Summer Training at
Manipal Hospitals,
Bangalore

Enhancing Positive Patient Experience in OPD of Manipal Hospital Bangalore

By
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Under the guidance of
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MBA Hospital and Health Management
2015-2017

The IIHMR University, Jaipur
2016

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Priyanka Malhotra** student of **MBA Hospital and Health Management** from the IIHMR University; Jaipur has undergone summer training at **Manipal Hospitals, Bangalore** from 1st April to 31st May, 2016.

The candidate has successfully carried out the study designated to her during summer training and her approach to the study has been sincere, scientific & analytical.

The internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavours.

Col. (Dr.) Ashok Kaushik
Dean (Academics & Student Affairs)
IIHMR University, Jaipur

Nutan P. Jain
Professor
IIHMR University, Jaipur

ManipalHospitals
LIFE'S ON

1st June 2016

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Priyanka Malhotra** has done an internship project with us from 1st April, 2016 to 31st May, 2016.

During this period she was involved in a project - **Enhancing patient experience in the OPD** of Manipal Hospitals Bangalore, a unit of Manipal Health Enterprises Pvt. Ltd., Bengaluru.

Her performance on the projects was assigned and her conduct was found to be good.

We wish her success in her future endeavors.

For Manipal Health Enterprises Pvt. Ltd.,

Asha Rao
Manager – Human Resources

Manipal Health Enterprises Pvt Ltd
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CIN: U85110KA2010PTC052540

ACKNOWLEDGEMENT

Every endeavor in itself is an impression of the efforts of not only those who pursue it but of those as well who provide guidance and motivation towards its successful completion. Likewise, this project bears the imprint of all those who helped me at various stages of this project's development and fruitful culmination.

I would like to extend a word of gratitude towards:

- Mr. Ajay Bakshi, Chief Executive Officer of Manipal Hospitals, Bangalore, for giving me an opportunity to undergo this summer internship project with Manipal Hospitals.
- Archna Gupta, Chief Operating Officer of Department of Customer Relations Department, for being my mentor and project guide for the entire tenure of my training. For helping me improve the quality of work done by working on my lacunas.
- Dr. Pallavi Nagwanshi, Assistant Manager in Department of Customer Relations Department, for providing me with guidance and support required to work on my project and readily enlightening me with information about the unchartered topics.
- Mr. Sarvana Sampath, Manager Training and Development, for granting me the opportunity to learn and train in this prestigious institute and for coordinating my entire training schedule.
- Dr. Nutan P. Jain, my mentor at IIHMR, Jaipur, for providing me with the guidance and support because of which this project has been successfully culminated.
- I would also like to thank my dean at IIHMR University, Mr. Ashok Kaushik and the university itself for providing me with this golden opportunity to learn and to work in a health facility which is one of the best amongst the current health providers.

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1. ABBREVIATIONS/ACRONYMS:

- **AAHRPP:**Association for the Accreditation of Human Research Protection progr ams, Inc
- **API:** Application Programming Interface
- **ATM:** Automated teller machine
- **BBS:** Bulletin board system
- **CAGR:** Compound annual growth rate
- **CRM:** Customer relationship management
- **CSR:** Corporate social responsibility
- **CSSD:** Central sterile supply department
- **CTA:** Call to action
- **HRPP:** Human research protection program
- **IAEA:** International atomic energy agency
- **ICMR:** Indian council of medical research
- **ICU:** Intensive care unit
- **IPD:** Inpatient department
- **ISO:** International organization for standardization
- **ISP:** Internet service provider
- **IVF:** Intra-venous fluids
- **MEMB:** Manipal Education and Medical group
- **MHB:** Manipal Hospital Bangalore
- **MHI:** Manipal Heart Institute
- **MHRC:** Manipal Hospital research centre
- **MIS:** Management Information System
- **LTSF:** Low temperature steam formaldehyde
- **MMS:** Multi-media messaging service
- **NABH:** National accreditation board for Hospitals and Healthcare providers
- **NABL:** National accreditation board for laboratories
- **NGO:** Non-governmental organization
- **OPD:** Outpatient Patient Department
- **OT:** Operation theatre
- **PACU:** Post-anesthetic care unit

2. Organization Profile:

Manipal Hospital has a special significance in overall healthcare industry of India particularly in South India. A social seed sown more than five decades ago is today the country's third largest healthcare group with a network of 15 hospitals providing comprehensive care that is both curative and preventive in nature for a wide variety of patients not just from India but from all across the globe. Manipal Hospital is one of the most preferred and recognized healthcare facilities by pharmaceutical companies for drug trials.

Manipal Education and Medical Group is divided into four wings:

- Manipal Education: India's university town with 2 universities and 24 professional colleges.
- Research: Genetics and Stem Cell Research.
- Manipal Integrated Services: Outsourced Manpower Services Provider.
- Manipal Health Enterprises Pvt. Ltd:

Manipal hospital Bangalore (MHB) is a part of Manipal Education and Medical Group (MEMG). Manipal hospital Bangalore is a private healthcare facility, founded in 1953 by Dr. T. M. A. Pai, a doctor, educationist, banker and philanthropist. He also instituted India's first private medical college, Kasturba Medical College in 1955. The focus at Manipal Hospitals is to develop an affordable tertiary care multispecialty healthcare framework through its entire delivery spectrum and further extend it to homecare.

Core Values:

The ethos of Manipal Hospitals is its belief in the credo of its triad of its core values, namely, "Clinical Excellence", "Patient Centricity" and "Ethical Practices".

- **Clinical Excellence:** The clinical excellence is rooted in our team of doctors/medical specialties who are well versed with latest advancements in their respective field of medical expertise. This is further complemented by our teams of highly trained nurses and paramedical people.
- **Patient Centricity:** Patient centricity is the key tenet that we follow and which has won the goodwill and trust of our patients over the years. A total 'patient first' approach at all times in the outpatient department- working at late hours of the day and even on holidays, are but a few examples of patient friendly practices that has resulted in us being one of the most preferred hospital wherever we are present across India and also the development of strong bond based on faith and trust with our patients.

- **Ethical Practices:** Our unwavering and unflinching belief in ethical practices along with our social initiatives through the Manipal Foundation and other associated NGOs has enabled us to extend quality and affordable healthcare to the lesser privileged sections of the society.

With its flagship quaternary care facility located in the heart of Bangalore city, five tertiary care, nine secondary care across five states, today Manipal Hospital successfully operates and manages 4,900 beds and caters to around 2 million customers from India and overseas every year. The hospital staff includes around 2,000 doctors and 6,000 nurses, paramedics and support staff.

Manipal Hospital Network:

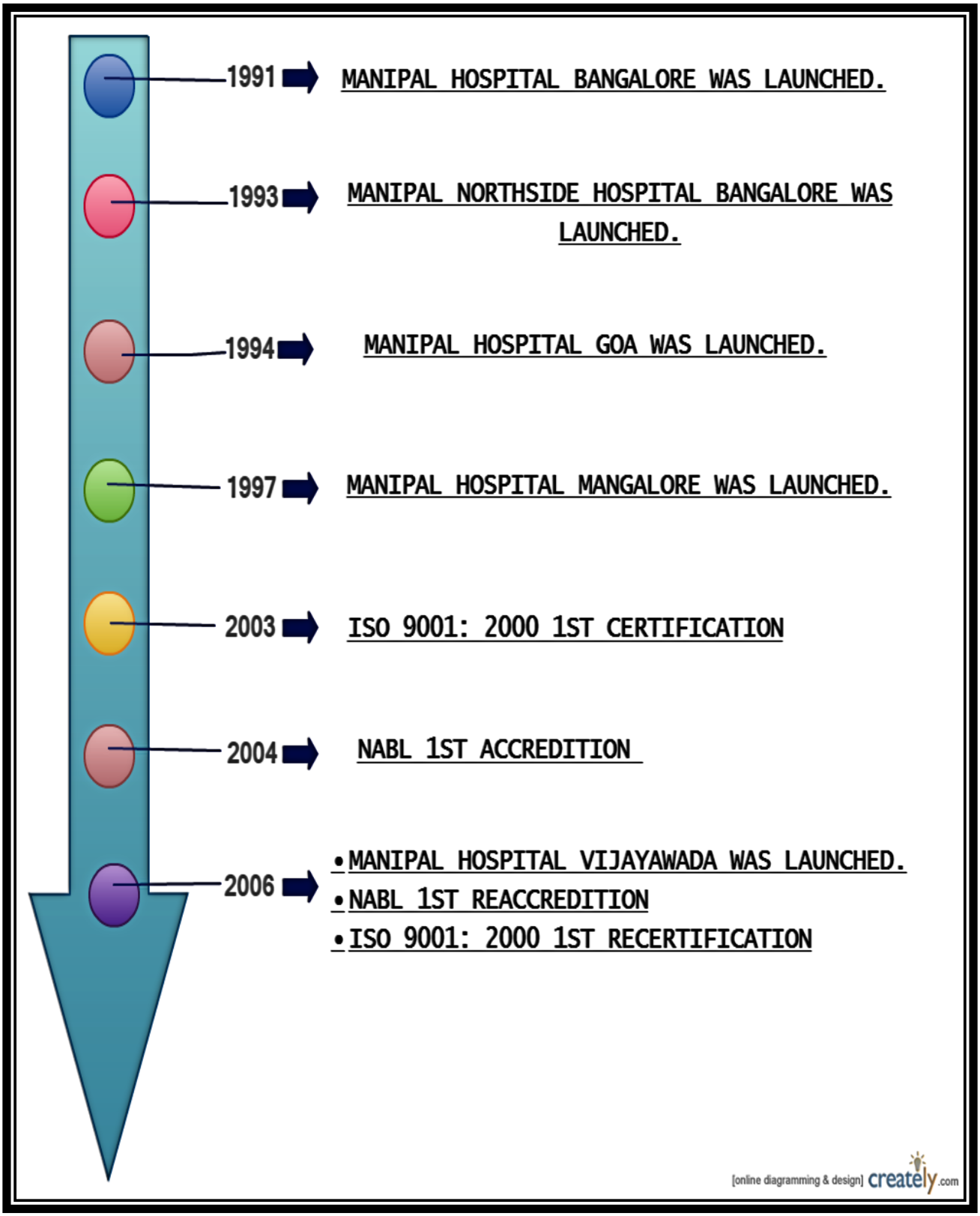
The list of Manipal Hospital network is as follows:

1. Manipal Hospital, Bangalore
2. Manipal North Side Hospital, Bangalore
3. Dr. Malathi Manipal Hospital, Bangalore
4. Manipal Hospital, Salem
5. Manipal Hospital, Goa
6. Manipal Mangalore, Hospital
7. Manipal Super Specialty Hospital, Visakhapatnam
8. Manipal Hospital, Vijayawada
9. Soni Manipal Hospital, Jaipur
10. Vedic Life care, Nigeria
11. Manipal Hospital Klang, Malaysia

Manipal Hospital Awards and Accolades:

- First Indian Multispecialty hospital to attain ISO 9001: 2000 Certification for all comprehensive protocols including Clinical, Nursing, Diagnostics and Allied Services.
- Golden Peacock National Quality Award, 2005, the first ever hospital in the country to be bestowed such a recognition.'
- The hospital based Clinical Laboratory is the first to get NABL Accreditation.
- Manipal Hospital organized the largest free heart screening event on World Heart Day. They entered the India/ Asia Book of Records, because 10,732 people attended the event organized in Manipal Hospital units in Goa, Jaipur, Salem, Vijayawada, Vishakhapatnam and Mangalore

❖ **Timeline:**


1991
MANIPAL HOSPITAL BANGALORE WAS LAUNCHED.
1993
MANIPAL NORTHSIDE HOSPITAL BANGALORE WAS LAUNCHED.
1994
MANIPAL HOSPITAL GOA WAS LAUNCHED.
1997
MANIPAL HOSPITAL MANGALORE WAS LAUNCHED.
2003
ISO 9001: 2000 1ST CERTIFICATION
2004
NABL 1ST ACCREDITION
2006
• MANIPAL HOSPITAL VIJAYAWADA WAS LAUNCHED.
• NABL 1ST REACCREDITION
• ISO 9001: 2000 1ST RECERTIFICATION
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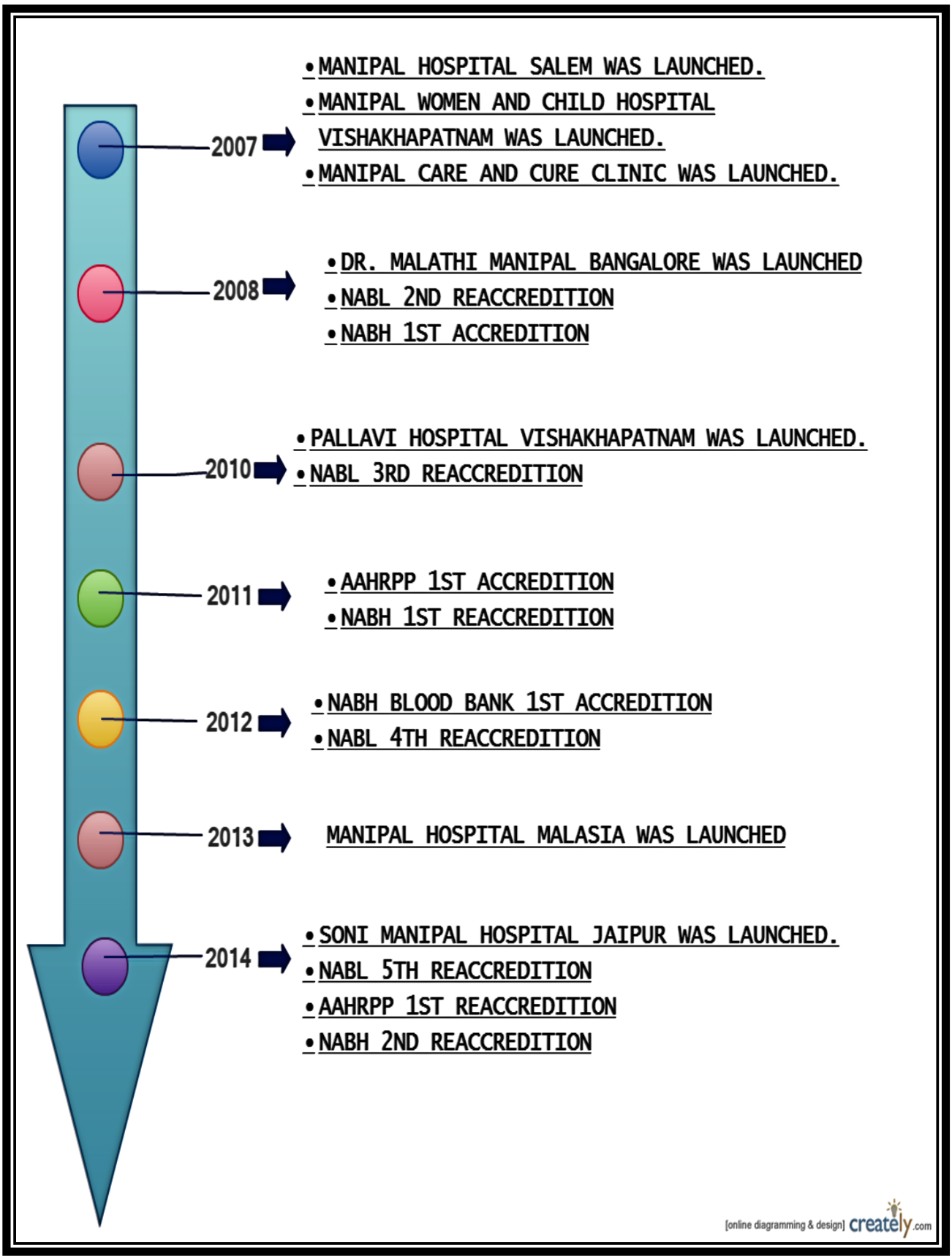
2007
• MANIPAL HOSPITAL SALEM WAS LAUNCHED.
• MANIPAL WOMEN AND CHILD HOSPITAL VISHAKHAPATNAM WAS LAUNCHED.
• MANIPAL CARE AND CURE CLINIC WAS LAUNCHED.
2008
• DR. MALATHI MANIPAL BANGALORE WAS LAUNCHED
• NABL 2ND REACCREDITION
• NABH 1ST ACCREDITION
2010
• PALLAVI HOSPITAL VISHAKHAPATNAM WAS LAUNCHED.
• NABL 3RD REACCREDITION
2011
• AAHRPP 1ST ACCREDITION
• NABH 1ST REACCREDITION
2012
• NABH BLOOD BANK 1ST ACCREDITION
• NABL 4TH REACCREDITION
2013
MANIPAL HOSPITAL MALASIA WAS LAUNCHED
2014
• SONI MANIPAL HOSPITAL JAIPUR WAS LAUNCHED.
• NABL 5TH REACCREDITION
• AAHRPP 1ST REACCREDITION
• NABH 2ND REACCREDITION
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Our Specialties:

Manipal Heart Institute (MHI)

Manipal Institute of Neurological disorders

Manipal Institute of Liver and Digestive diseases

Manipal Home Care

Manipal Institute of Nephrolology

Manipal Health Check

Manipal Comprehensive Cancer Center

Accident and Emergency Care

Manipal Ankur (Andrology

Bones and Joints care

Dermatology

Genetics

Diabetes and Endocrinology

Growth and Hormonal Medicine

Ear, Nose and Throat

ICU and Critical Care

General Medicine

Laboratory Medicine and Diagnostics

General Surgery

Pediatric Services

Rheumatology

Spine Care

Women and Child care

Sports Medicine

Robotic Assisted Surgery

Radiology

Rehabilitation Service

Manipal Eye care

Infrastructure Facilities:

- Bed strength: 600 beds
- Over 50 specialties
- Multispecialty services under one roof
- 24*7 Hi tech Ambulatory Services
- 24*7 Hi tech NABL accredited Diagnostic services
- 24*7 Pharmacy- free home delivery under 5 km radius
- 24*7 Blood bank
- 24*7 Accident and Emergency Services
- 24*7 Pediatric Emergency
- Telemedicine
- Valet parking to accommodate over 250 vehicles
- Outpatient consultations on Sundays and holidays
- Comprehensive health check facilities
- Intensive care units (ICUs)
- Operation Theaters (OTs)
- Cafeteria
- Florist
- ATM
- Syndicate Bank
- All support services.

General Findings:

I would like to present my general findings on the basis of my visits to different departments in Manipal Hospitals, in the form of process flow chart and data collected through observation learning.

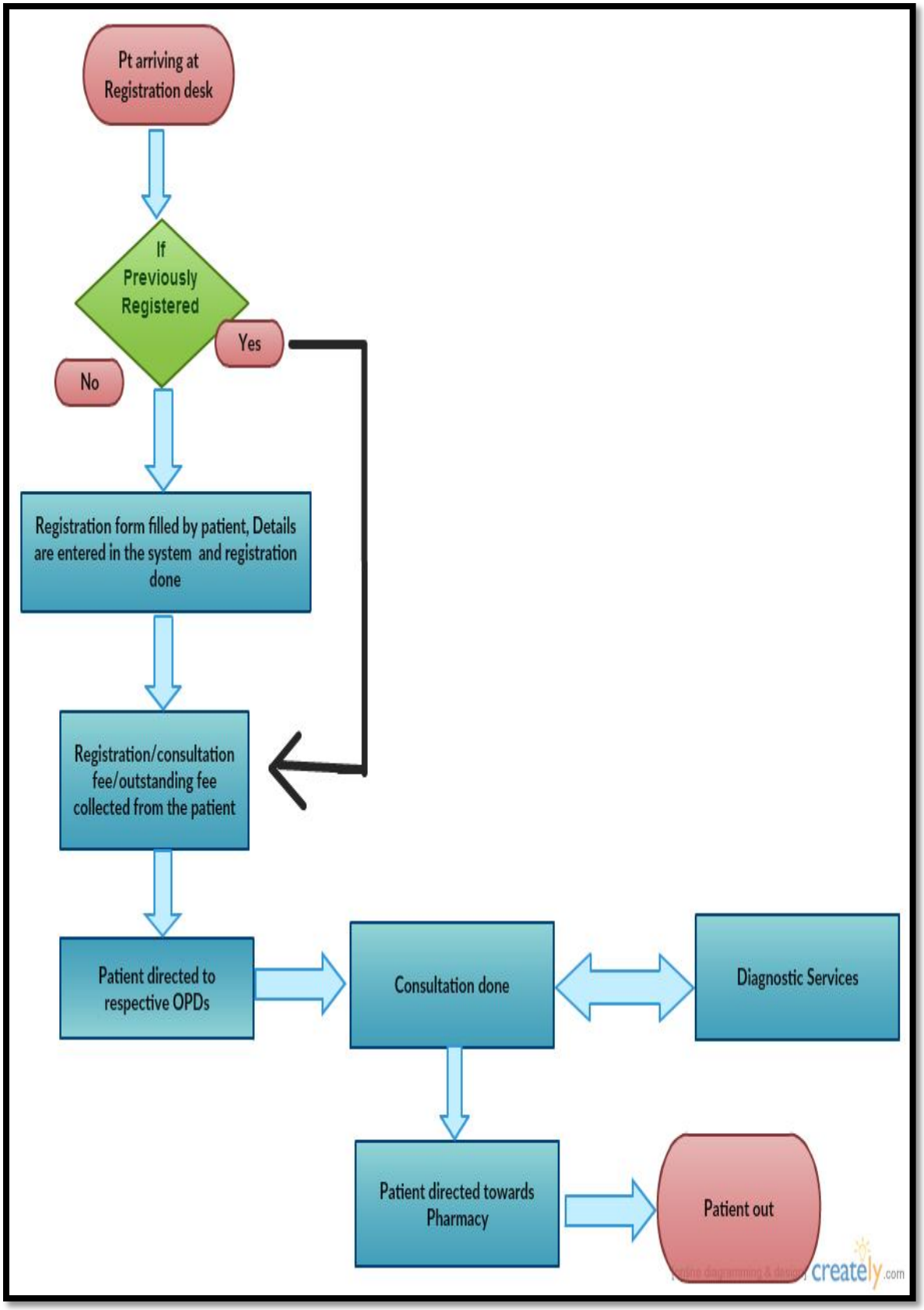
The department wise observation learning is as follows:

1. OPD:

Manipal Hospitals offers a wide range of outpatient services. It includes General medicine OPD, Gynecology and fetal medicine OPD, Ear, Nose and Throat OPD, Pulmonology OPD, Neurology OPD, Orthopedic OPD, Gastroenterology OPD, Rheumatology OPD, Spine care OPD, Endocrinology OPD, Cardiac OPD, Ophthalmology OPD and Dental care OPD. Manipal hospital Bangalore has the largest number of OPD in Bangalore serving 3000 patients every day. To serve 3000 patients per day with patient satisfaction is a huge task for Manipal staff. There is around 500+ staff working in the Manipal outpatient department.

OPD is situated on -1 and 1st floor in Manipal Hospitals. The registration desk is situated on the ground floor. Appointments are centralized and are recorded on the Hospital Information Management System. Manipal hospitals have outsourced their appointment booking to Qikwell. As soon as appointments are fixed, a text message is sent to the patient confirming the appointment. No walk-in patient is turned away, and the staffs try to accommodate these patients between the appointments already scheduled for the day. The daily volume is of approximately 2500-3000 patients across all the OPDs. Each OPD has the capacity to handle 70-100 patients waiting. For Chairpersons and senior doctors, a junior doctor does the initial assessment of the patient, which not only reduces the workload of the senior doctors (whose slots are always overbooked), but it also gives the junior doctors an opportunity to learn from the best brains in the industry.

The process flow of patient when the patient enters the hospital to the consultation to the time the patient leaves the hospital is given below:



OPD Process Flow

2. Operation Theater (OT):

The operating theater floor is an ultra modern facility containing 21 operating rooms most specialized for particular medical area. Their break up is as follows:

Sr. No	OT Number	Specialty
1.	4	Cardiac OTs
2.	1	Pediatric Cardiac Care OT
3.	4	Neurosurgical OTs
4.	8	General OTs
5.	2	Orthopedics OTs
6.	1	Brachytherapy OT
7.	1	IVF OT

The OT floor is staffed by highly qualified expert anesthesiologists and highly trained nursing teams to handle the demands of any routine or emergency surgical procedure. The hospital has specialized teams of general surgeons, pediatric surgeons, cardiothoracic surgeons, neurosurgeons, surgical oncologists, plastic surgeons, orthopedic surgeons, gastroenterology surgeons, endovascular surgeons and laparoscopic surgeons among others.

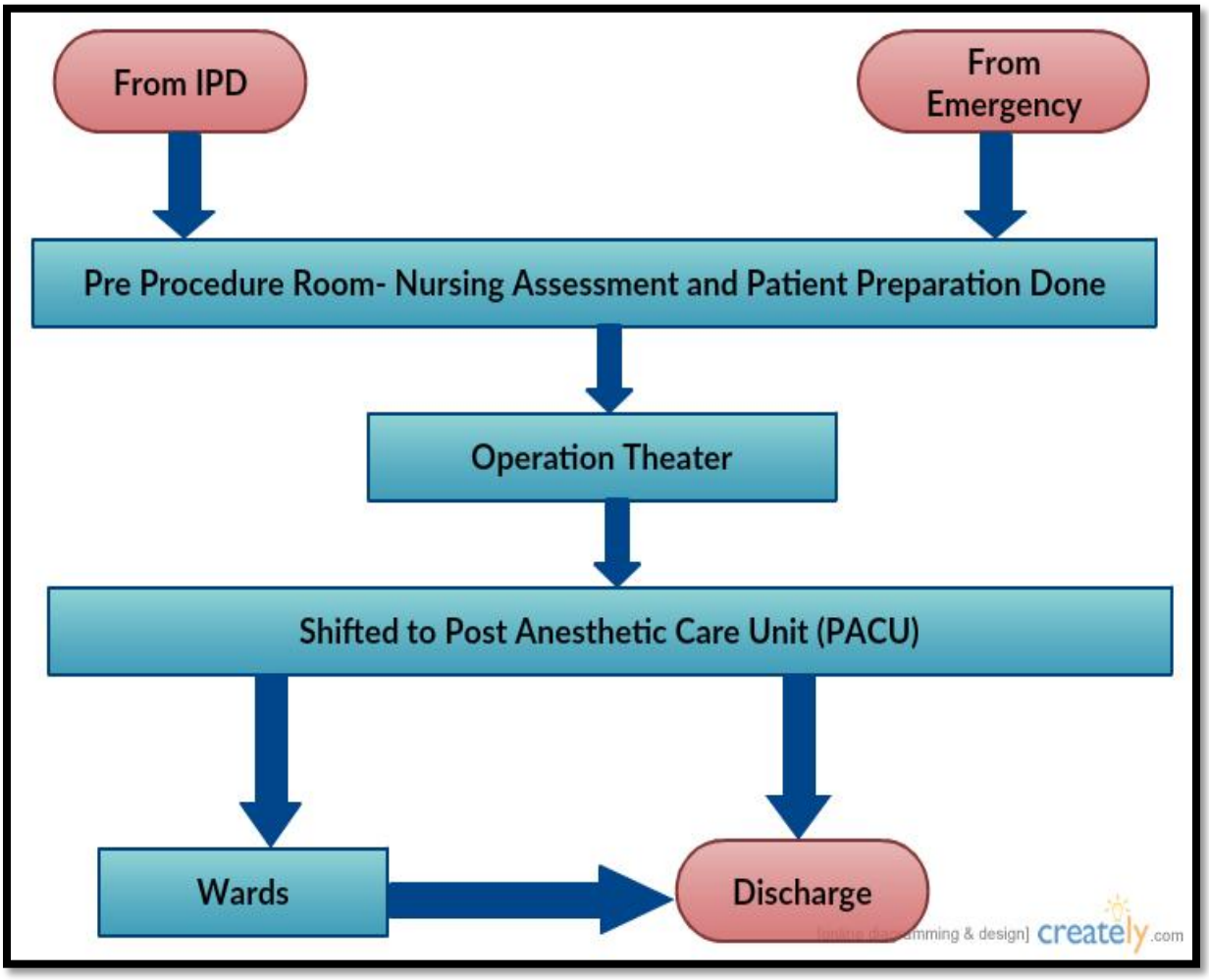
Intra-departmental team work is encouraged and hospital has huge success in complex, congenital and re-do surgeries. Commonly performed surgeries include total hip replacementotal knee joint replacement, spine surgeries, complex micro vascular and neurosurgical procedures.

The floor has one ultra modern Maternity Suite (equipped with labor, delivery, recovery and post partum facilities) and 4 delivery rooms with recovery bay. The operation suit represents the-state-of-the-art in its design and are equipped with the most advanced surgical and anesthesia system to offer the highest level of patient safety and infection control.

Process Flow:

The process flow of Operation Theater starting from patient coming from emergency or in patient department to the discharge is as follows:

Process flow in OT

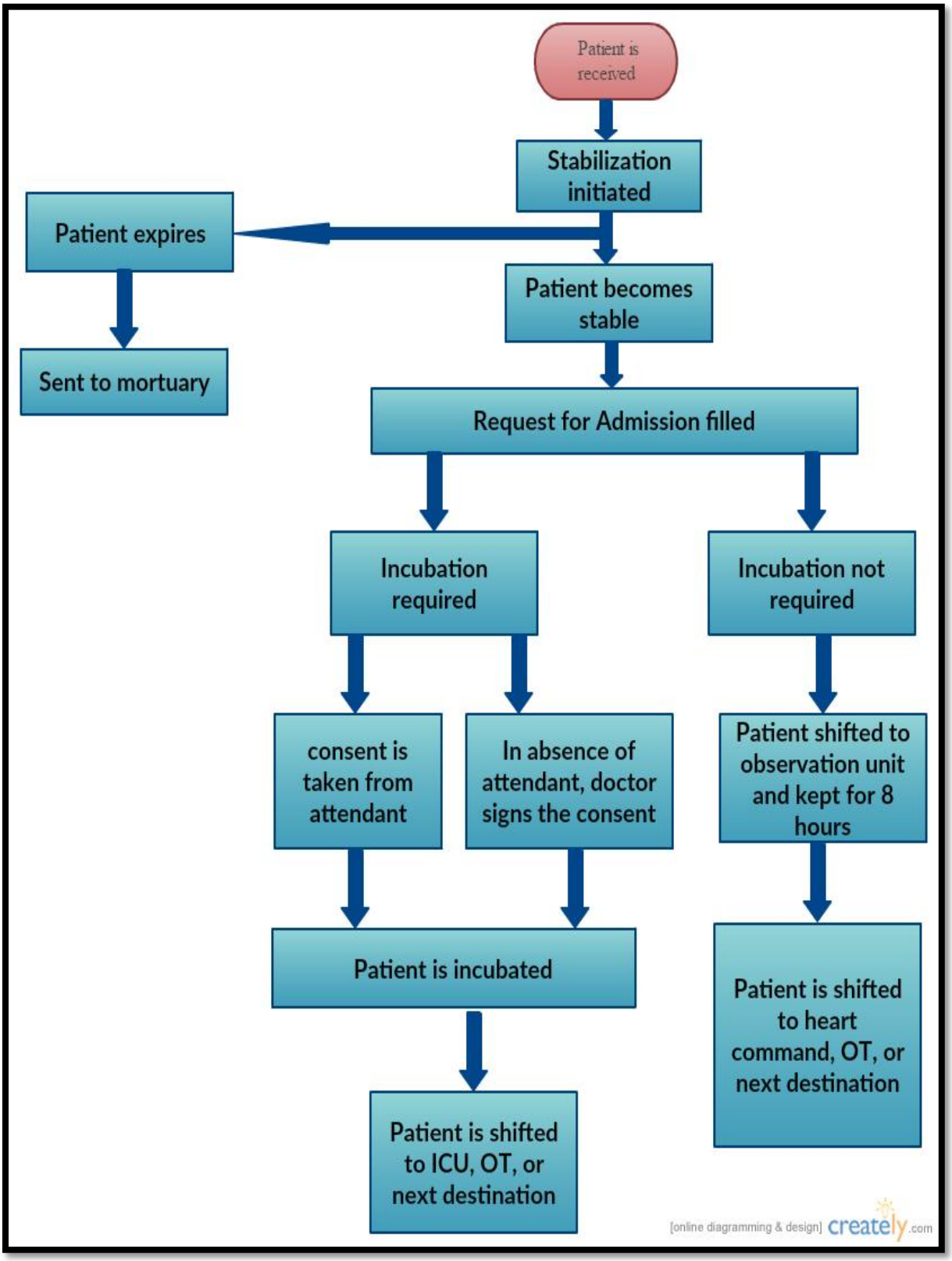


3. Emergency Department:

The Emergency Department in Manipal Hospital is situated on the ground floor and the entrance is from different route than main entrance of the hospital. The Emergency department receives about 80-100 patients per day.

The process flow of Emergency department is as follows:

Process flow in Emergency Department



4. CSSD:

The Central Sterile Supply Department of Manipal Hospital is situated on the lower ground floor. It is spread over an area of 1000 sq ft. This CSSD is capable of catering to all the requirements of the hospital.

The various areas of the CSSD, along with a list of the activities that take place in each department are as have been enumerated below.

1. Receiving Area:
    - All the infected instruments are received and their quantity is verified.
    - They are washed under water and in ultrasonic cleaners.
    - These instruments are then dried with an air gun and subsequently put in a Yorco oven for complete drying.
    - All instruments are then put into a washer-disinfection machine. This machine is equipped with double doors in order to facilitate collection directly from the processing area.
2. Processing Area:
    - This area receives cleaned instruments and in this area, the instruments are separated by the personnel according to the checklists.
    - The instruments thus separated are put into trays which are wrapped with a double layer for infection control.
    - These trays are then labeled and thrillium indicators are put on these trays as a measure of the quality of sterilization.
    - The sterilization method is selected according to the instruments in question. The methods of sterilization that may be used are LTSF (low temperature steam formaldehyde) or Plasma Sterilization.
3. Sterile Area:
    - All the sterilized instruments are collected in the sterile zone through the doors of the sterilization equipment opening in that area.
    - These equipments are separated according as per the quantities received from each department and are put on separate racks.
    - Low temperature and positive pressure is maintained in this area for infection control.
4. Issue Area:
    - Instruments are sent to the OT directly from the sterile area through a lift in the issue area to prevent any kind of cross contamination.

5. Marketing:

This department is situated in 'The Annexe' the corporate office of Manipal Hospital. The chief function of this department, as the name suggests, is to market the services of Manipal Hospitals.

Manipal is now at such a stage of its life cycle that it need not indulge in extensive marketing activities. Manipal Hospitals is a brand name recognized internationally, which is evident from its large international patient base. In fact, this brand is so well known that Manipal Hospitals has not even invested in large billboards (to be erected on top of the building) and does not spend too much on Out-Of-Home advertising. This hospital does have a strong presence on Facebook, and is followed on Facebook by many.

This uniqueness of the hospital lies in the services that it offers, and the quality of services offered. This is why most of the marketing that this hospital enjoys is through 'word of mouth'. The clinical team employed at Manipal Hospital is among the finest in the Asia Pacific region, and the technology used here is among the finest in the world. All these factors have come together to make Manipal Hospital the strong brand it is.

A majority of the activities of the marketing department comprise of CSR initiatives. Manipal Hospital has partnered with a number of charitable organizations and conducts periodic camps in various areas.

6. Engineering:

The Engineering department is situated on the first basement of Manipal Hospital. This department is responsible for catering to all the electrical needs of the entire hospital. The Engineering department is responsible for centrally providing water, electricity and air to the entire hospital. Eighty percent of the Engineering Department is outsourced, and the staff employed by Manipal Hospital is tasked with supervising the functions of the outsourced staff and ensuring that quality work is delivered, as these requirements of water, electricity and air are crucial to any enterprise, and especially in hospitals.

7. Clinical Research:

1) **Manipal Hospital Clinical Research Department:** Manipal has been conducting funded and non-funded research for past 12 years. Funded research has been industry sponsored as well as ICMR, IAEA, and Student thesis. The primary focus has been patient safety and well being over science.

2) **Human Research Protection Program (HRPP) Organization:** The HRPP was put in place to ensure protection, well-being of human participants participating in research under auspices of Manipal Health Enterprises Ltd. The objective of this system is to assist the institution meeting ethical principles and regulatory requirements for protection of human subjects in research.
3) **Manipal Hospital Research Centre (MHRC):** The research centre supporting all the research activities at Manipal Hospital was put in place to stream line the process of conducting research. Research is conducted in various departments like Anesthesia, Cardiology, Diabetes and Endocrinology, Gastroenterology, General Medicine, Oncology, Orthopedics, Pediatrics, rheumatology and Vascular Surgery.
4) **Accreditation:** The organization has quality and patient care as priority. The organization regularly updates policies on the same which have been accredited by major accreditation bodies of India like NABH, NABL.
5) **Quality policy:** Exercising oversight over research protection by supporting an effective monitoring and compliance program to ensure research is conducted in compliance with ethical principles, applicable laws and regulations and institutional policies and procedures.

8. IPD:

The inpatient department of Manipal Hospital is starts from 4th floor to 11th floor. There are different types of room available in the hospital; patient can choose any room depending upon their requirement. The executive and deluxe rooms are where the culture, expertise and hospitality of India blends with modern state-of-the-art medical facilities and services to provide what is the finest hospital service in India. The warmth of a tastefully designed décor, sophistication, comfort and an impeccable attention to detail provides a congenial atmosphere for healing and an extravagant experience.

The ornate rooms are singular in design and character with an ambience to heal and comfort you. These rooms offer utmost privacy, a panoramic view of the Bangalore Airport and tranquility of the golf course! The spacious rooms are equipped with controllable air conditioning, reading lights, STD and ISD facility and color television.

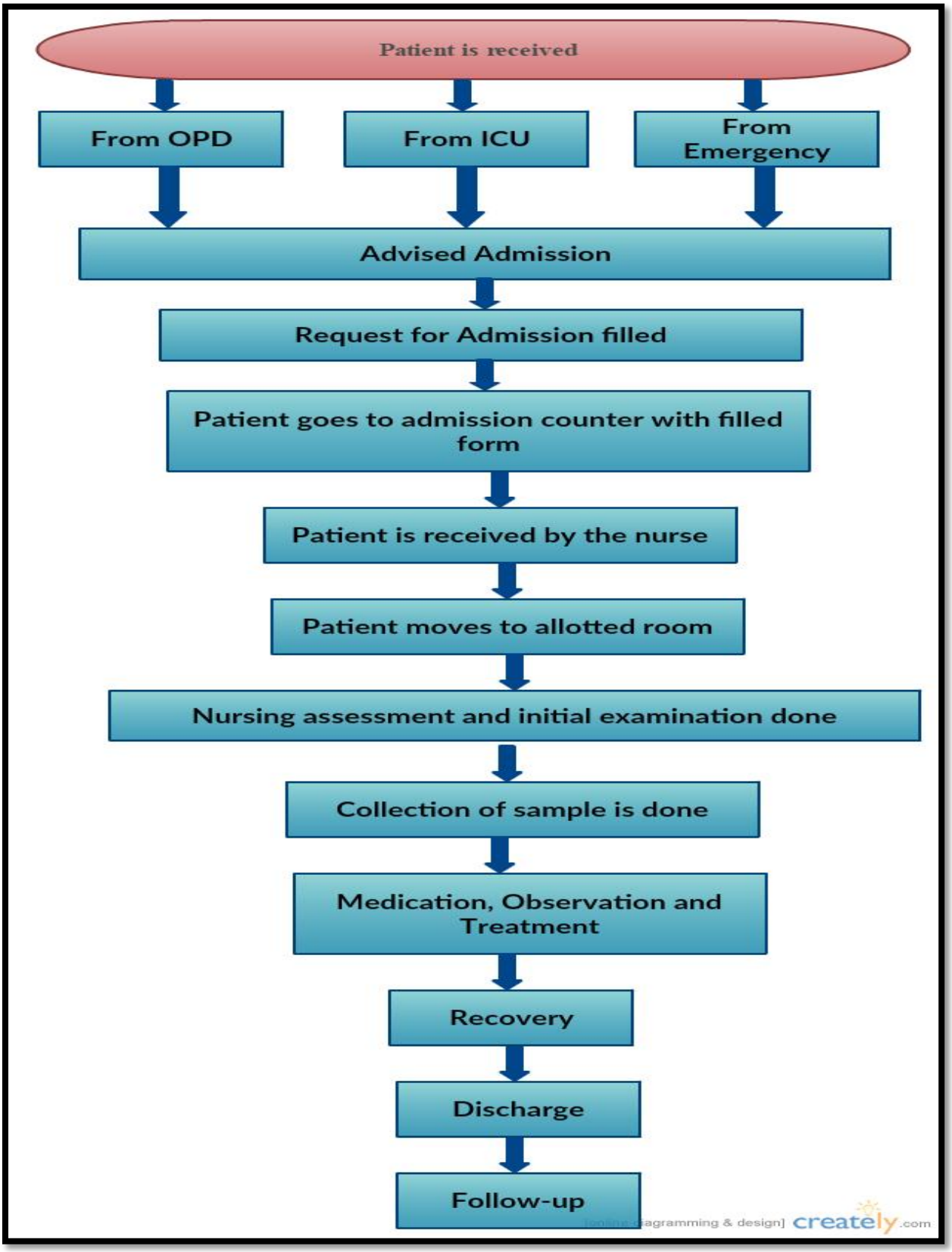
Different types of room available in Manipal Hospital are as follows:

Category	Facility
General Rooms	• Five patients in a Cubicle. • Attendees permitted from 7 am to 7pm only • Common Toilet.

Semi - Special Rooms	• Two patients in a Room • One attendee permitted throughout. • Attendee cot provided. • Common Toilet for both patients
Special Rooms	• Single Room. • Attendee cot provided • Telephone facility • Television facility
Executive - Special Rooms	• Spacious rooms with ambience. • Attendee cot provided. • Telephone & Television Facility. • Internet, controllable A/c etc.
Deluxe Rooms	• Double Room • Attendee cot provided • Telephone Facility • Television Facility
Ultra - Special Rooms	• Spacious rooms with ambience • Attendee cot provided • Telephone & Television Facility • Internet, Controllable A/c etc.
Super Deluxe Rooms	• Double Room • Attendee cot provided • Telephone & Television Facility • Dining Table & Fridge
Ultra Deluxe Rooms	• Spacious Double rooms with ambience • Attender cot & Dining Table • Telephone & Television Facility (2) • Internet, Controllable A/c etc.

The process flow of in-patient department from OPD, ICU and Emergency Department is as follows:

Process Flow in IPD



9. Dietary, Food and Beverages:

These offices are situated in the lower ground floor of Manipal Hospital. These departments are tasked with managing the dietary needs of the patients coming into the hospital. This task is made all the more difficult by the fact that the hospital caters to the needs of over 1200 patients (beds) per day. The enormity of this task can be appreciated by the fact that most five star hotels are able to handle only up to 600 clients per day, and the Food and Beverages Department of this hospital has to be able to serve close to 7000 meals per day.

In order to be able to cater to the delicate yet crucial needs of all the patients coming in to the hospital, most of the Food and Beverage functions are outsourced (the company to which the functions are outsourced shall hence be referred to as the 'Partnering Company'). All heavy equipments in the kitchen are property of Chef On Wheels, and the Partnering Company has the responsibility of bringing in only light equipment like cutting knives, etc.

With respect to ensuring quality of services, Chef on Wheels maintains service level agreements with the Partnering Company, and both strive jointly towards maintaining the quality standards. Both Chef on Wheels and the Partnering Company have representatives present on each floor, and these representatives jointly keep a check on any issue that may crop up on a floor.

The Dietetics department is tasked with the specialized function of ensuring that a patient is not presented with a meal that may not be in compliance with the treatment that the patient has come to Manipal for. To be able to deliver on this front, the dietician's role includes checking the diet of all the patients periodically, going on rounds of the patients with the chairpersons, solving patient queries related to diets, planning the diets of the patients and coordinating with the kitchen in order to ensure the provision of the right quality food to the patients.

Finally, these departments also maintain a chart of the amount of food wasted per day (wasted food is discarded) and thus, a strict control is maintained on the inventory of all food item

10.Housekeeping:

This office of this department is situated on the lower ground floor of Manipal the Manipal Hospital, and is tasked with managing the sanitation needs of the patients coming into the hospital. This task is made all the more difficult by the fact that the hospital caters to the needs of over 1200 patients (beds) per day. The enormity of this task can be appreciated by the fact that most five star hotels are able to handle only up to 600 clients per day.

In order to be able to cater to the delicate yet crucial needs of all the patients coming in to the hospital, most of the Housekeeping functions are outsourced (the company to which the functions are outsourced shall hence be referred to as the 'Partnering Company'). All the cleaning material is the property of MIS. The Stores of Manipal Hospital issue cleaning material to the personnel on the lower ground floor, to ensure that such material is not wasted. Any extra requirement requires permission and explanation.

With respect to ensuring quality of services, MIS maintains service level agreements with the Partnering Company, and both strive jointly towards maintaining the quality standards. Both MIS and the Partnering Company have representatives present on each floor, and these representatives jointly keep a check on any issue that may crop up on a floor.

11. Medical Records Department:

The Medical Records Department of Manipal the Medicity is situated on the ground floor of the hospital. This department is tasked with storing all the physical medical records generated in the hospital. Once a medical record is received by the department, a unique reference number is generated through Microsoft Excel, and the medical record is stored according to this number. MLC records are stored in a yellow file, and the records of expired patients are stored in a red file.

The Medical Records Department maintains the records of each patient file it receives for a period of 5 years. During this period, if a certain file is requested for reference/research purposes by any department of the hospital, the clock of storage is restarted. Apart from these functions, the personnel of the Medical Records Department may also be required to attend to calls from the courts of law, with the files of any patient as and when required.

Project:

Enhancing Positive Patient Experience in OPD, Manipal Hospital Bangalore

Introduction:

A hospital is a healthcare institution that provides medical services to the sick and injured people. It provides medical, nursing and support staff to provide outpatient care to people who require ambulatory care as well as inpatient care to patients who require close monitoring. Hospitals provide diagnosis and medical treatment of physical and mental health problems, surgery, rehabilitation, health education programs, nursing and physician training. Hospitals also serve as a centre of innovative research and medical training.

Outpatient department in the hospital is called as shop window of the hospital, like window shopping in supermarket where articles are laid down to choose and pick. Outpatient department can also be considered as mirror of the hospital, which reflects the functioning of the hospital being the first point of contact between patients and hospital staff. Patients visit OPD for various purposes, like consultation, day care treatment; investigation, referral, admission, and post discharge follow up. People not only visit hospital for treatment but also for preventive and promotive services like health check-up, immunization, physiotherapy and so on. OPD provides ambulatory care to the patients avoiding patients to stay overnight in the hospital. From the past decade, a current trend has been observed in the hospitals that there is decrease in inpatient services and an increase in outpatient services. So, for hospital managers there is a need to shift their focus from inpatient services to out- patient services so as to set a good brand image of their hospital by making the patient centered services.

The hospital market today has been changed from a seller's market to a buyer's market, where the patient is all important. There is a need to understand that patient do not flock to hospital just because the services are cheap, but because of its good image and its name *(Berman and Dave, 1994; Engel et al., 2004).* It is essential for a hospital to reach out to its customers (patients), if they want to survive in the competition. This can be achieved only by building a bridge of trust between the hospital and community, so that community can cross over to the hospital. To establish the sense of trust between hospital and community, it requires a great customer relationship management strategy (CRM).

Patients are the main users of the hospital. The primary function of the hospital is patient care. Thus, patient care is one of the yardsticks to measure success of the services that hospital produces. According to Swamy (1995) patient satisfaction is the real testimony to the efficiency of the hospital administration. As hospital serves all the members of the society, the expectations

of the users differ from one individual to another because every individual has particular set of values, thoughts, feelings and needs. Hence, determination of real patient's feelings is difficult. "Put yourself in the patient's shoes" is the proverb that explains how to proceed with the patient.

The performance of healthcare facilities can be assessed by measuring the level of patient satisfaction. According to Dona Badian, "Patient satisfaction is considered to be one of the desired outcomes of care even on element of health itself" and "information about patient satisfaction should be as indispensible to assessment of quality as to the design and management of health care facilities". A completely satisfied patient believes that organization has potential in understanding the patient needs and demands related to patient care. The World Health Organization Conference, supporting Health for all held in 1990, defined future development of health to be human centered. Investment in health, patient care and patient's right to delivery of quality health care leading to patient satisfaction. There are many reasons to measure patient satisfaction as it is an important outcome of quality health care.

Patient satisfaction results in enhanced compliance of the patient to medical regimens, appropriate use of medical resources and quick recovery from illness besides, evaluation by the patients makes medical staff aware about their shortcomings. Employees will understand that they are accountable to the patients and their family members. Patient's suggestions also help policy makers to identify bottlenecks in the system, thereby improving the service.

Patient satisfaction survey is reliable, a yardstick to assess quality of healthcare extended by health institute. Surveys manifest the patient's perspective of ganging the quality of healthcare provided, their expectation and their need. It also enables to infer as to how well equipped doctors, hospitals and health planners are in satisfying the patients needs and expectations measure of patients satisfaction become imperative in modern days as the patients in the central customer and information and experience provided from his perspective enables the healthcare provided to identify the area of strength and improvement opportunities within a single system. Secondly, it helps to measure satisfaction as an outcome of care and help's to study patient behavior. Satisfaction itself encompasses the perceived need of patient expectations of care provided by hospital experience of care and during stay in the hospital.

Patient satisfaction surveys have evolved into a powerful management and marketing tool, being widely used by various hospitals as feedback forms, to capture the "Voice of Consumer" and understand the views of patients in respect of services being provided. Patient satisfaction depends upon many factors: Quality of clinical services provided, availability of medicine, behavior of doctors and other medical staff, cost of healthcare services, hospital infrastructure, physical discomfort, emotional support, and respect for patient needs. Mismatch between patient expectation and services received leads to dissatisfaction. There is a quoted statement in the

patient satisfaction, if you don't measure it, you can't improve the quality of services provided to the patient. So, patient satisfaction survey needs to be conducted regularly.

OPD in Manipal Hospital:

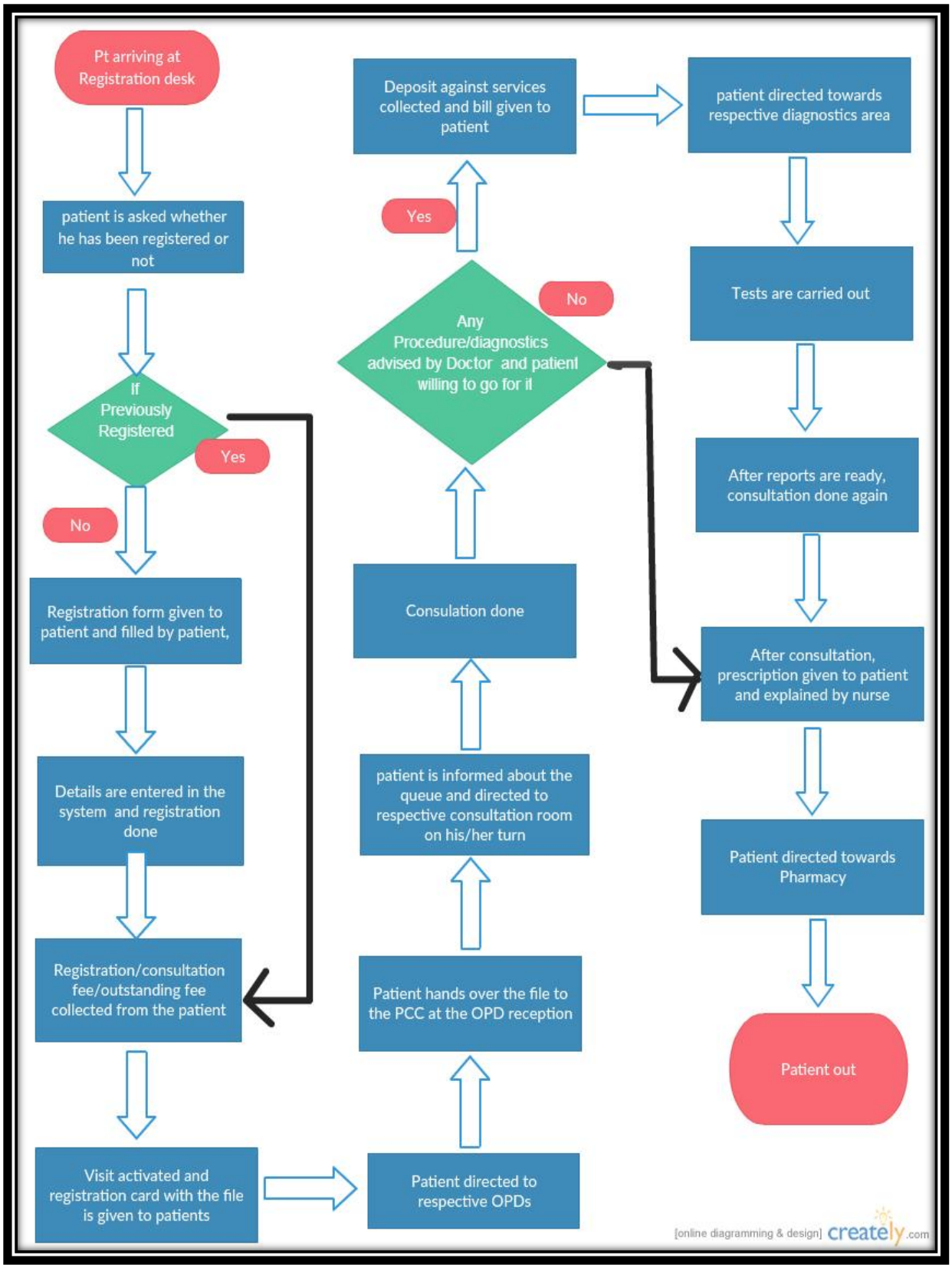
Manipal Hospitals offers a wide range of outpatient services. It includes General medicine OPD, Gynecology and fetal medicine OPD, Ear, Nose and Throat OPD, Pulomonology OPD, Neurology OPD, Orthopedic OPD, Gastroenterology OPD, Rheumatology OPD, Spine care OPD, Endocrinology OPD, Cardiac OPD, Ophthalmology OPD and Dental care OPD. Manipal hospital Bangalore has the largest number of OPD in Bangalore serving 3000 patients every day. To serve 3000 patients per day with patient satisfaction is a huge task for Manipal staff. There is around 500+ staff working in the Manipal outpatient department.

OPD is situated on -1, ground and 1st floor in Manipal Hospitals. The registration desk is situated on the ground floor. Appointments are centralized and are recorded on the Hospital Information Management System. There are both paperless and paper based appointment. Paperless appointments include appointment through widgets, call-centre and online appointments. Manipal hospitals have outsourced their appointment booking to Qikwell. As soon as appointments are fixed, a text message is sent to the patient confirming the appointment. No walk-in patient is turned away, and the staffs try to accommodate these patients between the appointments already scheduled for the day. The doctors have different shifts starting from morning 8 a.m. which lasts till 8 p.m. in the evening. The outpatient department even works on holidays.

Each OPD has a reception where Patient care Coordinator sits for the help of the patients. Also a differentiator stands near the entrance of the OPD to direct patients to the respective departments. They are in constant contact with the control room to call porters and other required staff. The daily volume is of approximately 2500-3000 patients across all the OPDs. Each OPD has the capacity to handle 70-100 patients waiting. For Chairpersons and senior doctors, a junior doctor does the initial assessment of the patient, which not only reduces the workload of the senior doctors (whose slots are always overbooked), but it also gives the junior doctors an opportunity to learn from the best brains in the industry.

The waiting area is well furnished and has all the facilities for patient's entertainment when they are waiting for their consultations. For patient's entertainment, there is television, newspapers and magazines. Also a cafeteria is present on -1 floor for the patients. There is an obvious interactive working environment; however each doctor and staff focuses on certain goals with ultimate target being patient's health, safety and integrity. Each doctor and staff are following the organization's values and understanding the importance of giving patients the priority, respecting all people, working with honesty and trying hard to be the best.

Process Flow in OPD:



Measures of Patient Satisfaction in hospital:

1. **Physical Facilities**: Physical facilities are tangible facilities such as ease of location, department's cleanliness and tidiness, bed, ventilation and lightning system, restrooms, waiting area and availability of adequate space.
2. **Registration Staff:** Registration staff services include courtesy paid by registration staff and effective communication skills.
3. **Doctor's Service:** Doctor's service is referred to physician's communication and consultation skills such as self-introduction, effective consultation skills, attentiveness, time management, respect of a doctor for patient and time spent by doctor in physical examination.
4. **Nurse's Service:** Nurse's service is referred to nurse's communication and assistance skills such as politeness and respect for the patient, responsiveness towards patient's questions and patient's referring process.
5. **Pharmacy:** Pharmacy service is referred to respect and attention shown by pharmacy staff towards patient, adequate availability of drugs and explanation of prescribed medicines.
6. **Accessibility:** Accessibility to healthcare services is comfort ability to access the healthcare service n terms of distance and location of the hospital, waiting time and information received. They are:
    - ❖ Distance from hospital includes distance of hospital from home, availability of public transport, travelling time to reach hospital and money spent on travelling.
    - ❖ Waiting time includes waiting time of doctor and total time spent in OPD.
    - ❖ Information received includes adequacy of OPD timing, general information about the hospital and main source of introduction about the hospital.
7. **Perception:** Experience to healthcare services is an important variable because it made the expectation of patient which was dependent of perceptive image. A common definition of perceived image is to become aware of something through ones senses - touch, taste, smell, hearing or sight. It is understood to be the common general knowledge, or knowledge acquired by self experience or other's experience of utilization of health care services. Experience to health services is assessed by:
    - ❖ Convenience includes waiting time for physical examination, time for receiving medicines, convenience of medicine receiving place, adequacy of OPD timing, and receiving services from one department to another department in OPD.
    - ❖ Quality of care includes treatment received from doctor, availability of prescribed medicines, skill of the nurse in using medical equipment, and attention paid by the hospital officer in case of any problem

The report aims to discuss ways for Manipal hospital Bangalore to improve patient flows, which will increase patient satisfaction and safety, increase revenue and decrease costs. The hospital is dedicated to process improvement, innovation and quality improvement. The patient's journey in hospital is studied from registration desk to the OPD to the exit. The end goal is to improve patient satisfaction by reducing waiting time and movement of the patient throughout the hospital systems by decreasing the average length of time at each point. The best way to enhance patient satisfaction is to apply patient-centered approach in the organization. This report aims at discussing ways of applying patient centered approach so as to enhance patient's experience in OPD in Manipal hospital Bangalore.

Problem Statement:

The purpose of the study is to assess and t determine the degree of patient satisfaction in the Outpatient Department of Manipal Hospital Bangalore and also to determine ways to enhance patient experience in terms of courtesy, responsiveness and quality of care provided in the hospital.

The study was conducted for two months i.e. from 1st April to 31st May. Enhanced patient satisfaction in terms of quality of care provided will lead to an increase in likelihood of patients to return back to the hospital for subsequent health services.

In healthcare industry, there are many hospitals that are providing the same clinical services; it's the hospitality which differs. So as to stand out amongst different hospital, many hospitals are adopting different methods to improve hospitality. This study aims to enhance the hospitality services of Outpatient Department of Manipal hospital, Bangalore.

Literature Review:

Literature review aims to support the conducted study within the literature body and provide evidence for the reader by searching in certain areas of interest in books, published articles and websites (Lamb 2013). In this project, the literature review was done to realize the aspect of change in better way, compare relevant information, support the findings, provide evidence on best evaluation tools, highlight on similar area of argument, as well as to get benefit from any suggestion to achieve successful change *(Mays et al., 2001).*

Customer Relationship Management (CRM) is, "a revolving process during which companies interacts with customers, thereby generating, aggregating, and analyzing customer data, and employing the result for service and marketing activities" *(Schoder, 2002*). CRM refers to all business activities directed towards initiating, maintaining, and developing long term relational exchanges. CRM is a promotion of customer loyalty, which is considered to be relational phenomenon. *(Evans and Laskin, 1994).*

Lawson-body and Limayem (2004) developed a seven major CRM's component model, which includes customer prospecting, relations with customer, interactive management, understanding customer's expectations, empowerment, partnership and personalization.

1. **Customer prospecting**: These are various means employed in business to track, locate and attract new customers. This can be through television, radio, magazines, newspapers and conferences. The Reception or Registration desk serves as a good meeting point for both staffs and general public, in terms of how patients and their relatives are welcome.
2. **Relations with patients/customers**: This concerns to extent to which firms develop, initiate, maintain and improve relationships with customers. Patient will prefer hospital where there is efficient and qualitative delivery of health services. The hospital with qualify medical doctors and nurses has advantage over hospital with unqualified personnel.
3. **Interactive management:** This comprises all actions designed to transform the prospective client into an effective customer. Relationship manager and other executives can be used to establish interactive management.
4. **Understanding customer expectations**: It stresses the importance of identifying customer's desires and supplying those products which would satisfy customer's expectations. This can be through interaction with patients, this enables patient's background, needs and expectations to be known and how these can be met. For instance, an indigent patient can be given discounts, pr allow credit facilities for regular patients with a steady job.

5. **Empowerment**: This refers to process a firm adopts to encourage and reward employees who exercise initiative, make valuable, creative contributions, and do whatever is possible to help customers to solve their problems. Hospital givers their employees monetary and non-monetary benefits, for instance, providing recognition to the best performing nurse/doctor.
6. **Partnerships**: These are created when suppliers work closely with customers and add desired services to their traditional product and service offerings. It establishes a suitable relationship between supplier and customers.
7. **Personalization:** It refers to the extent to which a firm assigns one business representative to each customer and develops or prepares specific products for specific customers. In health care organizations, the services are highly personalized, for instance, the service needs for one patient is different from other. The treatment needs of neurology patient are different from the treatment needs of cardiology patient.

Hospitals are now following an entrepreneur trend even though the commodity they market is healthcare services. The patient care has become extremely important in healthcare environment. Patient's satisfaction and their expectations has become an important indicator in determining the quality of healthcare services. Thus, patients have become the most important client of the hospital. Since, patients only bring revenues for hospital; hence the main objective of the hospital should be patient satisfaction.

The hospitals tend to judge themselves entirely on formal, non-psychological levels, number of beds, specialist, procedures, modernity of building and equipment, the size of the budget and so forth. The fact is patient does not react to this statistical aggregates. Satisfaction is achieved when patient's perception of quality of care and services that they receive in healthcare setting has been positive, satisfactory and meets their expectation. Customer feedback is recognized method of available health services.

The high patient satisfaction is certainly indicative of good treatment. Return of customer is a fundamental marketing principle that is becoming increasingly important for healthcare providers in today's competitive environment. Second, by identifying the sources of patient dissatisfaction, the organization can address system weaknesses, thus improving risk management. Thirdly, satisfied patients are more likely to follow the specified medical regimens and treatment plans. Most complaints are of five types: accommodation, quality of care, respect and caring, humanness and attitude behavior and communication.

Ross et al; (1987) argues that restricting patient's satisfaction to perception of quality of healthcare received is an "inherent" weakness. These researchers support their position by noting that a segment of "healthy but unhappy" patients has been found in several empirical

studies. Ross suggested that conceptualization of patient satisfaction should not be limited to perceptions but should be enlarged to include other evaluations (waiting time, costs, etc)

Stephen (1993) and Swartz et al; from Advances in service Marketing and Management defined client's satisfaction as a result of matching one's expectations of healthcare services with actual experiences whether its pleasant or disappointed. Swartz states that the level of satisfaction will be low if services do not meet patient's expectations. However, the patient will show high level of satisfaction if their expectation is met. In addition, the patient will be highly satisfied and delightful if services are even better than what they have expected.

Swan et al; (1985) suggested that patient's positive opinion about services they have received is the process of matching between the set of generally accepted quality with their personal past involvement. Many articles about patient satisfaction have suggested the following significant relationship:

- Satisfaction is the result of perceiving service implementation against expectation.
- Willingness to buy or come back to receive the same services is the effect of satisfaction.
- Expecting and willingness to have services create alternatives for patients.

The more the patients are pleased, the greater the level of satisfaction will be.

Abdal et al; (2000) argues that patient satisfaction studies have, however, received comparatively little attention in public or government sponsored settings and in developing countries in particular. In a study done in Qatar, it pointed to a number of deficiencies in these dimensions: availability, convenience of services, facilities (physical environment), and humaneness of doctors, quality of care and continuity of care and delivery of services in government health facilities in states of Qatar.

Jawahar (2007) done a study on outpatient satisfaction at super specialty hospital in India, it concluded that outpatient services have elicited problems like overcrowding, delay in consultations, proper behavior of staff, etc. Whenever there is delay in consultation, it is to be explored to elicit the problem. It is worthwhile to note that there is scope of improvement in outpatient services.

Rao et al; (2006) studied (i) To develop a reliable and valid scale to measure in-patient and outpatient perceptions of quality in India and (ii) to identify aspects of perceived quality which have large effects on patient satisfaction. Cross-sectional survey of health facilities and patients at clinics, primary health centers, district hospitals and female district hospitals was done in the state of Uttar Pradesh, India. The major outcomes are internal consistency, validity and factor structure of scale is evaluated. The association between patient satisfaction and perceived quality

dimensions is examined. Five dimensions of perceived quality are identified: medicine availability, medical information, staff behavior, and doctor behavior and hospital infrastructure.

Patient perception of quality at public health facilities is slightly better than neutral. Multivariate regression analysis indicates that for outpatients, doctor behavior has largest effect on general patient satisfaction followed by medicine availability, hospital infrastructure, staff behavior, and medical information. For in-patients, staff behavior has the largest effect followed by doctor behavior, medicine availability, medical information and hospital infrastructure. Perceived quality at public facilities is marginally favorable, leaving much scope of improvement. Better staff and interpersonal skills, facility infrastructure, and availability of drugs have largest effect in improving patient satisfaction at public health facilities.

Gremigni et al; (2008) study is aimed at developing and providing preliminary validation of questionnaire to measure outpatient's experience of communication with hospital personnel other than doctors. Participants are outpatient and hospital staff. A quantitative validation phase involving 401 patients followed in order to verify the hypothesized dimensionality of selected items and to measure reliability a 13-item questionnaire emerged, comprising four components of outpatient's experience in healthcare communication domain; problem solving, respect, lack of hostility and nonverbal immediacy. The developed healthcare communication questionnaire is a self-administered brief measure with good psychometric properties. The HCCQ gives information that could be taken as an indirect and subjective indicator of the quality of hospital services as provided by non-medical staff. This aspect may have a role in local quality improvement initiatives.

Raghda Al Khani (2015) studied "Improving waiting time and Patient's experience in Medical Retina Clinic". The health executive change model was applied in the Medical Retina Clinic. Several evaluation methods were used in this project before and after the change. A total of 100 patients questionnaires which included information on waiting times and patient satisfaction were distributed during two times period in the retina clinic. The main result of the implemented change was doubling number of patients receiving the injection at same time so the average waiting time was reduced from 120 minutes to 60 minutes (±10minutes) which led to raise patients' satisfaction to 90% (n=45) where 50% (n=25) were not satisfied with long delays before the change.

Abhijit C. (2014) studied patient satisfaction with services of outpatient department. Study was conducted by using a pre-structured questionnaire with 120 samples. Patient satisfaction is a multi dimensional concept, and a subjective phenomenon that is linked to perceptive needs, expectations and experience of care. Staff behavior, particularly polite and courteousness has been observed to be a necessity of hospital OPD services. Waiting time needs to be improved so

to enhance OPD services. When waiting time becomes inevitable, waiting rooms should be well equipped with television, magazines and newspapers. The dispensary should have adequate medicines; the staff should be courteous which would contribute to patient satisfaction. The feedback form was analyzed means there were no parameters deciding what is excellent, good, fair and poor. The pie chart represents the overall satisfaction of the patient who visited the hospital.

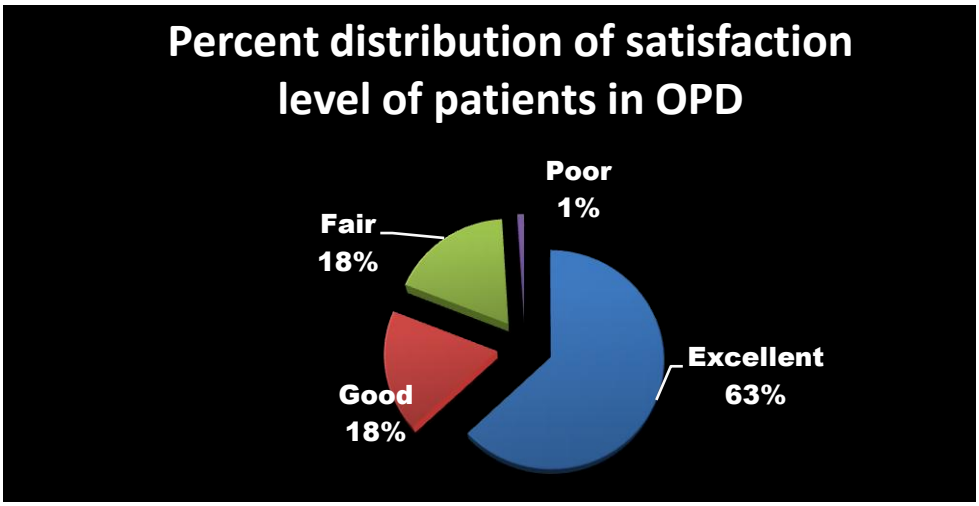


Fig represents the overall satisfaction of OPD services done by Abhijit in 2014

Current Challenges in OPD:

Current challenges and problems for hospitals today include the fact they are slow to implement change, their patient flows are ineffective, increase employee and patient satisfaction and reduce the waiting times. Since the competition among hospitals has been raised in past decade, it is essential for the hospital to change and focus on continuous improvement processes and retaining the current patients. One of the areas for improvement includes the decreased patient satisfaction that accompanies long waiting times. This also directly influences the increased costs while decreasing the much needed revenue for the hospital. For example, if the patient flow process is inefficient and nurses are busy, they may not be able to run the tests fast or may make the mistakes as they are rushed. Errors are serious problems in the hospital setting and can result in adverse event that leads to unfavorable outcomes for the patient. In addition, hospital is not paid for the faulty tests done by the nurses. In turn, this process dissatisfies the patient. Adverse errors are not only costly in terms of patient's safety and additional costs to hospital, but also negatively affect the image of the hospital, which can impact future revenue streams.

From the studies conducted in the past, several wastes have been identified which can lead to patient dissatisfaction in the hospital. Some of these problems have been listed below:

1. *Confusion:* People doing the work are not confident about the ways to perform the task. Examples: same activities being performed by different people, unclear routes of medicine administration.
2. *Motion (movement):* Unnecessary movement of parts, processes or information. Examples: looking for information, looking for people, clarifying orders, or tools located far from the work.
3. *Waiting:* Ideal time created when people, information, equipment or materials are not at hand. Examples: waiting in queue, waiting for the procedure and so on.
4. *Processing:* Activities that do not add value from the patient's perspective. Examples: clarifying orders, redundant information gathering, or regulatory paperwork.
5. *Defects:* Work that contains errors or lacks something of value. Example: medication error, re-work, or surgical errors.
6. *Overproduction:* Redundant work. Are we producing sooner, faster or in greater quantity than customer needs? Examples: duplicate charting..

Impact of Waiting Time on Patient Satisfaction:

Long waits for first outpatient appointment are a common cause of patient dissatisfaction. The length of time patient have to stay in a hospital is a common source of frustration. Huang reported that patients are generally happy to wait for 37 minutes when arriving on time, and no more than 63 minutes when arriving late. Patient's who arrive 15 minutes early are expected to be seen earlier.

Dunnil and Pounder (2004) suggested ways to manage waiting time in hospital service. According to them, the length of time patient spend on waiting list is a product of availability of outpatient appointment and number of patients requiring appointments. These factors depend on numbers of new patients referred from primary care, number of new patients referred internally from secondary care and number of patients given repeat appointments. Reducing the waiting time by increasing the number of appointment slots is not the solution to the problem. This is because reduction in waiting times may increase the rate of referrals.

Impact of Consultations on Patient Satisfaction:

Hospital staff is important source of patient satisfaction. This is provided by personal contact with a member of staff who able to give advice, information and reassurance, especially if person is known to the patient, i.e. from previous outpatient appointment. The length of time spent on consultation is also important. Patients attending the hospital felt that seeing the same doctor at each visit is also important. Patient also expects staff to be formally dressed and to have chaperones during examinations, with women expecting female chaperones.

Rationale:

Manipal Hospitals has increasingly developed its healthcare services in response to patient needs over few years. Patient satisfaction is one of the essential indicators for healthcare improvement. Specifically, outpatient department is the first line healthcare consultation service that comes in contact with patients. Therefore, the quality of care will indicate the quality of service of hospital as perceived by patients regarding various factors.

From the literature review, most of the noticeable issues were identified like the impolite manner of service providers at all levels, the insufficient basic infrastructure, the poor functional buildings, the inadequacy of medical equipment, the ineffective medical supplies, the inadequate amount of drugs supplied and their poor quality, the absence of qualified hygiene procedures, and so on. As a result, these factors led to decreased patient satisfaction.

In this study, researcher aims to identify the level of patient satisfaction in Outpatient Department of Manipal Hospital and to identify areas to enhance patient experience in terms of quality of care provided using patient centered approach.

Objectives:

General Objective:

The main objective of the study is to determine ways to enhance patient experience in the outpatient department in terms of convenience, courtesy and quality of care provided in Manipal Hospital, Bangalore.

Specific Objectives:

- To *assess the level of patient satisfaction* in Manipal Outpatient Department
- To *determine ways to enhance patient experience* in the Outpatient Department in terms of convenience, courtesy and quality of care provided in Manipal Hospitals Bangalore.
- To *identify the strategies* to help the hospital to increase their patient satisfaction scores.
- To *describe the patients opinions and suggestions on improving the services* in OPD of Manipal hospital, Bangalore.

Research Methodology:

Study Design:

A cross-sectional descriptive study was conducted in the Outpatient Department of Manipal Hospital Bangalore. The design was particularly aimed to assess the level of patient satisfaction and to determine ways to enhance patience experience in Manipal Hospital Bangalore. In order to achieve set goals, the feedback form already in use in Manipal Hospital has been applied accordingly.

Study Area:

The study was conducted in Outpatient Department of Manipal Hospital, Bangalore.

Study Population:

The patients visiting the Outpatient Department of Manipal Hospital are selected as the study population. Targeted samples are drawn from the patients who visited Outpatient Department in the selected period i.e. from 10th April 2016 to 15th May 2016.

Sample Size:

The sample size consists of 120 patients who visited the Outpatient Department of Manipal Hospital, Bangalore.

Tools and Techniques of Analysis:

- Personal Observations
- Feedback form

To determine level of satisfaction, respondents were asked 18 questions and 4 point Likert scale was used for measuring satisfaction. In satisfaction part, four-point Likert ranking scale was used for all the questions.

The rating was done as follows:

4 – EXCELLENT
3 – GOOD
2 – FAIR
1 – POOR

The measure of excellence, good, fair and poor is subjective to the patient. There are no parameters defining the deeds which will lead to excellent service, good service, fair service and poor service.

Data Analysis and Interpretation:

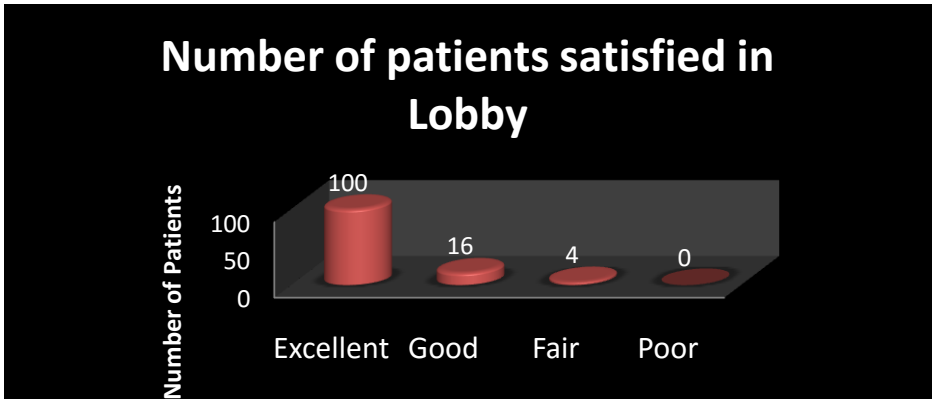
A. Lobby:

The lobby services were assessed on five parameters: time taken for new registration, courtesy and responsiveness of staff, ease of information availability, ease and comfort of finding your way inside hospital premises and efficiency of porter services. Table 1 shows the distribution of responses about the lobby:

	EXCELLENT	GOOD	FAIR	POOR
a. Time taken for new registration	112	6	2	0
b. Courtesy and responsiveness of staff.	108	10	2	0
c. Ease of information availability.	105	12	3	0
d. Ease and comfort of finding your way inside hospital premises	94	25	1	0
e. Efficiency of porter services.	80	30	10	0

Overall Satisfaction in Lobby:

Overall satisfaction in lobby is calculated by taking the average of five parameters on which the lobby services have been assessed. Thus, an average number of patients who found the services to be excellent, good, fair and poor have been analyzed. The bar graph shows the average number of patients who are satisfied by the services provided in the lobby.



B. Doctor Service:

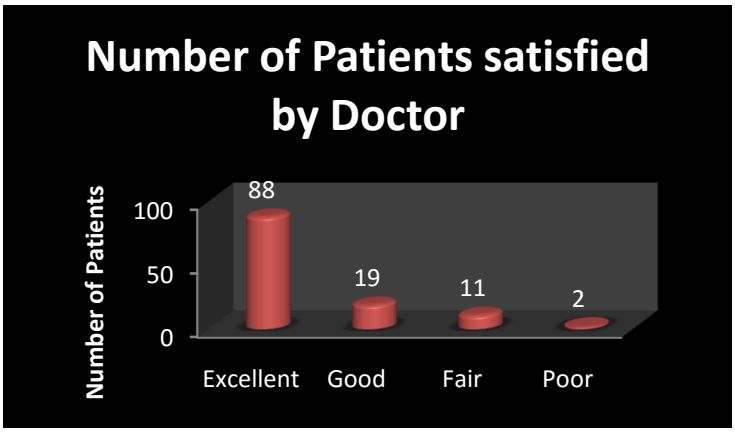
The doctor's service was assessed on four parameters: courtesy and compassion of doctor, doctor gave adequate time and explanation to the queries, effectiveness of treatment and waiting time of consultation.Table 2 shows the distribution of responses about the doctor services at OPD of Manipal Hospital Bangalore.

	EXCELLENT	GOOD	FAIR	POOR
a. Courtesy and Compassion of doctor.	97	20	3	0
b. Doctor gave adequate time and explanation to the queries.	93	22	2	3
c. Effectiveness of treatment.	89	21	10	0
d. Waiting time of consultation	74	12	29	5

Overall Satisfaction in Doctor Service:

Overall satisfaction by doctor is calculated by taking the average of four parameters. Thus, an average number of patients who found the services to be excellent, good, fair and poor have been analyzed.

The bar graph shows the average number of patients who are satisfied by the services provided by the doctor.



From the bar graph, it has been observed that out of 120 patients, 88 respondents were completely satisfied by the doctor, 16 respondents found the service to be good, 4 respondents found the service to be fair and only 2 of the respondent found the services to be poor**.**

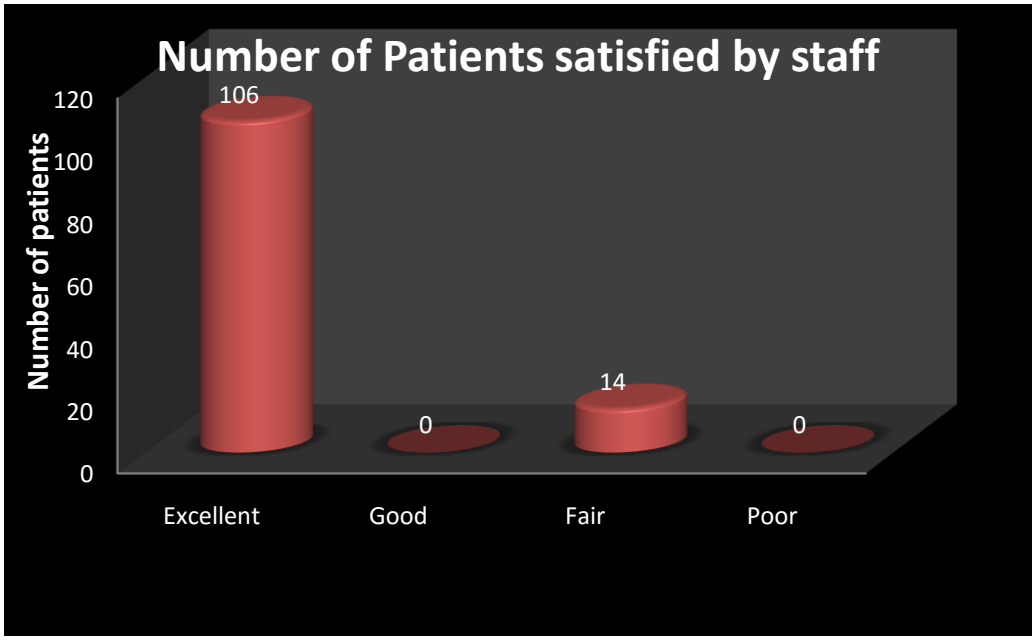
C. Overall Staff:

The staff service was assessed on only one parameter i.e. responsiveness of the staff.

Table 3 shows the distribution of responses about the staff services at OPD of Manipal Hospital Bangalore:

	EXCELLENT	GOOD	FAIR	POOR
Courtesy and Responsiveness of staff	106	0	14	0

The bar graph shows the average number of patients who are satisfied by the services provided by the staff.



From the bar graph, it has been observed that out of 120 patients, 106 respondents were completely satisfied by staff and 16 respondents found the service to be fair. None of the respondent said that the service to be good and poor.

D. Laboratory Services:

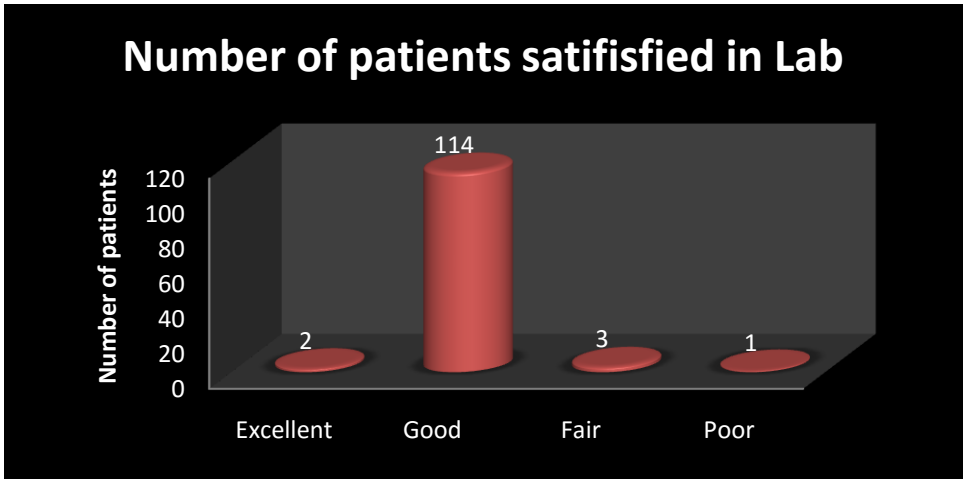
The laboratory services were assessed on four parameters: waiting time for sample collection, competency of lab technician, waiting time for reports and courtesy and responsiveness of staff. Table 4 shows the distribution of responses about the Laboratory services at OPD of Manipal Hospital Bangalore:

	EXCELLENT	GOOD	FAIR	POOR
a. Waiting time for Sample Collection.	6	115	5	4
b. Competency of Lab Technician.	2	112	6	0
c. Waiting time for Reports.	1	118	1	0
d. Responsiveness of Staff	1	117	2	0

Overall Satisfaction of Laboratory Services:

Overall satisfaction in Laboratory is calculated by taking the average of four parameters. Thus, an average number of patients who found the services to be excellent, good, fair and poor have been analyzed.

The bar graph shows the average number of patients who are satisfied by the services provided in the laboratory:



From the bar graph, it has been observed that out of 120 patients, 2 respondents were completely satisfied by services provided in Lab, 114 respondents found the service to be good, 3 respondents found it to be fair and only 1 respondents found the service to be poor.

D. Pharmacy:

The pharmacy services can be assessed on four parameters: medicine availability, pharmacy waiting time, explanation on usage and courtesy and responsiveness of staff. Table 5 shows the distribution of responses about the Pharmacy services at OPD of Manipal Hospital Bangalore:

	EXCELLENT	GOOD	FAIR	POOR
a. Availability of Medicine	80	37	3	0
b. Pharmacy Waiting time	59	55	3	3
c. Explanation on usage	62	56	2	0
d. Courtesy and Responsiveness of Staff	84	36	0	0

Overall Satisfaction of Pharmacy:

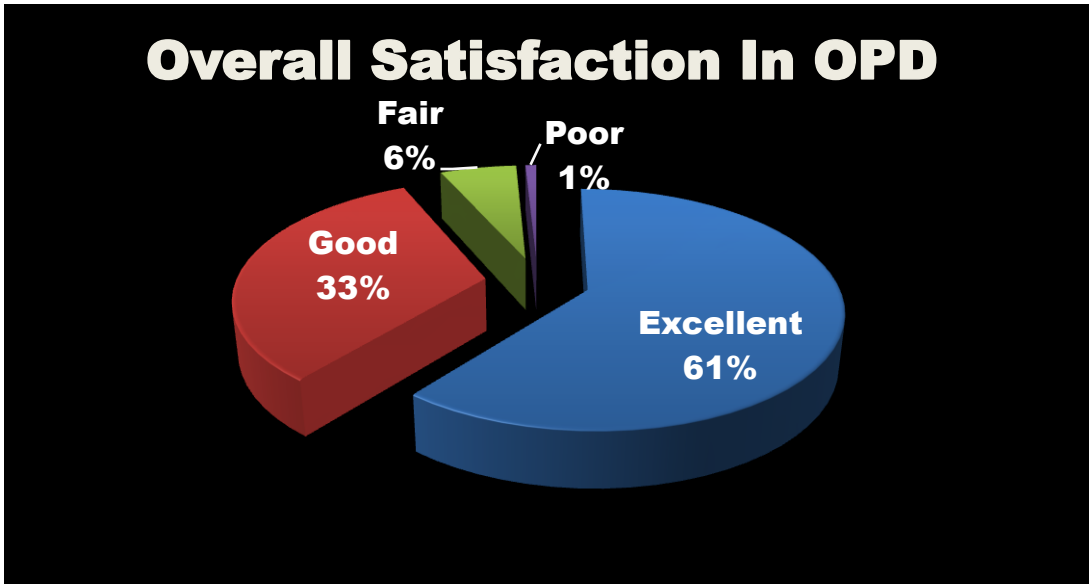
Overall satisfaction in Pharmacy is calculated by taking the average of four parameters. Thus, an average number of patients who found the services to be excellent, good, fair and poor have been analyzed. The bar graph shows the average number of patients who are satisfied by the services provided by the doctor.

From the bar graph, it has been observed that out of 120 patients, 71 respondents were completely satisfied by services provided in Pharmacy, 46 respondents found the service to be good, 2 respondents found it to be fair and only 1 respondents found the service to be poor.

Overall Satisfaction in OPD:

The overall satisfaction is calculated by giving 0.20 weightage to Lobby, Doctor, staff, laboratory and Pharmacy. Thus, average numbers of patients have been calculated who are satisfied by the services provided in OPD of Manipal hospitals. The average number of patients is then converted into percentage, so as to calculate overall percentage of the satisfaction of patients in outpatient department of Manipal Hospitals.

Graph 6 shows the graphical representation of overall satisfaction of respondents in the OPD:



From the pie chart, it has been observed that 61% of respondents were completely satisfied with the services provided in OPD, 32% of respondents found it to be good, 6% of the respondents found the services provided in OPD to be fair and only 1% of the respondents found the OPD services to be poor.

Conclusion:

Patient visiting the hospital are responsible for spreading good image of the hospital and therefore satisfaction of patients attending the hospital is an important factor for hospital management. Patient satisfaction is the key indicator that can reflect the health service quality at any level of health care facilities.

The objectives of this study were to assess the level of patient satisfaction towards OPD services in Manipal Hospital Bangalore and to determine ways for enhancing patient's experience in OPD.

Five parameters were studied namely, Lobby, Doctor, Staff, Laboratory and Pharmacy and 120 patients were anonymously selected for the study. The feedback forms were studied and analyzed.

The feedback analysis done in Manipal Hospital Bangalore brought to the conclusion that 61% of the respondents were completely satisfied by the quality of care provided in Manipal Hospital, 32% of respondents found the services to be good, 6% found it fair and only 1% of the respondents found the services to be poor.

The respondents were mostly satisfied with services provided in Lobby, doctor services, and overall staff behavior. The respondents were observed to be less satisfied with laboratory services and pharmacy services. These two areas can be improved so as to improve the overall effectiveness of the OPD department in Manipal Hospital, Bangalore.

Patients provided suggestions and comments which were mostly concerned regarding the sitting chairs in the waiting area of the OPD for the patients and the drinking water facility in the waiting area of OPD for improvement, also regarding the waiting time of laboratory reports, the waiting time for medicines in the pharmacy, the waiting time before meeting the doctor finally in terms of expenses and time convenience of going from patient house to OPD they are expecting improvement in these areas.

On studying patient's suggestions and comments, several new techniques have been applied in the OPD so as to enhance the patient experience in Manipal Hospital. These new advances include all areas i.e. parking, lobby, OPD area, laboratory services and Pharmacy.

Recommendations:

❖ Lobby:

➢ Registration:

- *Pre-registration kiosk*:

  (i) Pre-registration Kiosk will help the patients to do self registration, moving from paper to paperless registration. The kiosk can be a touch screen laptop where patient can enter his/her details and register him. A unique number will be generated, which is sent on patient's mobile number. The patient will tell the unique number at registration counter and make the payment.

  (ii) Also, a pre-registration app can be designed so that registration can be done from home itself.

  (iii) The kiosk can later be modified to have an option of online payment so that the registration counter can be removed and making the registration process digitalized.

➢ Lobby area:

- *Digital map:* A digital map of the hospital can be put into the lobby so that patient can find their way inside the hospital and can locate themselves.
- *Differentiators:* Differentiators in the lobby so as to direct the patients inside the hospital and to solve patient's and visitors queries.

❖ OPD Waiting Area:

- *Guest Relations Executive:* Guest Relations Executive will provide link between hospital, patient and visitors. The various responsibilities of a GRE should be:
  - Initiate greetings and positive interaction with patient, visitors and staff and also provide a welcoming expression and to convey clear, precise information and directions to the patients.
  - Provide link between hospital, patient and visitors especially at the time of conflict resolution.

- At the time of long waiting times, GRE should act smartly. They should either take contact numbers of the patients or inform them when their turn is about to come.Should have a sound judgment and appropriate discretion in resolving patient's difficulties.
- Ability to identify problems and proactively making a try to solve them.
- Should encourage smooth patient flow with the help of assistance from the support.

➢ *Free Wi-Fi:* Free Wi-Fi facility for the patients in the waiting area.

➢ *Food and Drinking water availability:*

- Healthy snacks vending machine
- Easy drinking water facility available at different accessible locations.

❖ **Laboratory Services:**

➢ *EDC machine:* EDC machine could be provided in Radiology so as to reduce the patient movement in the department.

➢ *Active queue Display System*

➢ *E-reports:* Radiology reports to be e-mailed to the patients

➢ *Courier Facilities:* Courier Facilities can be started for out station patients.

❖ **Pharmacy:**

➢ Pharmacy should get *the details of the prescription* before the patient arrives to the pharmacy.

➢ *Home delivery on request*

➢ *Contact number* to handle enquiry of available medicines.

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Annexure

OPD Feedback Form

	EXCELLENT	GOOD	FAIR	POOR
LOBBY:				
• Time taken for New Registration	○	○	○	○
• Courtesy and Responsiveness of Staff	○	○	○	○
• Ease of Information Availability	○	○	○	○
• Ease and Comfort of finding your way inside hospital Premises	○	○	○	○
• Efficiency of Porter Service	○	○	○	○
DOCTOR:				
• Courtesy and Compassion of doctor	○	○	○	○
• Doctor gave adequate time and explanation to you queries	○	○	○	○
• Effectiveness of Treatment	○	○	○	○
• Waiting time for Consultation	○	○	○	○
OVERALL STAFF:				
• Responsiveness of staff	○	○	○	○
• Courtesy and behavior of staff	○	○	○	○

	EXCELLENT	GOOD	FAIR	POOR
LABORATORY SERVICES:				
• Waiting time for Sample Collection	○	○	○	○
• Competency of Lab Technician	○	○	○	○
• Waiting time for reports	○	○	○	○
• Courtesy and Responsiveness of Staff	○	○	○	○
PHARMACY:				
• Availability of prescribed medicine	○	○	○	○
• Waiting time	○	○	○	○
• Explanation of Usage	○	○	○	○
• Courtesy and Responsiveness of Staff	○	○	○	○