2,583,052

Growth Rate - 18.40%

Projected Population (March 2015)

City- 582513.88

District 2773164.62

District Literacy Level: 69.33

Socio Economic Information:

- Medical Colleges – 1 Govt
- Universities - 2 Govt
- Schools & Colleges - 65 Schools and 58 Colleges
- Shopping Malls and Complexes – <5 (3Malls)
- GDP/Capita of State - Rs. 65098

Hospitals in Private Organized Sector:

1	Gheesibai Memorial Mittal Hospital and Research Centre	300
2	Saint Francis Hospital	250

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	25.8Lakhs	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.94	20%			✓			3	0.60
Medical College in City and around 50 Km	1 Govt	15%			✓			3	0.45
Integration with Our Units and Planned System	Gurgaon Unit is 361 KM away	15%					✓	1	0.15
Availability of Doctors	Medium	10%			✓			3	0.30
Socio Economic Status	Rs. 65098	10%		✓				4	0.40
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	87.53	5%	✓					5	0.25
Total		100%							3.20

Average to fair location

22. Muzaffarpur:

Muzaffarpur is a city in [Muzaffarpur district](#) in Bajjikanchal region of [Bihar](#). It also serves as the headquarters of [Muzaffarpur district](#) and [Tirhut division](#). Muzaffarpur is the fourth most populous city in [Bihar](#). Muzaffarpur, is the largest city of northern Bihar. As of 2011 it is the third most populous district of Bihar (out of [39](#)), after [Patna](#) and [East Champaran](#). Muzaffarpur district has an area of 3,173 km²

Population:

As per Census 2011

City - 351,838

District - 4,801,062

Growth Rate - 28.14%

Projected Population (March 2015)

City- 391440.88

District - 5341469.53

District Literacy Level: 63.43

Socio Economic Information:

- Medical Colleges – 1 Private
- Universities - 1
- Schools & Colleges - 29 Schools and 25 colleges
- Shopping Malls and Complexes - <5
- GDP/Capita of State - Rs. 31229

Hospitals in Private Organized Sector:

- 1 Prashant Memorial Charitable trust 75beds
- 2 Mishra Multi Specialities Hospital Pvt Ltd

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	48Lakhs	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City		20%							
Medical College in City and around 50 Km	1 Private	15%				✓		2	0.30
Integration with Our Units and Planned System	Patna Hospital is 72.2 KM from Muzafarpur	15%	✓					5	0.75
Availability of Doctors	Medium	10%			✓			3	0.30
Socio Economic Status	Rs. 31229	10%				✓		2	0.20
Insurance Coverage	15%	5%				✓		2	0.10
District Literacy	64.3	5%		✓				4	0.20
Total		100%							

23. Saharanpur:

Saharanpur district is the northernmost of the [districts](#) of [Uttar Pradesh state](#), [India](#). Bordering the states of [Haryana](#) and [Uttarakhand](#). Saharanpur district has an area of 3,860 km²

Population:

As per Census 2011

City - 703,345

District - 3,466,382

Growth Rate - 19.66%

Projected Population (March 2015)

City- 758656.05

District - 3738978.28

District Literacy Level: 70.49

Socio Economic Information:

- Medical Colleges – 1 Govt.
- Universities - 1 private
- Schools & Colleges - 46 Schools and 30 Colleges
- Shopping Malls and Complexes - <5
- GDP/Capita of State - Rs.37630

Hospitals in Private Organized Sector:

- 1 Santosh Hospital 100
- 2 Eye Q

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	34.6Lakhs	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.13	20%	✓					5	1
Medical College in City	1 Govt	15%			✓			3	0.45

and around 50 Km									
Integration with Our Units and Planned System	Delhi unit is 192 KM Away	15%		✓				4	0.60
Availability of Doctors	High	10%		✓				4	0.40
Socio Economic Status	Rs.37630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	70.49	5%		✓				4	0.20
Total		100%							3.95

Good Location

24. Faridabad:

Faridabad is the largest city in the north Indian state of Haryana, in Faridabad district. It is a leading industrial center and situated in the National Capital Region near the Indian capital New Delhi. Faridabad district has an area of 2,151 km²

Population:

As per Census 2011

City – 1,404,653

District – 1,809,733

Growth Rate – 7.14%

Projected Population (March 2015)

City- 1444769.88

District – 1861418.97

District Literacy Level: 70.49

Socio Economic Information:

- Medical Colleges – 2
- Universities - 2
- Schools & Colleges - 34 schools and 30 Colleges
- Shopping Malls and Complexes - >10
- GDP/Capita of State - Rs. 132089

Hospitals in Private Organized Sector:

1	Sarvodaya Hospitals	300
2	Park Hospital	250
3	Fortis Escorts Hospital	210
4	Asian Institute of Medical Sciences	350
5	QRG Central Hospital	140
6	Ashwani Hospital	100
7	Metro Hospital	200
8	BR memorial	52
9	Brrighton Kavita Hospital	35
10	Ghai Hospital	40
11	R.K. Hospital	60
12	Sirohi Medical Centre Pvt. Ltd.	50
13	UDM HOSPITAL	20
14	GOLD FIELD HOSPITAL & RESEARCH CENTRE	500
15	Navchetna Hospital	25

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	18Lakhs	20 %		✓				4	0.40
Hospitals Beds in Organized Sector in that City01	1.61	20%					✓	1	0.20
Medical College in City and around 50 Km	2 dental	15%					✓	1	0.15
Integration with Our Units and Planned System	Distance <150 KM from Existing unit	15%	✓					5	0.75
Availability of Doctors	VeryHigh	10%	✓					5	0.50
Socio Economic Status	Rs. 132089	10%	✓					5	0.50
Insurance Coverage	17%	5%				✓		2	0.10
District Literacy	70.49	5%		✓				4	0.20
Total		100%							2.8

Avoid this location

25. Varanasi:

Varanasi district is a district in the north Indian state of Uttar Pradesh with Varanasi city as the district headquarters. Part of [Varanasi division](#), the district occupies an area of 1,535 square kilometers.

Population:

As per Census 2011

City - 1,201,815

District - 3,676,841

Growth Rate - 17.15%

Projected Population (March 2015)

City- 1284259.50

District - 3929072.29

District Literacy Level: 75.60

Socio Economic Information:

- Medical Colleges – 1 Private
- Universities - 4
- Schools & Colleges - 66 schools and 30 Colleges
- Shopping Malls and Complexes - >10
- GDP/Capita of State - Rs.37630

Hospitals in Private Organized Sector:

1	Varanasi Hospital	66
2	Santushti Hospital	150
3	Popular Hospital	150
4	Apex Hospital	200
5	Heritage Hospitals	150
6	Meridian Hospital	100
7	Lifeline Hospital	100
8	DEVA INSTITUTE of Healthcare & Research Pvt. Ltd	55
9	UPKAR HOSPITAL	100

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted
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									Average Score
District Population	36.7Lakhs	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.83	20%			✓			3	0.60
Medical College in City and around 50 Km	1 Private	15%				✓		2	0.30
Integration with Our Units and Planned System	Distance between Allahabad and Varanasi is <150 KM	15%			✓			3	0.45
Availability of Doctors	High	10%	✓					5	0.50
Socio Economic Status	Rs.37630	10%				✓		2	0.20
Insurance Coverage	11%	5%				✓		2	0.10
District Literacy	75.60	5%	✓					5	0.25
Total		100%							

26. BAREILLY:

Bareilly district is the district of the state [Uttar Pradesh](#) in [northern India](#). Its capital is [Bareilly](#) city and it is divided in six [administrative division](#) or [tehsils](#): [Aonla](#), [Baheri](#), [Bareilly city](#), [Faridpur](#), [Mirganj](#), and [Nawabganj](#). The Bareilly district is a part of the [Bareilly Division](#) and occupies an area of 4120 km.²

Population:

As per Census 2011

City – 898,167

District – 4,448,359

Growth Rate – 22.93%

Projected Population (March 2015)

City- 980,547

District - 4,856,362

District Literacy Level: 58.49%

Socio Economic Information:

- Medical Colleges – 2(2Govt)
- Universities - 1(govt.)
- Schools & Colleges - 58 schools and 6 colleges
- Shopping Malls and Complexes - < 10
- GDP/Capita of State - Rs.37630

Hospitals in Private Organized Sector:

1. Shri ganga charanl hospital -
2. KK Hospital and kidney centre-
3. Sidhi vinayak hospital-
4. Sai hospital-
5. Sheel Hospital-

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	44 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.38	20%	✓					5	1
Medical College in City and around 50 Km	>2	15%						5	0.75
Integration with Our Units and Planned System	200Km from Delhi	15%		✓				4	0.60
Availability of Doctors	Very High	10%						3	0.30
Socio Economic Status	37630	10%						2	0.20
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	58.49	5%						3	0.15
Total		100%							3.9

Recommendation: Good location

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

27. AGRA:

Agra District is one of the 75 [districts](#) of [Uttar Pradesh state](#) of India, and the historical city of [Agra](#) is the district headquarters. Agra district is a part of [Agra division](#). Agra district is bounded by [Mathura District](#) on the north, [Dholpur District](#) of [Rajasthan](#) state on the south, District on the east and [Bharatpur District](#) of [Rajasthan](#) State on the west. Area of the district is 4027 km².

Population:

As per Census 2011

City – 1,574,542

District – 4,418,797

Growth Rate – 22.05%

Projected Population (March 2015)

City- 1,732,311

District - 4,808,535

District Literacy Level: 71.58%

Socio Economic Information:

- Medical Colleges – 1(govt.)
- Universities- 2
- Schools & Colleges- 311 schools and 102 colleges
- Shopping Malls and Complexes - < 10
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

[Peoples Heritage Hospital Ltd., Agra-25](#)
[Navdeep Hospital & Research Centre, Agra-50](#)
[City Hospital, Agra-100](#)
[Shanti Hospital, Dayal Bagh Road-100](#)

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	44 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.16	20%	✓					5	1
Medical College in City and around 50 Km	1	15%						5	0.45
Integration with Our Units and Planned System	200 Km from Gurgaon Unit	15%		✓				4	0.60
Availability of Doctors	Very High	10%						4	0.40
Socio Economic Status	37630	10%						2	0.20
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	71.58%	5%						4	0.20
Total		100%							3.90

Recommendation: Good Location

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

28. UDAIPUR:

Udaipur District is one of the districts of Rajasthan in western India. Udaipur city is the district headquarters. Maharana Udai Singh II founded Udaipur in the year 1559 and was named after the founder. Udaipur is popularly known as the 'Lake city of India'. Area is 13,883km²

Population:

As per Census 2011

City – 451,735

District – 3,068,420

Growth Rate – 23.69

Projected Population (March 2015)

City- 494,541

District- 3,359,183

District Literacy Level : 61.82%

Socio Economic Information:

- Medical Colleges – 2(1 Govt and 1 Private)
- Universities - 7
- Schools & Colleges - 134 schools and 135 colleges
- Shopping Malls and Complexes - < 10
- GDP/Capita of State - Rs. 65098

Hospitals in Private Organized Sector:

1. Noble hospital-udaipur - 80
2. Aravali hospitals private limited - 100
3. Goyal hospital - 150
4. Dr Chaudhary Hospital - 100

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	30 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.86	20%			✓			5	0.60
Medical College in City and around 50 Km	2	15%						4	0.60
Integration with Our Units and Planned System	202 Km from Ahemdabad	15%		✓				4	0.60
Availability of Doctors	Very High	10%						4	0.40
Socio Economic Status	37630	10%						2	0.20
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	61.82%	5%						4	0.20
Total		100%							3.75

Recommendation: Strong Reason to Explore

Weighted Average Score	Recommendation
> 4	Strong Reason to explore
3.5 to 4	Good Location
3 to 3.5	Average to fair
< 3	Avoid

29. JHANSI:

Jhansi District is one of the [districts](#) of [Uttar Pradesh state](#) in northern India. The city of [Jhansi](#) is the district headquarters. The district is bordered on the north by [Jalaun District](#), to the east by [Hamirpur](#) and [Mahoba](#) districts, to the south by [Tikamgarh district](#) of [Madhya Pradesh](#) state, to the southwest by [Lalitpur District](#), which is joined to Jhansi District by a narrow corridor, and on the east by the [Datia](#) and [Bhind](#) districts of Madhya Pradesh Jhansi District has an area of 5,024km² .

Population:

As per Census 2011

City – 507,293

District – 1,998,603

Growth Rate – 14.54

Projected Population (March 2015)

City- 536,797

District - 2,114,842

District Literacy Level : 75.05%

Socio Economic Information:

- Medical Colleges – 1
- Universities - 1
- Schools & Colleges - 38 schools and 21 colleges
- Shopping Malls and Complexes - <10
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

1. Happy family hospital - 62
2. Kapoor Hospital - 50
3. Shri guru ramdas hospital - 80
4. Arogya sadan Hospital - 60
5. Vinayak Hospital - 30

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	19.98Lakh	20 %						4	.80
Hospitals Beds in Organized Sector in that City	0.52	20%		✓				4	0.80
Medical College in City and around 50 Km	1	15%						3	0.45
Integration with Our Units and Planned System	211 Km from kanpur	15%		✓				4	0.60
Availability of Doctors	Very High	10%						3	0.30
Socio Economic Status	37630	10%						2	0.20
Insurance Coverage	4%	5%					✓	1	0.05
District Literacy	75.5%	5%	✓					5	0.25
Total		100%							3.45

Recommendation: Average to fair

30. ROHTAK:

Rohtak district is one of the 21 [districts](#) of [Haryana](#) state in northern India. It is located in the southeast of Haryana and northwest of [Delhi](#), bounded by [Jind](#) and [Sonipat](#) districts to the north, [Jhajjar](#) and [Sonipat](#) districts to the east, and [Hissar](#), [Sirsa](#), and [Bhiwani](#) districts to the west. [Rohtak](#) city is the district headquarters. . Rohtak District has an area of 1668 km².

As per Census 2011

City – 373,133

District – 1,061,204

Growth Rate – 12.88%

Projected Population (March 2015)

City- 392357

District - 1,115,877

District Literacy Level: 80.22%

Socio Economic Information:

- Medical Colleges – 1
- Universities - 4
- Schools & Colleges - 101 schools and 103 colleges
- Shopping Malls and Complexes - < 10
- GDP/Capita of State - Rs. 132089

Hospitals in Private Organized Sector:

1. Jiwan Nursing home – 52 beds
2. Life care hospital - 30
3. Karnal Nursing home - 40
4. Praveen Hospital private limited - 15
5. Saini Hospital - 10

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	10 Lakh	20 %						3	0.60
Hospitals Beds in Organized Sector in that City	0.37	20%						1	1
Medical College in City and around 50 Km	3	15%						3	0.45
Integration with Our Units and Planned System	68 Km from Delhi	15%						5	0.75
Availability of Doctors	Very High	10%						3	0.30
Socio Economic Status	132089	10%						5	0.50
Insurance Coverage	4%	5%					✓	1	0.05
District Literacy	80.22%	5%	✓					5	0.25
Total		100%							3.9

Recommendation: Good location

31. CHANIDIGARH:

Chandigarh district is a city district in the UT of [Chandigarh](#). There are 14 villages in Chandigarh district. There is one Zilla Parishad at district level, one Panchyat Samiti at block level and 12 Gram Panchayats at village levels. Chandigarh District has an area of 114 km².

Population:

As per Census 2011

City – 960,787

District – 1,055,450

Growth Rate – 17.19%

Projected Population (March 2015)

City- 1,026,851

District - 1,128,023

District Literacy Level : 86.05%

Socio Economic Information:

- Medical Colleges – 2
- Universities - 2
- Schools & Colleges - 143 schools and 100 colleges
- Shopping Malls and Complexes - <10
- GDP/Capita of State - Rs. 156951

Hospitals in Private Organized Sector:

1. Abhilasha Hospital – 15 beds
2. Delwyns Hospital - 80
3. Oxford Heart and Multispeciality Hospital - 150
4. Chaitanya Hospital - 40
5. Inscol Hospital - 50

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	10 Lakh	20 %						3	.60
Hospitals Beds in Organized Sector in that City	0.33	20%	✓					5	1
Medical College in City and around 50 Km	3	15%						4	0.60
Integration with Our Units and Planned System	250 Km from Delhi	15%		✓				4	0.60
Availability of Doctors	Very High	10%	✓					5	0.50
Socio Economic Status	156951	10%						5	0.50
Insurance Coverage	5%	5%					✓	1	0.05
District Literacy	86.09%	5%	✓					5	0.25
Total		100%							4.1

Recommendation: Strong Reason to Explore

32. AMRITSAR:

Amritsar district is one of 22 districts in the state of [Punjab](#) in North [India](#). The city of [Amritsar](#) is headquarters of this district. As of 2011 it is the second most populous district of Punjab (out of [22](#)), after [Ludhiana](#). District has an area of 2,683 km².

Population:

As per Census 2011

City – 966,862

District – 2,490,656

Growth Rate – 0.00%

Projected Population (March 2015)

City- 966,862

District - 2,490,656

District Literacy Level : 76.27%

Socio Economic Information:

- Medical Colleges – 1 (1 Govt)
- Universities - 1
- Schools & Colleges - 139 schools and 84 colleges
- Shopping Malls and Complexes < 10
- GDP/Capita of State - Rs. 92638

Hospitals in Private Organized Sector:

1. Dr.Hardas singh Orthopedic Hospital and Super Speciality - 50
2. Uppal Neuro Hospital and Super Speciality Centre - 52
3. Amandeep Hospital - 20
4. Sanjeevan Hospital - 20
5. Carewell Heart and Super Speciality Hospital - 250

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	24 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.40	20%						5	1
Medical College in City and around 50 Km	1	15%						3	0.60
Integration with Our Units and Planned System	248 Km from Chandigarh	15%		✓				4	0.60
Availability of Doctors	Very High	10%						3	0.30
Socio Economic Status	92638	10%						5	0.50
Insurance Coverage	4%	5%					✓	1	0.05
District Literacy	76.27%	5%	✓					5	0.25
Total		100%							4.30

Recommendation: Strong Reason to Explore

33. PATIALA:

Patiala district is one of the twenty two [districts](#) in the state of [Punjab](#) in North-West [India](#). Patiala is a city in southeastern [Punjab](#), in northern [India](#). It is the fourth largest city in the state and is the administrative capital of [Patiala district](#). Patiala District has an area of 3,430 km².

Population

As per Census 2011

City – 405,164

District -1,895,686

Growth Rate – 0.00%

Projected Population (March 2015)

City- 405,164

District - 1,895,686

District Literacy Level : 75.28%

Socio Economic Information:

- Medical Colleges – 1 (1 Govt)
- Universities - 2
- Schools & Colleges - 96 schools and 111 colleges
- Shopping Malls and Complexes - <10
- GDP/Capita of State - Rs. 92638

Hospitals in Private Organized Sector:

1. Aggarsan Hospital – 80 beds
2. Neelam hospital and maternity Centre - 160
3. Deep Hospital – 40 beds
4. Amarinder Hospital – 60 beds

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	18 Lakh	20 %						4	.80
Hospitals Beds in Organized Sector in that City	0.84	20%			✓			3	0.60
Medical College in City and around 50 Km	1	15%						3	0.45
Integration with Our Units and Planned System	67 Km from Chandigarh	15%						5	0.50
Availability of Doctors	Very High	10%						3	0.30
Socio Economic Status	92638	10%						5	0.50
Insurance Coverage	3%	5%					✓	1	0.05
District Literacy	75.28%	5%	✓					5	0.25
Total		100%							3.45

Recommendation: Good Location

34. MUZZAFFARNAGAR

Muzaffar Nagar District is a [district](#) of [Uttar Pradesh](#) state in northern [India](#). It is well known for its agricultural prosperity (Highest agricultural GDP in UP) and is one of the most prosperous districts of Uttar Pradesh. This district, being one of the highest producer of sugarcane in the country. It is part of [Saharanpur division](#). The town of [Muzaffar Nagar](#) is the district headquarters.. District has an area of 2,958 km².

Population:

As per Census 2011

City – 392,451

District -4,143,512

Growth Rate – 16.94%

Projected Population (March 2015)

City- 419,043

District - 4,424,276

District Literacy Level: 69.12%

Socio Economic Information:

- Medical Colleges – 1 (1 Govt)
- Universities - 2
- Schools & Colleges - 40 schools and 28 colleges
- Shopping Malls and Complexes - <10
- GDP/Capita of State - Rs. 37630

Hospitals in Private Organized Sector:

Jeevan Prakash Hospital – 100 beds

Gupta Nursing Home and Laparoscopy Centre - 25

Life care hospital-125 beds

Chandra Vidhya Hospital – 50 beds

Criteria:

		Weightage	5	4	3	2	1	Score	Weighted Average Score
District Population	41 Lakh	20 %	✓					5	1
Hospitals Beds in Organized Sector in that City	0.71	20%		✓				4	0.80
Medical College in City and around 50 Km	1	15%	✓					3	0.45
Integration with Our Units and Planned System	146 Km from Gurgaon Unit	15%						5	0.75
Availability of Doctors	Very High	10%						2	0.20
Socio Economic Status	37630	10%						2	0.20
Insurance Coverage	4%	5%					✓	1	0.05
District Literacy	69.12%	5%						4	0.20
Total		100%							3.65

Recommendation: Good location

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