

**Summer Training at  
Fortis Hospital, Noida  
(8<sup>th</sup> April 7<sup>th</sup> June, 2013)**

**Patient Conversion, PHC**

**By  
Mohita Sinha**

**Under the guidance of  
Dr. Vijay Raghuvanshi**

**Post Graduate Diploma in Hospital and Health Management  
2012-2014**



**Institute of Health Management Research,  
Jaipur  
2013**

## Certificate

This to certify that Ms. Mohita Sinha, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from Institute of Health Management and Research, Jaipur Batch 17<sup>th</sup> has undergone her summer training at Fortis Hospital, Noida and has done following project:

- Study of the number of patient coming for preventive health checks in Preventive Health Check department (PHC).
- Study of OPD and IPD flow of patient and their mode of payment.
- Study of number of patient being referred from OPD to IPD and actual number of patient undergoing referral and their comparison.

The candidate has successfully carried out the mentioned studies assigned to her during summer training from 8<sup>th</sup> April, 2013 to 7<sup>th</sup> June, 2013 and her approach to study has been sincere, scientific and analytical.

We wish her success in all her future endeavors.



**Mr. Vijay Pratap Raghuvansi**  
Assistant Professor and Mentor,  
IIHMR, Jaipur



**Dr. Ashok Kaushik**  
Dean, Academics and Student Affair,  
IIHMR, Jaipur

## Manpower Development Programme

This certificate is awarded to

**Mohita Sinha**

In recognition of having successfully completed her  
Internship in the department of

**Patient Care Services**

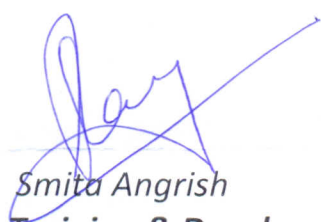
From

**April 8<sup>th</sup>, 2013 – June 7<sup>th</sup>, 2013**

At Fortis Hospital, NOIDA

She comes across as a committed, sincere & diligent person who has a  
strong drive & zeal for learning

We wish her all the best for future endeavors.

  
**Smita Angrish**  
**Training & Development**

  
**Alfons Madoc**  
**Zonal Head**  
**Human Resources**



## **FORTIS HOSPITAL, NOIDA**

### **CERTIFICATE**

This is to certify that the project entitled “patient conversion of PHC” has been completed by MOHITA SINHA in the 2 months of summer training under my supervision and guidance during the period ‘8<sup>th</sup> April-7<sup>th</sup> June,2013.

The work done is in accordance to the norms of the hospital and has been thoroughly examined and approved by us. Her work is original and genuine to the best of my knowledge.

Ms.Neeru Raina

Head of P.C.S.

(Patient Care Service)

Fortis Hospital, Noida

## **ACKNOWLEDGEMENT**

It's my extreme pleasure to acknowledge Col.Bhagat, Director, Fortis Hospital,Noida, for giving me an opportunity and providing me space for a free execution of my work.

I owe my deep gratitude to Ms.Alfons Madoc,Head of Human Resource Department and Ms.Neeru Raina, Head of Patient care service for giving me an opportunity to learn.

My special thanks to Ms.Smita Roy, Human Resource department and Ms.Charu Mehta, Preventive healthcare department for their guidance, support, involvement and encouragement.

I owe my sincere gratitude to Mr. Vijay Raghuvanshi, associate professor, IIHMR who always has been a source of motivation and inspiration.

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## ACRONYMS/ ABBREVIATIONS:

|      |                                                              |
|------|--------------------------------------------------------------|
| UHID | Unique hospital identity                                     |
| FOS  | Fortis Operating System                                      |
| TPA  | Third Party Administrator                                    |
| LAMA | Leave Against Medical Advice                                 |
| DOR  | Discharge On Request                                         |
| PWO  | Patient welfare Officer                                      |
| IPD  | Inpatient Department                                         |
| ICU  | Intensive Care unit                                          |
| CSSD | Central Sterile Services Department                          |
| NABH | National Accreditation Board for Hospitals<br>and Healthcare |
| NABL | National Accreditation Board of<br>Laboratory                |
| CSSD | Central Sterile Services Department                          |
| ER   | Emergency Room                                               |
| F&B  | Food & Beverages                                             |
| PPE  | Personal Protective Equipments                               |
| CMO  | Chief Medical Officer                                        |
| HIS  | Hospital Information System                                  |
| HAI  | Hospital Acquired Infection                                  |

## **HOSPITAL PROFILE:**

### **1.1 Introduction:**

Summer Training is an integral part of the Post Graduation Diploma in Hospital Management (PGDHM).

The main purpose of this summer training is to get an orientation towards the layout, operations and workflow of the hospital, in order to understand the processes and systems in the hospital.

After completing the first academic year of PGDHM, the students are supposed to undergo a two months training in a hospital, as a part of the curriculum.

Indeed I have got the golden opportunity to work in Asia's leading Healthcare provider, Fortis Group of Hospitals.

I joined Fortis Hospital, Noida, from 8<sup>th</sup> April, 2013 for summer internship. The duration for the summer training is of 2 months i.e. 8<sup>th</sup> April to 7<sup>th</sup> June.

### **1.2 AIM:**

To have an overall orientation / induction of the hospital setting.

### **1.3 Objectives:**

1. To get an overview and develop understanding of the hospital's functioning.
2. To gather knowledge about the process flows of major clinical and non clinical departments in a hospital.
3. To help the management study and address some issues/problems associated with some specific operational area/department.



## **1.4 History:**

Fortis Healthcare Limited was established in 1996 by its founder, Late Dr. Parvinder Singh. His vision of medical care was,

*“To create a world class integrated Health Care delivery system in India, entailing the finest medical skills combined with compassionate patient care.”*

Fortis took its first step towards becoming a world-class provider of integrated healthcare delivery in India by setting up its first hospital at Mohali, Punjab.

Fortis Hospital, Noida was inaugurated on 7<sup>th</sup> November 2004, which is a centre of excellence in Orthopedics and Neuroscience with additional focus on Cardiac Sciences, Minimally Access Surgery and Oncology. The hospital has a built over area of 5.53 acres and the allocation of space far above the current Indian norm of 800-900 sq.ft/bed. The total build up areas is 2.20,000 sq. ft with patient centric design by Kaplan Mc Laughlin Diaz (KMD) USA (award winning designers for FHI & MSH). This allows for flexibility to adapt and accommodate future trends of patient care.

It is a hub where some of the best medical professionals provide quality medical treatment catering to the special needs of patients and their families. The hospital has been designed and developed to deliver patient care with maximum ease warmth and effectiveness.

Fortis Hospital Noida has also achieved many first to its name:

- 1<sup>st</sup> NABH Accredited Hospital in U.P.
- 1<sup>st</sup> NABH Accredited Blood Bank in U.P.
- 1<sup>st</sup> NABL Accredited Lab services in U.P.

## The Fortis Logo:



### LOGO

“A **HEALING** **PASSION**”

The Fortis Healthcare Limited Logo defines the commitment to patient care. The logo reflects their endeavour to achieve excellence in healthcare delivery system by bringing together the best of technology, medical expertise, and patient care. The logo also implies the human values that govern every facet of our organization.

The 2 nurturing hands along with a red dot on the top depicts- “nurturing hands caring for human life”

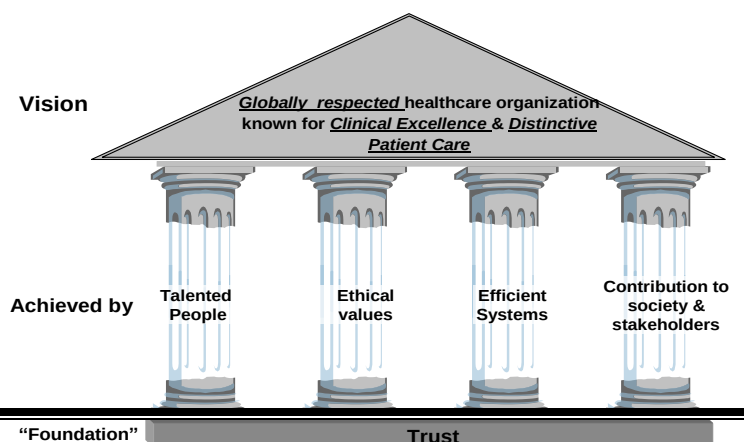
**GREEN** is a color of healing and depicts WELLBEING and **RED** is symbolic of steadfast focus, dynamic zeal and enthusiasm

### 1.5 Mission:

- To become an Integrated Healthcare delivering organization guided by quality, excellence, technology and compassionate patient care.
- To establish Fortis Hospital Noida as a major corporate hospital in healthcare delivery system in the region.

### 1.6 Vision:

*Globally Respected Health care organization recognized for Clinical Excellence and Distinctive Patient Care.*



## 1.7 Values:

They serve as a guideline for the routine conduct of each Fortisian. The core values of Fortis Healthcare are:

|                           |                                                                                                                                                                                                                                                                                       |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Patient Centricity</b> | <ul style="list-style-type: none"><li>• Commit to 'best outcomes and experience' for our patients.</li><li>• Treat patients and their caregivers with compassion, care and understanding.</li><li>• Our patients' needs will come first</li></ul>                                     |
| <b>Integrity</b>          | <ul style="list-style-type: none"><li>• Be principled, open and honest.</li><li>• Model and live our 'Values'.</li><li>• Demonstrate moral courage to speak up and do the right things.</li></ul>                                                                                     |
| <b>Teamwork</b>           | <ul style="list-style-type: none"><li>• Proactively support each other and operate as one team.</li><li>• Respect and value people at all levels with different opinions, experiences and backgrounds.</li><li>• Put organization needs' before department / self-interest.</li></ul> |
| <b>Ownership</b>          | <ul style="list-style-type: none"><li>• Be responsible and take pride in our actions.</li><li>• Take initiative and go beyond the call of duty.</li><li>• Deliver commitment and agreement made.</li></ul>                                                                            |

## **1.8 Committees in the Hospital:**

1. Quality Steering Committee
2. Hospital Infection Control Committee
3. Safety Committee
4. Sentinel Events Committee
5. Blood Transfusion Committee
6. Code Blue Committee
7. Pharmacy and Therapeutic Committee
8. Medical Audit Committee
9. Research and Ethics Committee
10. OT Committee
11. MRD Committee
12. Morbidity and Mortality Committee
13. CME Committee
14. Purchase Committee
15. Condemnation Committee
16. Credentialing and Privileging Committee
17. Sexual Harassment Committee

## **1.9 Infrastructure:**

The hospital offers world class infrastructure. It is designed as a green building to allow natural light into almost all parts of the building especially patient care areas. The architecture allows conservation of energy. The building is earthquake resistant. CFL lights have been used, thereby reducing power consumption. The space provided in the various departments is sufficient to move freely. CCTVs installed all over the building act as digital watchmen and help in security services. An efficient Hospital Information System is used to store all medical records.

### **The Hospital is equipped with:**

- 250 bedded hospital with 191 beds currently in use.
- 8 ICUs with 63 beds: Medical, Surgical, Liver Transplant, Kidney Transplant, Cardiac, Neuroscience, CTVS and Neonatal ICU.
- 7 OTs
- 2 Cath Labs (Neuro Cath Lab and Cardiac Cath Lab)
- 4 bed -Triage & 6 observation beds -ER
- 11 bedded Dialysis centre equipped with modern dialysis machines like SLED (sustained low efficiency dialysis machine) and providing 24 hrs. Coverage.
- Diagnostic facility comprising of 1.5 Tesla MRI scanner, 64 slice CT scan, 4 X-Ray units, 3 Ultrasound units, 1 Mammography machine and 1 Bone dxa scan machine.
- All laboratory services of world class standard like histopathology, microbiology, biochemistry and hematology are present.
- Ambulances which transport patients to the hospital emergency.

## **1.10 Departments-**

DEPARTMENTS IN THE HOSPITAL ARE:

- Pulmonology
- Rheumatology
- Obstetrics & Gynecology
- Pediatrics
- Physiotherapy
- Orthopedics
- Psychiatry
- Ophthalmology
- Dental
- Dermatology
- Diabetes and endocrinology
- Internal medicine
- Sports medicine
- ENT
- Emergency medicine
- Radiology
- Speech therapy
- Music therapy
- Gastroenterology
- Neurology
- Neonatology
- Infertility
- Dialysis

The surgical procedures carried out in the hospital are-

- General surgery
- Cardiac surgery

- Laparoscopic GI
- Bariatric surgery
- Neurosurgery
- Thoracic surgery
- Vascular surgery
- Plastic and reconstructive surgery
- Liver transplant
- Bone-marrow transplant

Other services in the hospital are-

- Blood bank
- Laboratory services
- CSSD
- Pharmacy
- Preventive health check-ups
- Patient care service
- Day care
- Clinical nutrition

## **1.11 DEPARTMENTAL PROFILE-**

### **1.11.1 Out Patient Department(OPD)**

#### **Functions:**

- Reception/Information
- Appointment
- Registration-OPD, Diagnosis
- Billing-OPD, Diagnostics, Emergency
- Report/Document delivery
- Customer Feedback

## **REGISTRATION PROCESS OF OPD**

PATIENT ENTERS INTO THE HOSPITAL



PATIENT APPROACHES THE OPD REGISTRATION DESK



PATIENTS FILLS THE REGISTRATION FORM



INFORMATION IS ENTERED IN TO THE HIS OF THE HOSPITAL



THEN, UHID (UNIQUE HOSPITAL IDENTIFACTION) IS GENERATED



BILLS ARE PROCESSED

### **1.11.2 Inpatient Patient Department(IPD)**

#### **Functions:**

- Reception/Information
- Appointment
- Admissions- IPD services(including Daycare)
- Report/Document delivery
- Customer Feedback
- Processing of TPA and corporate patient files



### **1.11.3 Human Resource Department:**

#### **Functions:**

- Development of HR policies and strategies
- Manpower Planning
- Recruitment and Selection
- Employee Training
- Salary Determination
- Performance Appraisal
- Personnel Data entry and record maintenance
- Consultation and Advisory services to management and employees
- Grievance Handling

### **1.11.4 Marketing Department:**

#### **Functions:**

- Branding and Promotion
- Online marketing through website
- Corporate link-ups
- TPAs
- Prepare brochures and pamphlets

### **1.11.5 Dietary and Nutrition (Food and Beverages)**

#### **Functions:**

- To ensure that Patient management system (PMS) is done according to F & B service standards
- Outpatient Diet counseling
- To educate all inpatients during hospitalization and at the time of discharge for therapeutic diet requirement
- To ensure proper room service to the attendants.

- To check the quality of grocery items as per the approved brand list and standard specifications
- Food services to consultants, doctors, and rest of the staff
- Food services extended during guest visit, CME, workshop and other important meeting.

#### **1.11.6 Housekeeping**

**Functions:**

- Sanitation and Hygiene
- Odour control
- Waste disposal
- Pests, rodents and animal control
- Interior decoration
- Infection control

#### **1.11.7 CSSD**

The objective of establishing this department is to make reliably sterilized articles available at the required time and place for any agreed purpose in the hospital as economically as possible.

**Functions:**

- It receives stores, sterilizes and distributes to all departments including the wards, OPD and other special units.
- It processes and sterilizes syringes, rubber goods (catheters, tubing etc.), surgical instruments, treatment trays and sets, dressing etc.
- It ensures economic and effective utilization of equipment resources of the hospital under controlled supervision.

#### **1.11.8 TPA**

TPA companies are BPO of insurance companies and are responsible for coordinating all aspects of claims arising due to health insurance policies. These companies are licensed by IRDA.

### **1.11.9 Stores:**

Stores receives all equipments, instruments and items of raw material, consumables, printing and stationary, medicines and other essential goods required by the hospital.

#### **Functions:**

- Procurement of stores through indigenous and foreign resources
- Checking of requisition and purchase indents
- Negotiating contracts
- Issue of purchase order
- Follow up of purchase orders for delivery in time
- Serving as an information centre on the materials' knowledge.

### **1.11.10 Engineering and Maintenance**

#### **Functions:**

- To maintain electric and water supply
- Air conditioning and refrigeration
- Intramural transportation

### **1.11.11 Finance**

#### **Functions:**

The functions of the financial departments are interlinked with the functioning of practically all other departments. The primary and essential functions of this department are:

- To maintain financial records
- To make payments of bills and expenses on time
- To collect accounts due
- To monitor the cash flow/ funds
- To make payments of wages and salaries
- To provide information regarding financial condition to managers and decision makers of the hospital

### **1.11.12 Medical Records Department**

#### **Functions:**

- Proper storage and maintenance of medical records
- Maintenance of integrity and confidentiality of medical records
- Submission of required data to government
- Classify the medical files as per ICD-10
- Obtaining missing patient files

### **1.11.13 Security**

Security services ensure the total safety and security of the internal as well as external customers which helps in preventing theft etc.

#### **Functions:**

- To secure the infrastructure and hospital property
- Safety of patients
- Control of flow of visitors
- VIP security
- Parking management

### **1.11.14 IT Department**

#### **Functions:**

- Maintenance of all the software's in the hospital.
- Modifications of the software are as per the requirements of the department.
- It covers the following modules: IPD Billing
  - OPD Billing
  - Administration
  - House keeping
  - Ward/Nursing
  - Diet
  - Visitor's pass
  - Stores

- Purchase
- Laboratory Information System
- Radiology Information System

## **2. The assigned Project:**

**2.1 Title:** PHC(PREVENTIVE HEALTH CHECK DEPARTMENT)

### **2.2 Aim:**

- 2.2.1 To study of OPD and IPD flow.
- 2.2.2 To study the number of patients coming for preventive health checks in PHC.
- 2.2.3 To study mode of payment by the patients.
- 2.2.4 To study number of patient being referred from OPD to IPD.
- 2.2.5 To study actual number of patients undergoing referral in IPD.
- 2.2.6 To study comparison of conversions with other admission.
- 2.2.7 To study comparison of total IPD patient to conversion occupancy

### **2.3 Objectives:**

- 2.3.1 Patient satisfaction.
- 2.3.2 Quality service in turnaround time.
- 2.3.3 Development of patient loyalty by surpassing their expectations.

### **2.4 Functions:**

- 2.4.1 To provide information
- 2.4.2 Appointment scheduling
- 2.4.3 Registration
- 2.4.4 Billing
- 2.4.5 Health check
- 2.4.6 Daily report generation
- 2.4.7 Doctor's appointment for final report consultation

- 2.4.8 Summary of patient is made after Doctor's consultation
- 2.4.8 Maintenance of record
- 2.4.9 Cross functional auditing

## **2.5 METHODOLOGY:**

**2.5.1 Population:** Population in the study includes PHC and referral department in the given span of time.

**2.5.2 Source:** The source of data collected is from individual department being referred and PHC, Fortis Hospital, Noida.

**2.5.3 Sampling method:** Quantities and qualitative sampling method.

**2.5.4 Sample size:** 450 PHC patient.

**2.5.5 Place:** The study is performed in Fortis Hospital, Noida.

**2.5.6 Selection criteria:** All the patients who availed the service of preventive health check.

### **2.5.7 Variables:**

Mode of payment (cash or credit)

UHID

Date of visit

Doctor visited

## **2.6 OPD&IPD**

### **2.6.1 General findings:**

2.6.1.1 There is 1 IPD front desk in the main atrium.

2.6.1.2 There are 2 OPD front desks, first on the ground floor and the second one on the first floor.

2.6.1.3 The ground floor one caters for patients for PHC and other OPD's.

2.6.1.4 The first floor one caters patients for dialysis, OPD's and procedure room.

2.6.1.5 There is separate front desk for diagnostics on the ground floor.

2.6.1.6 Both OPD and IPD comes under patient care services.

2.6.1.7 The OPD provides the patient with a UHID which will remain the same and if the patient is getting admitted in the hospital then he is provided with an IPID which will be changed each time the patient gets admitted.

### **2.6.2 SWOT ANALYSIS:**

#### **2.6.2.1 Strength:**

- There is defined flow so that the patient don't suffer inconvenience.
- There is a predefined split of departments under different POD's and each POD has a POD coordinator who handles the appointments as well as the patients who comes for consultation.
- A very warmy hospitality is given to the patients.

#### **2.6.2.2 Weakness:**

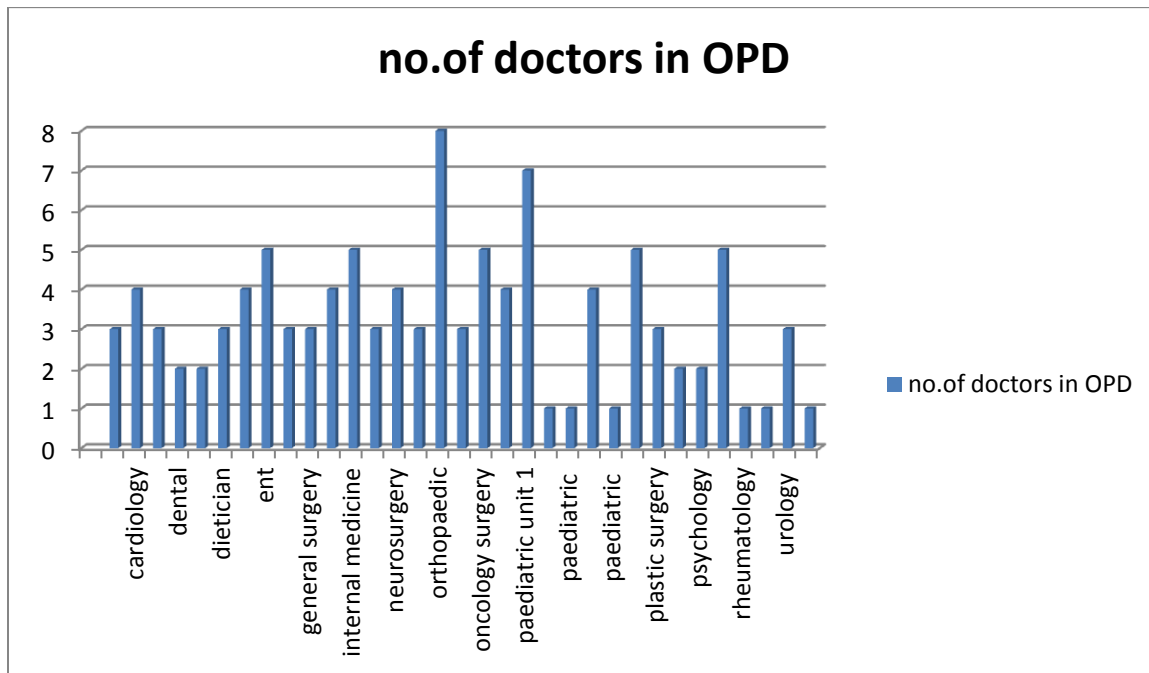
- Many a times the doctors on the OPD duties are late.

### 2.6.2.3 Opportunities:

- The department has a well equipped HIS system which help s in maintain the data and working faster by decreasing the paper work.

### 2.6.2.4 Threats:

- The department has to start synchronizing the appointments with the doctors on duty, because this has been seen to the most common reason for the customer to be dissatisfied.





| S.NO. | Departments       | no.of doctors in OPD |
|-------|-------------------|----------------------|
| 1.    | Cardiac surgery   | 3                    |
| 2.    | Cardiology        | 4                    |
| 3.    | Critical care     | 3                    |
| 4.    | Dental            | 2                    |
| 5.    | Dermatology       | 2                    |
| 6.    | Dietician         | 3                    |
| 7.    | Endocrinology     | 4                    |
| 8.    | Ent               | 5                    |
| 9.    | Gastroenterology  | 3                    |
| 10.   | General surgery   | 3                    |
| 11.   | Gynecology        | 4                    |
| 12.   | Internal medicine | 5                    |
| 13.   | Neurology         | 3                    |
| 14.   | Neurosurgery      | 4                    |
| 15.   | Nephrology        | 3                    |
| 16.   | Orthopedic        | 8                    |
| 17.   | Oncology medical  | 3                    |
| 18.   | Oncology surgery  | 5                    |
| 19.   | Ophthalmology     | 4                    |
| 20.   | Pediatric unit 1  | 7                    |
| 21.   | Pediatric unit 2  | 1                    |
| 22.   | Pediatric         | 1                    |
| 23.   | Cardiology        | 4                    |
| 24.   | Pediatric         | 1                    |
| 25.   | Pulmonolgy        | 5                    |
| 26.   | Plastic surgery   | 3                    |
| 27.   | Psychiatry        | 2                    |
| 28.   | Psychology        | 2                    |

|     |                  |   |
|-----|------------------|---|
| 29. | Pulmonology      | 5 |
| 30. | Rheumatology     | 1 |
| 31. | Thoracic surgery | 1 |
| 32. | Urology          | 3 |
| 33. | Vascular         | 1 |

**Table1:** Following table shows the department wise division of doctors in the OPD

### **Observation:**

- From the above table we can see that maximum doctors working in orthopedics unit with 8 doctors working in it and next to the list is pediatric unit 1 with 7 doctors working in it.
- Hence there are in total 103 doctors that support the OPD facility of the hospital presently.

## CONVERSION OF PATIENT FROM PHC

REFERRAL OF PATIENTS IN APRIL AND MAY from PHC:

| Sample<br>.No | Date        | Reffered To                                                         |
|---------------|-------------|---------------------------------------------------------------------|
| 1             | 10.4.<br>13 | Gynaecologist                                                       |
| 2             | 9.4.1<br>3  | DIABETOLOGIST (For Uncontrolled Diabetes) and CHEST PHYSICIAN       |
| 3             | 11.4.<br>13 | GYANECOLOGIST and CARDIOLOGIST (For Positive TMT)                   |
| 4             | 11.4.<br>13 | GYANECOLOGIST                                                       |
| 5             | 11.4.<br>13 | Cardiologist (For Hypertension)                                     |
| 6             | 17.4.<br>13 | DIABETOLOGIST (For Uncontrolled Diabetes) and URO SURGEON (For BPH) |
| 7             | 11.4.<br>13 | GYANECOLOGIST                                                       |
| 8             | 24.4.<br>13 | GYANECOLOGIST                                                       |
| 9             | 1.5.1<br>3  | CARDIOLOGIST (For AV Wenckebach Phenomenon)                         |
| 10            | 30.4.<br>13 | GYANECOLOGIST                                                       |
| 11            | 2.5.1<br>3  | CARDIOLOGIST                                                        |
| 12            | 1.5.1<br>3  | URO SURGEON (For BPH)                                               |

|    |             |                                                                                           |
|----|-------------|-------------------------------------------------------------------------------------------|
| 13 | 29.4.<br>13 | CHEST PHYSICIAN (For Abnormal X-Ray)                                                      |
| 14 | 2.5.1<br>3  | GYANECOLOGIST                                                                             |
| 15 | 29.4.<br>13 | CARDIOLOGIST (For Abnormal Lipid)                                                         |
| 16 | 1.5.1<br>3  | DIABETOLOGIST (For Diabetes), CARDIOLOGIST & NEUROLOGIST (For Neuropathy)                 |
| 17 | 26.4.<br>13 | GYANECOLOGIST and CARDIOLOGIST (For Positive TMT)                                         |
| 18 | 30.4.<br>13 | URO SURGEON (For BPH) and CARDIOLOGIST (For Uncontrolled Hypertension)                    |
| 19 | 29.4.<br>13 | GYANECOLOGIST and CHEST PHYSICIAN                                                         |
| 20 | 25.4.<br>13 | GYANECOLOGIST & CARDIOLOGIST (For Positive TMT) & NEURO PHYSICIAN (neurological Disorder) |
| 21 | 27.4.<br>13 | GYANECOLOGIST                                                                             |
| 22 | 30.4.<br>13 | URO SURGEON For BPH                                                                       |
| 23 | 29.4.<br>13 | CARDIOLOGIST (For Positive TMT) and URO SURGEON (For BPH)                                 |
| 24 | 30.4.<br>13 | GYANECOLOGIST                                                                             |
| 25 | 2.5.1<br>3  | CARDIOLOGIST                                                                              |
| 26 | 1.5.1<br>3  | GYANECOLOGIST                                                                             |

|    |             |                                                                                                                                                                               |
|----|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27 | 2.4.1<br>3  | CARDIOLOGIST (For Newly Detected Hypertension) and<br>GENERAL SURGEON (For Cholelithiasis)                                                                                    |
| 28 | 18.4.<br>13 | GYANECOLOGIST                                                                                                                                                                 |
| 29 | 1.5.1<br>3  | GYANECOLOGIST, ENDOCRINOLOGIST (For Newly Detected<br>Diabetes<br>& Hypothyroidism, CARDIOLOGIST (For Uncontrolled Hypertension)<br>&<br>GENERAL SURGEON (For Cholelithiasis) |
| 30 | 4.5.1<br>3  | GYANECOLOGIST                                                                                                                                                                 |
| 31 | 24.4.<br>13 | GYANECOLOGIST                                                                                                                                                                 |
| 32 | 2.5.1<br>3  | GYANECOLOGIST and CARDIOLOGIST                                                                                                                                                |
| 33 | 8.5.1<br>3  | GYANECOLOGIST                                                                                                                                                                 |
| 34 | 3.5.1<br>3  | GYANECOLOGIST and CARDIOLOGIST (For Positive TMT)                                                                                                                             |
| 35 | 29.4.<br>13 | URO SURGEON (For BPH)                                                                                                                                                         |
| 36 | 23.4.<br>13 | DIABETOLOGIST (For Uncontrolled Diabetes)                                                                                                                                     |
| 37 | 29.5.<br>13 | Gynecologist                                                                                                                                                                  |
| 38 | 2.5.1<br>3  | Gynecologist                                                                                                                                                                  |
| 39 | 19.4.<br>13 | URO SURGEON (For BPH)                                                                                                                                                         |

|    |             |                                                                                                                                                           |
|----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40 | 6.5.1<br>3  | ENDOCRINOLOGIST (For Uncontrolled Diabetes&<br>Newly Detected Hypothyroidism)&<br>NEPHROLOGIST (For High Creatinine, Protein and Blood Cells In<br>Urine) |
| 41 | 30.4.<br>13 | GYANECOLOGIST                                                                                                                                             |
| 42 | 2.5.1<br>3  | GYANECOLOGIST, CARDIOLOGIST (For Positive TMT)&<br>ENDOCRINOLOGIST (For Newly Detected Hypothyroidism)                                                    |
| 43 | 22.4.<br>13 | CARDIOLOGIST (For Positive TMT& URO SURGEON (For BPH)                                                                                                     |
| 44 | 6.4.1<br>3  | CARDIOLOGIST (For Positive TMT)                                                                                                                           |
| 45 | 3.5.1<br>3  | GYANECOLOGIST and CARDIOLOGIST (For Positive TMT) &<br>DIABETOLOGIST (For Uncontrolled Diabetes)                                                          |
| 46 | 15.4.<br>13 | URO SURGEON (For BPH                                                                                                                                      |
| 47 | 4.5.1<br>3  | DIABETOLOGIST (For Uncontrolled Diabetes) and URO SURGEON<br>(For BPH)                                                                                    |
| 48 | 23.4.<br>13 | URO SURGEON (For BPH)                                                                                                                                     |
| 49 | 25.4.<br>13 | URO SURGEON (For BPH)                                                                                                                                     |
| 50 | 25.4.<br>13 | Orthopedic                                                                                                                                                |
| 51 | 2.5.1<br>3  | DIABETOLOGIST (For Uncontrolled Diabetes)                                                                                                                 |
| 52 | 24.5.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                                                                                          |
| 53 | 8.5.1       | CARDIOLOGIST (For Exercise-Induced Hypertension)&                                                                                                         |

|    |             |                                                                                                 |
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|    | 3           | DIABETOLOGIST (For Uncontrolled Diabetes)                                                       |
| 54 | 15.5.<br>13 | CARDIOLOGIST (For Positive TMT)                                                                 |
| 55 | 16.5.<br>13 | CARDIOLOGIST (For Positive TMT)                                                                 |
| 56 | 24.5.<br>13 | CARDIOLOGIST (For Uncontrolled Hypertension)                                                    |
| 57 | 2.5.1<br>3  | DIABETOLOGIST (For Uncontrolled Diabetes)                                                       |
| 58 | 24.5.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                                |
| 59 | 8.5.1<br>3  | CARDIOLOGIST (For Exercise-Induced Hypertension)&<br>DIABETOLOGIST (For Uncontrolled Diabetes)  |
| 60 | 15.5.<br>13 | CARDIOLOGIST (For Positive TMT)                                                                 |
| 61 | 27.4.<br>13 | DIABETOLOGIST (For Uncontrolled Diabetes)                                                       |
| 62 | 24.4.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                                |
| 63 | 24.4.<br>13 | DIABETOLOGIST (For Uncontrolled Diabetes) &<br>CARDIOLOGIST (For Exercise-Induced Hypertension) |
| 64 | 29.4.<br>13 | CARDIOLOGIST (For Abnormal Echo)                                                                |
| 65 | 29.4.<br>13 | NEUROLOGY (? Peripheral neuropathy)                                                             |
| 66 | 29.4.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                                |
| 67 | 15.5.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                                |

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| 68 |             |  |                                                                                            |
| 69 | 15.4.<br>13 |  | URO SURGEON (For BPH)                                                                      |
| 70 | 3.5.1<br>3  |  | URO SURGEON (For BPH)                                                                      |
| 71 | 11.5.<br>13 |  | CARDIOLOGIST and URO SURGEON (For BPH)                                                     |
| 72 | 4.5.1<br>3  |  | DERMATOLOGIST (For Skin Lesions)                                                           |
| 74 | 17.5.<br>13 |  | DIABETOLOGIST (For Newly Detected Diabetes)                                                |
| 75 | 24.4.<br>13 |  | GENERAL SURGEON (For Cholelithiasis)&<br>DIABETOLOGIST (For Uncontrolled Diabetes)         |
| 76 | 27.5.<br>13 |  | DIABETOLOGIST (For Uncontrolled Diabetes)&<br>CARDIOLOGIST (For Uncontrolled Hypertension) |
| 77 | 25.5.<br>13 |  | CARDIOLOGIST (For Abnormal Lipid)                                                          |
| 78 | 25.4.<br>13 |  | CARDIOLOGIST (For Uncontrolled Hypertension)&<br>GENERAL SURGEON (For Hernia)              |
| 79 | 18.5.<br>13 |  | URO SURGEON (For BPH)                                                                      |
| 80 | 22.4.<br>13 |  | CARDIOLOGIST and CHEST PHYSICIAN                                                           |
| 81 | 11.4.<br>13 |  | CARDIOLOGIST (For Uncontrolled Hypertension) and URO<br>SURGEON (For BPH)                  |
| 82 | 18.4.<br>13 |  | URO SURGEON (For BPH)                                                                      |
| 83 | 10.4.<br>13 |  | CARDIOLOGIST (For Positive TMT) and URO SURGEON (For BPH)                                  |

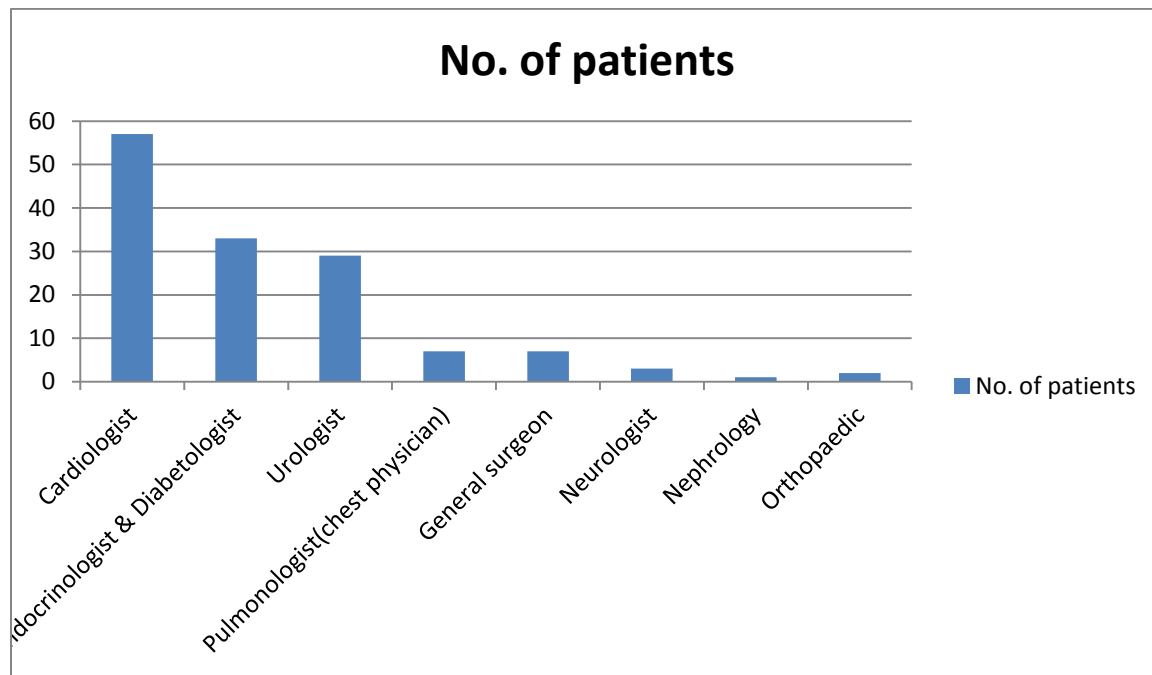


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| 84 | 11.4.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                   |
| 85 | 30.4.<br>13 | CARDIOLOGIST (For Newly Detected Hypertension) &<br>GENERAL SURGEON (For GB Polyp) |
| 86 | 20.5.<br>13 | URO SURGEON (For BPH)                                                              |
| 87 | 4.5.1<br>3  | CARDIOLOGIST (For Positive TMT)                                                    |
| 88 | 16.4.<br>13 | DIABETOLOGIST (For Uncontrolled Diabetes) and<br>RHEUMATOLOGIST                    |
| 89 | 9.4.1<br>3  | HEPATOLOGIST (For Hepatic Cyst)                                                    |
| 90 | 13.5.<br>13 | CARDIOLOGIST (For Exercise-Induced Hypertension)                                   |
| 91 | 10.4.<br>13 | CARDIOLOGIST (For Positive TMT)                                                    |
| 92 | 13.5.<br>13 | DIABETOLOGIST (For Uncontrolled Diabetes)                                          |
| 93 | 24.4.<br>13 | GYANECOLOGIST and CARDIOLOGIST (For Exercise-Induced<br>Hypertension)              |
| 94 | 10.4.<br>13 | CHEST PHYSICIAN (For Abnormal X-Ray Chest)                                         |
| 95 | 7.5.1<br>3  | DIABETOLOGIST (For Uncontrolled Diabetes)&<br>CARDIOLOGIST (For Positive TMT)      |
| 96 | 7.5.1<br>3  | DIABETOLOGIST (For Uncontrolled Diabetes)                                          |
| 97 | 16.5.<br>13 | CARDIOLOGIST (For Uncontrolled Hypertension)                                       |
| 98 | 16.5.       | CARDIOLOGIST (For Exercise-Induced Hypertension)                                   |

|     |             |  |                                                                                                                         |
|-----|-------------|--|-------------------------------------------------------------------------------------------------------------------------|
|     | 13          |  |                                                                                                                         |
| 99  | 11.4.<br>13 |  | ORTHOPEDICIAN (For Back Pain)                                                                                           |
| 100 | 18.4.<br>13 |  | CARDIOLOGIST (For Uncontrolled Hypertension)                                                                            |
| 101 | 22.4.<br>13 |  | CARDIOLOGIST (For Positive TMT)                                                                                         |
| 102 | 23.4.<br>13 |  | GENERAL SURGEON (For GB Polyp)                                                                                          |
| 103 | 1.5.1<br>3  |  | CARDIOLOGIST (For Positive TMT)                                                                                         |
| 104 | 11.4.<br>13 |  | : DIABETOLOGIST (For Uncontrolled Diabetes)                                                                             |
| 105 | 7.5.1<br>3  |  | CARDIOLOGY (For Positive TMT)                                                                                           |
| 106 | 28.4.<br>13 |  | DIABETOLOGIST (For Uncontrolled Diabetes) &<br>CARDIOLOGIST (For Abnormal Echo)                                         |
| 107 | 13.4.<br>13 |  | DIABETOLOGIST (For Uncontrolled Diabetes),<br>CARDIOLOGIST (For Uncontrolled Hypertension) and URO<br>SURGEON (For BPH) |
| 108 | 3.5.1<br>3  |  | CARDIOLOGIST (For Dyslipidemia (Abnormal lipid /cholesterol)                                                            |
| 109 | 4.5.1<br>3  |  | URO SURGEON (For BPH)                                                                                                   |
| 110 | 16.4.<br>13 |  | CARDIOLOGIST (Hypertension)                                                                                             |
| 111 | 13.5.<br>13 |  | DIABETOLOGIST (For Newly Detected Diabetes) and ENT                                                                     |
| 112 | 7.5.1       |  | URO SURGEON (For BPH)                                                                                                   |

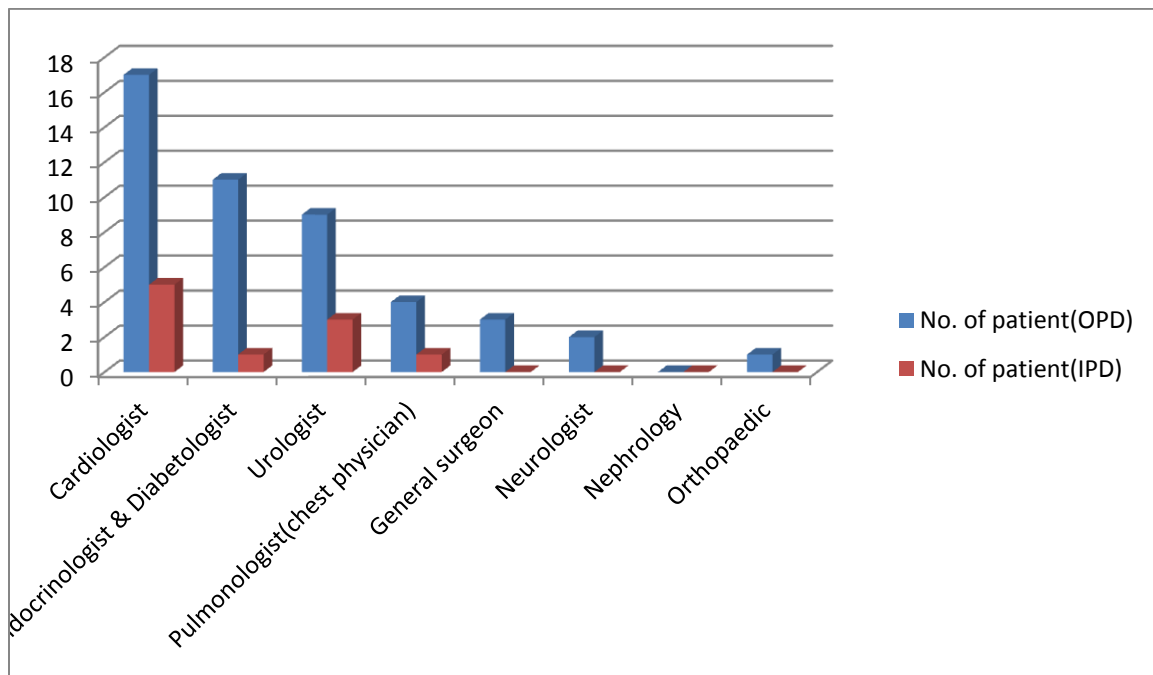
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|     | 3           |  |                                                                                               |
| 113 | 23.4.<br>13 |  | URO SURGEON (For BPH)                                                                         |
| 114 | 20.4.<br>13 |  | CHEST PHYSICIAN (For Abnormal X-Ray)                                                          |
| 115 | 4.5.1<br>3  |  | ENDOCRINOLOGIST and CARDIOLOGIST                                                              |
| 116 | 13.4.<br>13 |  | DIABETOLOGIST (For Uncontrolled Diabetes&<br>CARDIOLOGIST (For Uncontrolled Hypertension)     |
| 117 | 2.5.1<br>3  |  | DIABETOLOGIST (For Uncontrolled Diabetes)                                                     |
| 118 | 19.4.<br>13 |  | URO SURGEON (For BPH)                                                                         |
| 119 | 16.4.<br>13 |  | URO SURGEON (For BPH)                                                                         |
| 120 | 30.4.<br>13 |  | ENDOCRINOLOGIST (For Subclinical Hypothyroidism)                                              |
| 121 | 30.4.<br>13 |  | : ENDOCRINOLOGY (For Subclinical Hypothyroidism)                                              |
| 122 | 6.5.1<br>3  |  | GENERAL SURGEON (For Cholelithiasis)                                                          |
| 123 | 11.4.<br>13 |  | URO SURGEON (For BPH)                                                                         |
| 124 | 30.4.<br>13 |  | GENERAL SURGEON (For Cholelithiasis) and CARDIOLOGIST (For Positive TMT)                      |
| 125 | 15.5.<br>13 |  | URO SURGEON (For BPH)                                                                         |
| 126 | 15.5.<br>13 |  | CARDIOLOGIST (For Positive TMT),<br>DIABETOLOGIST (For Uncontrolled Diabetes) and URO SURGEON |

|     |             |  |                                                           |
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|     |             |  | (For BPH)                                                 |
| 127 | 8.5.1<br>3  |  | CARDIOLOGIST (For Positive TMT)                           |
| 128 | 15.5.<br>13 |  | CARDIOLOGIST (For Positive TMT) and URO SURGEON (For BPH) |
| 129 | 26.4.<br>13 |  | URO SURGEON (For BPH)                                     |
| 130 | 26.4.<br>13 |  | CARDIOLOGIST (For Positive TMT)                           |
| 131 | 24.4.<br>13 |  | DIABETOLOGIST (For Uncontrolled Diabetes)                 |
| 132 | 4.5.1<br>3  |  | PULMONOLOGIST                                             |



| Departments                     | No. of patients |
|---------------------------------|-----------------|
| Cardiologist                    | 57              |
| Endocrinologist & Diabetologist | 33              |
| Urologist                       | 29              |
| Pulmonologist(chest physician)  | 7               |
| General surgeon                 | 7               |
| Neurologist                     | 3               |
| Nephrology                      | 1               |
| Orthopedic                      | 2               |

**Fig:** showing patient referral from PHC. (APRIL & MAY)



| Departments                     | No. of patient(OPD) | No. of patient(IPD) |
|---------------------------------|---------------------|---------------------|
| Cardiologist                    | 17                  | 5                   |
| Endocrinologist & Diabetologist | 11                  | 1                   |
| Urologist                       | 9                   | 3                   |
| Pulmonologist(chest physician)  | 4                   | 1                   |
| General surgeon                 | 3                   | 0                   |
| Neurologist                     | 2                   | 0                   |
| Nephrology                      | 0                   | 0                   |
| Orthopedic                      | 1                   | 0                   |

**Fig:** showing patient conversion from PHC to OPD(APRIL & MAY)

## **OBSERVATION:**

- The highest number of referral are seen for cardiologist(57 patient) and lowest for nephrologist(1 patient) from preventive health check up(PHC).
- Again the highest number of conversion from PHC to OPD and further to IPD are seen highest for cardiologist and lowest for nephrologist.

## **ANALYSIS & DISCUSSION:**

Low rate of conversion were due to the following reasons:

- Far off from the patients residence.
- High cost of investigation.
- Family doctor available for the respective referral.
- Problem is not very severe.

## **RECOMMENDATIONS:**

- We can provide provision of transport facility if place is a constraint for patient.
- Counseling session to each referral patient.
- Can reduce the cost of investigation according to the different class of patient coming from the society.

## **REFERENCES:**

1. PHC, Fortis Hospital, Noida.
2. [www.fortishealthcare.com](http://www.fortishealthcare.com)
3. Outpatient department
4. Billing counters, Fortis Hospital, Noida