

**Summer Training at
Fortis Escorts Hospital,
Jaipur**

- **Study on the Fortis Seniors First Program**
- **Marketing Data Analysis for Associate Visiting Important Physicians (AVIPs)**
- **Study on Competitive Pricing**

**By
Aneesha Koul**

**Under the guidance of
Dr Monika Choudhary**

**MBA Hospital and Health Management
2015-2017**



**The IIHMR University, Jaipur
2016**

CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Aneesha Koul** student of **MBA Hospital and Health Management** from the IIHMR University, Jaipur has undergone summer training at **Fortis Escorts Hospital, Jaipur** 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



Dr. Monika Chaudhary
Associate Professor
IIHMR University, Jaipur

01st June, 2016

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Aneesha Koul** worked as a **Trainee** with us in the **Dept. of Sales and Marketing** from 1st April, 2016 to 31st May, 2016.

Her performance during the period in the department was good. She comes across as a willing, sincere and intelligent person who has a strong drive and zeal for learning.

We wish her the best for all her future endeavors.

Anant
1/6/2016
Authorized Signatory



ACKNOWLEDGEMENT

“NOTHING IS MORE KNOWLEDGEABLE THAN EXPERIENCE”

I am deeply indebted to **Mr Roopesh Mathur**, Head Sales and Marketing, Fortis Escorts Hospital Jaipur for taking deep interest and providing opportunity to work under his guidance.

I am also thankful to **Mr Prateem Tamboli**, Facility Director for their guidance and who permitted me to conduct the project in the hospital.

I would also like to thank my mentor **Dr Monika Choudhary** for full support throughout my project.

It is my pleasure thanking all those from the different departments for contributing with their ideas and thoughts during the training session held. Also I would like to extend my thanks to the staff of the hospital in assisting me in every aspect.

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INTRODUCTION TO

THE HOSPITAL

Introduction to Hospital

Fortis Escort Hospital, Jaipur is the first NABH accredited multi-specialty hospital at Rajasthan, established on 2 August, 2007 with the mission to bring quality care to Rajasthan. FEHJ is the first hospital in the country to attain NABH Accreditation in minimum stipulated time (ten months) after commencement of operations and was re-accredited on 27th April 2011. The hospital is a 245 bedded hospital spread over an area of 6.67 acre.

The hospital is committed to medical excellence with compassionate patient care. The vision is captured and defined by the Fortis logo of two hands holding a human form in a protective manner. It is reflection of our commitment to patient care and endeavor to achieve excellence in health care by bringing together the best of medical talent and technology. Our objective is to provide medical services with a humane approach.

With a vast pool of eminent doctors and well-trained nurses, we maintain our focus on providing the finest medical care in every specialty. Over the years, it has become a landmark hospital for cardiac sciences, orthopedics& joint replacements, critical care, pediatrics, gynecology& obstetrics, pediatric cardiac sciences, neurosciences, gastro sciences, endocrine sciences, plastic surgery and renal sciences & kidney transplant. Live surgeries like angioplasties, plastic surgeries and joint replacements for more than six national and international forums of doctors have been performed at Fortis Escorts Hospital, Jaipur. The hospital has a global recognition for its clinical team and world class medical amenities to match that. Over the years, the hospital has established numerous clinical benchmarks with many first to its credit like Rajasthan's first water birthing, fastest recovery of a pediatric cardiac surgery, lifesaving dialysis of a six day old, first laparoscopic whipple's case.

The hospital provides the most comprehensive facilities like two hi-end cath labs, electrophysiology laboratory, RFA, space suite and modular OTs, water birthing facilities, invasive and non-invasive ventilators, transport ventilators, fully equipped ICUs, level III neonatal ICUs, dedicated pediatric ICU, world-class dialysis facilities, laminar air flow system, and dedicated kidney transplant unit. This is well supported by the most advanced medical technology like IVUs technology of angiography, rota ablation, optical coherence tomography, cutting balloon blade, ECMO, balloon sinoplasty, multipara monitors and touch

screen monitors and high end diagnostic equipment like 64 slice CT Scan machine, 1.5 Tesla MRI and 100 Watt holmium laser machine.

History

Fortis Healthcare Ltd, one of the largest private healthcare companies in India, announced a multi specialty hospital at Jaipur on August 2, 2007 as part of its initiative to expand its operations in Rajasthan. The, then, Chief Minister, Mrs Vasundhara Raje inaugurated Fortis Escorts Hospital Jaipur (FEHJ) in the presence of Mr Malvinder Mohan Singh, Chairman, Fortis Healthcare, Mr Shivinder Mohan Singh, CEO and MD, Fortis Healthcare, besides other dignitaries and officials.

About Company Logo:



The two hands that fuse seamlessly with a human form, express our reassuring approach to healthcare.

- Green is the color of healing and is symbolic of our steadfast focus: to ensure the health and well-being of those we minister to.
- Red is expressive of the dynamic zeal with which we strive to make it a reality.
- Punch line “Your caring hospital”.

Vision of the Hospital:

“Globally respected Healthcare organization recognized for clinical excellence and distinctive patient care.”

Mission of the Hospital:

“To be the preferred super specialty healthcare provider of international standards known for patient centric care and clinical excellence through continual improvement of process and outcomes.”

Quality Policy:

To create a world class integrated health care delivery system in India, entailing the finest medical skills combined with compassionate patient care.

Values:

Values that Fortis has as an organization

P	-	PATIENT CENTRICITY
O	-	OWNERSHIP
I	-	INTEGRITY
N	-	INNOVATION
T	-	TEAM WORK

FORTIS Values:

Values that each Fortisian is expected to embody

F	-	FRIENDLY
O	-	ORGANIZED
R	-	RESPECTFUL
T	-	TIMELY
I	-	INNOVATIVE
S	-	SENSITIVE

Infrastructure:

The infrastructure facilities of the FEHJ are par excellence, such as:

- C arm with digital subtraction angiography.
- Flat panel cath Lab
- Advanced pathological lab
- Mobile x-ray
- 64 Slice CT scan
- TMT, ECHO, HOLTER recorder and monitor and ECG to help non-invasive cardiac investigation.
- 500mA image intensifier TV
- Digital CR reader
- X-ray.

Location:

The access to the hospital is very easy. The hospital is located on JLN Marg Road, Jaipur.

The address of the hospital is:

Fortis Escorts Hospital, Jaipur

Jawahar Lal Nehru Marg,

Malviya Nagar,

Jaipur-302107

Rajasthan, India

Tel: 0141-2547000

Departmental Information:

The organizations comprises of the clinical and non-clinical departments. Each department has its own operations.

Non-Clinical Departments:

1. Quality Assurance Department:

Headed to maintain and perk up the standards. Quality assurance(QA), the activity of providing evidence needed to establish quality in work and the activities that require good quality are been performed effectively. It includes all those planned or systematic actions necessary to provide enough confidence that a product or service will satisfy the given requirements for quality.

2. Human Resource Department:

The department helps to ensure the availability and retention of quality talent to meet organization goals and objectives and to provide overall growth and development of employee's orientation and functional training. The department looks into matters like attendance and leave management, appraisal and promotion process, medical benefits, employee welfare programs, payroll management, grievance handling, medical by laws.

3. Medical Record:

Medical Record Department (MRD) is the custodian of all the discharged/expired health record charts. The MRD staff ensures the confidentiality, preservation, storage and retention of the documents.

The department deals with record collection, codification, storage, analytical evaluation and retrieval of records if needed.

4. Pharmacy:

The goal of the pharmacy is to procure and provide medicines and surgical items to the patients. The pharmacy serves various areas of the hospital like Special ward, ICUs, OTs and bio-medical. The department services include procurement and providing medicines to the patients.

The department also provides medicines to the wards if needed and gives details to the billing department at the time of discharge of patients.

5. Housekeeping:

The aim of the department is to achieve defect free room with 100% hygiene and cleanliness to maximize patients' satisfaction along with minimum cost. The department performs activities like cleaning, providing room amenities, pest controlling and waste disposal.

6. Laundry:

The department delivers spotlessly clean and hygiene linen and uniforms to the users of different departments. The department maintains record for issued linen, received linen, new linen and alterations if needed. The department treats infected/ contaminated linen, treats heat labile linen.

7. Marketing:

The department is responsible for the revenue generation through brand building, retail sales, cooperate marketing, PR and media communications and liaison with the government. Some activities of the department are brand awareness, events management, cooperate social responsibility, and ensure business & growth in line with organizational objectives.

8. Finance:

The department provides accurate relevant and timely financial information necessary in making right business plan and decisions. The finance department looks into business building insights, areas for lowering cost and improving profitability, updating of bills on

daily basis for IPD patients. The billing staff has overall responsibility for coordination of various functions (Pharmacy, Wards etc.) and daily basis report for admission and provide the necessary solution to daily problems as deemed proper and reasonable.

9. Information Technology:

The department provides IT values to end users with respect to their day to day function. The department services various departments for IT infrastructure, hardware & network, anti-virus services, internet services.

10. Food & Beverage:

The department provides food and beverages to the esteemed customers and staffs as well. The department performs daily audits of the store and kitchen areas, take rounds of the entire service area with and after the services timings, monitoring of services and sales at various outlets like coffee shops, executive/doctor's dining hall.

11. Engineering:

The department manages all the engineering equipment and machines, supervising day to day hospital maintenance work and ensuring smooth functioning of facilities of hospital. The department coordinates with various departments medical and non-medical so that there is no hindrance in day to day work of all facilities. The Department is responsible for managing plant engineering equipment, utilizes, spares and consumables like diesel generators, plumbing, pipelines, ventilation, air conditioner water treatment plants etc.

12. Patient Welfare Department:

The departmental goal is to make and position the hospital as a “Centre of excellence” by ensuring customer satisfaction through personalized customer care. The department manages patients/attendants expectations as well as keeping the interests of the organization alive, improves the quality of services for the patients through the feedbacks given by them, networking within the organization for the benefit of the patient/attendant and to ensure the action on the feedback.

13. Bio-medical engineering:

The department installs commission and maintains all the medical equipments in an efficient and cost effective way and makes technical appraisal and recommendation for purchase of new equipments. The department provides inputs to commercial department about new/renewal of contract with equipment supplier including annual maintenance/comprehensive maintenance contracts.

14. Security:

The department provides proactive, competent services, to protect the life and property of every individual present in the premises, to prevent any action or situation that might result in an injury or death when a patient/attendant/visitor/employee are lawfully on the hospital premises. The department's responsibility is to protect and conserve the hospital's property against pilferage.

15. Research:

The department works on studies related to the hospital and the activities undergoing. The department maintains protocol report, investigator brushers, informed consent form file, case report form (CRF) and investigator site file.

Clinical Departments

1. Operation Theatre:

All types of cardio thoracic and vascular surgeries are performed here. High risk surgeries are also performed with Heart Supporting System and advanced perfusion techniques.

There are SICU, CTVS and general surgery, CCU and general wards. The services include invasive monitoring, Patient assessment (Physician, nursing, dietary and physiotherapy), personal needs, dietary needs, bedside X-ray, physiotherapy, transfer to room, patient and family education.

2. CSSD:

The department provides clean and sterile supplies which help in reduction of infection and improving quality of care. The department provides infection control by educating staff on biomedical waste management, by reviewing surveillance data and identifying areas of intervention, by identifying patients or staff with communicable/potentially communicable infections and institute appropriate measures in such cases.

3. Dialysis Unit:

It deals with the artificial replacement of the lost kidney function in patient with renal failure to remove excess water and waste products from the blood.

4. NICU:

It provides world class tertiary level management of sick babies and children. Specialized services include Pediatric surgery, neurosurgery, physiotherapy and child psychology.

5. Labour Delivery Room (LDR):

The department facilities include Obstetrics consultation, investigations, referrals and opinions from other departments if required.

6. Physiotherapy:

The department provides facilities such as Electrotherapy, Diagnostic, Manual, Mechanical Mobilization Therapy, Exercise Therapy, Chest Physiotherapy, Gynae/Obstetrics, Post Operative Cardiac Surgeries, For Neurological disorders and Geriatrics.

7. HDU, Triage and ICU:

They provide intensive care and monitoring. Procedures performed include bronchoscope, central venous line, peripheral line, arterial line, pulmonary artery catheter, temporary pacemakers, peripheral tracheotomies, PEG placement and chest tube placement.

8. Cath lab:

The range of services in this department includes all emergency and electives procedures across the spectrum of cardiology. CAG, PTCV, BMV, device closure, EP studies, RF ablations, pacemaker implantation, peripheral stenting and many other cardiac procedures are performed in the cath lab.

9. Dietics:

Dieticians provide an array of patient care services including nutritional assessment, counseling services and enteral and parenteral feeding recommendations. The food service department is committed provide all IPD patients with fresh hygienic food. Menus are planned to take advantage of seasonal food and changing patient preferences.

10. Laboratory:

The department offers a comprehensive menu of more than 300 regular and specialized tests performed through the state of the art equipment and based on more than 95 technologies.

FLOOR PLAN

BASEMENT

- Administration/HR Department
- Marketing Department
- Finance Department
- Staff Dining Hall
- Change Rooms
- IPD Pharmacy
- Medical/General Store
- Medical Records
- Kitchen
- Laundry
- Engineering Department
- Housekeeping Department
- Security Department
- Quality Department

GROUND FLOOR

- Emergency
- Main Lobby
- OPD-I & OPD-II
- Cardiology & Neurology
- Executive Health Check
- Cardiology Lab (Non Invasive)
- X-Ray, C.T> scan
- Blood Bank
- Lab Service
- High Dependency Unit
- Medical ICU

- Cafe
- OPD Pharmacy
- Executive Dining

1ST FLOOR

- Cath Lab
- Cardiac Care Unit
- General Ward
- Neurosurgery Ward
- Physiotherapy
- I.T. Department
- Labour Room
- Delivery/LDR
- NICU
- Library
- Training Hall
- Gastro
- Dining Hall

2ND FLOOR:

- Operation theatres
- OT Recovery I & II
- CSSD

3RD FLOOR:

- Semi Private Rooms
- Private Rooms
- Ward

4TH FLOOR:

- Semi Private Rooms
- Private Rooms
- Ward

5TH FLOOR:

- Semi Private Rooms
- Private Rooms
- Ward

6TH FLOOR

- Semi Private Rooms
- Private Rooms
- Ward

7TH FLOOR

- Deluxe rooms

PROJECT 1:

**A STUDY ON THE SENIORS FIRST PROGRAM OF
FORTIS ESCORTS HOSPITAL JAIPUR.**

- **INTRODUCTION:**

Elderly patients represent over 30% of acute care hospitalization and 50% of hospital expenditures. Elderly patients, and in particular the very old and frail elderly, are at high risk of functional decline and iatrogenic complications during hospitalization. In addition to the disease based management, care of the elderly patients must be approached within a specific psychosocial and functional context. Hospitals should engage in a collaborative, multidisciplinary approach to the care of the elderly patients that begins at the time of hospital admission and continues through all care transitions.

Fortis Escorts Hospital Jaipur has designed services especially for senior citizens in the form of the Senior First Program. It is a unique initiative that gives the elderly a host of privileges and priority over others. In this program the patients who have attained the age of 60 years and above are given special 10% discount on OPD services. The OPD services include consultations of doctors, preventive health check up packages, laboratory and radiological investigations, non invasive cardiac procedures like ECG, Echo, TMT etc and day care facilities such as dialysis, physiotherapy, dental procedures. The requirement for the registration of Seniors First is the photocopy of the ID and two photographs. The registration fee is Rs 200 valid for 2 years.

- **LITERATURE REVIEW:**

The hospital care can be either acute or long term care. The problems of senior citizens are different from other patients. Apart from the physical issues that arise with old age, there are social problems they have to deal with. Patients often complain of loneliness and rejection. It becomes very important to treat each patient with respect and dignity. Senior citizens require attention and care along with the healthcare services required by them. The hospitalists should be able to educate patients and families about individual measures and community resources that can reduce potential complications after discharge. They should appreciate the medical, psychosocial and economical impact of hospitalization on elderly patients and their families. They should appreciate the concept of transitional care and the risks and complications associated with restraint use. The hospitalists should promote a team approach to the care of the hospitalized elder, which

may include physicians, nurses, pharmacists, social workers and rehabilitation services. They should appreciate the medical, psychosocial and economic impact of hospitalization on elderly patients and their families. The hospitalists should establish and maintain an open dialogue with patients and families regarding care goals and limitations and palliative care. They should connect elderly patients with social services early in the hospital course to provide institutional support, which may include referral for insurance and drug benefits, transportation, mental health services and substance abuse services. The doctors should communicate effectively with primary care physicians and other post acute care providers to promote safe coordinated care transitions. They should lead, coordinate or participate in multidisciplinary hospital initiatives to develop prevention programs and standardized treatment algorithms for elder outcomes falls, delirium, functional decline and pressure ulcers. The physicians should lead, coordinate or participate in hospital initiatives to improve care transitions and reduce poor discharge outcomes in the elderly. They should lead, coordinate or participate in patient safety initiatives to reduce common elder complications in the hospital.

AIM:

To study the Seniors First Program designed for senior citizens at Fortis Escorts Hospital Jaipur.

STUDY DESIGN:

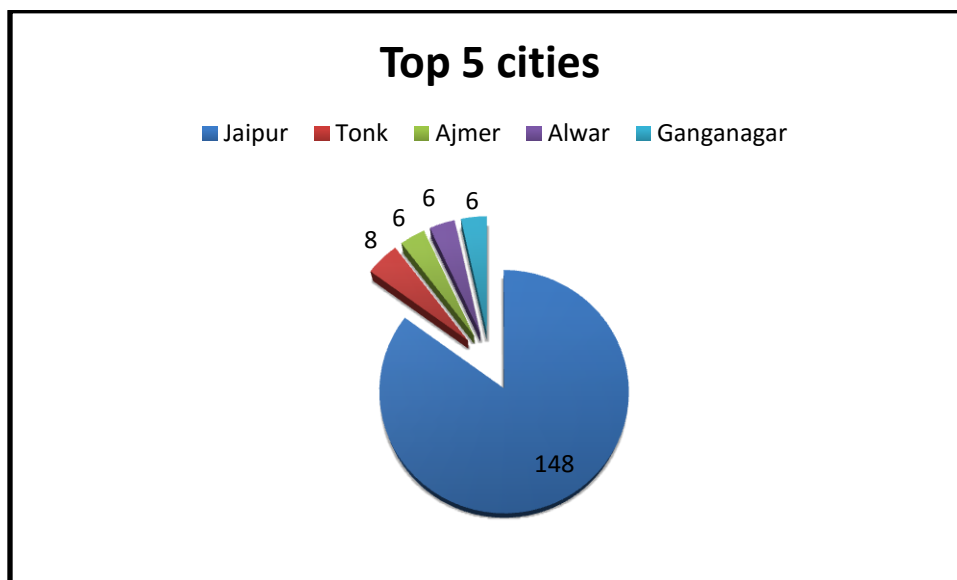
Observational study

METHOD OF DATA COLLECTION:

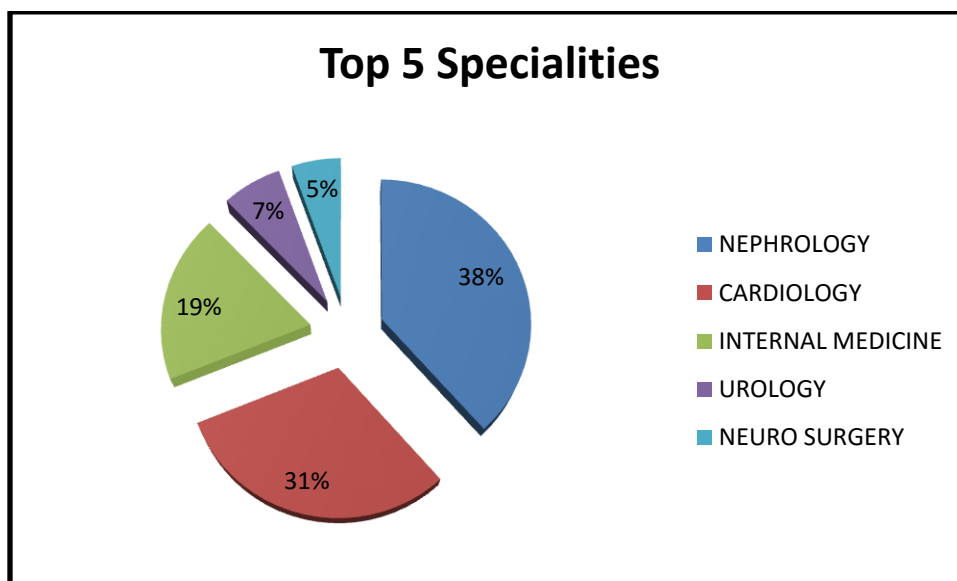
1. Data collected from previous records.
2. Observation at the main lobby Seniors First counter.

OBSERVATIONS:

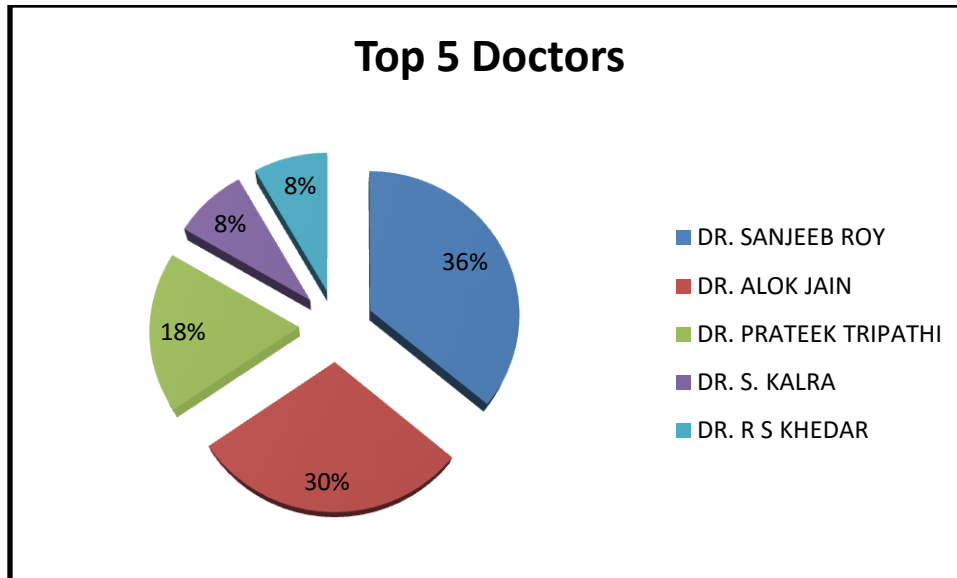
The data provided from the department was analyzed and it provided the following findings:



The highest numbers of patient registrations are from Jaipur followed by Ajmer, Alwar and Tonk.



The maximum numbers of patients are seen in the nephrology department followed by cardiology and internal medicine.



The maximum numbers of patients consult Dr Sanjeeb Roy followed by Dr Alok Jain and Dr Prateek Tripathi.

The bill amount was divided into slots of Rs 50,000 and it was observed maximum number of patients falling in the first Rs 50,000 slot for the Cardiology specialty.

The analysis of the data regarding the bills and expenses reveals the following details:

- F&B Expenses - Rs 63000
- Jaipur Publicity Centre (leaflets, invitation cards, talks, FSF programs, FSF Registration forms etc) - Rs 16798
- Courier charges - Rs 14000
- Total Expenses – Rs 93798

RECOMMENDATIONS:

- There should be a separate billing counter for senior citizens as mentioned in our Seniors First flyer regarding the same.
- The discount rate should be increased.
- There should be some banners/posters in the hospital regarding the Seniors First program so that the patients get to know the details about it.
- Tent cards depicting the Seniors First program should be placed in consultant rooms.
- There should be redirection of patients from all the OPD counters to the Seniors First desk in the main lobby.

REFERENCES:

1. [http://familymed.uthscsa.edu/geriatrics/reading resources/Caring For the Hospitalized Elderly_Best Practices.pdf](http://familymed.uthscsa.edu/geriatrics/reading_resources/Caring_For_the_Hospitalized_Elderly_Best_Practices.pdf)
2. <http://onlinelibrary.wiley.com/doi/10.1002/jhm.900/abstract>
3. patient.info/doctor/elderly-patients-in-hospital
4. <http://onlinelibrary.wiley.com/doi/10.1002/jhm.41/pdf>
5. www.archive.india.gov.in/citizen/senior_citizen/senior_citizen.php?id=2

PROJECT 2:
STUDY ON THE MARKETING DATA FOR AVIP FOR THE
FINANCIAL YEAR 2015-2016 OF FORTIS ESCORTS
HOSPITAL JAIPUR.

INTRODUCTION:

The Sales and Marketing Department of Fortis Hospital comprises of following area wise retail team members:

1. Manjeet Grover
2. Harish Asrani
3. Vikas Sharma
4. Vishal Sharma
5. Brijesh Gupta
6. Abhishek Rathore
7. Anas Ahmed Khan
8. Ankit Vaishnav

AIM:

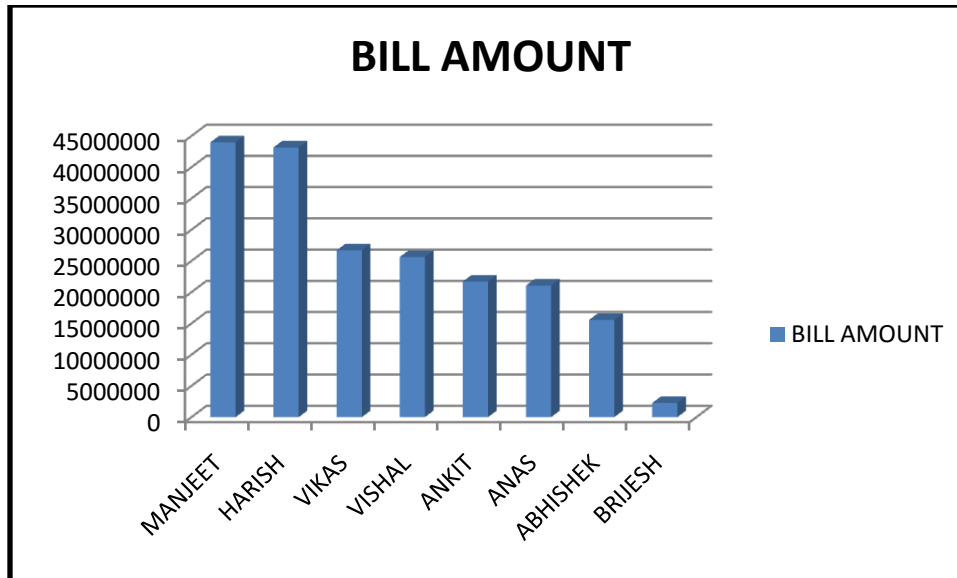
To study about the marketing data of AVIPs for the financial year 2015-16 for Fortis Escorts Hospital Jaipur.

METHOD OF DATA COLLECTION:

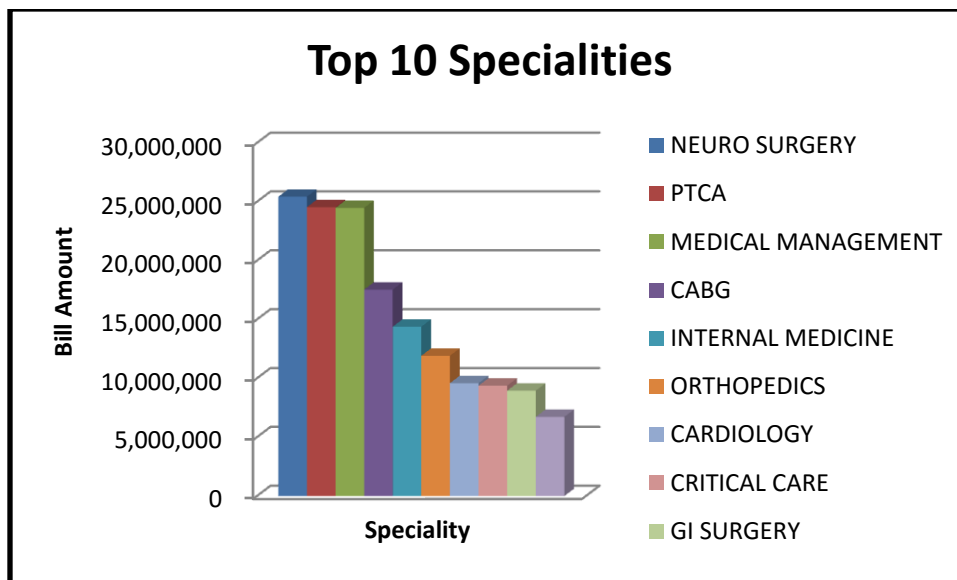
Data was obtained from the previous records of the marketing department for AVIPs.

METHODOLOGY:

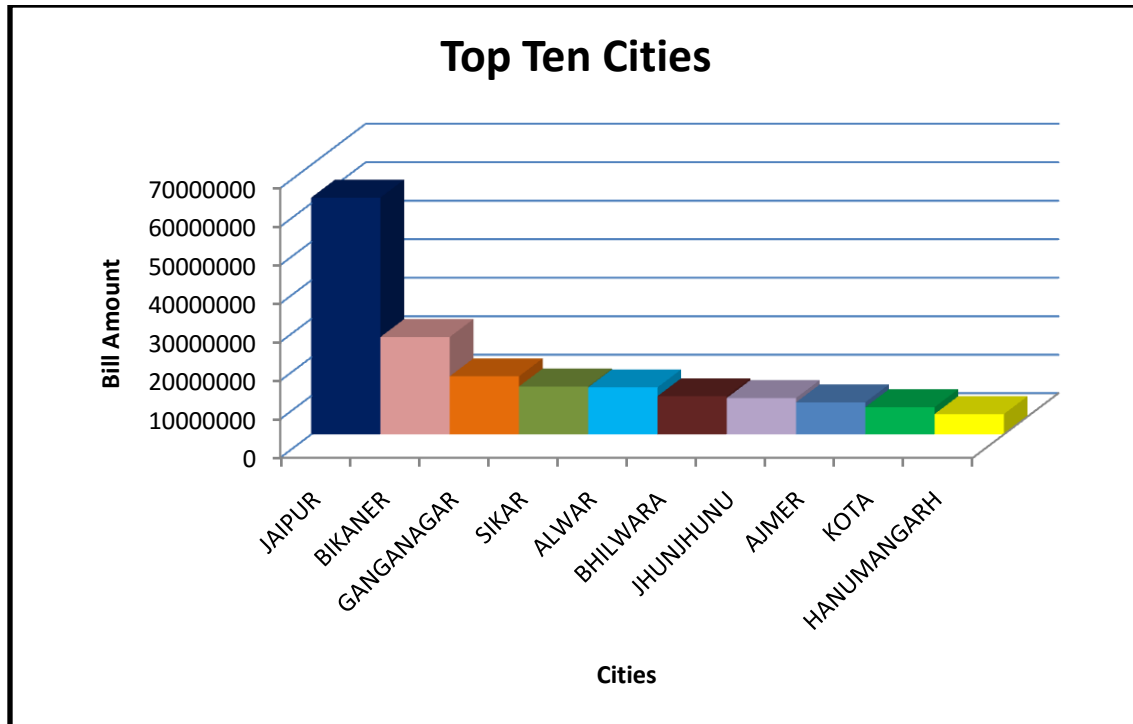
The data collected from the department was compiled for the financial year 2015-16 for the associate visiting important physicians (AVIPs).The data was analyzed and it revealed the following findings:



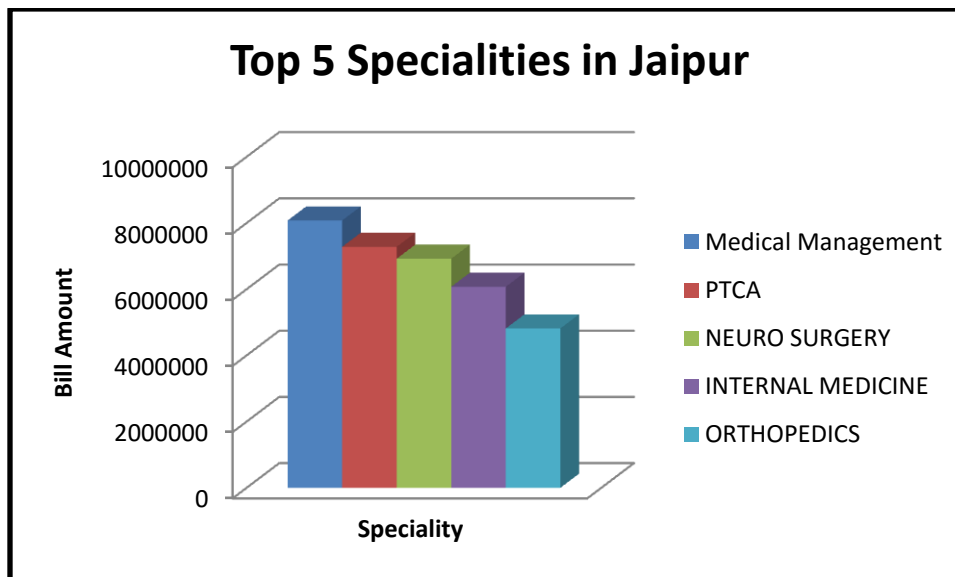
The analysis of the data reveals the highest bill amount was generated by Mr Manjeet Grover admitting 377 patients.



The chart depicts Neurosurgery getting the maximum bill amount. The specialties Internal Medicine and Medical Management are equally getting highest number of patients i.e., 130 followed by neurosurgery and PTCA (Percutaneous transluminal angioplasty) getting 115 patients each.



The maximum number of patients come from Jaipur i.e., 485 followed by Bikaner, Ganganagar and Sikar.



Medical management derives maximum bill amount in Jaipur as revealed by the analysis of the data.

RECOMMENDATIONS:

1. The data entry should follow a systematic code regarding the specialty, location names and all the team members should update their data following the same names and codes. It will help in keeping the data segregated and easily accessible always.
2. The data entries should be complete always in all respect such as patient's location, doctor's name, date etc.
3. As depicted by the data the number of patients in Jhunjhunu, Kota, Ajmer and Bhilwara is not very high and hence efforts should be made to increase the revenue from these areas.

PROJECT 3:

**A STUDY ON COMPETITIVE PRICING AND
COMPARISON OF PRICING BETWEEN DIFFERENT
HOSPITALS**

INTRODUCTION:

Traditional competition in health care involves one or more elements (e.g. price, quality, convenience, and superior products or services); however, competition can also be based on new technology and innovation. A key role of competition in health care is the potential to provide a mechanism for reducing health care costs. Competition generally eliminates inefficiencies that would otherwise yield high production costs, which are ultimately transferred to patients via high health service and delivery costs. Competitive pricing is setting the price of a product or service based on what the competition is charging in order to sustain and grow in the market.

AIM:

To study about the competitive pricing analysis of Fortis Escorts Hospital Jaipur with other hospitals.

METHODOLOGY:

The data regarding the pricing of various medical procedures done in Fortis Escorts Hospital was compared with other hospitals like Narayana Health Multi Specialty Hospital, Santokba Durlabhji Memorial Hospital, Soni Manipal Hospital.

The data was collected for various specialities like cardiology, general surgery, gastroenterology, orthopedics, gynaecology and nephrology. The data was collected for few procedures mentioned below:

1. Hernia
2. Hydrocele
3. Normal Delivery
4. Cesarean Delivery
5. CABG
6. Angioplasty
7. Angiography

8. Total Knee Replacement (Unilateral)
9. Total Knee Replacement (Bilateral)
10. Total Hip Replacement (Unilateral)
11. Total Hip Replacement (Bilateral)
12. Liver biopsy
13. Endoscopy
14. Colonoscopy
15. Cholecystectomy
16. Cholecystectomy (Laparoscopic)
17. Appendectomy
18. Sigmoidoscopy
19. Transurethral Resection of Prostate (TURP)
20. Dialysis (Peritoneal)

The data was collected for the following specialties for the twin sharing/ semi deluxe room and deluxe room for the hospitals as shown below:

PROCEDURE	FORTIS		NH		SDMH		MANIPAL	
	TWIN	DELUXE	TWIN	DELUXE	TWIN	DELUXE	TWIN	DELUXE
GENERAL SURGERY								
HERNIA	24750	33413	27300	36400	18250	19750	32300	38000
HYDROCELE	14231	19213	13725	17075	12060	13560	16150	19000
CARDIOLOGY								
CABG	160000	216000	136500	163800	110000	130000	122825	144500
ANGIOGRAPHY	10750	14513	11300	13500	23500	25000	10200	12000
ANGIOPLASTY	70000	94500	70000	84000	24500	26000	68850	81000
GYNAECOLOGY								
NORMAL DELIVERY	40000	49000	13200	17600	10650	14200	13600	16000
CEASAREAN DELIVERY	56000	69000	33000	44000	21525	28700	37400	44000
ORTHOPEDICS								
TOTAL KNEE REPLACEMENT U/L	65000	87750	51000	61500	90000	120000	76500	90000
TOTAL KNEE REPLACEMENT B/L	122000	164700	100000	120000	140000	200000	114750	135000
TOTAL HIP REPLACEMENT U/L	63000	85050	51000	61500	90000	120000	76500	90000
TOTAL HIP REPLACEMENT B/L	115000	155250	51000	61500	140000	200000	114750	135000
GASTROENTEROLOGY								
LIVER BIOPSY	10125	13669	10450	13500	6130	7630	3750	5000
COLONOSCOPY	8325	11238	6880	9100	6450	7950	3570	4200
ENDOSCOPY	6750	9113	5450	7340	5730	7230	1791	2107
CHOLECYSTECTOMY	18563	25061	30000	40000	18250	19750	28050	33000
CHOLECYSTECTOMY (LAP)	10125	13669	30000	40000	19730	21230	28050	33000
APPENDECTOMY	17500	19130	25400	33800	19730	21230	25500	30000
SIGMOIDOSCOPY	3375	4556	5450	7340	6200	7700	1791	2107
NEPHROLOGY								
TURP	24750	33413	38200	49100	21600	23100	44200	52000
DIALYSIS (PERITONEAL)	3375	3375	2860	3520	6000	7500	1105	1300

The data thus collected was analyzed and the following findings were deducted:

1. For 10% of the selected 20 procedures and surgeries Fortis has lowest rates among the other premier hospitals.
2. Narayana Health has lowest rates for 20% of the procedures.
3. Santokba Durlabhji Multispecialty Hospital has lowest rates for 40% of the procedures.
4. Soni Manipal Hospital has lowest rates for 30% of the procedures.
5. For 35% of the selected procedures Fortis has highest rates amongst all the hospitals.
6. For Narayana Health 15% of the selected procedures have highest rates.
7. Santokba Durlabhji Multispecialty Hospital has highest rates for 35% of the procedures amongst the other hospitals
8. Soni Manipal Hospital has highest rates for 15% of the selected 20 procedures amongst the other hospitals.

RECOMMENDATIONS:

1. Fortis should consider lowering the prices for some of the procedures wherever it is possible to be more cost effective for the patients.
2. The data analysis should be done considering other hospitals like EHCC, H&G and Apex Hospital etc.
3. The competitive pricing should be done by also considering the prices of many other upcoming new hospitals such as Birla Hospital, Bombay Hospital etc.

REFERENCES:

1. https://www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP82_Hospital_competition_quality_spatial_econometrics.pdf
2. <https://www.oecd.org/daf/competition/50527122.pdf>
3. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1360894/>
4. <http://www.kingsfund.org.uk/sites/files/kf/New-Labours-market-reforms-Chapter-6-Competition-between-hospitals-Carol-Propper-Jennifer-Dixon-September-2011.pdf>
5. <http://www.ncbi.nlm.nih.gov/pubmed/10129621>
6. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2865678/>