

# WINTER INTERNSHIP PROJECT REPORT

APOLLO HOSPITALS

APOLLO SPECTRA  
HOSPITALS,  
TARDEO

Submitted by:

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## **ABSTRACT**

For three months from 23/08/2021 to 30/11/2021, I did an internship at Apollo Spectra Hospital, Tardeo, Mumbai. The hospital is well structured and organized for general surgeries, chemotherapies and OPD'S. The hospital offers superlative care in a wide range of surgical specialties including Bariatric Surgery, ENT, General & Laparoscopic Surgery, Orthopaedics & Spine, Urology, Varicose Veins, to name a few. It is a surgical hospital where they look out for planned surgeries and consultations by specialists in the given time frame.

With a capacity of 30 beds, this state-of-the-art specialty hospital is committed to bringing together world-class medical services and world's best healthcare management practices. Spread over a 15000 sq ft area, the hospital houses 4 ultra-modern modular OT's, in-house pharmacies, and in-patient families waiting for the area to name a few.

With the single-minded objective of offering simplified quality healthcare, over 125 healthcare professionals, including 90 specialist consultants are committed to create a new standard in healthcare services.

This internship project is a part of my first year MBA and PGP in healthcare management programme, conducted at Motion Institute of Management Studies, Pune, Maharashtra.

I have worked in the fields of patient care service manager, CSE and billing departments respectively. Throughout this internship, I appreciated the core quality which should be inculcated in every individual is communicating skills. I was posted in every department of the hospital within a week's time span and was able to observe, analyze and conclude on the pattern of the workflow in the hospital.

This internship taught me managing and communicating skills, pitching up the conceptual ideas in front of team members and also the superiors, convincing power, to name a few. The journey in the hospital sector encourages you to do more for our country and build an organization of our own. It enhanced me to behave as an expert when required, to exhibit leadership qualities, to maintain a good relation with each and every member of the hospital.

At an organizational level, the skills required to set up an hospital were well instructed and enlightened on the areas of improvement in the healthcare management of the hospital.

## **INTRODUCTION:**

### **★ About Apollo**

Apollo Group Hospitals are the forerunner of integrated healthcare in Asia with a futuristic vision of making India a preferred global healthcare destination.

At the behest of his father, in 1971, Dr. Reddy left behind a flourishing practice in Boston and returned to India. On his return, he found the medical landscape in the country plagued by gaps in infrastructure, delivery, and affordability. Things took a turn for the worse when he lost a young patient who just did not have the means to go abroad for treatment. The incident marked a crossroad in Dr. Reddy's life and steeled his determination to get quality healthcare to India. He set the blueprint to build India's first multi-specialty private sector hospital.

Undaunted and unfazed by the obstacles faced, Apollo Hospitals opened its doors in 1983 and ever since nurtured a goal which read as "Our mission is to bring healthcare of international standards within the reach of every individual. We are committed to the achievement and maintenance of excellence in education, research and healthcare for the benefit of humanity".

In the 35 years since, it has scripted one of the most magnificent stories of success that India has seen. Not only is the Apollo Group one of the largest integrated healthcare groups in the region, it also successfully catalyzed the private healthcare revolution in the country. Apollo today has made every aspect of their lofty mission a reality. Along the way, the journey has touched and enriched 42 million lives who came from 120 countries.

Apollo Hospitals was the forerunner of integrated healthcare in Asia, as well as globally. Today, the group's futuristic vision has ensured that it has been in a position of strength at every touch point of the healthcare delivery chain. Its presence encompasses over 10,000 beds across 64 hospitals, more than 2200 pharmacies, over 100 primary care & diagnostic clinics, 115 telemedicine units across 9 countries, health insurance services, global projects consultancy, 15 academic institutions and a Research Foundation with a focus on global clinical trials, epidemiological studies, stem-cell and genetic research.

The Group continues to break new ground in adopting new technology. From leveraging new age mobility to getting futuristic equipment, Apollo has always been ahead of the curve. Currently, the group believes in the tremendous potential of robotics and is investing heavily in making it a real and robust option for all. Apollo pioneered Tender Loving Care (TLC) and it continues to be the magic that inspires hope, warmth and a sense of ease in the patients.

Apollo started out with the promise of bringing quality healthcare to India at a price point that Indians could afford. The cost of treatment in Apollo was a tenth of the price in the western world. Today as the group charts out its roadmap to take healthcare to a billion, the focus on driving a strong value proposition remains constant.

Apollo's remarkable story has captured India's attention. For its service to the nation, the Group was felicitated with the honor of a commemorative postage stamp bearing its name. For his untiring pursuit of excellence in healthcare, Dr. Prathap C Reddy was bestowed with the second highest civilian award, the 'Padma Vibhushan', by the Government of India.

Recently Apollo Hospitals celebrated its 35 years of bringing quality healthcare to patients from across the world. The Group, led by Dr. Prathap Reddy, reaffirmed its goals and redefined their focus. With ambitious projects like Apollo Reach Hospitals, a strong focus on preventive healthcare and commitment to nurturing excellence and expertise in healthcare, Apollo Hospitals envisions a new horizon – a future where the nation is healthy, where its people are fighting fit, and India emerges as the preferred global healthcare destination.

### ★ Highlights

- 1) 1991 – Conferred the Padma Bhushan by the Government of India
- 2) 1992 – Invited by the Government of India to be member of the Working Group on Health Financing and Management
- 3) 1993 – The Mother St.Teresa's 'Citizen of the Year' award
- 4) 1997 – Business India —Top 50 personalities who made a difference to India since Independence
- 5) 1998 – Sir Nilratan Sircar Memorial Oration (JIMA) award for single-handedly making super speciality care available to a vast section of society
- 6) 2000 – Conferred the Fellowship Ad Hominem by the Royal College of Surgeons of Edinburgh
- 7) 2001 – Ernst & Young 'Entrepreneur of the Year' award
- 8) 2002 – Lifetime Achievement Award by the Hospimedica International
- 9) 2004 – Franchise Award for Excellence in Business Development
- 10) 2005 – The 'Asia – Pacific Bio leadership Award' by the Marshall School of Business
- 11) Appointed as a Member of the Indo – US CEO's Forum by the Prime Minister of India
- 12) 2006 – 'Modern Medicare Excellence Award 2006', by the ICICI Group, for his outstanding achievements in the healthcare industry
- 13) 2007 – Appointed Chairman of the CII National Healthcare Committee
- 14) 2009 – The Government of India honors Apollo Hospitals with a Commemorative Postage Stamp
- 15) 2010 – Govt. of India conferred the Padma Vibhushan, the second highest civilian award in India
- 16) Lifetime Achievement Award from Rotary International and Frost & Sullivan

- 17) 2011 – Lifetime Achievement award from the FICCI
- 18) Lifetime Contribution Award from AIMA
- 19) 2012 – Apollo Hospitals was the winner of G20 Challenge on Inclusive Business Innovation for the Apollo Reach Hospitals initiative
- 20) 2013 – NDTV Indian Lifetime Achievement Award
- 21) Asian Business Leaders Lifetime Achievement award
- 22) CNBC TV18 Lifetime Achievement Award for India Business Leaders Awards 2013

### ★ News and Media:

Title	Date	View
20% increase in pediatric eye disorders during lockdown period, Dr. Hemant Todkar	August 13, 2020	<a href="#">Click to View</a>
Oral sex safe for women the answer will positively shock you	August 13, 2020	<a href="#">Click to View</a>
Work From Home Giving Your Sore Back? Make These 5 Lifestyle Changes, Dr Ashwani Maichand	August 12, 2020	<a href="#">Click to View</a>
Increase in refractive error cases in kids eyes, Dr Hemant Todkar	August 12, 2020	<a href="#">Click to View</a>
6 reasons why your experiencing vaginal swelling	August 11, 2020	<a href="#">Click to View</a>
Risk of blood clots in COVID-19 positive pregnant women	August 10, 2020	<a href="#">Click to View</a>
Now, Next Day Discharge From Hospital Is Possible Through New Age Technology Says Apollo Spectra Hospitals	August 27, 2018	<a href="#">Click to View</a>
Latest Injection Therapy to grow new Hairs and prevent Hair Loss by Dr Debraj Shome	March 19, 2018	<a href="#">Click to View</a>
Apollo Spectra Hospitals Performs First Ever Painless Bone Cell Therapy OSSGROW on a 44-year-old Accident Survivor	January 24, 2018	<a href="#">Click to View</a>
Super Foods for Strong Bones	December 8, 2017	<a href="#">Click to View</a>
Eat these fish for healthy and strong bones	December 7, 2017	<a href="#">Click to View</a>
Apollo Spectra – News Coverage in TOI- Dr. Jayshree Todkar	November 17, 2017	<a href="#">Click to View</a>
Diet to be followed after Bariatric Surgery	November 8, 2017	<a href="#">Click to View</a>
Latest Injection Therapy to grow new Hairs and prevent Hair Loss by Dr Debraj Shome	November 7, 2017	<a href="#">Click to View</a>

### HOSPITAL PROGRESS 1

**Figure no: 1. The above picture depicts the hospital's progress during the following years.**

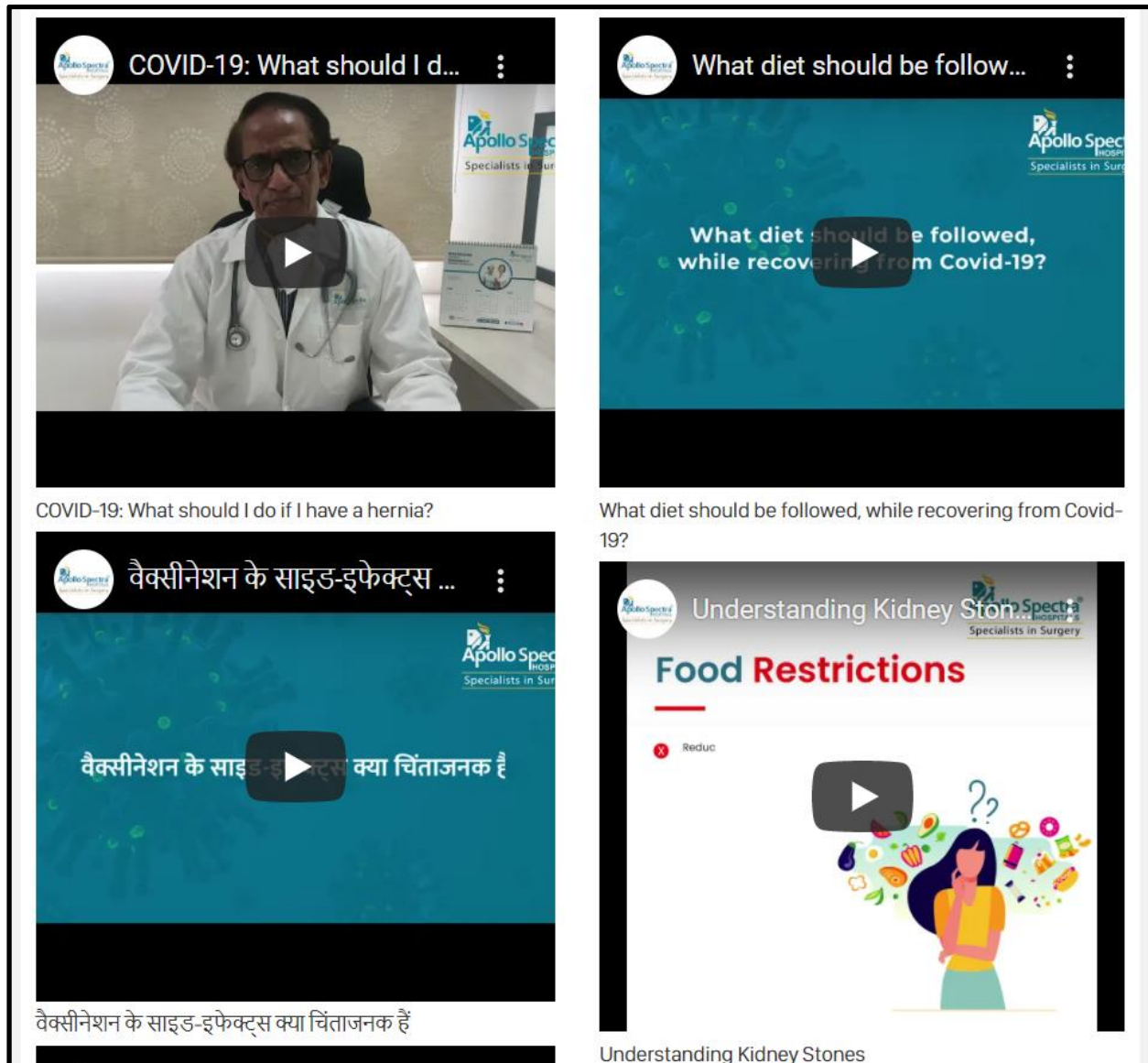
Knee Replacement Doctor	July 14, 2017	<a href="#">Click to View</a>
Expert Talk – Dr. Pawan Gupta on Arthritis	July 13, 2017	<a href="#">Click to View</a>
Do you need knee replacement – The New Indian Express	July 8, 2017	<a href="#">Click to View</a>
Body Beautiful – The Tribune	July 2, 2017	<a href="#">Click to View</a>
Talk show with Dr. Ritesh Mehta on Kidney Stone – Part 1	June 27, 2017	<a href="#">Click to View</a>
Dr. Goutam Kodikal Talked About- Air Conditioned Environments	June 12, 2017	<a href="#">Click to View</a>
Air-conditioned offices, cabs, and homes are making Bengaluru run low on Vitamin D	June 6, 2017	<a href="#">Click to View</a>
Dr. Dinesh Jindal Talk Show	June 5, 2017	<a href="#">Click to View</a>
Case Study	May 1, 2017	<a href="#">Click to View</a>
Apollo Spectra Hospital leads the miraculous recovery of 58year old lady from Saudi Arabia	December 22, 2015	<a href="#">Click to View</a>
Apollo Spectra Kanpur Coverage	December 20, 2015	<a href="#">Click to View</a>
Live surgery at Apollo Spectra	December 19, 2015	<a href="#">Click to View</a>
Apollo Health and Lifestyle Limited	January 7, 2015	<a href="#">Click to View</a>
Snoring is no laughing matter	June 2, 2014	<a href="#">Click to View</a>
Bariatric solution for curing diabetes offers new hope	May 23, 2014	<a href="#">Click to View</a>

## HOSPITAL PROGRESS 2

**Figure no: 2. The above picture depicts the hospital's progress during the following years.**

### ★ Safe OPD:

OPD means outpatient department. The elaboration of the term is quite simple but it is very complex when it comes to observe for real in hospitals. Patients complain about various health issues and one has to guide and direct them to specialist concern with their problem. Not an easy task to perform as an opd department coordinator. The person in charge has to be quick and versatile. Here are some picture videos which helped people understand the consequences and the solution to their complicated health life. Apollo hospital has conducted many such counseling session videos to educate every individual in the country about the importance of health.



### Counseling by doctors

**Figure No: 3. This is the picture taken from the official website of the Apollo Spectra hospital. The doctors are trying to express the solutions to every problem in a simple language so it is easy to grasp and follow it.**





### Counseling by doctors

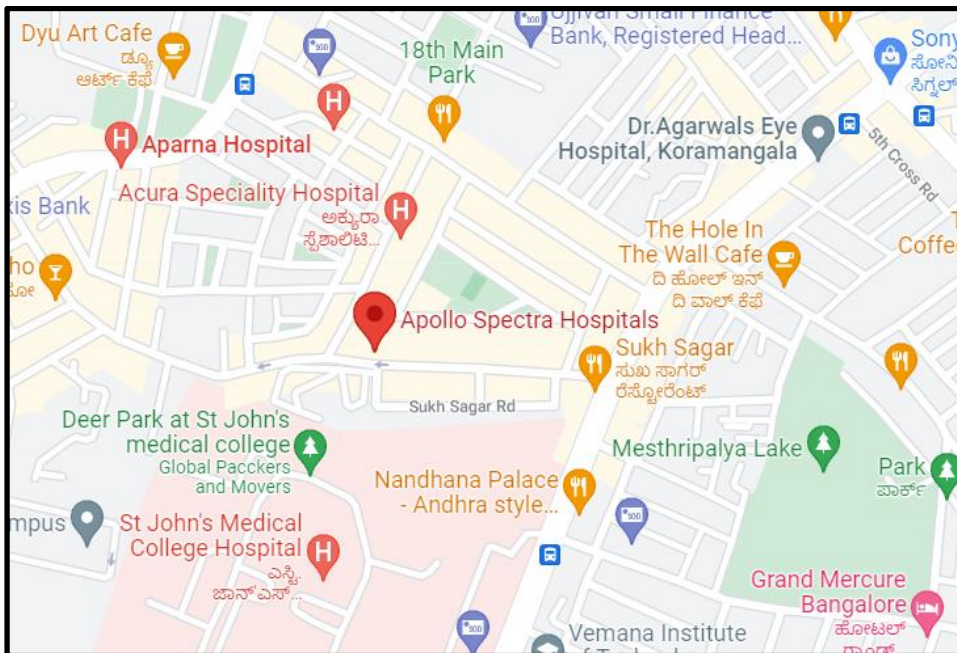
**Figure No: 4. This is the picture taken from the official website of the Apollo Spectra hospital. The doctors are trying to express the solutions to every problem in a simple language so it is easy to grasp and follow it.**



## **BRANCHES OF HOSPITALS ALL OVER INDIA**

Apollo Spectra Hospitals are spread all over India. Here is the list of states and their locations to spot the hospital.

### 1) Bangalore- Koramangala



**Location on Map**

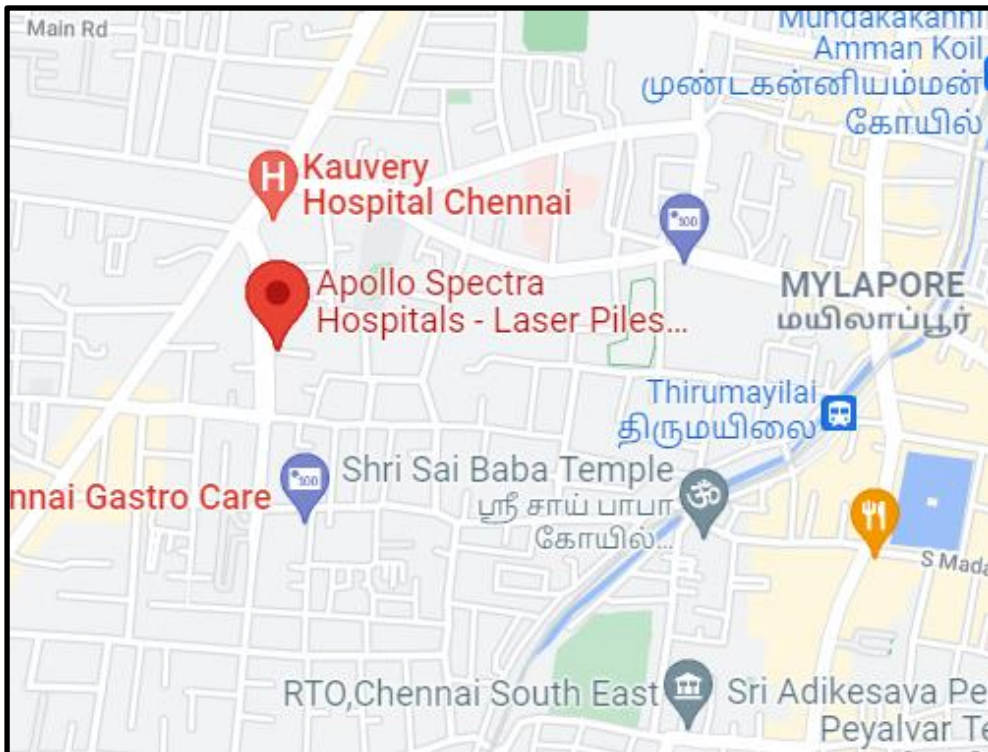
**Figure No: 5. The navigation picture depicts the exact location of the hospital in Bangalore.**



View of the hospital from the front gate.

**Figure No: 6. The above picture is the main entrance of the Apollo hospital, Bangalore.**

2) Chennai- Alwarpet, MRC Nagar



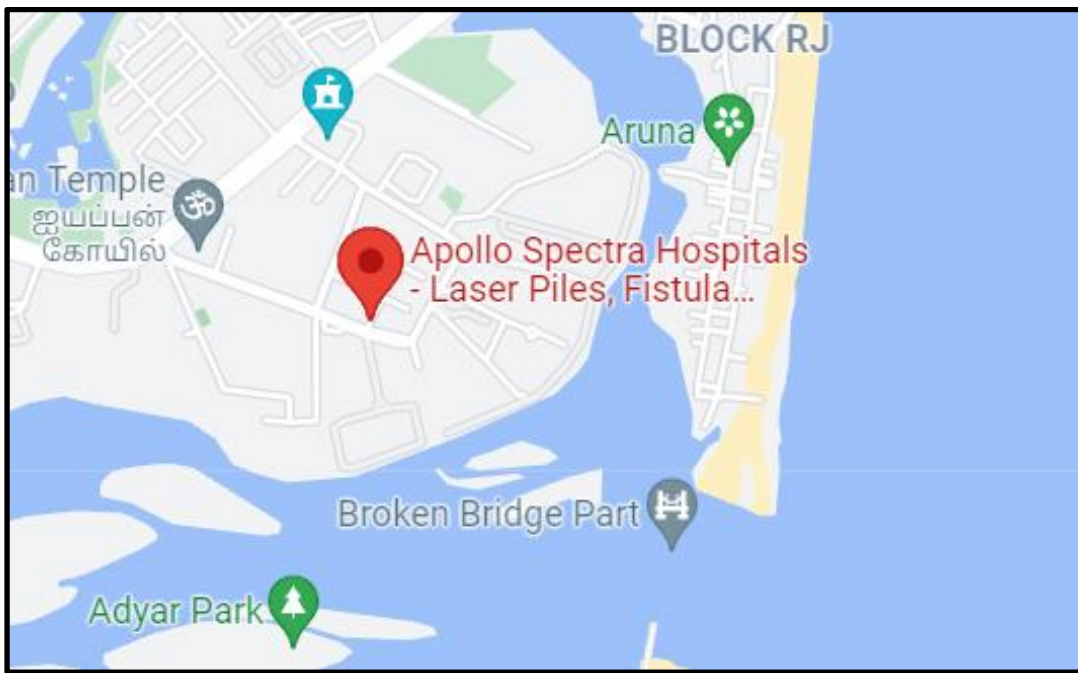
Location on Map

**Figure No: 7. The navigation picture depicts the exact location of the hospital in Chennai, Alwarpet.**



View of the hospital from the front gate.

**Figure No: 8. The above picture is the main entrance of the Apollo hospital, Chennai, Alwarpet.**



Location on Map

**Figure No: 9. The navigation picture depicts the exact location of the hospital in Chennai, MRC Nagar.**

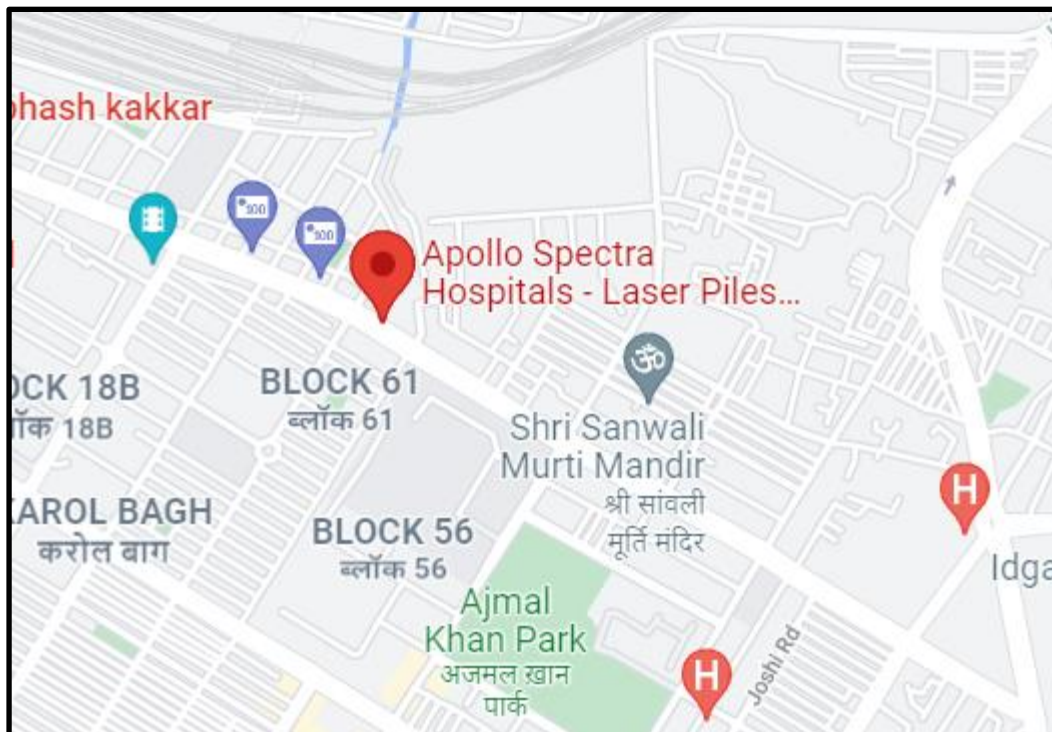




View of the hospital from the front gate.

**Figure No: 10. The above picture is the main entrance of the Apollo hospital, Chennai, MRC Nagar.**

3) Delhi- Karol bagh, Nehru Place.



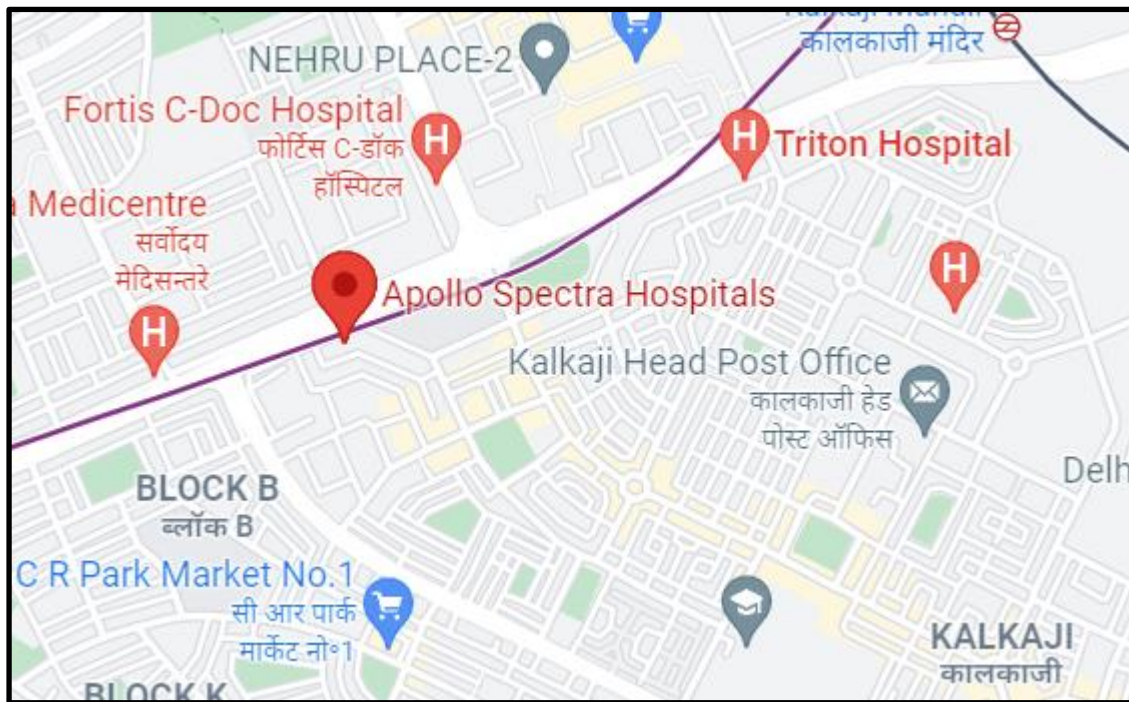
Location on Map

**Figure No: 11. The navigation picture depicts the exact location of the hospital in Delhi, Karol Bagh.**



**View of the hospital from the front gate.**

**Figure No: 12. The above picture is the main entrance of the Apollo hospital, Delhi, Karol Bagh.**



### Location on Map

**Figure No: 13. The navigation picture depicts the exact location of the hospital in Delhi, Nehru Place.**



Inside view from the front gate.

**Figure No: 13. The above picture is the main entrance of the Apollo hospital, Delhi, Nehru Place.**

### 4) Great Noida- NSG Chowk



### Location on Map



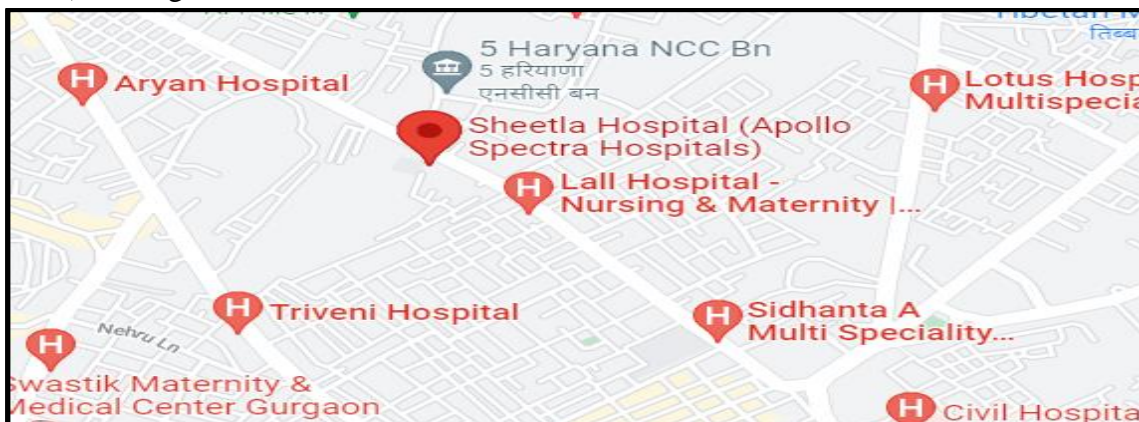
**Figure No: 14. The navigation picture depicts the exact location of the hospital in Greater Noida, NSG Chowk.**



**View of the hospital from the front gate.**

**Figure No: 15. The above picture is the main entrance of the Apollo hospital, Great Noida, NSG Chowk.**

5) Gurugram- sector 8, Sector 82.



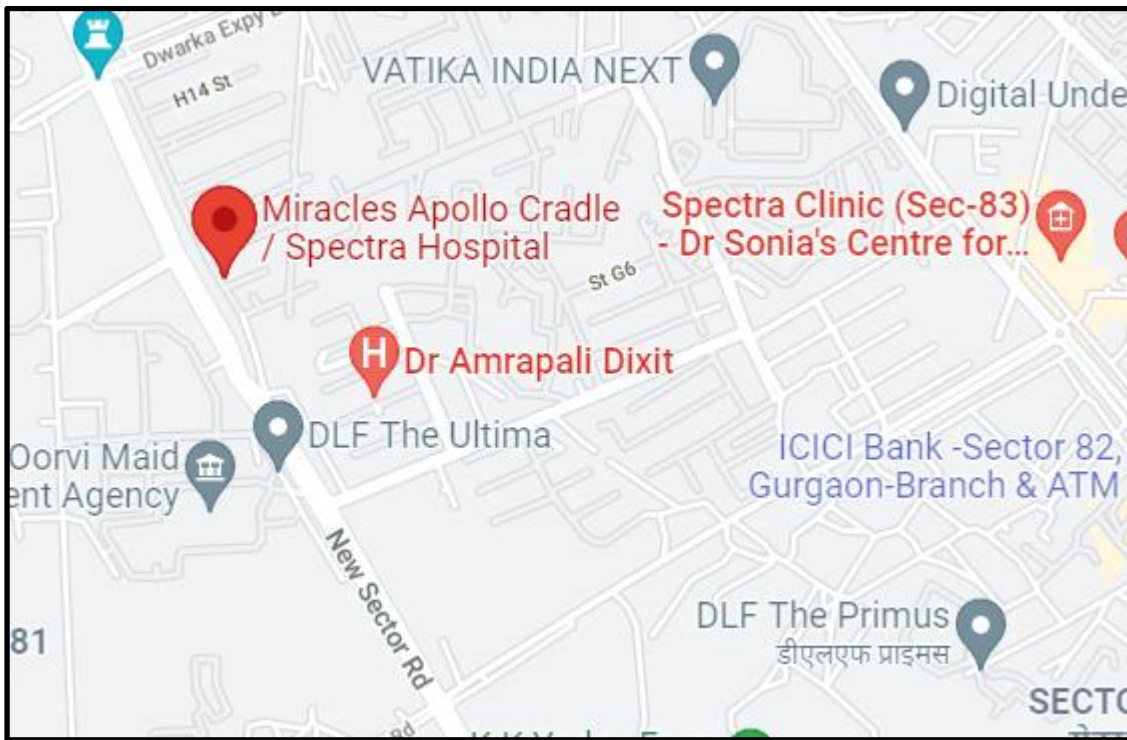
**Location on Map**

**Figure No: 16. The navigation picture depicts the exact location of the hospital in Gurugram, sector 8.**



**View of the hospital from the front gate.**

**Figure No: 17. The above picture is the main entrance of the Apollo hospital, Gurugram, sector 8.**



**Location on Map**

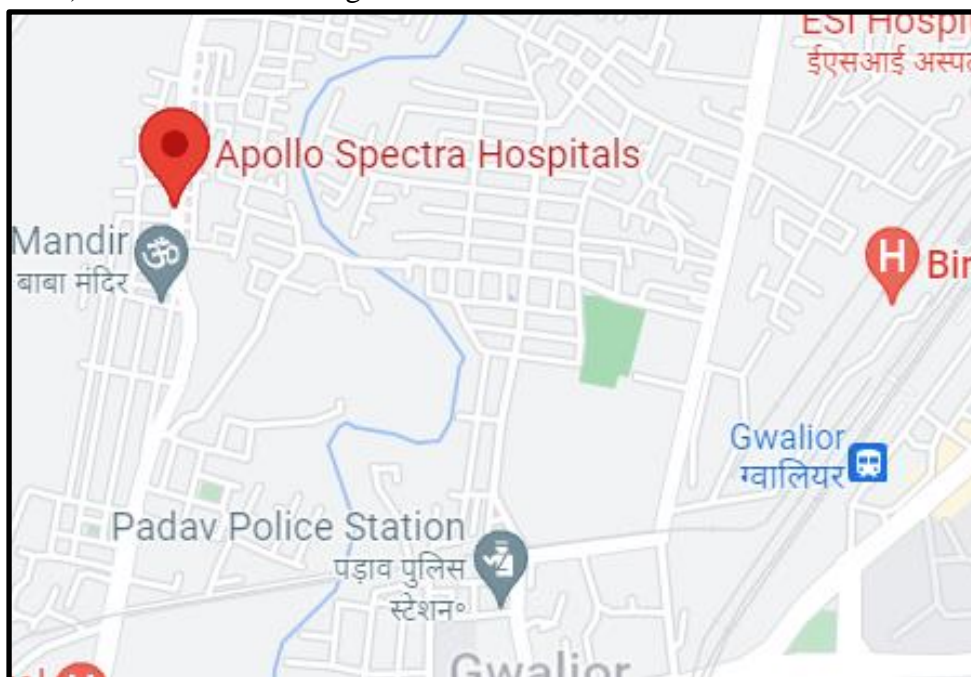
**Figure No: 18. The navigation picture depicts the exact location of the hospital in Gurugram, sector 82.**



View of the hospital from the front gate.

**Figure No: 19. The above picture is the main entrance of the Apollo hospital, Gurugram, sector 82.**

6) Gwalior- Vikas Nagar





### Location on Map

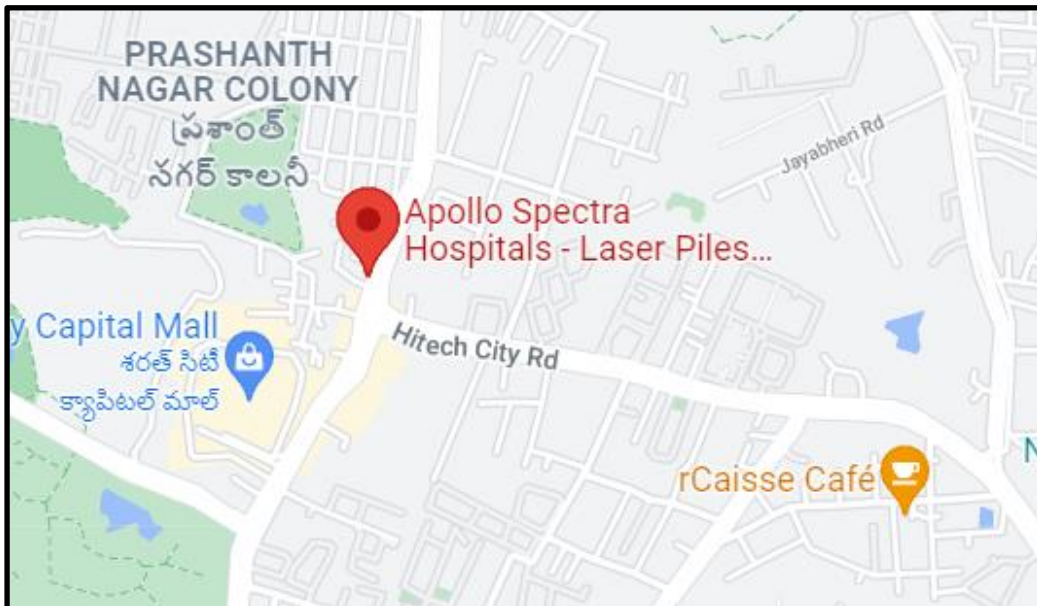
**Figure No: 20. The navigation picture depicts the exact location of the hospital in Gwalior, Vikas Nagar.**



View of the hospital from the front gate.

**Figure No: 21. The above picture is the main entrance of the Apollo hospital, Gwalior, Vikas Nagar.**

7) Hyderabad- Kondapur, Ameerpet



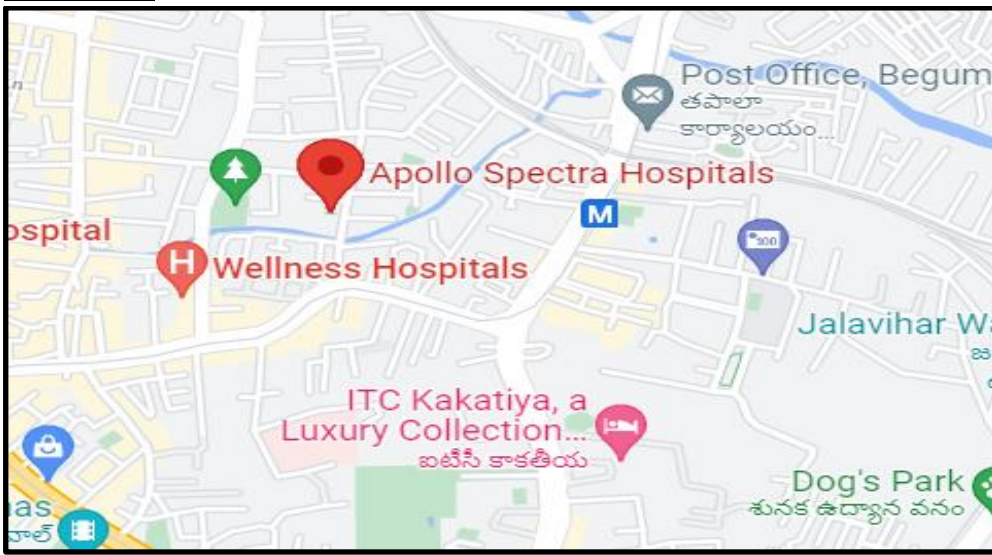
## Location on Map

**Figure No: 22. The navigation picture depicts the exact location of the hospital in Hyderabad, Kondapur.**



View of the hospital from the front gate.

**Figure No: 23. The above picture is the main entrance of the Apollo hospital, Hyderabad, Kondapur.**



### Location on Map

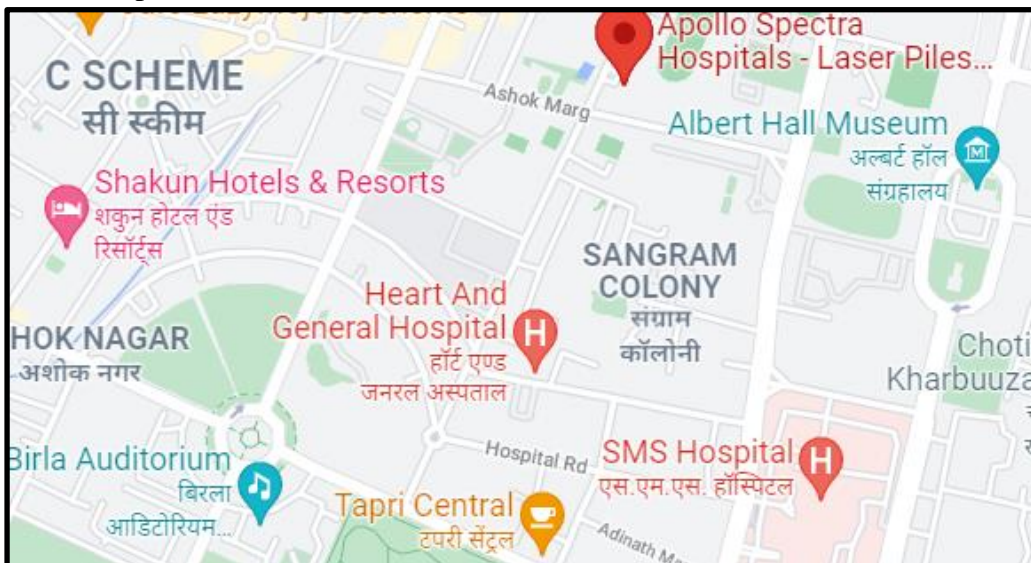
**Figure No: 24. The navigation picture depicts the exact location of the hospital in Hyderabad, Ameerpet.**



View of the hospital from the front gate.

**Figure No: 25. The above picture is the main entrance of the Apollo hospital, Hyderabad, Ameerpet.**

### 8) Jaipur- C Scheme





### Location on Map

**Figure No: 26. The navigation picture depicts the exact location of the hospital in Jaipur, C Scheme.**



View of the hospital from the front gate.

**Figure No: 27. The above picture is the main entrance of the Apollo hospital, Jaipur, C Scheme.**

9) Kanpur- Chunni ganj



### Location on Map

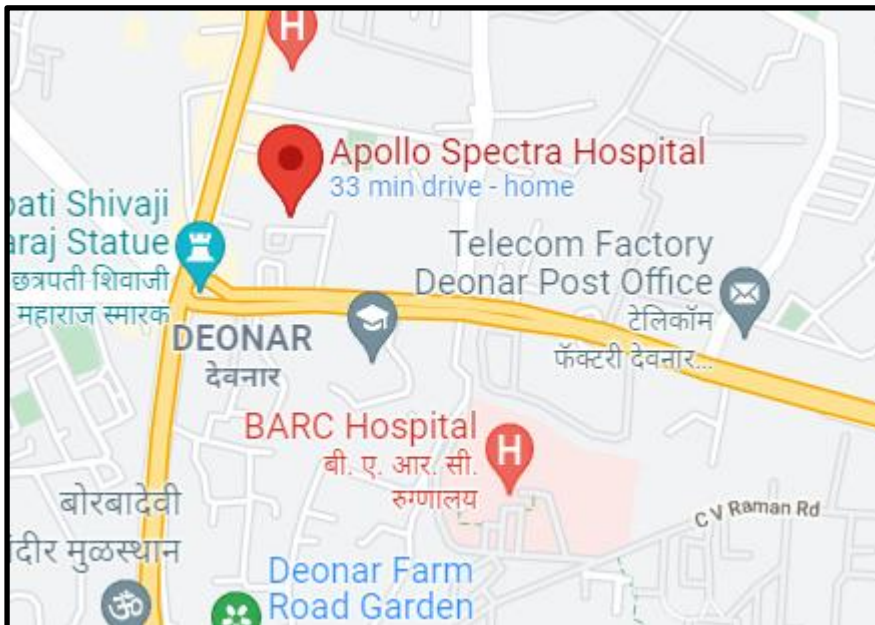
**Figure No: 28. The navigation picture depicts the exact location of the hospital in Kanpur, Chunni ganj**



View of the hospital from the front gate.

**Figure No: 29. The above picture is the main entrance of the Apollo hospital, Kanpur, Chunni ganj.**

10) Mumbai- Chembur, Tardeo



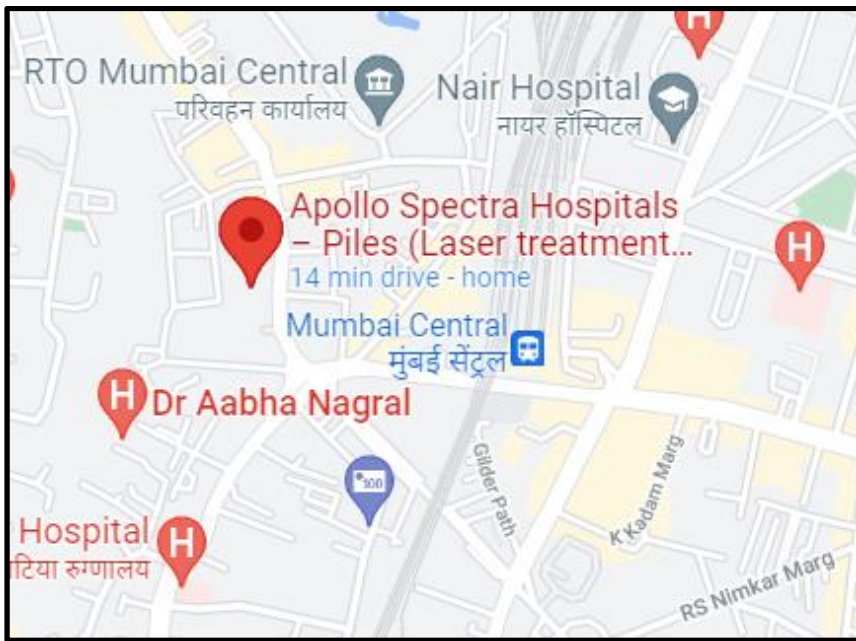
## Location on Map

**Figure No: 30. The navigation picture depicts the exact location of the hospital in Mumbai, chembur.**



View of the hospital from the front gate.

**Figure No: 31. The above picture is the main entrance of the Apollo hospital, Mumbai, chembur.**





### Location on Map

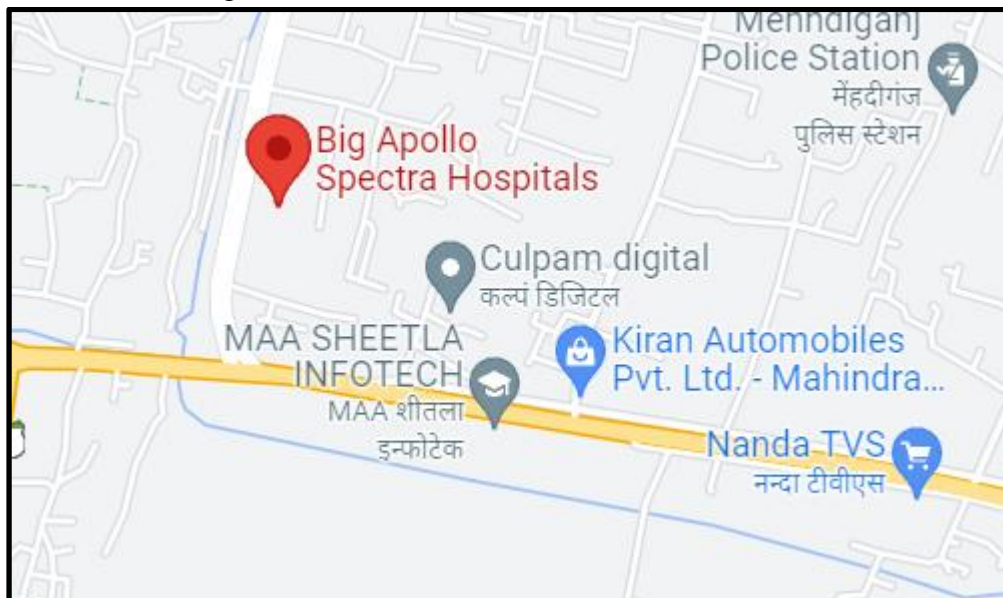
**Figure No: 32. The navigation picture depicts the exact location of the hospital in Mumbai, tardeo.**



View of the hospital from the front gate.

**Figure No: 33. The above picture is the main entrance of the Apollo hospital, Mumbai, tardeo.**

11) Patna- Agam kuan



### Location on Map

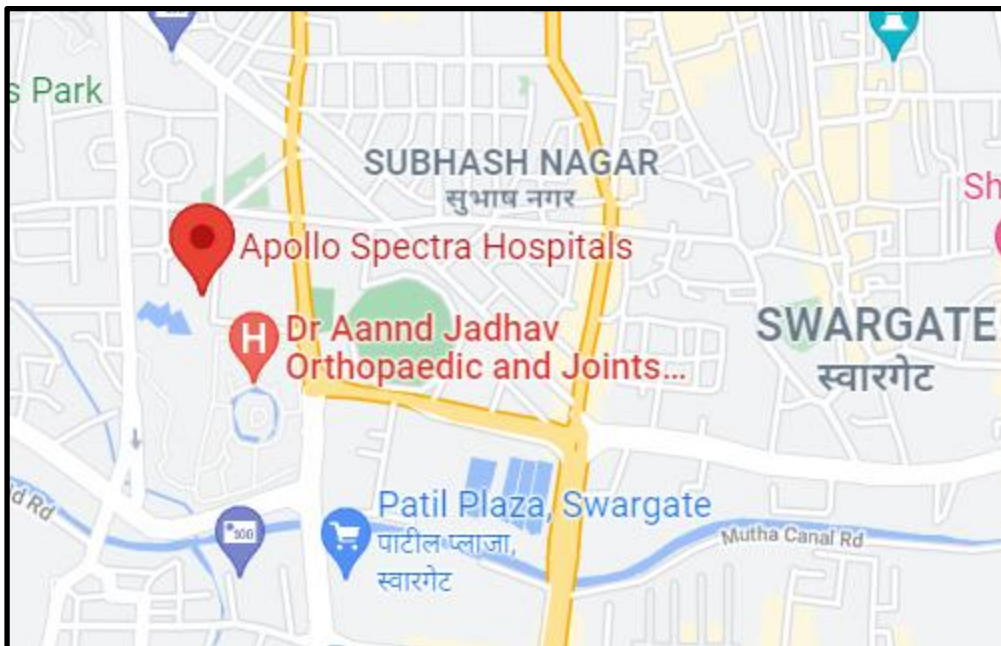
**Figure No: 34. The navigation picture depicts the exact location of the hospital in Patna, Agam kuan.**



View of the hospital from the front gate.

**Figure No: 35. The above picture is the main entrance of the Apollo hospital, Patna, Agam kuan.**

12) Pune- Sadashiv Peth



### Location on Map

**Figure No: 36. The navigation picture depicts the exact location of the hospital in Pune, Sadashiv peth.**



**View of the hospital from the front gate.**

**Figure No: 37. The above picture is the main entrance of the Apollo hospital, Pune, Sadashiv peth.**



## CLASSIFICATION OF APOLLO HOSPITAL GROUPS



### Types of Apollo hospitals

**Figure No: 38. The classification on the basis of specialist.**

APOLLO CLINIC: Comprehensive neighborhood clinics in 100+ locations across India

APOLLO WHITE DENTAL: Most trusted chain of dental clinics in India with over 70+ centers in 17 cities

APOLLO SUGAR: A single speciality diabetes and endocrine healthcare service provider, providing services in 12 cities

APOLLO DIAGNOSTICS: Quality, affordable diagnostics delivered through 450+ centers and 70+ labs

APOLLO HOMECARE: Healthcare brought home with clinical excellence and compassion through trained professionals

APOLLO CRADLE: Women and Children hospital chain with the experience of delivering 150,000+ babies safely

APOLLO FERTILITY: Impressive success rate delivered by experienced specialists in Fertility and Reproductive Medicine

APOLLO SPECTRA: Short stay surgery hospital with 12 centers across 9 cities, 71500+ successful surgeries and 700+ doctors

APOLLO DIALYSIS: 22 state-of-the-art Dialysis Centers across India with high standards of protocols and treatment outcomes

APOLLO PHARMACY: India's first and largest pharmacy network, with over 3000 outlets retailing 5000+ health & wellness products

APOLLO HOSPITALS: Asia's foremost integrated healthcare services provider trusted by > 65 million patients from 141 countries

## **INTERNSHIP PROGRAMME AT APOLLO SPECTRA HOSPITAL TARDEO**

Overall experience at Apollo spectra hospitals Tardeo was encouraging. This whole process of learning new things, interacting with new people, maintaining an inter and intra personal group and individuals relationship, etc. made a great impact, along with boosting ideas to execute it.

The following content is fully true and analyzed based on the report. Accordingly, the report is knowledge based and for future conceptual purposes. It focuses on one branch of the Apollo hospitals. The information is highly explicit and would be considered for execution of hospital projects in the future. The structural, functional organization, the department and their functions, the roles and responsibilities of the staff, etc are covered under the following analytical research paper.

Main focus would be on the current situation of the hospital's department, the following changes that the hospital will need to acquire, to adapt quickly and come in action as a manager of the hospital, conditions when resources are less, management according to the availability of the resources, the finance department handling, etc.

## **ADMINISTRATION ORGANIZATIONAL LEVEL AT APOLLO SPECTRA HOSPITAL TARDEO**

Center manager i.e. Operational head



Assistant manager



HR manager



Housekeeping head



Accountant  
Dietician

Nursing head

Biomedical engineering head

Maintenance head

Infection control head

Domestic marketing head

International marketing head

TPA head

Store head



OPD and IPD billing staff



Every department staff

## **DEPARTMENTS PRESENT AT APOLLO SPECTRA HOSPITALS TARDEO**

- IPD
- OPD
- DENTAL
- PHYSIOTHERAPY
- INTERNATIONAL MARKETING
- DOMESTIC MARKETING
- PHARMACY
- LABORATORY
- X-RAY
- SONOGRAPHY
- TPA i.e. third party association
- CENTER MANAGER'S OFFICE
- ADMIN
- NURSING STATION
- OT INCHARGE
- OT
- WARD STATION
- BIOMEDICAL ENGINEERING
- MAINTENANCE
- STORAGE
- ICN i.e. international council of nurses
- WARD

## **SPECIALIST AVAILABLE IN GENERAL AT ALL THE BRANCHES - IT IS MULTISPECIALITY HOSPITAL**

- Cosmetology
- Diabetology
- ENT
- General Surgery
- Gynecology
- Internal Medicine
- Ophthalmology
- Orthopedic Surgery
- Pediatrics
- Plastic Surgery
- Varicose Veins





### **Speciality spectrum.**

### **Figure No: 39. Pie chart viewing different specialists.**

## **STRUCTURAL ORGANIZATION OF THE HOSPITAL**

### **★ In theoretical language:**

There are two gates : The main gate and the back gate

The main gate is under high security supervision and is the entry for the patients, staff, vendors, etc. The back gate is under one security person who looks after loading and unloading of the equipment, the parking of the doctor's car, the flow of incoming patients, and due to covid the vaccination center was also handled here. From the front gate, the first and foremost section comes in is the IPD waiting area. This is the area where the relatives of the patients wait and relax for sometime. It's opening and closing timing are from morning 8.00 a.m. to evening 7.00 p.m. Then followed by the IPD desk accommodating two employees responsible for the billing.

Towards the extreme right of the IPD desk comes the nursing station no 1 and the wards which only have access to patients, doctors and staff members of the hospital. Now, at the left side one will be able to catch up the stairs which will further bifurcate into the left and right departments respectively. The left side will lead to the OPD and the right side will lead to the admin department, pantry, TPA, center manager's office. The OPD department consists of OPD reception, six OPD's, pharmacy, laboratory, radiology departments, washrooms, dressing room, and maintenance room. The admin department covers accountants, dieticians, domestic marketing staff etc. upstairs, bypassing the OPD department, the main three departments are the dental, physiotherapy and the international marketing departments. Now the remaining departments like OT (operation theater), biomedical engineering office, storage, doctor's room, laundry, CSSD room are situated on the ground floor itself.

### **★ Diagramatic explanation of the hospital through the map**



**Figure No: 40. Overview of the hospital**

## **ROLES AND RESPONSIBILITIES OF EACH DEPARTMENT**

### **SECURITY**

At the front gate of the hospital, two members of security are engaged in checking the temperature, noting down the time, consulting doctor name, looking after the patient relative who is in the waiting room etc. The security maintains the registers, each individual register is separate for the employees, patients, vendors, etc. The entrance also includes the waiting area for the patient's relatives to stay back and keep a check on the patient. The security staff maintains five types of registrations:

- For staff
- For patients with covid RT-PCR reports
- For vendors
- For staff going out for some time
- For security record ( in and out)

The following are the protocols that have to be followed by the security person of the hospital:

- Checking the temperature of the clients, patients, employees, doctors, etc
- Noting down the temperature and the timing of each and every individual.

- Asking for the required enquiry which is needed by the patient, client etc and guiding them accurately.
- Also requesting the patient relative for a covid report in order to stay in the waiting area and also permitting the person to see the patient in the ward.
- Never keep the front gate vacant without the security person, giving overs to one another is a must.

## **IPD**

IPD is also known as the in-patient department. It is the unit of the hospital where patients requiring medical attention are admitted to the hospital and are closely monitored, providing all the healthcare facilities to the patients. The main functions of the IPD are as follows:

- 1) Providing quality care to the patients and their relatives.
- 2) Easy availability of the essential drugs.
- 3) Housekeeping facilities must be hygienic in order to control any nosocomial infections.
- 4) Visitors coming to the hospital should be properly guided and provided with accurate information.
- 5) Maintaining a good relation with the doctor, patient and their relatives.

As a part of Apollo Spectra Hospital Tardeo, IPD was very complex to understand and execute. From keeping the records of the inventories to the name of the patients and their details was a basic medical record department work flow. The department is also meant to be the billing department as it deals with the admission and discharge of the patients. There are two main individuals in charge here. The planned surgeries for the day are mailed everyday for prior information to the billing department from the operation incharge person. The nursing station sends an OTT (operation theater time) schedule to the IPD desk to arrange rooms for international and national patients. Format for national and international patients is distinct. The national patients are further divided into cash patients and insurance patients. The insurance patients are further divided into gypsa and non gypsa patients and accordingly the bills are generated. Gypsa patients are classified as occupying governmental medical insurance and non-gypsa are considered under non-governmental i.e. having private medical insurance of the patient. The general workflow to be followed are as follows:

- The patient coming for the admission is asked for the covid report and is asked to fill the admission form.
- Consent is taken from the patient or the patient's relative if any extra inventory material is utilized prior to the operation.

- Medical claim form is also attached with IP proof xerox.
- Enter the details of international patients on the official website i.e.FRRO.
- Processing the discharge after tpa approval
- Submitting a copy of reports, bill to the patient or patient relative.
- Ensuring that only after receiving the gate pass, the patient is allowed to discharge.

TPA i.e. Third party administration bills are handed over here. After the operation, the OT form by incharge person in charge must sign in order to be cleared in terms of implants utilized. For the discharge process to start, ward GRN completion is a must. A GM sheet is maintained for internal records that must be confidential. A detailed bill along with the FC form is submitted to the accountant in the hospital. An estimation sheet is also prepared which is sometimes needed by a consulting doctor to conduct surgery. Most common frequent surgeries conducted are from orthopedic, general and urology departments. The general surgeries conducted here are from gynecology, ophthalmology, orthospine, bariatric, ENT, departments etc.

## **OPD**

OPD is also known as an outpatient department. An ideal opd of the hospital is classified as:

- a) Centralized
- b) Decentralized

A general centralized OPD accommodates each and every facility on the same floor or in the same room. A decentralized form of OPD indulges every facility in its specific room on the same floor or might be on a different floor. OPD is considered to be a point of contact between the patient and the doctor through the hospital. Hospitals act as a link between both. OPD's are characterized into three types:

- 1) General OPD
- 2) Emergency OPD
- 3) Referred OPD

In total three persons are incharge of OPD. There are 6 OPD'S overall which covers orthopedics, gynecologists, ophthalmologists, general surgeons, general physician, colorectal surgeons, ENT specialists, bariatric surgeons, gastroenterologists, cardiologists, diabetologists, dermatologists, etc. All the doctors are well trained and have expertise in their field which will benefit the patient with a very excellent treatment. Let's have a look at OPD staff along with their roles and responsibilities. There are two housekeeping staff associated with all the cleaning and hygiene work. Also two sisters are incharge of OPD and their role is to provide patient care, assist respective doctors, attend the procedure of the patient, etc. The role of the OPD staff is as follows:

- To guide and direct the patient regarding their query.



- Informing the doctor and confirming the appointments for the patients.
- Receiving the calls and helping the patients with their concerned appointments.
- Updating the TAT timings.
- Reverting the mails on time and checking on the leads.
- Mailing the reports to the patient.
- Fetching feedback from the patient.
- Scanning the reports and dispatching the reports via courier.
- Tally the bills on a daily basis.

Equipment of each OPD are as follows:

- Defibrillator
- Stethoscope
- Weighing machine
- X- ray view box
- Examining bed
- BP apparatus

These equipment are provided and checked upon by a biomedical engineer. Ideal layout of an OPD room is as follows:

- One examining bed
- Stethoscope
- Doctors table and revolving chair
- Patient's chair
- Weighing machine
- Hand sanitizers
- Dustbins with appropriate segregation color bags
- X ray view box
- Availability of proper curtains
- Wash basin

On a daily basis, the count of the patients approximately goes up to 200 inclusive of the patient's coming for the vaccination. The rush hour in the hospital is usually on Tuesdays and Saturdays. This is due to vaccination pre-booking by corporate people as well as normal crowds to be handled at one and the same time on Saturday. Each patient is without fail given a receipt before leaving the hospital premises. The payment system is either through cash, card or online payment. The main advantage of the OPD services is the organization of the rooms, dressing rooms, laboratory, x-ray services, sonography, pharmacy are on the same floor. The reports are generated within 24 hours and hardcopy is provided to the patient by the very next day. Due to the waiting for the doctor in the queue, sometimes patient's get irritated by the staff services and by the way they respond. To avoid this the patient is made to speak with the senior person or senior manager and

he/she is provided with all the facilities as soon as possible. Every patient is treated equally and justified with all the details appropriately. OPD has five types of registers. They are as follows:

- Dispatch register
- Courier register
- Cash register
- OPD appointment register
- Beneficiary entry of vaccines register

All types of registration are maintained to keep the records as the back-up for the MRD of the hospital. At the end of the day the staff tally's the money for the given day and notes it in the excel sheet and submits the thesis to the assistant manager of the hospital. Each patient is asked for feedback and ratings by the hospital.

### **INTERNATIONAL MARKETING DEPARTMENT**

Patients approach Apollo Spectra hospitals for better treatment. The patients get to know about the hospitals in three different ways.

- Educated patients did not need a translator to confront the hospital.
- They search on their own and are well aware of the doctors and their treatment.
- Patients get to know about the hospital through tours and travel agencies.
- Facilitator's guide the patients about the diagnosis, treatment and care of the hospital.

This is how the international patients are approached and brought to India for further treatment.

There four most important factors which are a must for international marketing:

- ★ Visa letter
- ★ Estimate letter
- ★ Fit to fly letter
- ★ Wheelchair request form in case of critical patients.

The necessary step is to do the FRRO of the international patient. The FRRO is done in two ways: offline and online methods. In the offline method the basic scheme to be followed is the collection of a copy of the passport and visa of the patient, and filled in a form to be submitted to the nearest police station for further procedure. Online method was established due to covid as to avoid any point of contact of infection, the process is totally online by entering the details of the patients on the official website.

E-FRRO

- 1) Online FRRO Service delivery mechanism without the requirement of visiting FRRO/FRO office. No requirement of taking appointments and visiting FRRO/FRO offices unless specifically called upon by the FRRO/FRO.
- 2) Web-based application aimed to build a centralized online platform for foreigners for visa-related services. Its key objective is to provide Faceless, Cashless and Paperless services to the foreigners with a user -friendly experience.
- 3) Using this application, foreigners are required to create their own USER-ID by registering themselves. Afterwards, they would apply online through registered user-id for various Visa and Immigration related services in India viz. Registration, Visa Extension, Visa Conversion, Exit Permit etc, without any hassle and obtain the service(s) without coming to the FRRO office.
- 4) The necessary immigration/Visa document e.g. Registration Permit/Certificate (RP/RC), Visa Extension Certificate etc will be sent by post to the address mentioned. It would also be electronically sent to the foreigner using his registered email ID.
- 5) Foreigners would not be required to mandatorily visit FRRO/FRO office for grant of service. However, in certain exceptional cases, the foreigner will be intimated to visit the FRRO/FRO on the scheduled date and time for the interview.
- 6) In case of exigency, the foreigner can visit the FRRO/FRO office directly for grant of service.

## International patient facilities

Over the past decade, India has emerged as the world's leading destination for affordable yet outstanding healthcare services. Apollo Spectra Hospitals, with its multi-specialty medical care in leading cities across India, is perfectly poised to meet their needs.

As per the most recent estimates, around 250,000 international patients fly to India for medical treatments every year. They require global standards of cleanliness, hygiene, infrastructure and trained, experienced doctors.

Apollo Spectra Hospitals, with its dedicated international patient service team, facilitates patients to a center that is most convenient for them. These patients are pre-screened for existing medical conditions and are suggested courses of treatment, along with cost estimates. International verification of insurance coverage is also undertaken by a Apollo Spectra Hospitals representative.

Upon arrival, a Apollo Spectra Hospitals international patient relation officer is assigned to the patient throughout his/her stay in India. Apollo Spectra Hospitals offers services that take care of the patient's medical, personal and logistical needs – right from greeting them at the airport and handling registrations up till their discharge. Apollo Spectra Hospitals provides quality healthcare for patients from all over the

world including the USA, Europe, Africa, the Middle East and South East Asia.

The international patient services team ensures that at the time of discharge you receive the right information, including translated materials and consolidated bills. The team will also discuss and plan your follow-up visits and future treatment needs in your home country.

### International patient services include:

- 🏠 Visa assistance
- ✈️ Flight arrangements and extensions
- 🚗 Airport transfer service
- 📅 Scheduling of all medical appointments
- 📋 Coordination of the admission process
- 💰 Cost estimates for anticipated treatment
- 📄 Processing of medical opinions
- 🏠 Booking of hotels/service apartments
- 🗣️ Providing language translators
- 🍽️ Special dietary needs/religious arrangements
- 📰 News and information updates for relatives back at home
- 📞 Remote consultations/conference calls with doctors
- 🏞️ Local sightseeing
- 💱 Foreign exchange

**Figure No: 41. Overview of the facilities provided to the international patients.**





**Figure No: 42. International patient safety goals.**  
**DOMESTIC MARKETING DEPARTMENT**

It is the open line of communication wherein patients and doctors are brought to the hospital by giving them certain facilities and also retaining them. The responsibility of the marketing team is to put forward the convincing ability in front of the customer and escort them to the hospital. Marketing team is the sole source of growth for the hospital. They customer approaching must be aware of all the facilities which they will acquire at the hospital. The main roles are noted down as follows:

- ❖ To escort the best experienced doctor's to the hospital
- ❖ The ability to retain the patients visiting the hospital.
- ❖ Proliferate the references of the hospital and the respective doctors in order to gain more patients.
- ❖ Guiding the patient to the specialist which they will acquire in future and also making them aware of suggesting the hospital treatment facilities to the people outside.

There are certain skills which must be a compulsory incultation in one's mind and heart. Those skills are as follows:

- The marketing team and head must have the power of patience. This is to listen to the doctor's whom they are going to meet and also to the patient's whom they are going to guide.
- Second most necessary skill to acquire as a marketing team member is convincing power. One should be able to captivate a customer's mindset and upbringing them to the hospital.
- Inducing a strong network between the hospital team and the customers.

- The way of speaking to the customer must be pleasant and interactive.
- Building trust and pinning up the interest of the customer.

## **BIOMEDICAL ENGINEERING DEPARTMENT**

The Department of Biomedical Engineering provides safe, calibrated and operational equipment for delivery of the best health care possible, reducing the inconvenience and frustration caused by malfunctioning equipment and the time lost because of non-availability of equipment.

The functions are as follows:

- 1) Biomedical Engineer advice whether to shift to a newer, more innovative technology or to stay with the tried and true one.
- 2) Planning & installation for all types of sophisticated Bio-Medical equipment.
- 3) Calibration, Performance verification and certifications of biomedical equipment.
- 4) Taking steps to prevent malfunctioning of biomedical equipment.
- 5) Planning and procurement of spare parts required for BM/PM PPM.
- 6) Repair & Maintenance of biomedical equipment.
- 7) Maintaining work-order, inventory of equipment, preventive maintenance schedule and technician time.
- 8) Analyses equipment characteristics in a clinical environment ensuring technical and clinical acceptability.
- 9) Reviewing maintenance contracts in terms of quality and responsiveness to make decisions on modification of service contract terms.
- 10) Management of maintenance contract: Analysis of equipment failure and assessment of repair cost, scheduling of repair/PM visits, documentation and monitoring of equipment up time.
- 11) Determining the optional lifespan of biomedical equipment and its aging, out-modeled and inappropriately costly instrumentation is retired in accordance with a rational equipment replacement policy.

Common terminologies used by biomedical engineers in a hospital are :

CAPEX- Capital expenditures are long term expenses on equipment.

OPEX- Operating expenses are daily basis expenses.

The CMC and AMC- Care management committee is to monitor the service provider equipment and the Annual maintenance contract is between the service provider and the company.

## **MAINTENANCE DEPARTMENT**

The Hospital Maintenance Department is committed to supporting the Health System by maintaining the physical environment and providing other related services, such as HVAC, plumbing, electrical, and general building maintenance.

- Maintaining records of any work and inspections done on-premises
- Performing inventory on repair supplies
- Keeping repair tools and supplies clean and organized
- Setting up repair appointments with mechanics or electricians when needed
- Making and installing new furniture or equipment
- Ensuring all safety systems are functioning properly, including smoke and carbon monoxide detectors
- Conducting routine maintenance on equipment and building systems
- Completing safety checks on systems and equipment

General terminologies are:

MGPS gas- Medical Gas Pipeline System. This is monitored daily in the hospital by the maintenance team.

## **PHARMACY DEPARTMENT**

In general this department provides medicines required to treat the patient. Pharmacy deals with the proper storage and supply of the medicines regularly. The daily basis check up and monthly basis check up of the medicines and temperature of the refrigerator is important. As a pharmacist of the hospital, the foremost roles are:

- 1) Stock order and stock check, updating on day to day utilization of the medicines.
- 2) Sorting and examining of medicines.
- 3) Temperature of the refrigerator should be checked daily in order to appropriately store medicines.
- 4) An indent book is maintained for the records of medicinal supply.
- 5) Every 6 months an audit is conducted so as to compare the standards of an ideal pharmacy being followed or not and the thesis is submitted accordingly.
- 6) Narcotic drugs are updated regularly and only given to the patient when a detailed prescription is provided.

- 7) Same goes for scheduled H1 medicines, these are habit forming drugs. This is the reason it should not to be sold without prescription.
- 8) LASA are look-alike and sound-alike medicines which must be labeled and kept in a cross sectional way.
- 9) For high alert medicines red stickers must be compulsory.

### **ICN DEPARTMENT**

ICN- Infection Control Nurse. The roles and responsibilities of a nurse are as follows:

- 1) Patient rounds are compulsory that is checking the labels of bottles, sanitizers, and date on the IV set, medicines etc.
- 2) Rub sterillium when examining the patient and also while leaving.
- 3) Humidification must be cleaned once a month, adding oxygen and a suction bottle.
- 4) Entering the details in the admission discharge book.
- 5) Surveillance form: following up with the patient after the surgery that is post operative interaction with the patient.
- 6) Contacting patients.
- 7) One month follow up is a must.
- 8) SSI (Surgical Site Infection) bundle tracker- it is basically an infection caused during the surgery and post surgery, the site at which the infection happened is noticed and treatment is given accordingly. For this the record is maintained for every patient to avoid as much infection as possible.
- 9) Antibiotics before surgery are given to every patient to avoid any infection during the surgery and should be given within one hour of the surgery.
- 10) There are 5 types of trackers:
  - SSI, Surgical Checklist.
  - Central line IV.
  - UT.
  - Hand hygiene audit.
  - CAUTI clabsi VAP.

The case paper file of every patient should follow a colored pattern.

- For vulnerable patients the file colored and the band of the patient should be yellow
- For allergic patients the color of the case paper file and band should be red
- For patients with normal medical behavior the color of the case paper file and band should be blue.



Clean and contaminated cases must be a record for ICN in every hospital.

### **HOUSEKEEPING DEPARTMENT**

Updating the everyday checklist of the hospital beds, cleanliness of the washrooms, overall hygiene of the hospital, proper disposal of the waste in the given colored dustbins, the disposal of biomedical and overall waste of the hospital at the end of the day to the BMC truck.

The housekeeping staff working pattern is as follows:

- During the operation at least one male/female must be present for cleaning up if the patient throws up.
- The cleaning of every room and ward must be on point at that time only.
- No pending works are allowed to prevent any cause of SSI of the patient.
- Providing the patient with a very outstanding service to also increase the number of patients referring the hospital to people around indirectly lends a helping hand to the marketing team.
- The procedure room must be always occupied with one housekeeping member.
- The housekeeping members are compulsory to wear uniform, head cap, and gloves.
- Managers incharge have to keep an eye on each member of the staff and take feedback from the patients about the work, take feedback from the hospital staff members and organize meeting for the queries to be solved immediately.
- Every doctor is provided with tea/coffee whenever required.

These are very few things which are mentioned and many more work patterns are followed in an organization.

SEGREGATION OF BIOMEDICAL WASTE					
RED BAG	YELLOW BAG	BLACK BAG	PUNCTURE PROOF CONTAINER	BLUE BAG	WHITE BAG
<b>Plastic waste</b> <ul style="list-style-type: none"> <li>● IV tubing</li> <li>● Catheters</li> <li>● Gloves and mask</li> <li>● Plastic IV bottles</li> <li>● Syringes</li> <li>● Blood and urine bag</li> </ul>	<b>Infectious waste</b> <ul style="list-style-type: none"> <li>● Cotton</li> <li>● Gauze</li> <li>● Dressing material</li> <li>● Used medicine vials and discarded medicines</li> <li>● Chemotherapeutic drugs</li> </ul>	<b>General waste</b> <ul style="list-style-type: none"> <li>● Kitchen waste</li> <li>● Paper</li> <li>● Paper and plastic packaging</li> </ul>	<b>Sharps</b> <ul style="list-style-type: none"> <li>● Needles</li> <li>● Ampoules</li> <li>● Surgical blades</li> </ul>	<b>Linen</b> <ul style="list-style-type: none"> <li>● Non infected patient linen.</li> </ul>	<b>Linen</b> <ul style="list-style-type: none"> <li>● Infected patient linen (contaminated with patient secretions / blood, linen used by patients who are with isolation precautions and/or seropositive)</li> </ul>
<b>लाल थैली</b> इन्जेक्शन सिरीज, प्लास्टिक आयव्ही बॉटल्स, टयुबींग, आयव्ही सेट, ग्लव्स, मास्क, गैज (प्लेस्टिक)	<b>पिला थैली</b> कापुस, गॉज, ड्रेसिंग मटेरियल, उपयोग में किया हुआ दवाई कि बोटल, उपयोगत आनलेली औषधे, गोली केमो थरापी की दवाईया साईं टोटोंक सीक दवाईं सकमीत (इंफेक्टेड) कचरा	<b>काला थैली</b> साधा कचरा, किचन कचरा, पेपर प्लास्टिक पैकींग	<b>शार्पकॅन</b> निडलस, (सुई), सार्जेकल ब्लेड, अँपूल्स	<b>गिली थैली</b> गैर संक्रमित (नॉन इन्फेक्टेड) पेशंट का कपडा	<b>सफेद थैली</b> संक्रमित (इंफेक्टेड) पेशंट के कपडा / रक्त लाग हुए, आलगाव (इसोलेशन) पेशंट का कपडा / जिरो पोसटीव

**Figure No: 43. The above picture depicts the proper waste disposal.**

## OPERATION THEATER DEPARTMENT

Operation theater is looked upon by the OT incharge. This department must be free of microorganisms to avoid the risk of getting a patient infected with any kind of nosocomial infection during the surgery and post surgery. In total there are 4 operation theaters wherein 2 are working OT's and remaining two are used for CSSD (Central Sterile Supply Department) and other one for storage purposes. The below given image describes in detail the daily cleaning and disinfecting of the operation theater whenever the patient enters and leaves.

OT CLEANING PROTOCOL			
	Daily Cleaning	Weekly Cleaning	Infected surgeries in the OT
Before start the OT	Carbolisation of the all equipment along with dome, wall, ceiling, floor of the all 4 ot's with Virex 0.4% solution		
	Dry mop with the Duster as per BMW Protocol		Fogging with Bacillocid 2% for 30 mints.
	BMW segregation of the Linen , Waste etc.		BMW segregation of the Linen , Waste etc.
After Each Case	Instruments cleaning with Cidizyme Solution	On Saturday :- Remove all equipment out of the ot , carbolisation of the equipments, Terminal cleaning (Virex solution) including Wall, Floor, Ceiling, OT lights, Dome etc. (If any major surgeries posted on next day then fogging with Oxivir solution)	Normal cleaning like each interval with the virex solution
	Suction Bottles clean with 1% Hypochloride , weight Mop clean with the Virex 0.4% solution then dry it.		Terminal Cleaning (Oxivir solution) including Wall, Floor, Ceiling, All Equipments , etc. (If any major surgery posted on next Day then Fogging with Oxivir Solution 0.16%)
	Terminal Cleaning (0.4% virex) including Wall, Floor, Ceiling, All Equipments. OT Corridors, scrub area, D.U. Room, C.S.S.D Room, etc. (If any major surgery posted on next Day then Fogging with Oxivir solution)		
End of the Day	Slippers cleaning (Virex 0.4%), Suction Bottles with 1% Hypochloride Solution then dry it & Replace it		

**Figure No: 44. OT cleaning protocol in depth.**

In short, for cleaning the floor of the OT bacillocid or vedex solutions are used Multi Enzymes are used for instrument cleaning. Bed trolleys are carbolized. Spillage kits are used for blood stains to be removed. Every night the operation theaters are deep cleaned i.e. fumigated with 2% of bacillocid solution. Ideal set up of an OT is having zones.

**1. Protective Zone:** It is the outermost entry/exit zone of the OT complex.

It includes:

- Changing rooms for OT staff (doctors, nursing staff and other support staff).
- Patient's waiting area and reception
- Rooms for administrative Staff
- Stores and records room.
- Receiving area for various materials and equipment

**2. Clean zone:**

It connects the protective zone to the aseptic zone.

It includes:

- Pre-operating room
- Recovery room
- Store room for sterile equipment and consumables.

### 3. Sterile/Aseptic zone:

It includes operation rooms which are kept sterile.

This zone includes:

- (a) Operating room/suite in particular
- (b) Scrubbing station/ room and gowning area/ room.
- (c) Pre-Anesthesia room
- (d) Sterile Instruments trolley area.

### 4. Disposal Zone:

Areas in this zone include dirty utility and disposal corridors.

Disposal areas from the operating room and connecting corridors lead to the Disposal zone.

The connecting corridors are outside the aseptic zone.



### Area of OT.

**Figure No: 45. The above is a short description of different zones of OT.**

### Equipment in Operation Theater Complex

The modern Operation Theater complex is highly equipped. The range of equipment of OT will depend upon the OT of a particular specialty. The requirement of equipment in OT complex includes medical equipment and medical furniture. All the OT complex areas must be equipped with a medical gasses delivery system. (Oxygen, Nitrous Oxide, medical air along with a dedicated suction line)



Medical Equipment: The requirement of medical equipment varies with the type of surgeries routinely being done in a particular operating room.

The common medical equipment includes:

1. OT table and OT lights
2. Anesthesia machine/ Workstations
3. Patient monitors (ECG, BP, Oxygen saturation, etc.) and Defibrillator.
4. Drugs and Drug Trolleys.
5. Various surgical equipment required for performing surgeries.

Medical Furniture: This is specified furniture for use by patients in the operation theaters and other hospital areas. These are usually different from household furniture specifically with regards to their fixity, mobility, cleanliness, lightweight, adjustability, and safety features. E.g. Hospital beds, hospital couches, patient transfer trolleys, storage cabinets for medicines and equipment.

Office furniture: In addition to the above, office furniture like chairs, tables, filing cabinets, almirahs, lockers etc. are required in the rooms in the protective zone for record keeping, administrative work etc.

Cleaning protocol for every instrument in Operation Theater.

# Equipment Cleaning Protocol

## Ambu bag

### INSTRUCTIONS

- Wash first with soap & water & then send to ETO after each use.

साबुन और पानी के साथ पहले धोएं और फिर प्रत्येक उपयोग के बाद ईटीओ को भेजें।

# Equipment Cleaning Protocol

## Cautery Machine

### INSTRUCTIONS

- Clean with Bacilol spray Daily daily once.
- Do not spray directly; use gauze piece to clean.
- In case of break down, contact biomedical engineer at +91 8879036642

# Equipment Cleaning Protocol

## CO2 Insufflator

### INSTRUCTIONS

- Clean with Bacilol spray daily once or when visibly soiled.
- Do not spray directly; use gauze piece to clean.
- In case of break down, contact biomedical engineer at +91 8879036642

बेसिलोल स्प्रे के साथ एक बार या साफ दिखाई देने पर साफ हो।  
सीधे स्प्रे न करें; साफ करने के लिए धुंध का टुकड़ा का  
इस्तेमाल करें।  
ब्रेकडाउन के मामले में बायोमेडिकल इंजीनियर से संपर्क  
करें +91 8879036642



# **Equipment Cleaning Protocol**

## **Electric Suction Machine**

### **INSTRUCTIONS**

- Clean with bacillocid Solution (0.25 % i.e. 10ml of bacillocid solution in 200 ml water) spray daily once or when visibly soiled.
- Do not spray directly; use gauze piece to clean.
- In case of break down, contact biomedical engineer at +91 8879036642

# Equipment Cleaning Protocol

## Endoscopy Console

### INSTRUCTIONS

- Clean with Bacilol spray daily once or when visibly soiled.
- Do not spray directly; use gauze piece to clean.
- In case of break down, contact biomedical engineer at +91 8879036642

# Equipment Cleaning Protocol Infusion Pump

## INSTRUCTIONS

- Clean with Bacilol spray daily once or when visibly soiled.
- Do not spray directly; use gauze piece to clean.
- In case of break down, contact biomedical engineer at +91 8879036642

# Equipment Cleaning Protocol

## Laryngoscope

### INSTRUCTIONS

- Wash first followed by cidex OPA disinfection for 20 minutes. After that wash with distilled water.
- Remove bulbs before cidex disinfection.

पहले 20 मिनट के लिए Cidex OPA कीटाणुशोधन के बाद धो लें। डिस्टिल्ड वॉटर के साथ धोने के बाद Cidex कीटाणुशोधन से पहले बल्ब निकालें



# **Equipment Cleaning Protocol**

## **Mini Muscle Stimulator**

### **INSTRUCTIONS**

- Clean with R 1 solution .(20 ml in 1 litre water)
- Use napkin for cleaning.
- In case of break down, contact biomedical engineer at +91 8879036642

आर 1 समाधान से साफ करें। (1 लीटर पानी में 20 मिलीलीटर) सफाई के लिए नैपकिन का उपयोग करें ब्रेक डाउन के मामले में बायोमेडिकल इंजीनियर से संपर्क करें +91 8879036642

# Equipment Cleaning Protocol

## OT Light

### INSTRUCTIONS

- Clean with bacillocid Solution (0.25 % i.e. 10ml of bacillocid solution in 200 ml water) every day in morning & after use.
- In case of break down, contact biomedical engineer at +91 8879036642

बैकिलोकिड समाधान (0.25% अर्थात् 10 मिलीलीटर  
बेसीलोसिड समाधान 200 मिलीलीटर पानी में) सुबह और  
बाद में उपयोग के साथ साफ करें  
ब्रेक डाउन के मामले में बायोमेडिकल इंजीनियर से संपर्क  
करें +91 8879036642

# Equipment Cleaning Protocol

## Oxygen Mask

### INSTRUCTIONS

- Clean with Isopropyl alcohol swab before and after each use
- Use single mask for single patient

प्रत्येक उपयोग के पहले और बाद में आइसोप्रोपिल अल्कोहल स्वाब के साथ साफ करें एकल मरीज के लिए एकल मुखौटा का उपयोग करें

# Equipment Cleaning Protocol

## Stryker Battery Charger

### INSTRUCTIONS

- Clean with Bacilol spray daily once or when visibly soiled.
- Do not spray directly; use gauze piece to clean.

In case of break down, contact  
biomedical engineer at +91  
8879036642



# Equipment Cleaning Protocol

## Suction Bottle

### INSTRUCTIONS

- Rinse with sodium hypochlorite and clean with soap & water after each use.

प्रत्येक उपयोग के बाद सोडियम हाइपोक्लोराइट से कुल्ला  
और साबुन और पानी से साफ करें।



# Equipment Cleaning Protocol

## Syringe Pump

### INSTRUCTIONS

- Clean with Bacilol spray daily once or when visibly soiled.
- Do not spray directly; use gauze piece to clean.
- In case of break down, contact biomedical engineer at +91 8879036642

# Equipment Cleaning Protocol

## Tourniquet

### INSTRUCTIONS

- Clean with Isopropyl alcohol Daily once or when visibly soiled.

ईसोप्रोपिल अल्कोहल के साथ एक बार या साफ दिखाई देने पर साफ हो जाओ।

# Equipment Cleaning Protocol

## Ultrasonic Cleaner

### INSTRUCTIONS

- Clean with soap & water at the end of each shift.

प्रत्येक बदलाव के अंत में साबुन और पानी से साफ करें।

# Equipment Cleaning Protocol

## Video Laryngoscope

### INSTRUCTIONS

- Clean blades with cidex OPA disinfection before and after every use.
- Dip the blades in cidex OPA for 20 min and then rinse with sterile water.
- In case of break down, contact biomedical engineer at +91 8879036642

त्येक उपयोग के पहले और बाद में सीडएक्स ओपीए कीटाणुशोधन के साथ साफ ब्लेड 20 मिनट के लिए सीडीएक्स ओपी में ब्लेड डुबकी और फिर बाँझ पानी से कुल्ला।  
ब्रेक डाउन के मामले में बायोमेडिकल इंजीनियर से संपर्क करें +91 8879036642

# Equipment Cleaning Protocol

## Xenon Light source

### INSTRUCTIONS

- Clean with Bacilol spray daily once & after every case.
- Ensure the cleaning is done after light source is cooled .
- Do not spray directly; use gauze piece to clean.
- Ensure all the cables are tied to avoid clutter.
- In case of break down, contact biomedical engineer at +91 8879036642



# Equipment Cleaning Protocol

## X-Ray viewer

### INSTRUCTIONS

- Clean with R 1 solution (20 ml in 1 litre water).
- Use napkin for cleaning.
- Ensure that the cleaning solution should not go inside the machine.
- In case of break down, contact biomedical engineer at +91 8879036642

आर 1 समाधान (1 लीटर पानी में 20 मिलीलीटर) के साथ स्वच्छ सफाई के लिए नैपकिन का उपयोग करें सुनिश्चित करें कि सफाई समाधान मशीन के अंदर नहीं जाना चाहिए। ब्रेक डाउन के मामले में बायोमेडिकल इंजीनियर से संपर्क करें +91 887903664

PATIENT NAME :-	DATE :- 12/10/21
AGE/SEX :-	TIME IN :-
TRD NO :-	INTUBATION TIME :-
SURGEY :-	INCISION TIME :-
SURGEON :-	CLOSURE TIME :-
ANAESTHESIA :-	EXTUBATION TIME :-
ANAESTHETIST :-	OUT TIME :-
SCRUB NURSE :-	COUNT RECORD
CIRCULATING NURSE :-	1 <sup>st</sup> COUNT 2 <sup>nd</sup> COUNT
OT TECH :-	

Details.

Figure No: 64. Ideal OT details of the patient on board.

12/10/2021

OT 1	OT 2	OT 3	OT 4
9am to 10 AM Stent Removal		9.30am to 12pm mastoidectomy DR. Mptul Bhakt	
12pm to 1pm UGI scopy DR. Ruchit Patel			
05pm to 07pm RIRS DR. TG			


**SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

- 1. GOWN**
  - Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
  - Fasten in back of neck and waist
- 2. MASK OR RESPIRATOR**
  - Secure ties or elastic bands at middle of head and neck
  - Fit flexible band to nose bridge
  - Fit snug to face and below chin
  - Fit-check respirator
- 3. GOGGLES OR FACE SHIELD**
  - Place over face and eyes and adjust to fit
- 4. GLOVES**
  - Extend to cover wrist of isolation gown

**USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION**

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

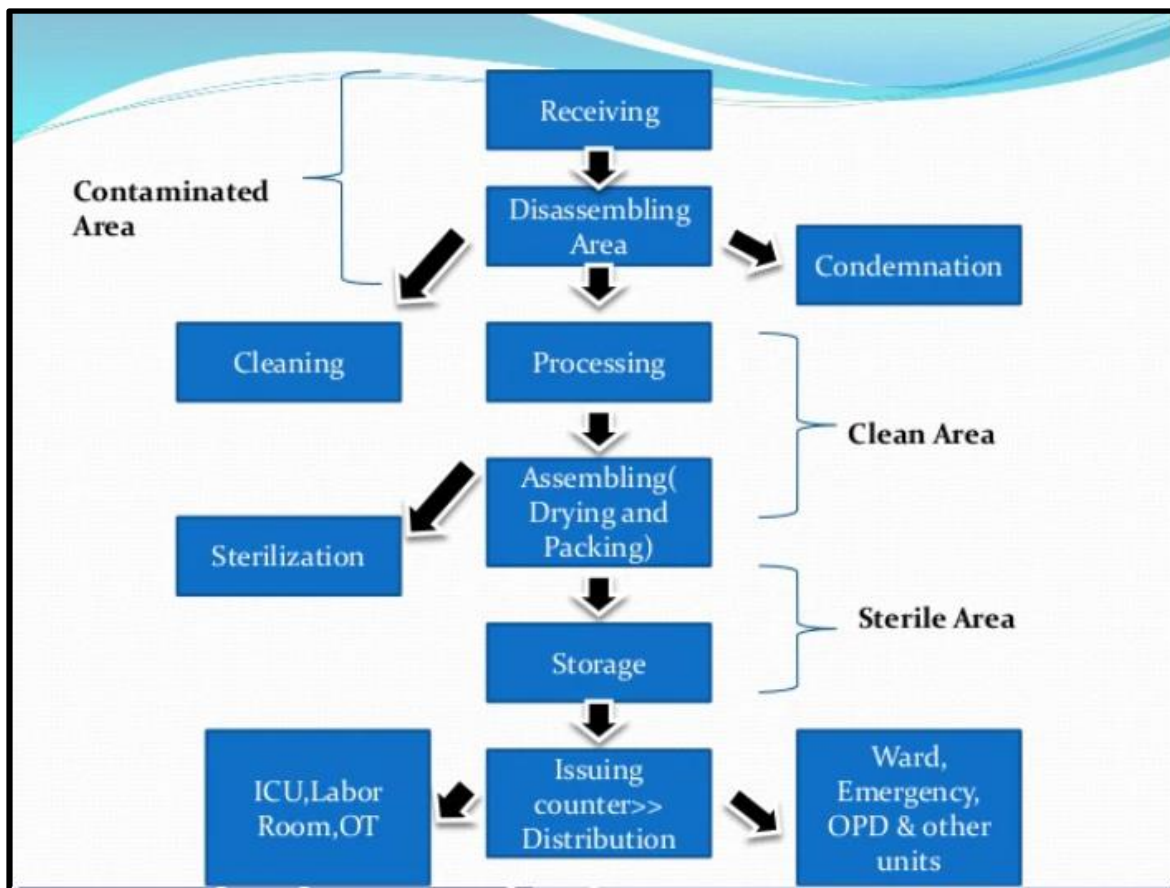


### Sequence for putting on personal protective equipment (PPE)

**Figure No: 66. Steps to be followed while wearing a PPE kit.**

### CSSD

CSSD plays a vital role in patient safety and in reducing hospital surgical infection. From an infection control perspective, it is essential to ensure that proper disinfection of surgical equipment is performed. If instruments are microbially contaminated, this leads to an increased likelihood of contamination and subsequent infection of the surgical wound. Therefore, appropriate sterilization of surgical instruments is recommended as one of the fundamental and proven measures against surgical site infection (SSI). The Central Sterile Supply Department is responsible for preparing medical/ surgical supplies and equipment so that they are sterile and ready for use in patient care.

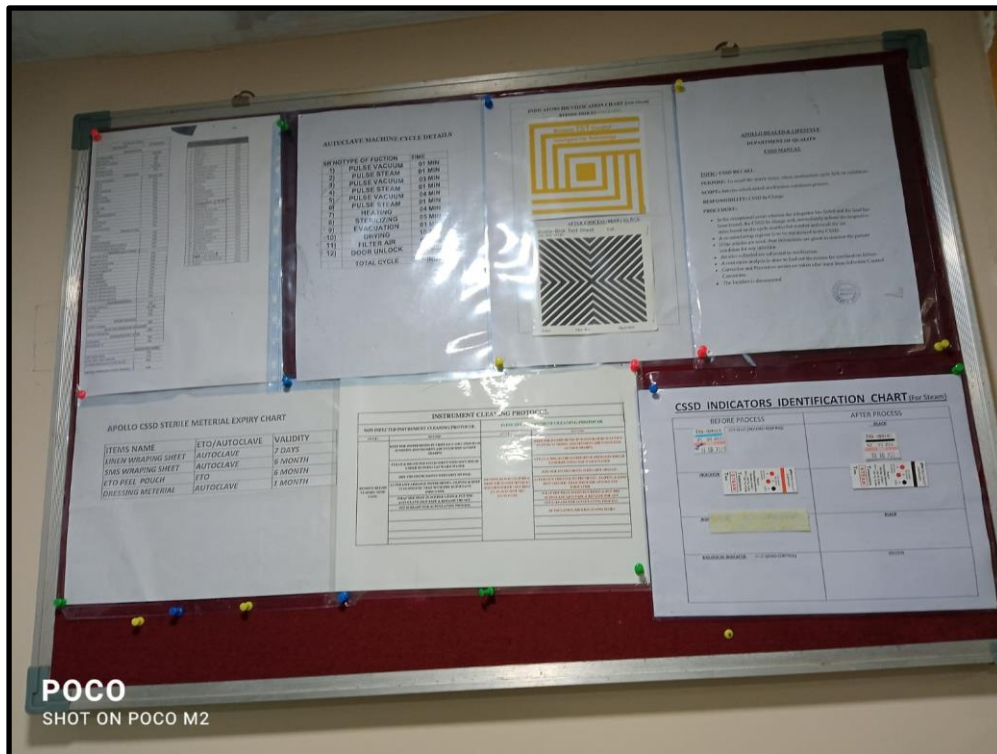


### CSSD FLOW

**Figure No: 67. Diagrammatic explanation of the CSSD workflow..**



There are two autoclave machines in the hospital. The temperature used for sterilization of linen is 134 degree celsius and 6 bar for 7 minutes. ETO is done for plastic sterilization. Ultrasonic cleaner for instruments. There is a continuous flow of sterile air through HEPA filters and these filters are regularly monitored after every 1 month. The expiry for dressing material after sterilization is done is 1 month and for linen it is 6 days.



**CSSD Indicators.**  
**Figure No: 68. The indicators used in autoclaves and other machines.**

## ACCOUNTS

The major job is to deposit cash on a daily basis and by keeping a record of it by mailing it to the head office (HO). Petty cash or a petty cash fund is a small amount of money available for paying small expenses without writing a check. Petty cash is basically used for emergency purposes only.



The limited total amount is 50k and the limit for usage of the petty cash is 1500/- only per day. Account is also responsible for the doctor's payout sheet. Doctor's payout sheet is on contract basis or on agreement and according to that account maintains the excel sheet. Account responsibility is to regularly update the finances of the different departments and inform the person in charge. Vendor's payout is also overlooked by the account of the hospital. It is basically purchasing of goods and services from vendor's of different companies and keeping a record of it. Once the equipment or an instrument is taken for rent, it is the responsibility of the accountant to hand in the money to the respective vendor in due time. Cash certificates are generated by the accountant of the hospital which in general language means at the end of the month how much in cash is being procured. Provisions and expenses are maintained in the excel sheet as how much is required for non PO equipment. Accountant also has to present the overall finance presentation at the end of the month which includes basic things such as doctor's payment, dietician vendor's payment, water filter payments, electricity payment, etc.

### **DIETICIAN**

The foremost thing of a dietician is to take rounds daily three times. The basic workflow is as follows:

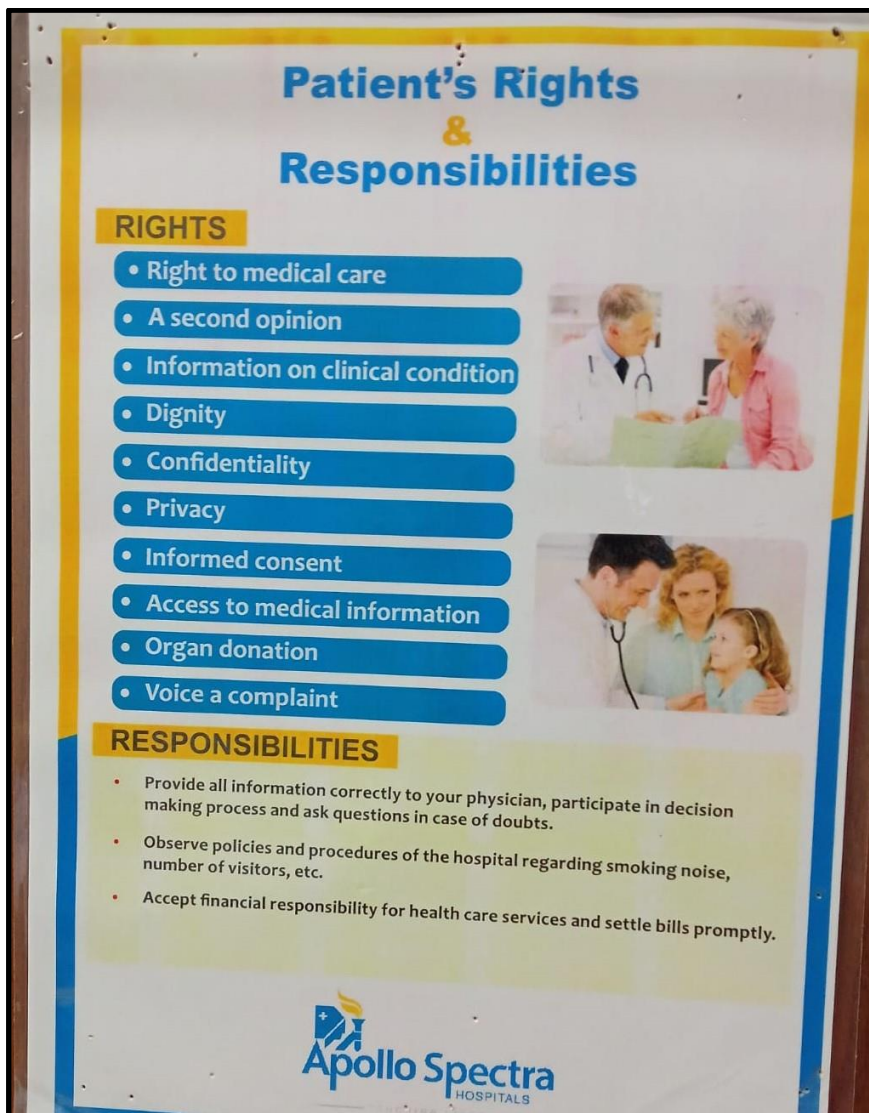
- ★ As soon as entering the hospital the dietician needs to look after each patient and counsel them about their diet.
- ★ Updating the diet chart.
- ★ Informing the pantry person to cook food according to the chart.
- ★ Instructing the housekeeping person to maintain record book after serving the meals to the patient and noting down the price for each meal provided for the day.
- ★ Before serving food to the patient the dietician himself checks the quality of the food and sends the sample to the person in charge.
- ★ This helps in maintaining the quality of the food and minimizes the chances of the infection.
- ★ After each session of the round the dietician has to update the reaction of the patient towards the intake of the food so as to make any further changes in the diet.

Apart from the major roles of the dietician, the other roles performed by the dietician are as follows:

- Mentioning the OT utilization rate in the excel sheet and regularly mailing it to the center manager and to the head office.
- Keeping a track on ward census rate.
- Acknowledging the colleagues about the codes of the hospital.

→ Attending the audits like validation audits, how is the data consolidated, etc.

## **PATIENTS RIGHTS WHEN HE/SHE ENTERS IN THE HOSPITAL**



**Figure No: 69. Rights of the patients.**



**Figure No: 70. Reducing the risk of patient fall.**

Dr. Vijay Chavda (M.D. Radiology)

GOVT. OF MAHARASHTRA

Public Health Department  
(PRE-CONCEPTION AND PRE-NATAL DIAGNOSTIC TECHNIQUES)  
(PROHIBITION OF SEX SELECTION ACT, 2003)

**SCHEDULE III  
CERTIFICATE OF REGISTRATION**

1. In exercise of powers conferred under Sec 19 (1) of Pre-natal Diagnostic techniques (Regulation and Prevention of Misuse) Act, 1994, (57 of 1994), the appropriate Authority MOH-D hereby grants registration to the Genetic Counseling Center\*/Genetic Laboratory\*/Genetic Clinic\* named below purposes of carrying out Genetic aforesaid Act for a period of five years ending on 19.09.2025.

2. This registration is granted subject to the aforesaid Act and Rules there under and any contravention there of shall result in suspension or cancellation of this certificate of Registration before the expiry of the said period of five years.

A) Name and address of the Genetic Counseling Center\*/Ultrasound\*/Genetic Clinic\*/Genetic Laboratory APOLLO SPECIALITY HOSPITALS PVT LTD, Thomas Coe Labs, 156 Pt. N.M. Malviya Rd, Tandon, N.H.

(i) Name of Applicant for PCPNDT registration Mr. Mahrague Musa Shaim  
(ii) Name, Qualification and Reg. No. of Sonologist/Doctor Conducting Sonography / PCPNDT Procedure (Genetic Clinic)  
(i) Dr. Vinod Shetty (MD Radiology) (ii) Dr. Ghoshil Padaria (BSc Genet) Dr. Purni Chhabhani (BSc Med)  
(iii) Name of Embryologist / Geneticist (Genetic lab), Qualification and Experience:  
(i) \_\_\_\_\_ (ii) \_\_\_\_\_

(B) Pre-natal Preconception Art diagnostic Procedures\* approved for Genetic Counseling /USG/ Genetic Clinic/ Genetic Lab  
Non-Invasive ☒ Ultrasound  
Invasive ☒ Amniocentesis ☒ Chorionic villi biopsy (iii) Foetoscopy  
☒ Foetal skin or organ biopsy (v) Cordocentesis

(C) Pre-natal diagnostic Tests\* approved (For Genetic Laboratory)  
(i) Chromosomal studies (ii) Biochemical Studies (iii) Molecular studies  
ART/IVF Techniques  
1. Gamete intrafallopian tube transfer 2. Zygote intrafallopian tube transfer  
3. Intra cytoplasmic sperm injection 4. Egg donation  
5. Embryo donation 6. Semen washing  
7. Semen Freezing 8. Embryo Freezing  
9. Egg Freezing 10. Ovarian tissue Freezing  
11. Pre implantation genetic diagnosis 12. In vitro maturation  
13. Surrogacy 14. Testicular tissue Freezing  
15. Ovum pickup 16. Embryo pick up  
17. IVF 18. Assisted hatching  
19. Foetal reduction 20. IMSI

3. Model / make / serial No. / and MRC No. of USG equipments being used (any change is to intimated to the Appropriate Authority under rule (13))  
(i) a) Sr No. 18245502 (ii) a) Sr No. \_\_\_\_\_ (iii) a) Sr No. \_\_\_\_\_  
b) Make Model 4E logis PC b) Make Model \_\_\_\_\_ b) Make Model \_\_\_\_\_  
c) MRC No. MM/BMC/224 c) MRC No. \_\_\_\_\_ c) MRC No. \_\_\_\_\_

4. Registration No. allotted BMC/PHD/53/MOH

5. Period of validity of earlier Certificate of Registration (For Renewed Certificate of registration only)  
Date: 13.08.15 to 19.08.2020  
Date: From 19.08.2020 To 19.08.2025

Signature, name and designation of  
Appropriate Authority

Figure No: 71. Prohibition of sex selection act.



## CODES OF THE HOSPITAL

75. Name and color of codes

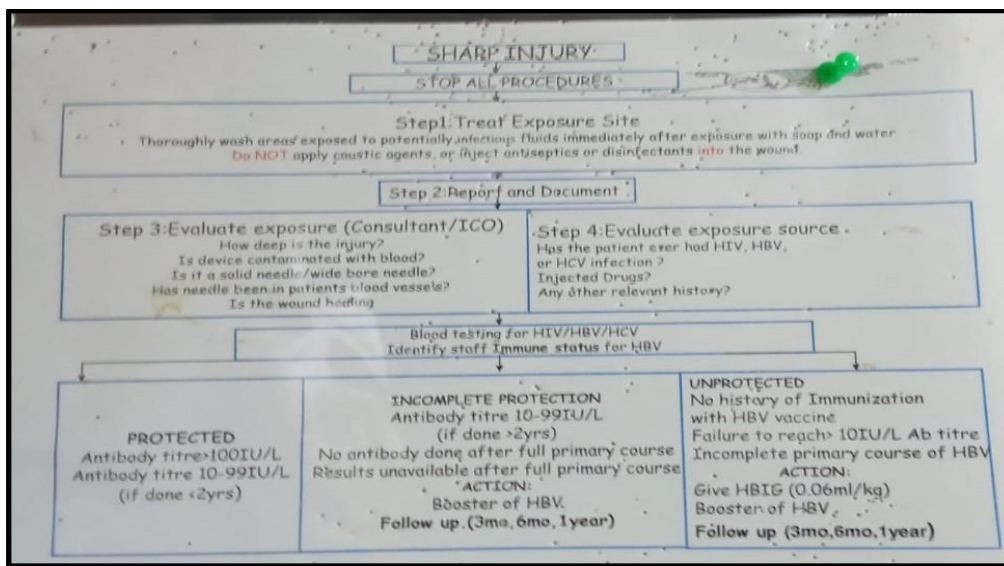
CODE	SITUATION	CONTACT NO.	RING AT	TO BE CONDUCTED	MESSAGE	TEAM RESPONDING
CODE PINK	CHILD ABDUCTION	444	SECURITY SUPERVISOR	CM/OPERATION-HEAD/NS/SECURITY	code<name>,dept.<name>, floor<name>	SECURITY TEAM
CODE RED	FIRE AND EXTERNAL DISASTER	777	SECURITY SUPERVISOR	CM/OPERATION-HEAD/NS/MAINTENANCE/SECURITY	code<name>,dept.<name>, floor<name>	EMERGENCY RESPONSE TEAM
CODE BLUE	CARDIAC ARREST	666	NURSING STATION	NS/ANESTHETIST/OPERATIONS HEAD/PHYSICIAN	code<name>,dept.<name>, floor<name>	CODE BLUE RESPONSE TEAM
CODE VIOLET	HOSTILE / COMBATIVE VIOLENT PERSON	555	SECURITY SUPERVISOR	OPERATIONS HEAD/NS	code<name>,dept.<name>, floor<name>	EMERGENCY RESPONSE TEAM

CODE yellow - Disaster

### Codes

**Figure No: 72. Codes representing the meaning and usefulness in the hospital.**

## SHARP INJURY CLEANING PROTOCOL



**Figure No: 73. Sharp injury cleaning protocol.**



## **MRD of the hospital**

MRD is defined as the Medical Record Department. This keeps a record of every patient's medical history along with the formalities which they have completed in hospital. The basic flow of the MRD file is:

- 1) Patient record form
- 2) Covid report RT-PCR compulsory (min. 72 hours)
- 3) Initial admission form
- 4) FC form i.e. Finance declaration form
- 5) Nursing assessment form
- 6) Surgical kit
- 7) Nurses progress report
- 8) Nursing hourly assessment sheet
- 9) Nurses GRN sheet
- 10) Regional doctor report
- 11) Dietician papers
- 12) Physiotherapist papers
- 13) Blood transfusion papers (if utilized)
- 14) OT inventory papers
- 15) OT diagnosis report
- 16) Laboratory reports
- 17) TPA papers
- 18) Discharge summary
- 19) Discharge gate pass
- 20) Sticker

## **OBSERVATIONS and EXPERIENCES**

### Processes learned:

- 1) OPD and IPD billing
- 2) Roles and responsibilities of biomedical engineer, dietician, accountant, operations head, domestic marketing towards hospitals.
- 3) Basic steps of TPA, International marketing, domestic marketing etc.
- 4) The placement of equipment and instruments, their importance and working.
- 5) The infection control mechanism of the hospital.
- 6) Disinfection by housekeeping staff
- 7) The OT working
- 8) Accountant work flow in dept
- 9) Housekeeping work flow

### The following are the things which I did as an intern:

1. Scanning the MRD, prescriptions.
2. Receiving the calls, directing the patients, following up on the leads, taking appointments, taking google reviews and feedback from the patient.
3. Taking regular patient rounds.
4. Completing the FRRO everyday.
5. Generating OPD and IPD bills sometimes.
6. Vaccination verification on a daily basis.

### The qualities that are acquired:

Patience,  
sincerity to work,  
tackling the unresolved situations,  
perseverance,  
communication skills, etc.

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