Summer Training at
Max Super Speciality Hospital,
New Delhi

- **To Identify Reasons for Delay in Discharge Process and to Give Suggestions to Reduce Time Taken in Discharge Process.**
- **Study on Factors Affecting Productivity of Outpatient Pharmacy of Max Super Speciality Hospital, Shalimar Bagh**

By
Yashika Bhatia

Under the guidance of
Dr. Suresh Joshi

MBA Hospital and Health Management
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The IIHMR University, Jaipur
2016

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

IIHMR UNIVERSITY

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Yashika Bhatia** student of MBA Hospital and Health Management(MBA-HM) from The IIHMR University, Jaipur has undergone summer training at **–The Max Super Speciality Hospital, Shalimar Bagh, New-Delhi from 1st April 2016** 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 and analytical.
The summer training is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.

Col (Dr) Ashok Kaushik
Dean, Academic and Student Affairs
The IIHMR University, Jaipur

Dr Suresh Joshi
Professor
The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur-302029, Rajasthan, India.
Ph.: 0141-3924700, 2791431- 32, Fax:0141-3924738,E-mail: iihmr@iihmr.edu.in,Web: www.iihmr.edu.in

MAX HEALTHCARE

Ms. Yashika Bhatia
New Delhi

31st May 2016

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Yashika Bhatia has completed her training from **Max Super Specialty Hospital, Shalimar Bagh** from **1st April' 2016 to 31st May 2016** in department of **"Front Office" & " OP Pharmacy" & completed projects on "Discharge Process" & "Inventory Management" respectively in these departments**

During her period of attachment with us, we found her to be sincere and hardworking person.

We wish her very best in all future.

Yours sincerely,

Anuj Vijh
Deputy Manager – Human Resources

Max Super Speciality Hospital, Shalimar Bagh
FC - 50, C & D Block, Shalimar Bagh, New Delhi - 110 088, Phone: +91-11-6642 2222, 4978 2222
Max Healthcare Institute Limited
(CIN: U72200DL2001PLC111313)
Regd. Office: Max House, 1, Dr. Jha Marg, Okhla, New Delhi - 110 020
Phone: +91- 11-4122 0600, Fax: +91-11-4161 2155, E-mail: secretarial@maxhealthcare.com
www.maxhealthcare.in

NABH

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My sincere thanks are also due to my guide, Dr. DayaKrishanMangaland Dr. Suresh Joshi and teachers at IIHMR, Jaipur to their immense support and guidance. I am really thankful to the placement cell for all their efforts to place the MBA-HM students to organization of such repute, for summer internship.

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Acronyms/Abbreviations

HIS	:	Hospital Information System
EMG	:	Electro Myography
EEG	:	Electro Encephalogrphy
ECG	:	ElectroCardioGraph
HOD	:	Head Of Department
CCD	:	Customer Care Department
PCE	:	Patient Care Executive
PCC	:	Patient Care Coordinator
ICU	:	Intensive Care Unit
CT	:	Computerized Tomography
MRI	:	Magnetic Resonance Imaging
HR	:	Human Resource
CSSD	:	Central Sterile Supply Department
H/K	:	House Keeping
SICU	:	Surgical Intensive Care Unit
MICU	:	Medical Intensive Care Unit
GI	:	Gastro Intestinal
F&B	:	Food and Beverage
CPR	:	Cardio Pulmonary Resuscitation
CT	:	Computed Tomography
BME	:	Bio Medical Engineering
MRD	:	Medical Records Department
CPRS	:	Computerized Patient Record System
GDA	:	General Duty Assistant
LSS	:	Local Sub Store

INTRODUCTION

Max Super Speciality Hospital,Shalimar bagh, Delhi is another milestone towards realizing the dream of a great visionary Bhai Analjit Singh, chairman and managing director of Max healthcare limited.

With over 1900 beds and 12 top hospitals in Delhi-NCR, Punjab and Uttarakhand, 2100 world-class doctors and 9300 support staff, Max Healthcare is one of the leading chain of hospitals in India.

With 525 ICU beds & the most advanced technology, Max healthcare's state-of-the-art infrastructure is rated the best in North India thereby making Max Healthcare one of the best hospitals in India.

Max healthcare is committed in meeting all healthcare needs of customers, starting from the maintenance of good health to providing global standards in diagnostics, therapeutics and surgical requirements at the time of need. It aims to exceed customer's expectations in terms of quality, service, safety and value for money through constant innovation and better product delivery.

HOSPITAL OBJECTIVES

1. To facilitate hospital dissemination about MAX.

2. To give a broader outlook about the infrastructure, functioning of various departments.

3. To serve as a basic document defining the facility.

MAX SUPER SPECIALITY HOSPITAL, SHALIMAR BAGH

A 300-bedded Super Speciality Hospital, covering over 2 lakh 98 square feet area and standing 12 floors tall.

Max Super Speciality Hospital is providing the highest level of professional expertise and world-class care across all specialities.

PASSION

Build Trust

VISION

Deliver international class healthcare with a total service focus, by creating an institution committed to the highest standards of medical & service excellence, patient care, scientific knowledge, research & medical education.

MISSION

- Create exceptional standards of Medical & Service Excellence
- Care provider of FIRST CHOICE
- Principal Choice for Physicians
- Ethical Practices
- Create international Centre of Excellence for select Super Specialties.
- Safety – Patient, Customer, Staff

ACCREDITATIONS

Certifications assuring the highest level of medical and service quality.

- **NABH- NATIONAL ACCREDITATION BOARD FOR HOSPITALS**

The accreditation is a recognition of Max Healthcare's commitment to provide the highest quality of care to its patients.

- **NABL- NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES :**

Max Healthcare laboratories have successfully obtained NABL accreditation in the field of medical testing**.**

- **ISO :**9001,**ISO :**14001,**ISO :**18001

- **LEED Certified** (Leadership in energy and environmental design)

SERVICES & AMENITIES

- 24*7 Blood Bank Services
- 24*7 Max Pharmacy
- Regional Translators - French, Persian, Arabic (On Call)
- Waiting Lounge - On Ground Floor & Second Floor
- Cafeteria - Whole Foods, Cafe Coffee Day &SagarRatna
- Pathology and In House Radiology Lab Services
- Dedicated TPA Desk
- Dialysis Services

FACILITY LAYOUT

Floor	
Lower Basement	Engineering Office &WorkShop
	ETP & STP
	F&B Cold Store
	HK Linen Store
	LSS
	Oncology OPD and Day care
Upper Basement	BME Office & Workshop
	Call Center
	I.T and Server Room
	Staff Change Room
	Uniform Issue room
	Security Control Room
	Material Store
	Central Sterilization Services Department
	IP Pharmacy
	Gas Manifold
	BMW Central Collection room
	Medical Record Department
Ground Floor	Front Office – In-Patient Billing & TPA counter
	Duty Manager's Room
	OPD Chambers- A and B
	Preventive Health Programme
	ECG, ECHO, PFT, TMT Rooms
	Radiology Services – X Ray, C.T Scan, MRI, Ultrasound, and Mammography.
	Nuclear Medicine

	ACCU
	Op pharmacy
	Emergency OT
	Resuscitation room
	Waiting Lounge
	Visitors Cafeteria
First Floor	OPD-C
	Day Care
	Endoscopy
	Labour Room
	Cath Labs-2
	OT 1-6
	CTVS ICU
	Observation Post op
Second Floor	Blood Bank
	Dialysis
	HDU
	Neo Natal ICU
	PICU
	Neuro ICU
	SICU
	MICU
	Waiting Lounge
Third Floor	Pathology
	Kitchen
	Staff Cafeteria
	OPD-D
	Doctors Lounge
Fourth Floor	Administration Office
	Seminar Room
	HDU

INFRASTRUCTURE

Building

Plot Area	10,000 sq meters
Height	37 meters
Number of Floors	12 (2 Basement + Ground + 9)

Bed Capacity

Number of Beds	300
IP Beds	196
Critical Care Beds	80
Day Care Beds	12
Others	12

Cath Labs

Number of CathLabs	2

Operation Theatres

Major	9
Minor	6
C Sec	1
Day Care	1
Emergency	1

OUT PATIENT SERVICES

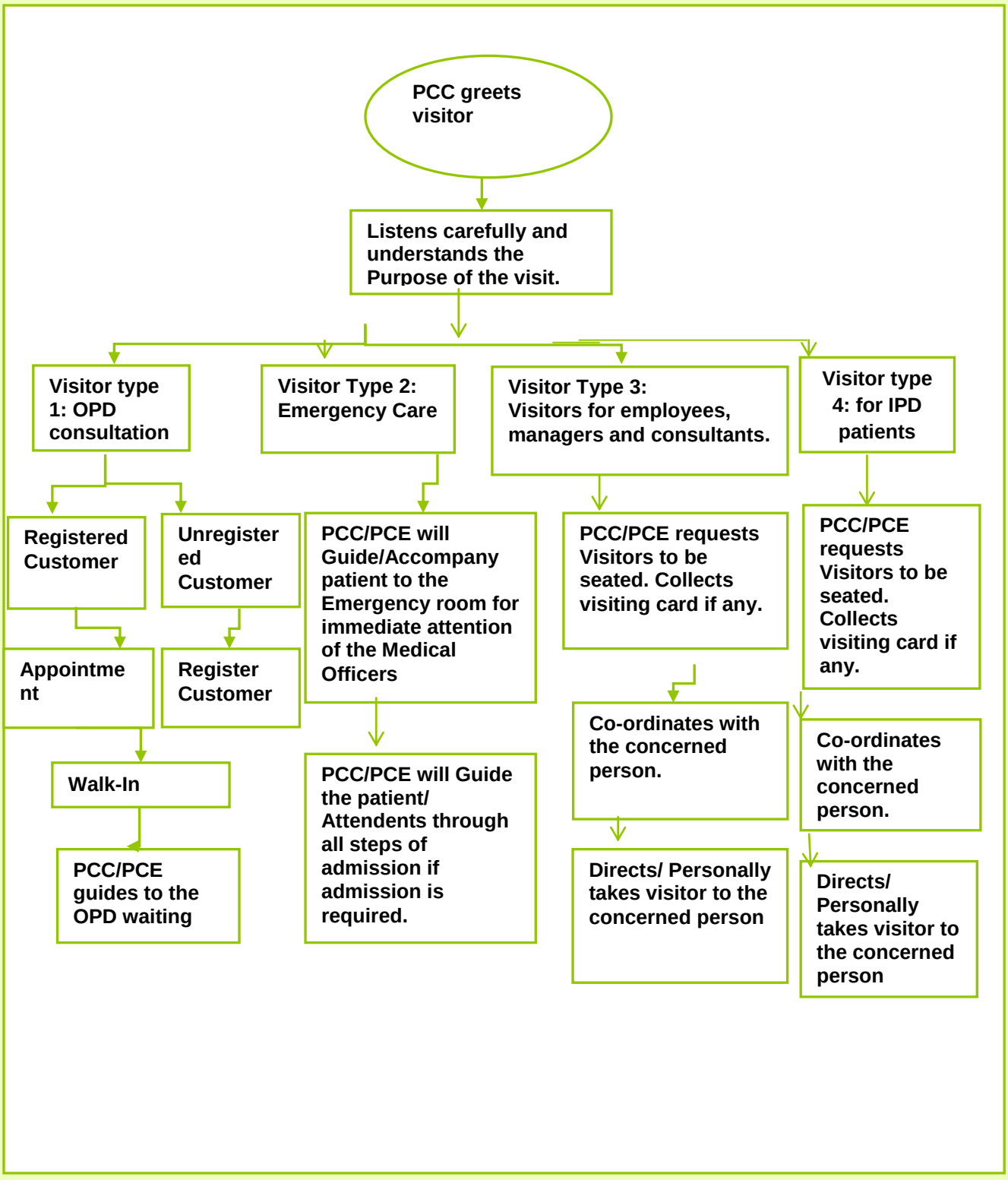
- Ambulatory patient care services.
- One of the first point of contact between hospital staff and patient.
- Reflects the human relation skills and public relation functions of the hospital for the patients, relatives and visitors.

OBJECTIVES

- To provide adequate quality of care.
- All modern technique for investigation and treatment.
- Creating facilities for total patient satisfaction.
- Good public relation.


Specialist consultation
Modern investigation facility and treatment
Conversion to admissions
Follow up care and rehabilitation
Health education
Preventive Health services
Roles and functions

FLOW OF VISITOR


PCC greets visitor
Listens carefully and understands the Purpose of the visit.
Visitor type 1: OPD consultation
Visitor Type 2: Emergency Care
Visitor Type 3: Visitors for employees, managers and consultants.
Visitor type 4: for IPD patients
Registered Customer
Unregistered Customer
PCC/PCE will Guide/Accompany patient to the Emergency room for immediate attention of the Medical Officers
PCC/PCE requests Visitors to be seated. Collects visiting card if any.
PCC/PCE requests Visitors to be seated. Collects visiting card if any.
Appointment
Register Customer
Walk-In
PCC/PCE guides to the OPD waiting
PCC/PCE will Guide the patient/ Attendents through all steps of admission if admission is required.
Co-ordinates with the concerned person.
Co-ordinates with the concerned person.
Directs/ Personally takes visitor to the concerned person
Directs/ Personally takes visitor to the concerned person

LOCATION OF OPDs

- Ground floor: A and B
- First floor- C
- Third floor- D
- Number of consult chambers- 28

OPD timings- 8am-8pm

Appointment system- Call centre (outsourced) and direct call to hospital

OPD record keeping- OPD slip

No. of OPD Consultation/day- 250(approx.)

INPATIENT SERVICES

ORGANIZATION AND MANAGEMENT OF INPATIENT SERVICES

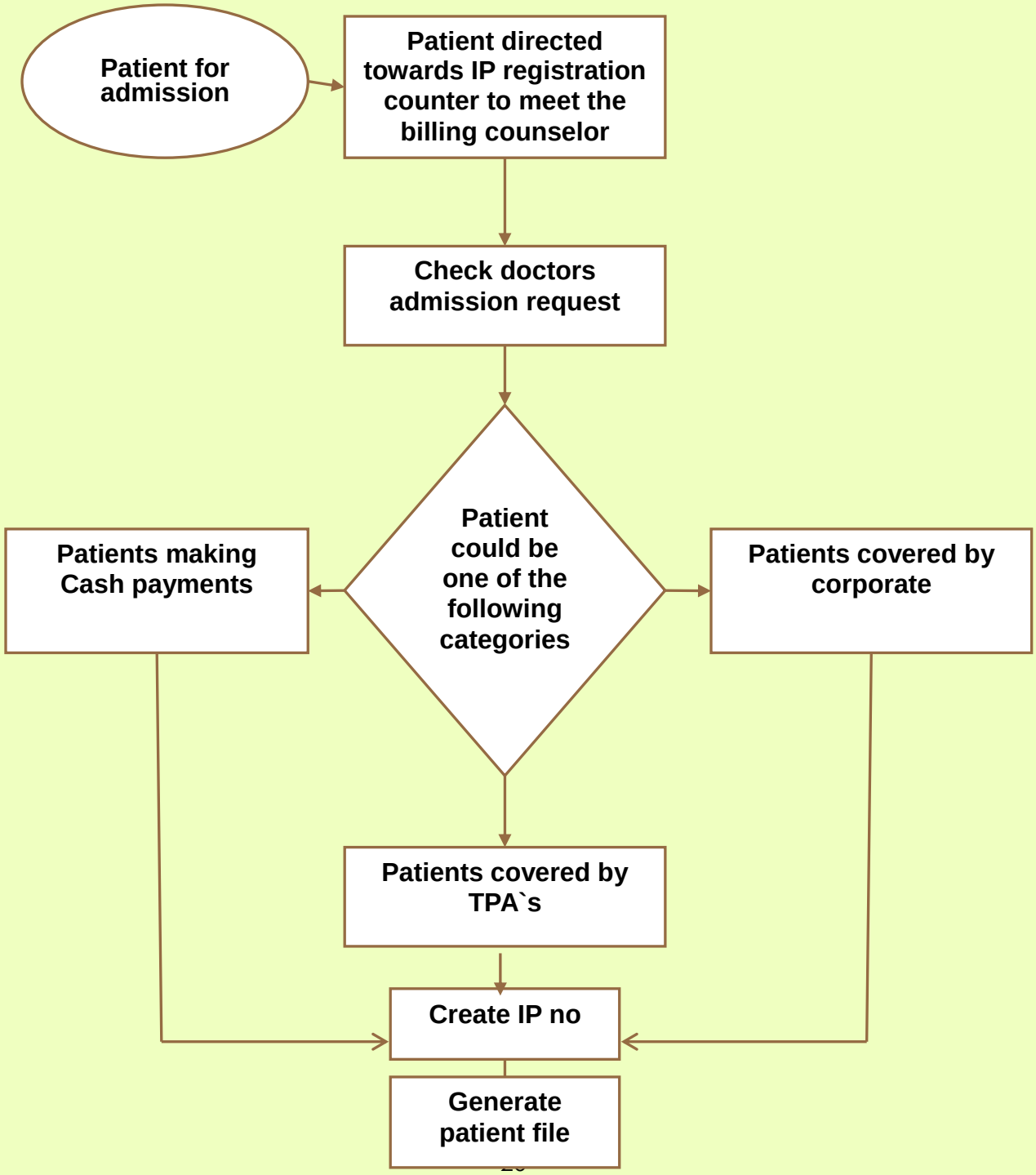
- In patient services includes the ward and nursing station and all other facilities necessary for good patient care.
- To provide care under direct supervision for a patient at the point of illness when dependence on others is at its height by admitting in a hospital bed.

OBJECTIVE

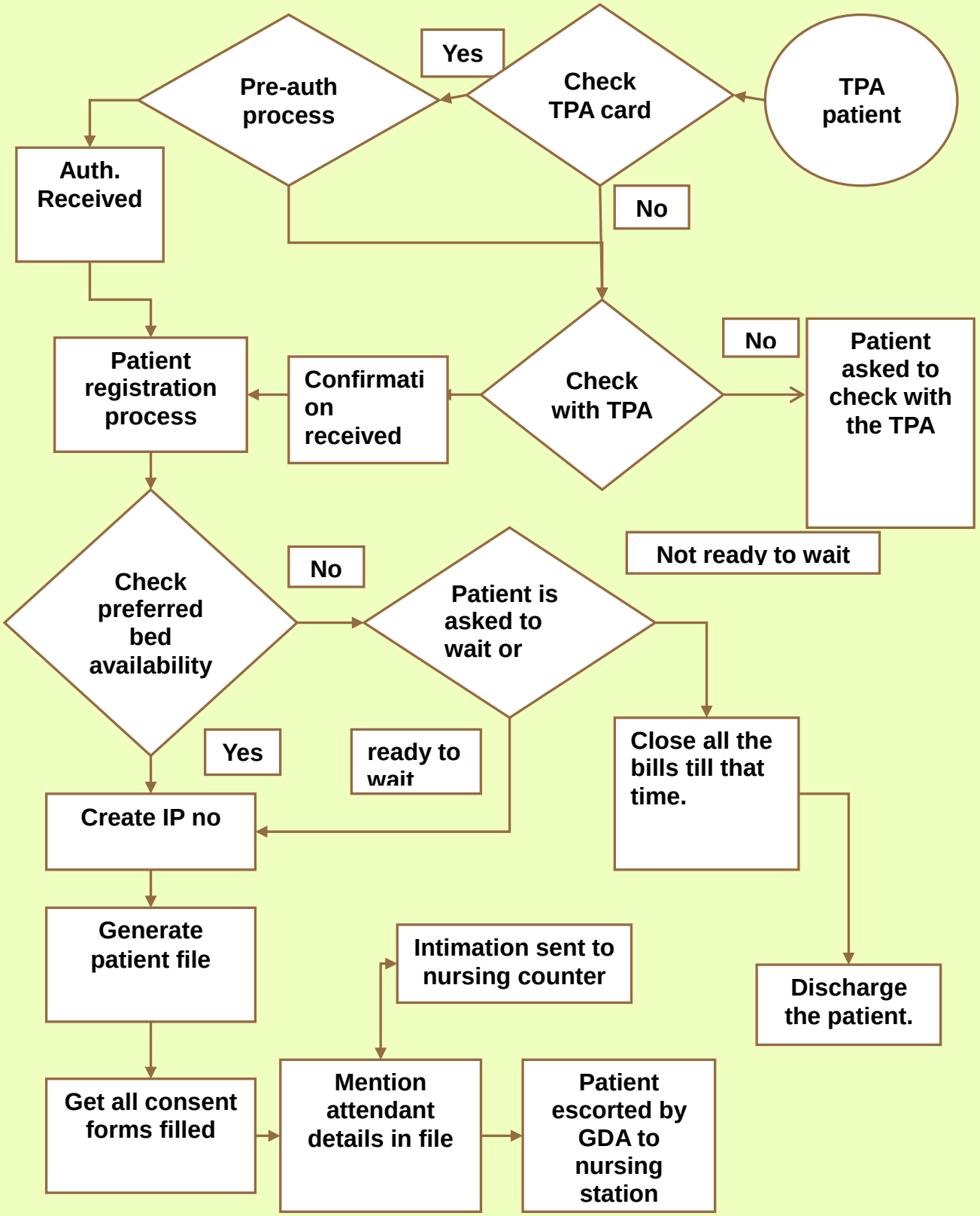
- To provide the highest possible quality of medical and nursing care for an admitted patient.
- To make provision for essential equipments, drugs and all other items required for patient care in an organized manner.
- To provide most comfortable and desirable environment on temporary substitution for home.
- To fulfill all the basic needs in the hospital like eating, toiletry, sleeping, entertainment etc.
- To facilitate the visit of attendants and visitors.
- To provide the atmosphere and facilities for highest degree of job satisfaction of nursing and medical staff and high levels of patient satisfaction

PATIENT ADMISSION PROCESS

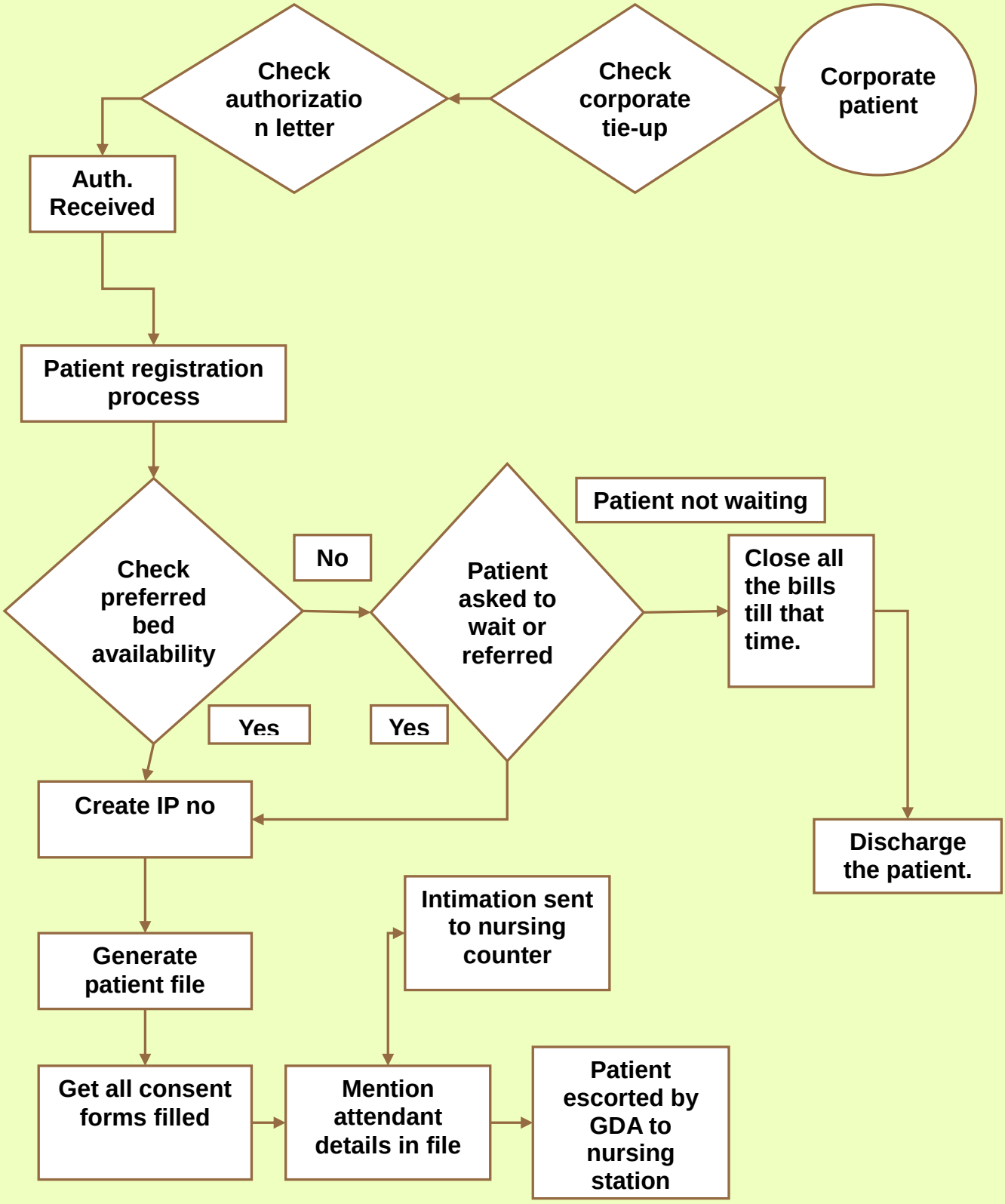
- Patient informed about the charges and other essential details like Estimated Expense , inpatient Information, etc required during the stay.
- Availability of room is checked by HIS.
- Patient/ attendant are being explained about of categories of room required and available and its tariff.
  Patient is given a registration form to be filled.
- Patient details entered in HIS and face sheet generated as per the details filled in registration form.
- Advance amount deposited as per the requirement.
- For TPA patient pre authorizationform is given to the patient party for completing by patient as well as by the doctor and make it ready by filling other information for TPA.
- Passes are issued to the patient as per visitor policy and entry made on Face Sheet (Office Copy)
- Patient folder is created & sent to the wards along with a GDA
- For any International patient International Patient Services are informed.


Patient for admission
Patient directed towards IP registration counter to meet the billing counselor
Check doctors admission request
Patient could be one of the following categories
Patients making Cash payments
Patients covered by corporate
Patients covered by TPA`s
Create IP no
Generate patient file

PROCESS FLOW OF TPA PATIENT



PROCESS FLOW OF CORPORATE PATIENT



MULTISPECIALITY OPERATION THEATRES

Total number of OTs : 9 OT rooms

Location : 1st floor

Preoperative room-here patient is prepared before operation takes place like fixing IV lines,ECG, BP check, pre medication etc.

- The patient is kept here for around 15-20 minutes.
- It is attached with clean utility room & work stations

INTENSIVE CARE UNIT/CRITICAL CARE UNITS

Medical intensive care unit	(MICU)
Surgical intensive care unit	(SICU)
Neonatal intensive care unit	(NICU)
Neuro intensive care unit	(NeICU)
Pediatric intensive care unit	(PICU)
Cardiothoracic and vascular surgery	(CTVS ICU)
Acute Coronary Care unit	(ACCU)

CATH LAB

- Location-1ST floor
- For intervention procedures only
- Number- 2 labs

DIALYSIS

- Location- 2ND FLOOR
- Number of dialysis machines-12
- Dialysis/day-30-35

BLOOD BANK

- Location-2nd floor
- Equipments-Amicus cell separator,
  Gel cards-used for cross matching,non-reactive blood bags
- Blood stored at 4 degree Celsius.so must be transfused within 30 minutes

EMERGENCY SERVICES

- Location-ground floor
- Department provides 24*7 emergency & trauma care

FUNCTIONS OF EMERGENCY DEPARTMENT

1. To treat unannounced patients
2. To function 24*7
3. To provide immediate appropriate life saving care
4. To Service both efficiently and effectively
5. Sensitive to emotional need like
   - Liase with court and police in medico legal cases
   - Public relation
6. Provide ambulance services
7. Information and communication Centre
8. Education, Training and Research

MEDICAL RECORDS

- Type of medical record system-Electronic Health record (EHR)
- Record keeping period:
  Pediatric file has to be kept till child is 18 years of age
  Medico legal cases, death cases-files have to be kept forever
- Retrieval-Doctor can see on CPRS system
- Arrangement of MR-Ideally should be according to SSN#
- Destroying files-1 month prior notice is given in newspapers before destroying files

HUMAN RESOURCE DEPARTMENT

HEADCOUNTS

MAX SUPER SPECIALITY HOSPITAL	
Category	**No: Employees**
Front Office	56
Nursing	397
Paramedics	96
Physician	195
Support	122
Grand Total	**866**

PHARMACY

- Centralized purchase from Delhi (Okhla).
- Outpatient , Inpatient pharmacy & Economically weaker section outpatient is separate.
- Drugs are stored at 2-8 degree Celsius in refrigerator
- Sound alike drugs-blue coding
- Look alike drugs-pink coding
- High alert drugs(diabetic chemo only)-Orange

HOUSEKEEPING

Location-Basement 1

Housekeeping staff is outsourced

Laundry-Outsourced

DIETETICS

- Nutritional assessment of patient is done within 24 hrs
- Reassessment is done after 7days
- ICU notes are put daily
- Small coupons are prepared for tea to nursing staff.

MAINTENANCE

- Location-basement 2
- Manpower is outsourced
- Engineers are in house
- 2 Generators- 750KVA each
- RO water is being used.

MEDICAL ENGINEERING

- Manifold room-In this room medical gases are stored
- Medical gases-O_2-(Identification)-Yellow pipe, white bend(pressure-4.5 kg)
- Air-4 kg(pressure) air is used(black& white bend)
- 7 kg(pressure) air-used in pneumatic drills in CSSD(Identification)(Black white black)
- Nitrous oxide-used in anesthesia(Identification)(yellow pipe, French blue bend)
- Co_2-Yellow pipe,grey bend(identification)(used in laproscopy system in OT)
- Medical air(99.5% o_2+0.5% other gases)

CSSD (Central sterile supplies department)

Location-basement 1

OBJECTIVE

To provide all hospital departments adequate supply of sterilized goods conforming to highest standards of sterilization from a central place thus reducing the overall cost and contributing towards reduction in hospital acquired infection

EQUIPMENTS

1 .Steam sterilizers: 2 in number(capacity 16&32 cu f)

2. Ethylene oxide gas sterilizer: 1 no.(capacity 4 cu f)

3. Automatic water disinfector- 1 no.

4. Ultrasonic cleaner- 1 no.

THREE METHODS

1. Steam sterilization-(for linen) at 134 C for 4 minutes, 121 C for 16 minutes
2. Ethylene oxide sterilization-(only plastic items) at 55 C(hot cycle) for 12 hrs,at 37 C(cold cycle) for 24 hrs
3. Glutaraldehyde

    - Ethylene oxide treated items-6 months storage life
    - Steam sterilization treated items-7 days life

PART II

To identify reasons for delay in discharge process and to give suggestions to reduce time taken in discharge process.

PROCESS: PATIENT DISCHARGE

Among various factors affecting the health care system, discharge process is one of the important factors related to patient satisfaction. It is the process that occurs when the patient leaves the facility. As the final step in the hospital experience, the discharge process is likely to be well remembered by the patient.

Mogli defines “discharge as the release of a hospitalized patient from the hospital by the admitting physician after providing necessary medical care for a period deemed necessary” . Sakarkar defines “discharge as the release of an admitted patient from the hospital”.

Discharge process is defined as the process of activities that involves the patient and the team of individuals from various discipline working together to facilitate the transfer of patient from one environment to another.

Discharge planning is essential to the concurrent patient care review system conducted as part of the hospital’s utilization management effort. If discharge planning is delayed, patient’s stay can be unnecessarily extended. Discharge planning is centralized, coordinated effort, to ensure that each patient has a planned program for needed continuing care and follow-ups. When it comes to the discharge subject, it’s the moment where the patient pays for the services enjoyed in the hospital and the management receives for the same and there occur some delay which causes patient to wait longer hours for discharge, but for the satisfaction of the patient, minimizing the time consumption in billing is again an important factor. Billing and discharge process documents are vital for any hospital. Its importance encompasses the Clinical aspect, Financial aspect, Scientific database for research purpose, Administration both retrospective and prospective, help to improve the functioning of the hospital as well as to make many administrative decisions and these documents are also legally important. Therefore this study on discharge is undertaken with the aim of giving better services for the patient satisfaction.

By Earlier findings it is found that there are some delay in discharge process, so this study is to find out the reasons which causes delay in discharge process and leads to longer waiting hours for patient to leave the hospital.

AIM

To identify reasons for delay in discharge process and to give suggestions to reduce time taken in discharge process.

OBJECTIVE

- Identify main causes of delay in discharge process.
- To study root cause analysis.
- To suggest key strategies to overcome the delay in discharge process.

METHODOLOGY

- **STUDY TYPE:**
  OBSERVATIONAL & ANALYTICAL

- **SAMPLE TYPE:**
  SELECTIVE SAMPLING

- **STUDY POPULATION:**
  IN-PATIENTS & DAY CARE PATIENTS OF MAX SHBG.

- **SAMPLE SIZE:**
  ALL IN-PATIENTS AND DAY CARE PATIENTS OF THE HOSPITAL

- **SOURCES OF DATA:**
  PRIMARY DATA: DIRECT OBSERVATION
  SECONDARY DATA: FROM HIS.

- **METHODS OF DATA COLLECTION :**
  DIRECT OBSERVATION
  TALKING TO DIFFERENT STAKEHOLDERS

METHODS

This observational study was carried out in tertiary care 300 bedded hospital in MAX Super speciality hospital, Shalimar bagh, Delhi. The time taken for discharge from respective doctor writing orders on the case sheet to completion of billing process in all the departments was observed. The data was collected for patients for 23 days including time period from 12 noon to 2 pm. Planned discharges of inpatient patients were included during study period.

The data collected was analyzed using fish bone analysis and MS-Excel.

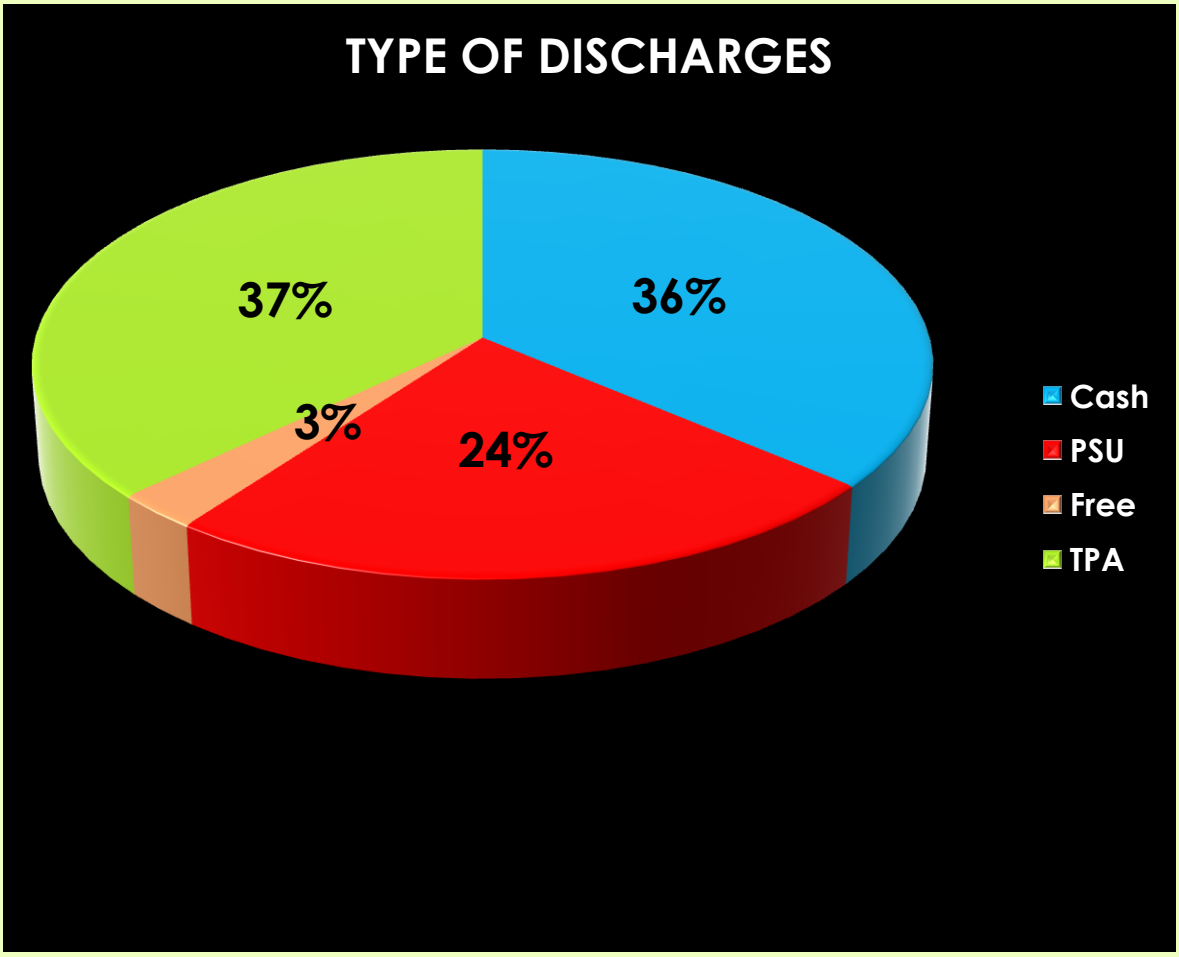
DISCUSSION

The result shows that there were various reasons which causesdelay in all types of patient discharges in the hospital.

- Type of discharges (CASH, TPA, CORPORATE)
- Percentage of Planned versus Unplanned discharges
- Various Reasons for delay in Discharge Process

DATA ANALYSIS

- **Type of Discharges in Hospital**

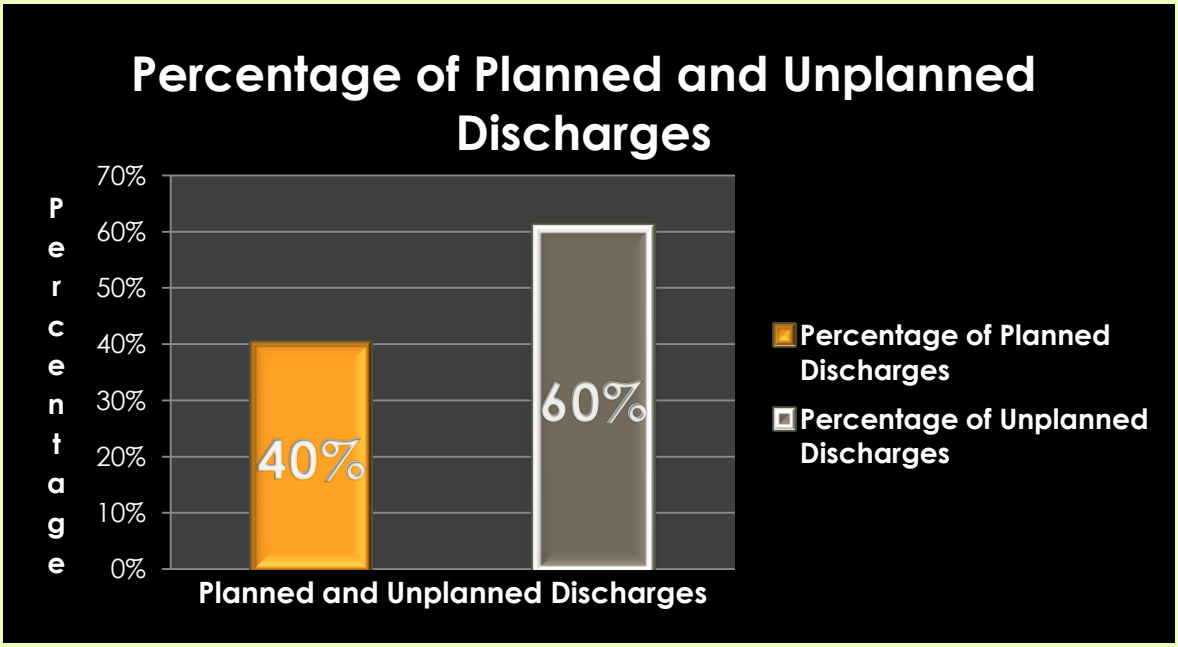


Note:

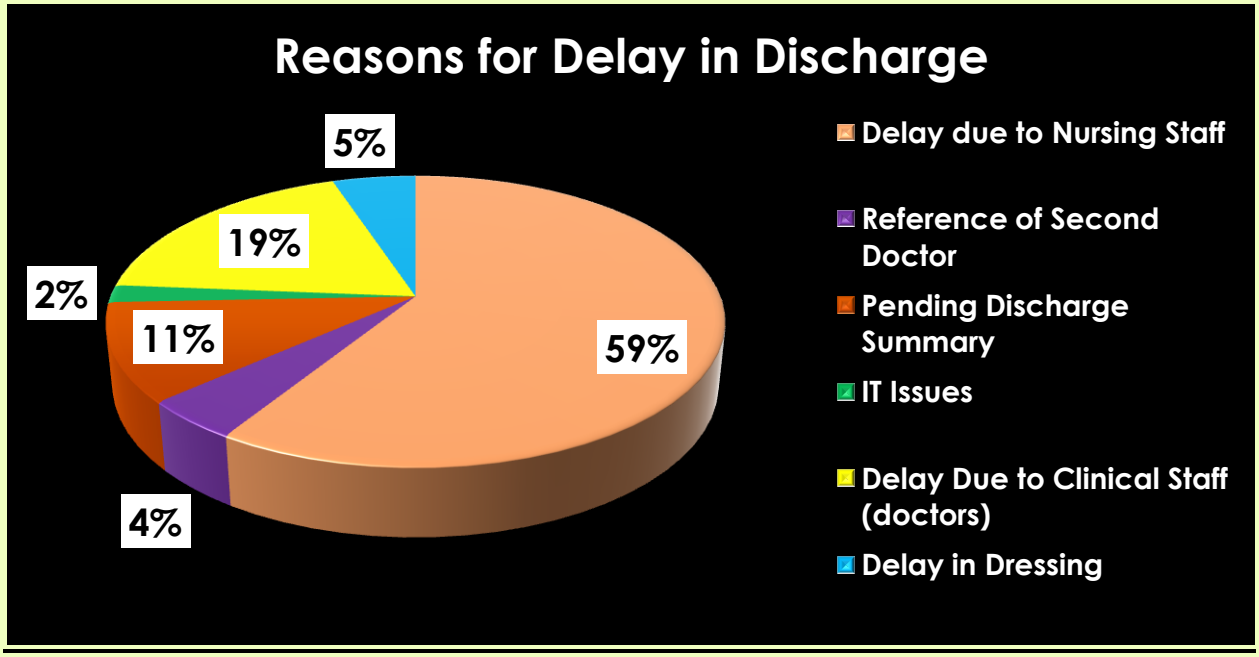
PSU : Public Sector Unit

TPA: Third Party Administrator

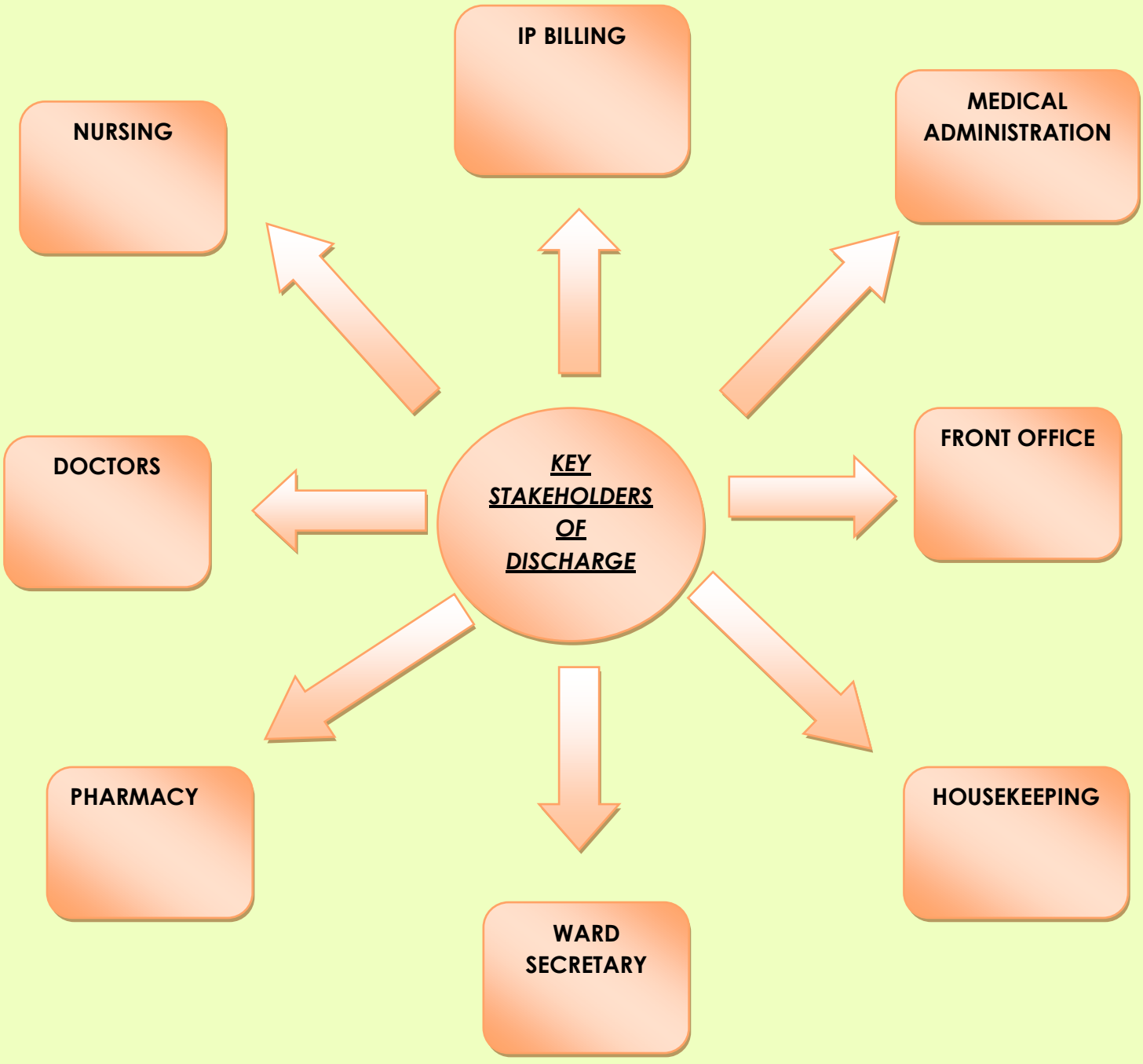
Percentage of Planned Versus Unplanned Discharges



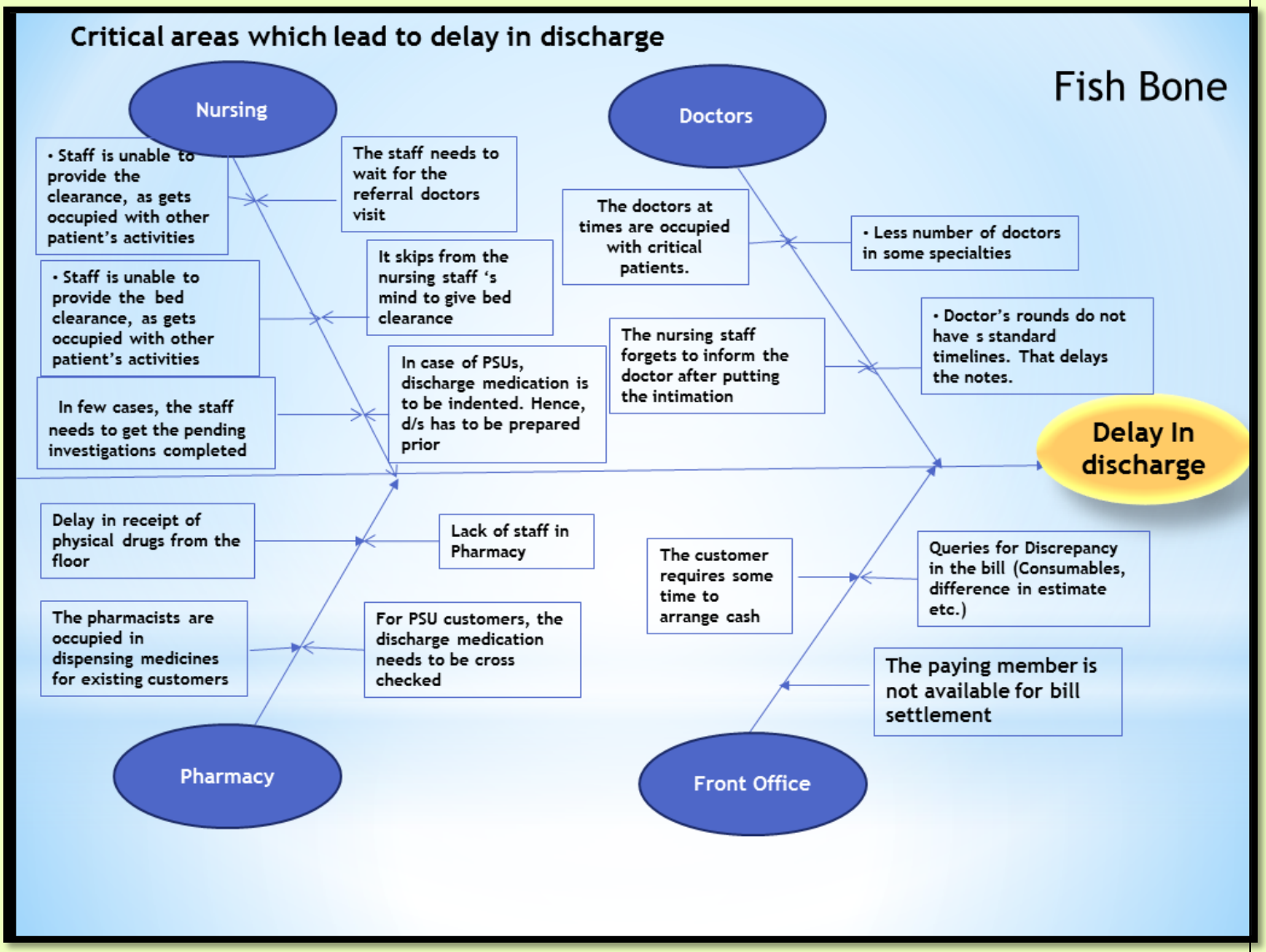
Various Reasons for delay in discharge process



DIFFERENT STAKEHOLDERS IN DISCHARGE PROCESS



FISH BONE ANALYSIS



RECOMMENDATIONS

BARRIER TO EFFECTIVE PLANNED DISCHARGE	RECCOMENDATION FOR OVERCOMING BARRIERS
Doctor's rounds do not have standard timelines.	Doctors are to be reminded in each meeting and be requested to adhere to the timelines. Awareness should be created among doctors to have their rounds first and morning rounds should be completed before 11 am
Delay in preparation of discharge summary	Provisional discharge summary should be made before hand a night before discharge and must include all medications and follow-up details
Inappropriate discharge intimation	Doctors should confirm discharges one night before in the evening round
Nursing staff is not able to give clearance as they are pre-occupied with other in-patients	A team Leader should be appointed on each floor to coordinate among various departments regarding various activities involved in discharge process Bed Manager should call to team leaders and help to increase the discharges
No timely dressing	Dressing should be done by concerned doctor night before discharge.
Pending investigations	Nursing staff must acknowledge all the investigations whether pending in past or to be done before putting discharge intimiation
Error in medicine return and indent	Team leaders on each floor should help assign nursing staff for pharmacy. Assign staff should check medicine physically if

	any left on bed side.

Issue of permission in credit patients	Attendant of credit patients should be informed before hand to bring permission from their respective panels.
Long waiting hours for refund cheque	Once discharge is final refund cheque should be made before hand. Process for online transfer for refund should be made available.
Non-availability of attendants for discharge	Once discharge is final, attendant should be informed to be available.
Non-availability of cash at time of discharge	The attendant should be proactively informed about the outstanding amount on daily basis by the front office executives.
Less availability of man power	Staff should be appointed as the current staff is engaged with present patients , as patient load is more.

- Design a system where the user departments gets a pop-up on their screens, regarding any activities in discharge process entered by other departments and then prioritizes processing these orders over other daily work.
- Train and utilize same Ward secretary/technical staff at each department so that the discharge summary could be prepared parallel to the ongoing process, and any delays could be reduced (if any), because of the same.
- Increase the number of Planned discharges, and to be seen in the system. (Planned discharges: these are the discharges that are pre planned a night before the discharge. It includes discharge summary preparation, doctor's notes to be put in system, and the physical drugs are returned to the pharmacy, financial counseling regarding the final bill a day prior to the discharge.)

- At least one Housekeeping supervisor/ staff should be present at each nursing station so that current status of the discharge should be taken care of and housekeeping service can be provided immediately after bed clearance.
- Asking attendant to fill the feedback form and specifically asking reasons for delay in discharge which they have faced during their hospital stay.

RESULTS

Out of 906 total discharges in 23 days between time period of 12-2 pm , 360 i.e. (40%) were planned discharges and 546 i.e.(60%) were unplanned discharges.

Because planned discharges were very less which leads to increase the time taken for discharge process.

Hospital and the concerned staff should work on nursing department as nursing delay was maximum i.e. 59% .

If the above mentioned recommendation are considered and worked upon , time taken in discharge process can be reduced significantly and ultimately will lead to patient satisfaction.

CONCLUSION

A Systematic approach to develop the structure and key processes of the discharge planning system is critical in ensuring the quality of care and maximizing organization effectiveness.

In this study, important views on barriers experienced in hospital discharge were provided, Suggestions for building a comprehensive , system wide and policy driven discharge planning process with clearly identified staff roles were raised.

Communication and coordination across various healthcare parties and provisions were also suggested to be a key focus.

PART III

A Study on Factors affecting Productivity of Outpatient Pharmacy of MAX Super Speciality Hospital, Shalimar Bagh

INTRODUCTION TO INVENTORY MANAGEMENT

INVENTORY MANAGEMENT

Inventory is one of the major current assets to the organization. They are important input of final product. It is an area where significant cost savings can be made. Inventory decisions are high risk and high impact from the perspective of financial operation. Inventory, as current asset, differs from other current assets because only financial managers are not involved. Rather, all the functional areas, finance, marketing, production, and purchasing are involved. The job of the financial manager is to reconcile the conflicting viewpoints of the various functional areas regarding the appropriate inventory levels in order to fulfill the overall objective of maximizing the owner's wealth. Raw materials shortages can shut down a manufacturing line or modify a production schedule, which, in turn introduces added expenses and potential for finished goods shortages. Just as shortages can disrupt planned marketing and manufacturing operations, over stocked inventories also create problems. Overstocks increases cost and reduce profitability through added warehousing, working capital requirements, deterioration, insurance, tax and obsolescence.

Outpatient retail pharmacy is a very significant contributor to the overall financial success of the hospital. Lack of retail expertise is a common problem in health-system pharmacy operations. There are opportunities to drive new revenues through better inventory management, improving the outpatient pharmacy management, prescribing & dispensing of medicines, managing the discharge prescriptions and emergency department fills. In addition all these increase in patient satisfaction, and decrease readmissions with better drug compliance following discharge.

AIM To study the conversion rate of prescription to pharmacy invoice(s) in Outpatient pharmacy in MAX Super specialty Hospital, Shalimar Bagh.

INTRODUCTION

Outpatient retail pharmacy is a very significant contributor to the overall financial success of the hospital. Lack of retail expertise is a common problem in health-system pharmacy operations. There are opportunities to drive new revenues through better inventory management, improving the outpatient pharmacy management, prescribing & dispensing of medicines, managing the discharge prescriptions and emergency department fills. In addition all these increase in patient satisfaction, and decrease readmissions with better drug compliance following discharge.1

OBJECTIVES

- To evaluate productivity, especially in relation to prescriptions being dispensed and its impact on revenue& customer satisfaction

.METHODOLOGY

STUDY TYPE: OBSERVATIONAL AND DESCRIPTIVE

STUDY DURATION: 24 APRIL'2016 - 25 May '2016

STUDY AREA: OUTPATIENT RETAIL PHARMACY, MAX SUPERSPECIALITY HOSPITAL, SHALIMAR BAGH

STUDY SAMPLE: OPD CASH PATIENTS OF NINE DOCTORS OF THREE SPECIALITIES

SPECIALITIES	DR.	DR.	DR.
INTERNAL MEDICINE	VINEET ARORA	S.K. NAGRANI	SANJAY DHALL
ORTHOPAEDICS	PALASH GUPTA	RAJU EASWARAN	MONU SINGH
GYNAECOLOGISTS	S.N. BASU	NITIKA SOBTI	SEEMA JAIN

SAMPLING TECHNIQUE: PURPOSIVE SAMPLING

SOURCES OF DATA: 1. PRIMARY SOURCE:DIRECT OBSERVATION.

2. SECONDARY SOURCE: FROM HIS.

METHOD

One month data on daily number of prescriptions reaching the pharmacy, number of drugs bouncing, the reasons for non-availability of medicines was collected from the pharmacy records, MIS and interviews with pharmacy staff..

Drugs bounced were studied and categorized under Formulary and Non formulary drugs and ABC analysis was checked from HIS.

One Month data on number of patients visiting outpatient departments, number of consultations and pharmacy invoices were obtained from HIS.

Compilation and analysis of data was carried out using MS Excel.

RESULTS

On an average, Outpatient visits for the given study time for selected doctors under study was 2964 , out of which, 67% of total invoices of these doctors were generated.

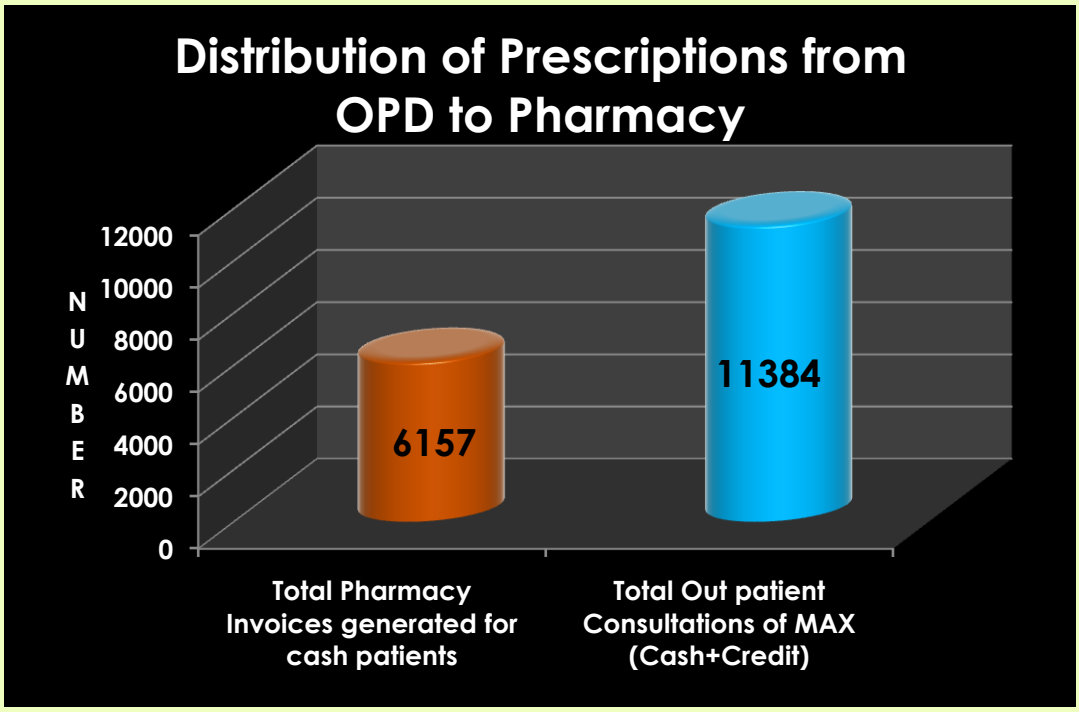
1896 (64%) of those prescriptions were reaching the OP pharmacy and 363 (12.2%)were not reaching the pharmacy.

Out of 1896 prescriptions reaching the pharmacy, 74 were bouncing due to the following reasons :

- Prescribed Brand of the drug not available in the pharmacy
- Prescribed drug not available in the hospital formulary (Non Formulary Drugs)
- Prescribed drug not in stock in the pharmacy though listed in the hospital formulary.
- Patients do not prefer to take any prescribed drug if one or more than one prescribed brand is not available.
- Prescribed brands are available but because of no discount they do not purchase from max pharmacy\

FIGURES AND TABLES

Distribution of Prescriptions from OPD to Pharmacy

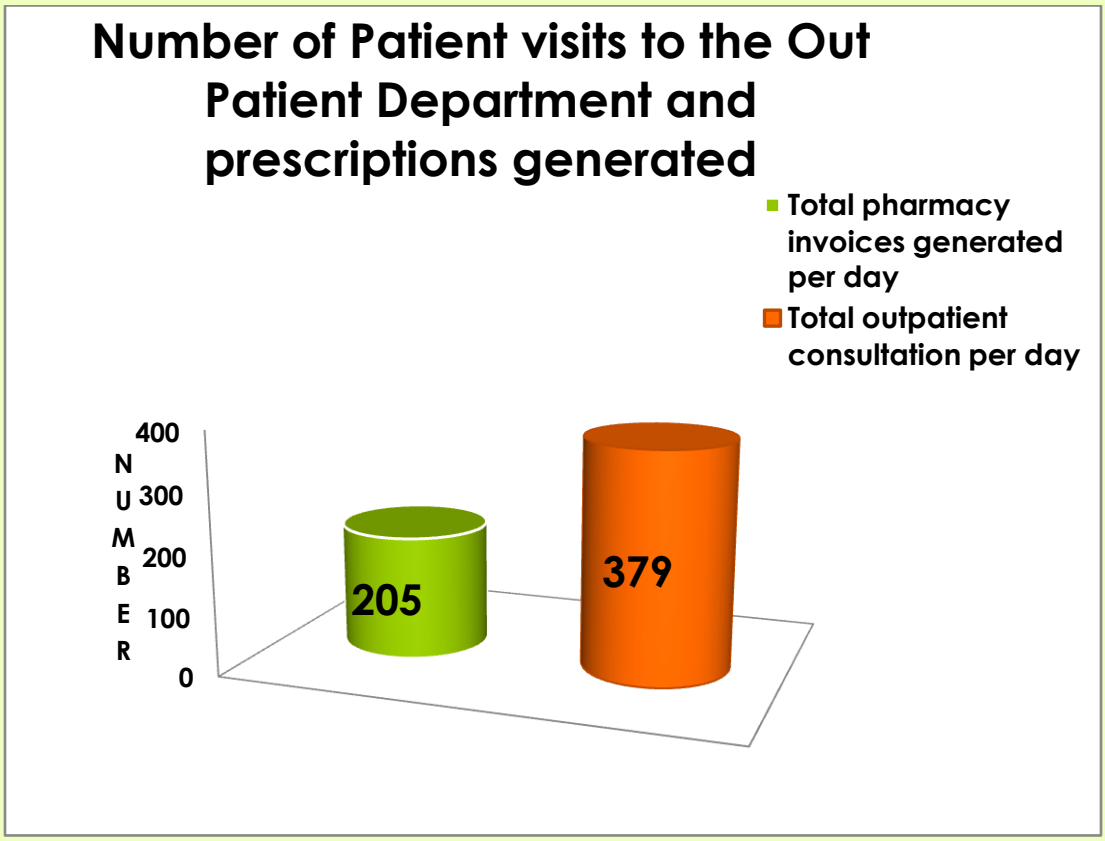


Description: Total number of out- patients that consulted in MAX Superspeciality Hospital, Shalimar bagh in 30 days were 11384, out of these only 6157pharmacy invoices were generated.

Total54% of the total patients of Out-patient department were served by the Pharmacy.

NOTE: OPD receive two type of patients i.e. Cash & Credit, whereas pharmacy receive only cash patients.

Number of Patient visits to the out-patient department and prescriptions generated



Description: Op visits in max hospital per day is 379 and pharmacy invoices were made only for 205 patients per day. It can be because

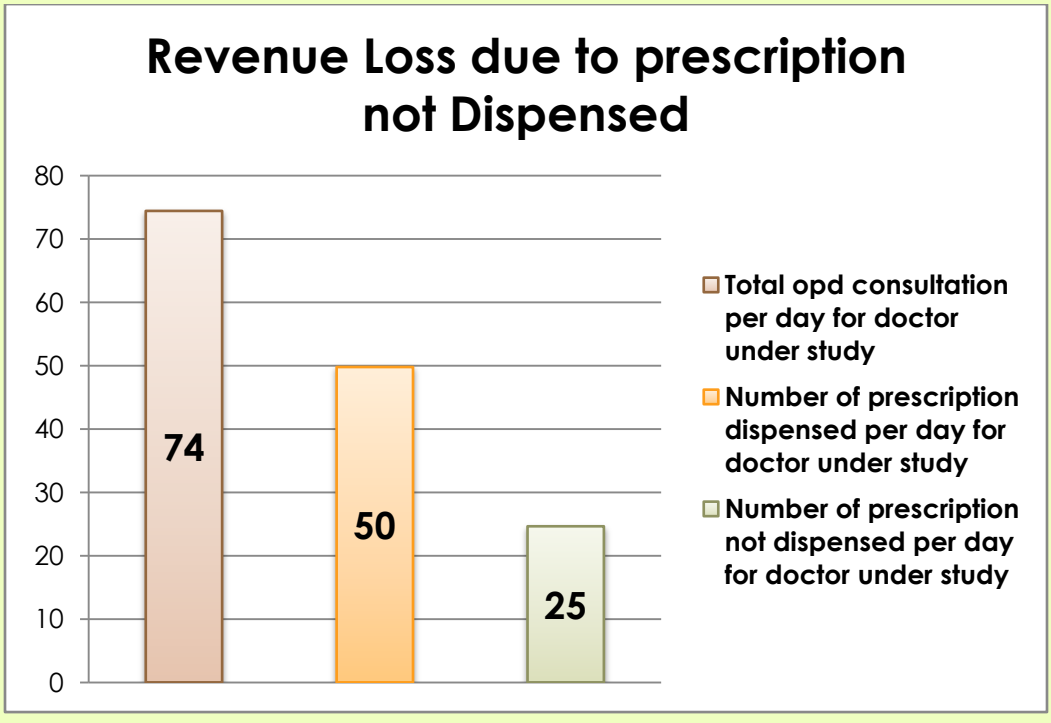
- Credit patients do not take medication from hospital pharmacy.
- Any drug which is not available with same brand, patient refuse to take either entire prescription or that drug
- Doctors prescribe non- Formulary drugs.

Consultation-invoice Conversion

Description: The conversion rate of three specialties which were included in the study was taken. In Internal Medicine, out of 732 consultations, only 473 pharmacy invoices were prepared. In Orthopedics, out of 735 consultations, 695 patients were being served by pharmacy. And in Gynecology, 325 invoices out of 765 consultations.

Overall, it constituted around 67% of the total conversion rate of the consultations to pharmacy invoices

Revenue loss due to prescription not dispensed



Description: Total OPDconsulations for nine doctors of three specialities for one day is 74. Number of prescription dispensed per day is 50 and 25 prescriptions were not dispensed which leads to revenue loss to the hospital.

RECOMMENDATIONS

ISSUE	STRATEGY	OUTCOME
• **Drug Bouncing** • **Revenue Generation**	• Efficient purchasing and contracting of drugs • Committee formation for non-formulary management • Timely conversion of non-formulary drugs to formulary drugs. • Telepharmacy	• Reduction in overall drug bouncing • Improved order processing speed, expanded clinical pharmacy services
• **Drugs out of stock**	• proper inventory control • Maintaining adequate ROL level as per the consumption pattern of consuming brands • Introduce frequently non formulary brands in formulary	• Drugs will be available in pharmacy and hence less prescription bounce • Revenue can be generated
• **Rational use of drugs**	• Medical Council of India, with the approval of the Central Government, who makes the regulations relating to the Professional Conduct, Etiquette and Ethics for registered medical practitioners, insists in chapter 1.5, use of Generic names of drugs: Every physician should, as far as possible, prescribe drugs with generic	• No bouncing of drugs • No Revenue loss to hospital • Rational use of drugs

	names	
• **Bouncing of Drugs**	• Procurement is to be stream lined by effective consultations with the clinicians to include commonly prescribed medicines in the formulary. • Accordingly the formulary needs to be regularly updated. Up to date information shall be circulated to all clinicians about the drugs position in the pharmacy. • Stock out list also shall be circulated.	• Reduction in drug bouncing of both formulary and non-formulary
• **Discounts**	• Percentage of discount should be increase as many people do not take medicines because of less discount or no discount	• Increment of sale in pharmacy
• **Inventory**	• Effective inventory control mechanism, including training pharmacists in inventory control should be instituted in the pharmacy, to ensure adequate stock, and prevent stock outs	• Stock outs in pharmacy can be avoided by proper inventory management

Further, the factors which encourage patients to purchase their prescriptions from a hospital Outpatient pharmacy are

1. Attitude of pharmacy personnel
2. Accessibility and convenience of pharmacy location
3. Quality and cost of drugs
4. . Conducive physical environment
5. Availability of prescribed drugs
6. . Timeliness of service delivery

CONCLUSION

Conclusion Outpatient pharmacy, in a corporate hospital plays an important role in patient care in that it makes available the prescribed medicines at ease of comfort for the patients and without financial burden, thus facilitating effective patient outcomes as well as meeting their satisfaction. The department demands effective inventory control and quality management to boost the hospital revenues. As such, review studies of functioning of hospital pharmacy would immensely contribute to enhancement of its quality and productivity.

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