Internship Training

At Gulf Medical College Hospital

By:

Dr. Pratibha
Roll. No. (PG/13/047)
Post-Graduate Diploma in Hospital & Health Management
2013-2015

International Institute of Health Management Research, New Delhi

Internship Training
At
Gulf Medical College Hospital

مستشفى جي إم سي
GMC HOSPITAL
HEALTHCARE • EDUCATION • RESEARCH
AJMAN

CRITICAL ANALYSIS OF THE PATIENT DISCHARGE PROCESS AT GMC HOSPITAL, AJMAN

By:

Dr. Pratibha

Under the guidance of

Ms. Divya Aggarwal (Assistant Professor)

Post Graduate Diploma in Hospital and Health Management

Year 2013-2015

IIHMR DELHI

International Institute of Health Management Research, New Delhi

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr.Pratibha student of **Post Graduate Diploma in Hospital and Health Management** from IIHMR, New Delhi has undergone internship training at **Gulf Medical College Hospital, Ajman (UAE)** from 18/3/2015 to 23/ 5/2015.

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

The Internship is in fulfillment of the course requirements.

I wish her all success in all his future endeavors.

Dr. A. K. Aggarwal
Dean Academics and Student Affairs
IIHMR, NEW DELHI

Ms. Divya Aggarwal
Assistant Professor
IIHMR, NEW DELHI

CERTIFICATE OF COMPLETION OF DISSERTATION

مستشفى جي إم سي
GMC HOSPITAL
"Healing through knowledge and wisdom"

ثومبي
THUMBAY

May 23, 2015

To Whom It May Concern

This is to certify that **Dr. Pratibha Ashwani Kumar** holder of Indian Passport Number Z2998066 was working in our institution as Management Trainee from 18th March 2015 till 23rd May 2015, as a part of dissertation of her P.G.D.H.M program. She has completed the assigned project.

We wish her all the best.

For **GMC Hospital and Research Centre, Ajman**

THUMBAY MOIDEEN
President

AFFILIATED TO GULF MEDICAL UNIVERSITY

ACCREDITATIONS & MEMBERSHIPS

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Certificate from Dissertation Advisory Committee

This is to certify that **Dr.Pratibha** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled "CRITICAL ANALYSIS OF THE PATIENT DISCHARGE PROCESS AT GMC HOSPITAL, AJMAN" in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Ms.Divya Agarwal,
Associate Professor
International Institute of Health Management & Research

Dr.Sadashiv Bangera
Assistant Director
PAD & Marketing Department

Certificate Of Approval

The following dissertation titled **"Critical Analysis of the Patient discharge process at GMC Hospital, Ajman"** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
S.V. Adkini	
VINAY TRIPATHI	
Dr Dhananjay.	

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Critical Analysis of discharge process of patients at GMC Hospital Ajman** and submitted by **Dr.Pratibha** Enrollment No. **PG/13/047** under the supervision of **Ms. Divya Aggarwal (Assistant Professor)** for award of **Post Graduate Diploma In Hospital and Health Management** of IIHMR, New Delhi carried out during the period from **18 March 2015 to 23 May 2015** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Dr. Pratibha
Roll No. PG/13/047
IIHMR, NEW DELHI

ABSTRACT

Hospitals around the country are struggling to provide timely access to inpatient beds. A lengthy and inefficient process of discharging inpatients from the hospital is an essential component that needs to be addressed in order to improve the quality of health care facility. This study involves tracking and understanding the process flow for discharge in non-insurance and insurance patients. Discharge process in hospitals is a big problem cause of delays which creates a lot of patient dissatisfaction as well loss of revenue as beds are not available in time. This project will try to understand the factors, reasons and causes of delay. Once the reasons for delay are understood make the right changes and rectify the causes for delay. This is to achieve an ideal time for discharge process to be completed. Here done critical analysis to study the inpatient discharge process in GMC Hospital, Ajman. This is a cross sectional descriptive study involving the review of patient discharges. The data will be recorded from the Hospital Information Management System to analyze the discharge process. Inpatient care areas of the Hospital – Left Wing & Right Wing were taken. Critical analysis of the Discharge process at GMC Hospital, Ajman was done from 20April, 2015 to 11 May, 2015 aiming to find the time taken for the discharge process in the hospital and study the different steps involved in the discharge process and time taken for every step. Two Tracking sheets were prepared-one for PAD & one for WARD. They were used as a data

collection tool and HIMS of GMCHRC also used. Process improvement is possible using the systematic methods used in this study along with rigorous data collection of pre and post interventions. To maintain these improvements, we must equip our healthcare leaders with the knowledge to adequately track and analyze our discharge data in real time. This will be accomplished using daily run charts for hospital that will be monitored by the Nurse Supervisors for their respective departments and wards.

ACKNOWLEDGEMENT

The success of any task would be incomplete without the expression of appreciation of gratitude to the people who made it possible .Though words fall short to express the sincere gratitude towards everyone who helped directly or indirectly in my endeavor. It is a pleasant aspect that I now have the opportunity to express my gratitude for all of them. This is a humble attempt in this regard. I would like to render my sincere thanks to GMC Hospital, Ajman for providing me with such unique learning experience.

I convey my deep and sincere thanks to Dr. A. K Aggarwal (Dean Academic and Student Affairs) and My Guide- Ms. Divya Aggarwal (Assistant Professor) for being helpful, supportive and receptive.

Most importantly I would like to thank my Hospital mentor **Dr. Sadashiv Bangera** (Assistant Director Patient Affairs and Marketing Departments of GMC Hospital Ajman) to question and take responsibilities, for his precious time and instructions support, guidance and motivation throughout the study period.

Mr. Avil Fernandez (Executive Patient Affairs Department**)** was instrumental in guiding us to design the study and helped us to successfully overcome any difficulty during the course of the study. Without his kind patronage, this work would not have been possible. We extend our heartfelt gratitude to him.

I am highly grateful to all the departmental heads and staff for giving me time in spite of their hectic schedule. Without their co-operation and warm attitude this project would have been a distant dream.

FEEDBACK FORM

Name of the Student: Dr. Pratibha

Dissertation Organization: Gulf Medical College Hospital, Ajman

Area of Dissertation: Patient Affairs Department

Attendance: 18th March, 2015 to 23rd May 2015 (100%)

Objectives achieved:
→ Critical analysis of the discharge process at GMC Hospital, Ajman
→ Probable recommendations for improving patient discharge process.

Deliverables:
→ New cost estimation strategies
→ New information giving strategies for enquiries.
→ Communication strategy.

Strengths: Has good knowledge of Healthcare Industry.
→ Integrity values are high.
→ Good team player & committed.

Suggestions for Improvement:
→ openness for new ideas.

28/5/2015

Signature of the Officer-in-Charge/ Organization Mentor (Dissertation)

Date: 23rd May, 2015
Place: Ajman, UAE

INTERNSHIP REPORT

CONTENTS

INTRODUCTION

What started in 1998 with the establishment of the Thumbay Group at Ajman, UAE by its founder, a visionary and third generation entrepreneur from India, Mr. Thumbay Moideen, blossomed into a diversified group with operations in Education, Healthcare, Medical Research, Diagnostics, Retail Pharmacy, Health Communication, Retail Optical, Wellness, Nutrition Stores, Hospitality, Real Estate, Publishing, Trading, and Marketing & distribution? Today, the Thumbay Group is a symbol for superior service, quality and innovation.

Venturing into new avenues of service with missionary zeal, the Thumbay Group has over the past decade spread its wings of excellence in various fields of social and business endeavors. The GMC Chain of Hospitals, the constituent teaching hospitals of Gulf Medical University, is one of the largest healthcare services providers in U.A.E serving patients from more than 175 countries. Similarly, Gulf Medical University attracts a student cohort of over 67 nationalities and faculty and staff from over 22 countries.

Apart from being an acknowledged leader in the health sector, Thumbay Group operates a reputed pharmacy chain, diagnostic centers, multi-brand retail outlets, world-class wellness centers, a prestigious chain of coffee shoppers, popular health & lifestyle publication, to name a few. An academic and entrepreneurial powerhouse, the Thumbay Group takes its strength from an empowered and loyal employee group exceeding two

thousand and two-hundred people, which has enabled Mr. Thumbay Moideen to emerge as a personality of eminence in the Arabian Gulf.

HOSPITAL PROFILE

GMC Hospital Ajman, Dubai, Sharjah & Fujairah are full-fledged multi-specialty hospital providing quality care at affordable prices. GMC Chain of Hospitals is one of the largest health care providers in the region. The group focuses on three pillars Education, Healthcare and Research.

GMC Hospitals aims to provide exceptional quality of care with latest technology, highly skilled medical work force from 20 nationalities, speaking more than 50 languages, treating guests from more than 175 nationalities worldwide with warm Arabian Hospitality.

GMC Hospital is managed by qualified professionals with wide ranging experience in Hospital Management and is well equipped to meet the challenging task of running a

state of the art medical facility. Its goal is to build lasting relationship with people and medical professionals in the region.

Vision

“Our vision is to make GMC Hospital a world class tertiary healthcare center and teaching hospital that is committed to patient safety and emerge as a trustworthy healthcare provider in academic settings in the region.”

Mission

“Healing through Knowledge and Wisdom” The mission of the GMC Hospital, Ajman is to provide comprehensive healthcare services of high quality and health education to the Community imparts excellent educational opportunities for students in a stimulating environment and promotes relevant bio-medical research.

GMC Hospitals Overview

Gulf Medical College Hospital (GMC Hospital), Dubai is a 150 bed multispecialty Hospital with cutting edge technology and is located at Al Qusais, Dubai. It is established to cater to the ever increasing need for quality healthcare for the people of the UAE and will be functional by mid-2014.

Gulf Medical College Hospital and Research Centre (GMCHRC), Ajman is a 250 bedsmulti-speciality Hospital with cutting edge technology having over 40 outpatient departments and is located in the heart of Ajman with easy access to patients from Dubai, Sharjah, UAQ and RAK apart from the local residents of Ajman. The multi-specialty hospital was established to cater to the ever increasing need for quality healthcare for the people of the UAE.GMC Hospital Ajman is the first hospital in the Middle East to receive International Accreditation from the Joint Commission International (JCI).

Gulf Medical College Hospital (GMC Hospital), Fujairah is a 60 bed multi-specialty hospital providing quality care at affordable prices. The hospital is equipped with various specialty departments and services supported by highly qualified and experienced doctors, technicians and trained nurses.

Gulf Medical Center and Dental Specialist center Sharjah is a modern satellite clinic consisting of departments like internal medicine, orthopedics, Radiology, Pediatrics, Obstetrics and Gynecology, Dental and in-house Pharmacy.

GMC Super Specialty Dental Center (Ajman and Sharjah). Together with exceptional knowledge in advanced Dental Techniques, Specialist dentists here are also known for their focus on patient satisfaction. GMC Super specialty Dental Center is the first hospital in the Middle East to receive Temos Certification.

Gulf Medical College Hospital & Research Centre, Ajman

Department of Internal Medicine

The department is staffed with highly experienced consultants and specialists rendering expert service in a caring and friendly environment. The subspecialties under internal medicine are

- Endocrinology and metabolism
- Gastroenterology
- Neurology
- Immunology
- Nephrology

The services offered include outpatient consultation, specialty clinics, 24 hours inpatient care, and emergency services.

Department of General Surgery

The Department of General Surgery is a full-fledged healthcare facility providing complete evaluation, diagnosis, and surgical treatment for a wide variety of disorders

The Department specializes in operations of

- Laparoscopic appendectomy,
- Laparoscopic Hernia
- Laparoscopic Cholecystectomy
- Laparoscopic Varicocelectomy

- Upper and Lower GI endoscopies
- Diagnostic endoscopies
- Colonoscopy
- Circumcision (for all ages)
- All general surgical, urological and gastroenterological procedures
- Breast Surgery
- Thyroid Surgery
- Anal Diseases Surgery- hemorrhoid, fistulae, and anal fissure
- Large bowel surgery like tumors and obstruction
- Small bowel surgery
- Gastric surgery
- Spleen surgery
- Urology surgery, testicular surgery.

Department of Obstetrics & Gynecology

The Department of Obstetrics &Gynecology of GMC Hospital provides comprehensive services to women in the treatment and management of gynecologic and obstetric conditions

From routine care to complex high-risk situations. Our maternity services manage and care for women during pregnancy, childbirth and postnatal periods. The department is fully equipped with

Maternity Unit

- Antenatal package
- Delivery package
- Modern Labor Suits
- Neonatal Intensive Care Unit
- Inpatient Wards
- Fully equipped operation theatre

Special Services:-

- Labor analgesia (Epidural) for painless delivery in labor suit
- Health Education- Antenatal Classes

Gynecology Department specialized in

Laparoscopic Surgeries: - Hysterectomy, myomectomy, ectopic pregnancies, ovarian cyst, etc.

- Diagnostic Laparoscopy for infertility evaluation
- Diagnostic and operative hysteroscopy
- Non Descent Vaginal Hysterectomy.

Department of Pediatrics

The Department of Pediatrics of GMC Hospital provides comprehensive healthcare services for children and adolescents below the age of 15 years old. The Department has Consultants A, Specialists A&B and resident

doctors to diagnose and treat infants and children with Cardiac, Gastrointestinal and Neurological problem.

Respiratory: Diagnostic and Management of bronchial asthma and other forms of allergy.

Facilities

- Ultramodern neonatal ICU with high facilities of preterm, respiratory distress, low birth weight management.
- Capsule phototherapy for severe neonatal jaundice.
- Vaccination Centre
- 24 Hours Specialist on Call

ENT Department

The department of ENT deals with all ENT related problems and emergency situations to provide full coverage of services. The department provides round the clock emergency services and Outpatient Services from Saturday to Thursday

The department specializes in the operation of:-

Adenoidectomy, Tonsillectomy, Uvulectomy, Uvulopalatopharyngoplasty, Submandibular Sialadenectomy, Submandibular Salivary Calculus Excision, Excision of neck swellings, Tongue tie release, FESS, Nasal Polypectomy, Septoplasty, Caldwell-Luc, Excision of oral lesions, Nasal bone fracture reduction, Parotidectomy, Auricular sinus excision, Window operation for auricular hematoma or abscess, Myringotomy, Grommet insertion, Myringoplasty, Tympanoplasty, Mastoid exploration, Direct Laryngoscopy, Hypopharyngoscopy, Oesphagoscopy, Fibroptic

Nasopharyngoscopy, Direct Laryngoscopy, Oesophagoscopy, Pediatric Bronchoscopy, CO Laser assisted Surgery etc.

Ophthalmology Department

The Department of Ophthalmology of GMC Hospital Ajman provides both basic and specialized eye care services for patients. Experienced Consultant provides specialized treatment for a wide variety of eye problems. Specialized equipment such as the argon laser for treatment of diabetic eye diseases, and computerized visual field analyses for assessment of glaucoma are available:

All surgeries are conducted at state-of-the-art operation theatres in the hospital.

- OCT - Topcon
- F.A - Topcon
- Field Exam (Perimetry) Humphrey
- Glaucoma Assessment- Applanation Tonometer Keeler - Field Examination (Humphrey)
- Optic Nerve Head Analysis (Topcon Image net system)
- Glaucoma operation by laser:

- Laser Peripheral Iridotomy
- Laser Trabeculoplasty
- Operation surgical
- Peripheral iridectomy
- Trabeculectomy
- Diabetic Retinopathy work up

- OCT macular assessment
- Filed Examination
- Fluorescein Angiography

- Fundus Photography

  • Diabetic Retinopathy Treatment

- PRP

- Grid Macular Treatment

- Itravitreal VEGF Injection

- Itravitreal Steroid Injection

- Focal Laser Treatment

  • Vein Occlusion and Branch Artery Occlusion Management

- Laser treatment to PRP (Pan Retinal Photocoagulation)

- Itravitreal VEGF Injection

  • Cataract Evaluation and Treatment

- ECCE Operation

- Phacoemulsification (coming soon)

• Pterygium Excision and Grafting

• Lacrimal Sac Operation

• Lid operation Including Cosmetic and Chalazion operation.

Orthopedic Department

The department of orthopedics is an independent department with its own scope of services i.e.,

Patient's care, medical graduate teaching and related clinical research; provided with the help of qualified MOH licensed physicians having vast range of knowledge and experience on various

Aspects of orthopedics on all the seven days of week

Type of Major Surgeries Performed

- Arthroscopy – diagnostic, for sport injuries of knee, shoulder and ankle joint.
- Spine, joint replacement surgeries.
- Diagnosis of Bone tumor, hand reconstruction surgery.
- Amputation.
- Pediatric orthopedics including corrective surgery for congenital deformities, like club foot, CDH.
- Tendon repair, reconstruction, including hand injuries.
- Soft tissue injuries of limbs.
- All types of advanced fracture fixation and dislocation cases.
- Bone, joint and spine infection.
- Degenerative joint disorders.
- Interlocking intramedullary nailing.

Dermatology & Venereology Department

The Department of Dermatology offers comprehensive care for all common and rare diseases of the skin, hair and nails. Dermatologists here offer safe and innovative care for their patients based on years of specialized experience and expertise.

Specialized services

- Dermatology Surgery
- Cosmetology- Botox and filler injections, Microdermabrasion, skin peels
- Electro Surgery
- Cryotherapy
- Phototherapy
- Laser Therapy- Hair removal, skin rejuvenation and acne scars.
- Venereology

Cardiology Department

The department of cardiology in GMCHRC is an independent unit, serving patients with various forms of heart diseases. The department provides all emergency cardiac consultation round the clock. The department is ready to receive emergency cardiac cases (CCU) 24 hours a day. The department is well equipped with centrally monitored beds, ventilators, Defibrillators and excellent medical supervision by highly qualified doctors and nursing staff.

Cardiology Department Services

- 12-Leads standard surface Electrocardiogram (ECG)
- Exercise Treadmill Test (Stress ECG)
- 24 Hours Continuous Ambulatory ECG Monitoring (Holter Monitoring)
- 24 Hours Continuous Ambulatory Blood Pressure Monitoring (ABPM)
- Echocardiography:

Adults:

- 2D & 3D Transthoracic Echocardiography (TTE)
- Trans-Esophageal Echocardiography (TEE)
- Pharmacological Stress Echocardiography
- Pediatric Transthoracic Echocardiography
- Neonatal Transthoracic Echocardiography

Urology Department

The Department of Urology at GMC Hospital is dedicated to provide state-of-the-art medical and surgical care in all aspects to male and female, as well as male infertility problems.

The Department of Urology in this hospital has the expertise to deal with the following conditions:

- Urinary Stones
- Congenital Anomalies

- Prostate enlargement
- Urinary infections
- Injuries to the Kidneys, Urinary bladder and Urethra
- Urinary Incontinence (urine leaks) in men, women and children
- Cancers of the Urinary Tract and Testis

Special services

- Day Care surgery
- Endoscopic Surgeries & Open urological surgical procedures
- ESWL (Shock wave treatment for stone diseases)

Anesthesia Department

Department of Anesthesia of GMC Hospital offers a wide range of cutting-edge anesthetic, perioperative and pain management services to patients.

The services provided are:

General Anesthesia, Spinal Anesthesia, Local Anesthesia.

Peripheral Nerve Blocks and Bier's block.

- MAC (Monitored Anaesthesia Care)
- TIVA (Total Intravenous Anesthesia) for Major Orthopedic,

General Surgery, ENT, Urological, Uro Surgery, Obstetric and Gynecological Procedures, Plastic and Reconstructive Surgeries, including Laparoscopic and Laser Surgeries.

In addition the department provides round the clock services

1. OT:

- Providing anesthesia inside the theatres
- Pre Anesthesia check-up Clinic (PAC)
- Post Anesthesia Care Unit (PACU)

2. ICU:

- Management of post-operative patients
- Management of critically ill patients
- Patients on ventilator support

3. Pain clinic:

- Labor epidural analgesia
- Post-operative pain management

4. Met call

Psychiatry Department

The Department provides consultation services through highly qualified and experienced Psychiatry Consultant. Services offered and conditions that may be treated are as follows,

- Evaluation and Treatment of Psychiatric disorders
- Different disorders among adults(anxiety, depression, panic, phobia and psychotic disorders)
- Psychological problems among elderly people.

- Psychological and behavioral problems among children.
- Psychological problems among people with epilepsy or Learning disabilities.
- Cases of substance abuse (addition) and associated psychological problems.

Counseling Services include:

- Marital Counseling Services.
- Family counseling to deal with domestic problems including those among adolescents.
- Educational advisory services to students at different educational levels.
- Evaluation and treatment of psychological problems among patients in collaboration with other departments in the hospital

Family Medicine Department

- Family Medicine Department provides health care services in an integrated holistic manner and in harmony with the other Departments in the Hospital.
- Family Medicine department provides: Physical, Social and Psychological Health care services in continuous, coordinated, integrated competent and compassionate manner care.
- Family Medicine department concerned with physical , social and psychological states of the patients and discover hidden agenda: family

stress, work stress and occupational hazards to reach Cause of illness or sickness through holistic approach during consultation interview, advices, counseling or during discussion of management plan with the patients.

List of services conducted

- Routine comprehensive health Checkup.
- Health Fitness examination and Fitness certificate
- Vaccination (Adult Vaccination) and issue of vaccination

(Pediatrics Vaccinations are running in pediatrics department).

• Traveller's medicine issue, advices, vaccinations recommended for travelling to different countries and malaria prophylaxis therapy.

• Early detection and management of Hypertension, Bronchial Asthma, Diabetes mellitus, Thyrotoxicosis and Gout.

Department of Gastroenterology

Department of Gastroenterology is devoted to the clinical care of patients with gastrointestinal and liver disorders. The department manages a variety of gastrointestinal and liver disorders, including peptic ulcer disease, gastro esophageal reflux disease, gastrointestinal bleeding, functional gastrointestinal disorders, inflammatory bowel disease, pancreatic-biliary diseases, acute and chronic liver disease.

Special services

- Endoscopy
- Colonoscopy
- Endoscopic Polypectomy for small polyps
- Diagnostic Biopsy of GIT

Department of Nephrology

The Department of Nephrology of GMC Hospital is a leading provider of services for patients with kidney disease, including the diagnosis and management of all forms of kidney diseases

(Including kidney stones). It’s also provides management of patients who are on CAPD (Peritoneal Dialysis) and Post renal transplants patients.

GMC Super Specialty Dental Centre

GMC Super-Specialty Dental center-Ajman is a unique oral health care center which renders super specialty services, and is the Only Accredited Dental Center in the Middle East by TEMOS

As a Super-Specialty Dental Center, the main specialties served are:-

1. Orthodontics and Dent facial Orthopedics.
2. Oral and Maxilla-Facial Surgery.
3. Periodontics (Treatment of gum).
4. Pedodontics (Treatment of kids).
5. Fixed & Removable Prosthodontics.
6. Implant Dentistry.
7. General Dentistry.

Radiology Department

In Gulf Medical Collage Hospital, Diagnostic Imaging Department plays a pivotal role in many clinical conditions by helping the clinicians to reach an accurate diagnosis and hence efficient treatment for patients.

Services

Most of the major advancements in the field of Radiology are available in the Radiology Department.

The full range of services includes:

- Digital Conventional X-Ray machines with Digital fluoroscopy.
- Portable X ray unit.

- Computerized Radiology system with Laser printer
- Ultrasonography examinations including Routine abdominal, pelvic & obstetric Scans, Breast, Thyroid, scrotal, musculoskeletal, Color Doppler studies, Endocavitary (Trans rectal and Transvaginal), cranial ultrasound. Ultrasound guided fine needle aspiration cytology is also available.
- DEXA Scan (Bone densitometry).

Additional services:

- Multi detector 128 Slice CT machine for Coronary angiography in addition to other routine examination with colonography and angiography facility.
- Digital Mammography

Neurology Department

Department of Neurology of GMC Hospital provides comprehensive consultative services, diagnostic testing and treatment for a broad spectrum of neurological conditions, including diseases of the brain, spinal cord, peripheral nerves and muscles. The department uses the latest technology and facilities, staffed by an experienced team of neurologists and nurses who are committed to patient's care.

GMC Hospital Neurology Department offers management of a variety of Neurological conditions in both adults and children includes:

- Different types of stroke
- Epilepsy, seizures and other types of unconsciousness
- Migraine and Headaches of different types
- Brain infections like meningitis, encephalitis, etc.
- Vertigo/dizziness
- Paralysis of different kinds
- Parkinson>s disease and other movement disorders
- Cerebral palsy and other developmental disorders of children
- Behavioural disorders
- Degenerative brain diseases
- Memory problems/ dementia
- Neck, back, lower back, arm & leg pains and tingling
- Cervical, lumbro-sacral spondysosis
- Some types of brain tumours
- Other neurological diseases

Clinical Nutrition Department

Clinical Nutrition Department mainly functions as two subunits namely: Inpatients Dietetics Department and Outpatients Nutrition Clinic.

• Nutrition Services of the Department include both medical nutrition therapy and nutrition education to both out patients and inpatients with the aid of personalized diet regimes, education handouts and therapeutic lifestyle management guidelines. The department is responsible for in patient's meal services according to the standard hygiene practices and recommended dietary guidelines.

Referral service

GMC Hospital is providing round the clock Outpatient and Inpatient services to the patients, referred from other clinics/ Hospitals. The hospital is equipped to carry out all outpatients, inpatient and Emergency services round the clock.

24X7 Facilities

- Emergency
- ICU-CCU
- Ultramodern Neonatal ICU
- Labor & Delivery Room
- Hi-Tech Laboratory

- Radiology – Diagnostics imaging & Services
- Pharmacy
- Doctor on Call facility
- Patient affairs department
- Ambulance Service

Special Features

- Wide ranging tertiary care services
- Separate IP & OPD blocks
- Male & Female wings
- Private rooms, Deluxe rooms, Smart Deluxe rooms
- Four well equipped Theatre and Post-operative care
- Day care facility
- New generation medical electronics
- Women’s Health Centre

Centre-Of – Excellence

- Orthopedics Total Knee Joint Replacement
- Total hip replacement
- Spine Surgery and joint replacement surgery
- Critical care medicine
- Reproductive medicine

- Plastic Surgery
- Urology
- Renal dialysis unit

Timings:-

Emergency Services – 24 Hours

In Patient Services - 24 Hours

Out Patient Services – 9.00 am to 9.00 pm

Friday Clinics – 5.00 pm to 9.00 pm

(Internal medicine, Gynecology, Orthopedic &Pediatric)

ANCILLARY DEPARTMENTS

- Accident & Emergency
- Laboratory - Pathology , Hematology ,Microbiology ,Blood Storage Centre
- Physiotherapy
- Pharmacy & Drug Information Center
- Patients Affairs
- Nutrition and Diet
- Patient Education
- Catering
- Biomedical Engineering
- Insurance
- Hospital Informatics
- CSSD
- House Keeping

Special Features

- Wide ranging tertiary care services
- Separate IP & OPD blocks
- Private rooms & deluxe Facilities
- 24 Hour emergency
- ICU- CCU & Labor Rooms
- Day care facility

- New generation medical electronics
- Traditional architecture with modern facilities
- Doctor on call facility

Key Highlights

- GMC Hospital, Ajman, UAE was inaugurated on 17th October by **H.H Sheikh Humaid Bin Rashid Al Nuaimi**- Member of Supreme Council, U.A.E and Ruler of Ajman.
- **First JCI Accredited Hospital in Ajman UAE**
- The First Private University Teaching Hospital in U.A.E.
- GMC Hospital conducts the highest number of deliveries in the private sector in U.A.E.
- Affordable prices and caters to population from all the Emirates.
- First dedicated Patient Affairs Department in the private sector in the country.

Accreditations – Memberships – Affiliations

In 2013, GMC Hospital Ajman received international accreditation from the Joint Commission International (JCI) and was the first hospital in the Middle East to be a certified member of the International Tesmos Network. Other Accreditations/memberships

Ministry of Health, UAE

Member - Medical tourism Association

International Hospital Federation

Tesmos, International Board of Medicine and Surgery

Tesmos Dental certification

Asian Hospital Federation

International patients

As a major Health Care Service Provider within the Gulf, GMC Hospital has taken great measures to improve all its services and procedures with the introduction of the International Medical and Health Care Tourism unit of the Hospital. Clients are provided with excellent

Health care services world class recovery measures as well as recreational therapy and Spa services.

Aim at GMC Hospital is to target a great volume of Medical Tourists travelling from all over the world with a great need for excellent and affordable medical health care services.

Enquiries come from all over the world from various hospitals, medical practitioners, personal contacts and enquiry portals seeking medical services.

Affordable Care

GMC Hospital has special schemes to provide affordable medical care to the economically weaker sections of the Society. Its mission is to provide affordable healthcare that doesn't compromise on quality. It is towards this end that they have established quality systems and controls that meet international standards of excellence in Healthcare.

GMC Hospital brings together highly skilled professional and the latest in medical technology. Their goal is to build lasting relationship with people. They believe that the healing process is as much about personal care as medical attention. It's this conviction that drives **Ajman's first ever private hospital.**

Work Done in Patient Affairs Department at GMC Hospital Ajman

PATIENT AFFAIRS DEPARTMENT (PAD):

Patient Affairs Department is one of the most important departments at any hospital. It's a main directory for patient's relatives and visitors to know about their rights and responsibilities. PAD is available 24x7 to assist the patients, family members and friends with any non-medical question or concern relating to their outpatient visit or hospital stay. The purpose of this SOP is to describe how patient affairs department at GMCH will provide and maintain quality inpatient services for the patients and their attendants. This SOP focuses on capturing elements of the quality care with respect to patient expectations. These elements include: the art of care (caring attitude); technical quality of care; accessibility and convenience; finances (ability to pay for services); physical environment; availability; continuity of care; efficacy and outcome of care.

Work Handled by PAD:

Patient Affairs department is the central core department of the GMC Hospital, Ajman. Its work starts in assisting the patient and its relatives from the time of their entry, involving their stay in the hospital to their exit. The works handled by PAD are enumerated below:

1. Admission
2. Discharge – Billing
3. Referrals
4. Procedure Estimations (Cost Estimation)
5. Delivery Packages
6. Gold Card processing
7. In-patient rounds
8. Insurance approval
9. Dealing with patient problems and complaints

Aims of the Department:

1. To make Patient /Patient's relatives to know about their rights and responsibilities during their care in the hospital.

2. To guide the patient/ handle the patient / patients relatives grievance about the care and thereby making patient stay more comfortable.

3. To minimize the waiting time for admission and discharge and thereby patient satisfaction.

Pre-admission process:

1. Customer or patients are welcomed to the hospital with a formal greeting and are attended quickly.

2. Pre Admission form is collected from the patient.

3. The staff checks the validity of the legal documents.

- Pre Admission Form
- Emirates ID of the patient
- Passport and visa (Patient and spouse)
- Marriage Certificate (in case of deliveries/ obstetric procedures)

4. Patients on request are given a suitable written estimate and all queries with regard to billing are explained to the patient prior to admission

5. The staff explains types of accommodation available, asks for the preference of the patient and checks for the availability of the rooms.

Admission Process:

1. After the pre admission process is completed, the Inpatient Authorization form is filled with required information such as:

- Patient Name, Age, Gender and Nationality.
- Name of the doctor.
- Diagnosis.
- Payment Mode
- Admission Date and time.

2. Initial advance deposit is collected and the consent of the patient/ relative is taken on the

"Agreement for settlement of payments" form and general consent.

3. Credit facility if offered only to the patients from corporate and insurance covered (Insurance) having tied up with the GMCHRC.

4. Advance is taken where in patient walks in without authorization from the insurance company.
5. If the patient has insurance limitation then nominal deposit is collected to recover the non-payable items
6. Once the admission form has been filled, the same is handed over to the care assistant (assisting the patient), to submit at the concerned nursing station for further care & management.
7. At the time of admission Pass is given to the patient

- For ward patient : one visitor Pass and attender pass only
- For room patients: Two visitor pass & One Attender Pass
- NICU – One visitor pass to the Father
- ICU- One visitor pass

8. In the event of non-availability of room desired by the patient, any available and suitable bed will be offered. Subsequently on availability the patient will be shifted to the desired bed.
9. If a hospital bed is not available the patient is referred to the nearest Government/Private hospital. If ambulance service is required the same is provided.
10. The patient is handed over a folder which contains Leaflet – Patient's Rights and Responsibilities, General Consent, In-patient Information sheet.

In-patient services:

Daily Patient Rounds

The administrative assistant meets with inpatient on a daily basis. Based on the patient feedback the administrative assistant coordinates with the respective HOD's in providing proper care to the in-patients.

Grievance Recording, Redress & Prevention:

The nature of the complaint and the details are recorded on the feedback form by the Administrative Assistant, PAD. The filled form is handed over to the HOD, PAD.

The HOD, PAD uses the Corrective Action Preventive Action (CAPA) form attached for necessary investigations. It is ensured that the complaint process is fair, impartial, and confidential.

INFORMATION CENTER & PROVISION OF INTERNET:

- Detailed information about various departments and scope of medical services available is provided to patient as and when required.
- Queries are directed to the appropriate department /consultant for information and resolution.
- If the patient wants to avail the internet facility, the PAD staff explains the tariffs and usage rates and collects the payment and issues the internet voucher to the patient/attendant.

Assistance with Billing:

Billing officer, Assistant Billing Officer and Billing Clerk explains the total bill, the amount paid and the outstanding bill on a daily basis to the patient or attendant.

DISCHARGE PROCESS

- The payment for the in- patient care is collected in the PAD; PAD staffs explain the bill and give detailed bill to the patient/ patient party. PAD staff ensures that the patient's bills are clear, easy to read, there are no queries and completely accurate.
- If the patient has any complaints regarding bill/ clarification on bill they will meet Assistant director Patient Affairs or Assistant director Medical Affairs.
- If the Patient has insurance, the nurses will inform the insurance department and PAD about the discharge, and PAD staffs prepares the bill and coordinates with insurance department, respective staff nurse and patient / patient party in settlement of bills.
- At the time of discharge the PAD staff enquires if the patient/attendant requires transport facility and arranges the same.

Second Opinion for OPD:

- If the patient need for a second opinion they can approach either PAD or Front Desk for the further consultation with the second person. PAD or Front Desk will either arrange for the consultation according to the patient's choice or they will be provided with a list

  of doctors that contains details of their nationality and the languages they can communicate, within the organization. After the decision made by the patient, an appointment will be taken for the second opinion.

Second Opinion IPD:

- In the inpatient department, if the patient need for a second opinion they can approach either the health care providers including the inpatient coordinator or directly to PAD for the further consultation with the second person. If the information has been given to the health care providers /inpatient coordinator, it will be communicated to the PAD. They will either arrange for the consultation according to the patient's choice or they will be provided with a list of doctors that contains details of their nationality and the languages they can communicate, within the organization. After the decision made by the patient, an appointment will be taken for the second opinion.

Second Opinion outside the organization:

In the inpatient department, if the patient request for a second opinion for consultation from an outside organization, the PAD will check for the reasons with patient/family and the patient will be discharged by signing a LAMA [Leave against Medical Advice] form.

In case of demise:

The PAD on duty is contacted by the nurse soon after a death is declared in any of the wards in the hospital. Upon receiving information, the PAD reaches the site where the deceased is. The PAD checks for

- MLC / non MLC status
- Full & Final settlement of bill
- Authenticity of the relationship of the next of kin to the deceased

In case the deceased is a Medico Legal Case, the deceased (body) is handed over to the representatives of the concerned police station in the presence of the immediate family member.

Workload in the Department:

1. Average Admission per day- 50
2. Average discharges per day – 50
3. Average packages explained per day (Walk ins) – 30
4. Average Package explained telephonically – 25
5. Average referrals taken per day – 6
6. Average estimation given to patients per day- 6
7. Average time taken for admission of the Patients – 15 min
8. Average time taken for preparing bill for self-payment – 15 min
9. Average time taken for preparing bill for insurance patient – 15 min

Observations/Learning

Patient Affairs Department is key department of hospital, but there are some things that can be done to make this department better for patients.

During my posting I observed some things, which I think if we can work on it can make this department better.

1) Instead of one executive PAD if there are two then it will help in smooth working of department.

2) Sufficient staff but what Department need is Arabic staff as there are many Arabic patients that come to department but we had only 2 staff who knows Arabic.

3) Problem with signage - Pad is divided into sections

1) Insurance (1)

2) Admission (2)

3) Enquiry (2)

4) Discharge (3)

5) Cashier (1)

There is problem with two sections

1) Insurance – No one has knowledge of insurance in PAD, for every query we sent patient to Insurance department.

2) Discharge- In the discharge section, Pad clerks do the discharge (Computer calculation) but patients think for billing they have to hand over paper to person sitting in this section , but actually patient had to hand over paper to cashier . So we can change discharge section name to inpatient billing.

4) Most of the people come to enquire about delivery packages. We give them only Photostat copy. Need to make them more presentable.

5. Work done besides Dissertation Study

1) Improving accuracy of Procedure estimates

Price **estimation** is the approximation of the cost of operation & overall expenses to be charged to the patient. Though it is mainly an approximate figure based on past experiences but it can affect the patient satisfaction in a big way

Methodology

- Frequently opted procedures were considered for our study which included Circumcision, Delivery package, Hernia, Appendectomy, Tonsillectomy.
- Bill estimation of procedures for past 3 months given by PAD taken .(dec 26- jan 25 2015, jan 26 to feb 25- 2015, Feb 25 to March 25-2015)
- Actual bills of procedures were compared with the above mentioned estimates.
- Sample : Total 60 cost estimates

Criteria considered

- Deviation (+/-) up to 10 % acceptable.
- Difference between actual bill and cost estimation more than 10% (Matter For concern)
- Only self-payment patients were considered

Result

- Out of 60 estimates, 36 estimates are showing more than 10% deviation.
- In these 36, majority of problem is in cost estimation of medicine and lab investigation.

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LIST OF ABBREVIATIONS

1. GMC – GULF MEDICAL COLLEGE
2. PAD – PATIENT AFFAIRS DEPARTEMENT
3. IPD – IN PATIENT DEPARTMENT
4. MRD – MEDICAL RECORDS DEPARTMENT
5. HOD – HEAD OF THE DEPARTMENT

Chapter 1

INTRODUCTION

1.1 Background

The discharge process is a challenge faced by all hospitals the world over. It effects the admission process, a lot of planned surgeries have to be refused sometimes, patients at the end of their stay once told they can leave are eager to leave. A delay due to any reason causes a lot of patient dissatisfaction and loss of revenue when they are unable to accommodate them. Thus hospitals are always striving to improve the discharge process and most important maintain the discharge timing to the minimum. In the present competitive world, quality of health care is playing an important role in the modern society. Among various factors affecting the health care system, discharge process is one of the important factors related to patient satisfaction. Discharge from the hospital is the point at which the patient leaves the hospital and either returns home or is transferred to another facility such as one for rehabilitation or to a nursing home. Discharge from hospital is a process involves the development and implementation of a plan to facilitate the transfer of an individual from hospital.

The discharge process is critical bottleneck for efficient patient flow. Slow or unpredictable discharge translates into a reduction in effective bed capacity and admission process delays. Patients can also be diverted to other hospitals. In fact, the discharge process and scheduling in patient

surgery rank as the two biggest factors impacting wait times for in- patient beds.

A good discharge process leads to:

A) Increase patient satisfaction

B) Decreased length of stay

C) Positive impression of the hospital

D) It will help hospital to get more number of patients by the way of referrals.

In effect, discharge delays create an upstream tidal wave of patient flow constraints which negatively impact the patient satisfaction, patient safety, hospital capacity and financial performance. So whether we look at the discharge process from the perspective of patient's wellbeing or the hospital's need to streamline bed capacity, the discharge process is of important aspect of modern hospital care.

It is increasingly evident that effective hospital discharges can only be achieved when there is good joint working between the departments of hospital organization, TPA, consultants, nurses, floor and bed managers, billing staff, pharmacy in the commissioning and delivery of services including a clear understanding of respective services, without this the diverse needs of the patients and the family members can't be met. Discharge planning should begin shortly after the admission of the patient in the hospital.

1.2 Rationale

As the final step in the hospital experience, the discharge process is likely to be well remembered by the patient. Even if everything else went satisfactorily, a slow, frustrating discharge process can result in low patient satisfaction. It is an important area which touches the patients' emotion; influence the image of the hospital and patient satisfaction. Therefore, the demand for effective health services is ever increasing. The discharge process represents the final contact between the patient and the hospital health professionals, and the outcomes of all procedures undergone by the patient are recorded at this stage.

Improving the quality of the discharge process should therefore lead to an increase in patient satisfaction. As a result patients are likely to return to a health center where they have experienced an efficient discharge process when they next seek treatment. In turn, efficiency and productivity are increased at the hospital .The delay in discharge process leads to dissatisfaction and affects the image of the hospital. The time management study on discharge process aims to give better services for the patient satisfaction within the minimum time and also to improve the financial performance of the hospital. This can be done only with the help of thorough study of time taken for the whole discharge process beginning from Discharge order time till the patient leaves the Hospital.

1.3 Observation

Following is the procedure which was observed before conducting the study on discharge process in the super specialty hospital.

1. Consultant comes for rounds in the morning & evening (in the IPD) and announces the discharge and briefs the concerned RMO for the discharge summary.
2. RMO prepares the discharge summary and gives to ward secretary for typing it and then is counter signed by the consultant.
3. In case of insurance patients, nurse indents discharge medications for patient through medical orderly after the summary is prepared.
4. Simultaneously, the concerned nurse arranges all the documents like investigation reports in discharge file &nurses checks for all the services to be added for final bill.
5. After this, the nurse intimates the discharge in HIMS both to PAD & Insurance.
6. The billing staff receives the intimation and check for the clearance from lab, pharmacy, etc. and makes the final bill.
7. The nurse is informed after the bill is generated and the attendants are sending to do the payment and get the clearance slip.
8. Attendants give the clearance slip to the nurse and nurse explains them the summary and handovers the discharge summary and investigation results to the patient.

9. Then, the patient leaves the hospital.

1.4 General Objective

Critical analysis of the patient discharge process at GMC Hospital, Ajman.

1.5 Specific Objectives

- To measure the average time taken for a discharge process in IPD of the hospital.
- To find out the factors leading to delay in the discharge process.
- To suggest the measures to improve the discharge process time.

Chapter 2

LITERATURE REVIEW

This chapter will review literature that emphasized the need for identifying delays occurring in hospitals that impede patient flow. With relevance to inpatient units, it will introduce some of what has been said and done in terms of discharge planning. It declares the call for recuperating this aspect of the patient's hospital experience as an effort that partakes in improving patient flow. Finally, research efforts that tackled the same issues using modeling techniques and tools used in industrial engineering will be referenced

In the present competitive world, quality of health care is playing an important role in the modern society. 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. It implies that the patient has previously been admitted to the facility. As the final step in the hospital experience, the discharge process is likely to be well remembered by the patient. Even if everything else went satisfactorily, a slow, frustrating discharge process can result in low patient satisfaction. It is an important area which touches the patients' emotion; influence the image of the hospital and patient satisfaction. Therefore, the demand for effective health services is ever increasing. 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" [1]. Sakarkar defines "discharge as the release of an admitted patient from the hospital" [2]. 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 [3]. Soon after completion of treatment, the patient as well as his or her escorts expects to be relieved off immediately. The delay in discharge process leads to dissatisfaction and affects the image of the hospital. 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. This we call Billing, which plays a vital role in the discharge process, which involves much of clerical work to be done in the billing office and demands time. 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 and billing process is undertaken with the aim of giving better services for the patient satisfaction within the minimum time. This can be done only with the help of thorough study of time taken for the whole discharge process beginning from Discharge order time till the patient leaves the Hospital.

Tracey M. Minichiello, Andrew D. Aurebach, Robert M. Watcher did a study to identify caregiver's perceptions of reasons for discharge delays at Moffitt – Long Hospital. The findings showed that nurses were much more likely than house staff or attending physician to cite inadequate communication as a reason for discharge delays. Nurses were also more likely to attribute delays to rounds and other conferences. Physicians, however, were more likely to cite delays in testing and availability of sub-acute care beds. Almost all house staff and attending thought that discharge decisions were generally made in the morning and over 60% felt that discharge orders were usually written before noon. In contrast, none of the nurses thought that orders were usually written before noon. It showed that caregivers at the same institution perceived different barriers to discharge and believed that discharge- related activities occurred at different times.

Therefore, to facilitate hospital discharge, communication gaps should be addressed and traditional morning routines should be reexamined.

J. Mellinghoff, A. Rhodes and M. Grounds did a retrospective study in 17-bed London teaching hospital ICU for three years to look at the processes and consequences that cause a delay in the discharge of patients from an adult ICU. They founded that there is a delay of over 4 hours occurred in 81% patient episodes .The delays in discharge to the wards increased by over 100% for the year following a reduction of 28 beds in total intra hospital ward bed capacity. There were over 42,000 hours (equal to 1,751 days) of delays in discharges for the patient episodes. Delays were caused by all stakeholders involved in the discharge process. The main reasons were insufficient ward bed availability (21%), delays in bed allocation (30%), delays in the completion of administrative tasks on the ICU (4%), delays in adequate preparation of ward beds (27%) for the arrival of the ICU patient, and delays that were attributable to intra hospital transport arrangements (5%).Discharge delays to surgical wards were twice as likely compared with medical wards as they were also trying to deal with elective and emergency surgical admissions. Medical wards had fewer delays in transfer but were more likely to have longer delay times as a result of subsequent delays in discharging patients back to the community.

SimaAjami and SaeedhKetabhi did a case study to analyze the discharge process at Kashani Hospital in Esfahan, Iran. This study was done on 448

patients and 40 hospital staff. Hospital staff included physicians, nurses, secretaries and personnel who worked in the accounting section, the social Centre, the cashier's office, and Para clinical wards in the hospital. The study founded that the average time for patients to complete the discharge process was 4.93 hours. The hospital personnel involved identified the main factors affecting average waiting time as patients' financial problems and distance between different wards. The reasons for the delay were that the physicians do not visit patients on time, delay by interns in completing the documentation summary sheet (Discharge Summary) in the medical record, absence of networked Hospital Information Systems, absence of guidelines for personnel involved in the discharge process, lack of patients' financial ability to pay their bills. The personnel's suggestions on how to reduce the length of the discharge process were punctual attendance by physicians, formulation of guidelines for personnel involved in the discharge process, determining a specific discharge time, implementing Hospital Information System networks, in-service training for personnel, and timely documentation by interns of the summary sheet (Discharge Summary) of the medical record.

The discharge process in hospitals is a problem faced by all hospitals world over there are subjective as well as objective reasons for the delays but delays do exist in every hospital no matter the changes made from time to time. Meeting and maintaining an ideal time for discharges makes a big

change in the whole hospital flow and a process from admissions to out-patient departments to planned surgeries.

There are 3 main ways that patients arrive at the hospital:

1. Accident and emergency cases

2. Walk in from the neighbourhood

3. Patients referred by other health professionals and doctors.

An admission is usually an emergency, accident or planned admissions for surgeries or procedures.

Discharge processes in hospitals are tracked from when the doctor advises discharge to when the bed is ready for the next patient. There are a lot of steps in this process. Once the doctor advises discharge the summary is prepared. Once the discharge summary is prepared the nurse gives the green light to the finance department to prepare bills while the nurse in charge gets the entire lab and radiology reports ready in a packet. Once the patient pays the bill or approval from insurance comes in the nurse goes and gives instructions to the patient. After all the formalities does the patient vacate the bed? Once the bed is vacated housekeeping is called in and the room/ward. This whole process is time consuming the ideal time for a discharge process is 30-40 minutes. Rarely does a hospital reach this mark even if they do it's tough to maintain this time for long. Maintenance is a challenge as a discharge process requires co-ordination of all departments and planning of discharge during admission itself (**Institute**

for Healthcare Improvement, 2010). Delays in the discharge process can be due to many reasons. In this review we will analyse the reasons for delays happening in the discharge process and corrective measures one can take to reach the ideal time of 30-40 minutes for a discharge to be completed.

Anthony et al, (YEAR)(2005) performed a multi-faceted process evaluation "Re-engineering the Hospital discharge" at Boston University-More house College of Medicine AHPQ Developmental Centre for Patient safety Research. The core principles of the discharge process were discussed and implemented. There should be roles and responsibilities for every step given to individual persons and they have to be held responsible if there is any delay or challenge faced in that particular step. Patient education and instructions are to be given throughout the hospital stay of the patient. Information must be exchanged freely from one department to the other and made available to all other departments. Discharge summary prepared should be a detailed summary with all medications, post discharge therapies, diet modification, lifestyle changes and instructions and follow up. Waiting to start the discharge process till discharge summary is received increases the probability of errors. Thus discharge process planning should start before the discharge day.

Donabedian (1980) explains how analysing the reasons of errors and use of safety net concept to make sure there are no errors by correcting them

before they happen. Errors and delay in discharge process are subjective and objective. Subjective are caused by the patient. They may not vacate the room in time as they don't have a ride arranged to take them back home, not having finances to pay the bill immediately or something as simple as having the meal at the hospital before vacating the room. Objective reason could be a constant delay by the pharmacy to get the medicines needed to give the patients before discharge or nurses not knowing about the instructions and education to be given to the patient before discharge. Thus knowing the errors and where delay is happening we can tackle them better.

Failure to coordinate admissions and discharges happens when discharges are not handled affectively. Planning discharges as soon as a patient is admitted should improve the discharge process. Especially for planned admissions where in recuperation after surgical procedures or surgeries can be predicted for 80% of the patients. If hospitals can plan discharge a day in advance and inform all parties involved the doctors and nurses about the discharge schedule of each patient they can in turn organise there day with the time they need to give for a specific patient. This way everyone knows beforehand and can plan accordingly making the discharge process a lot smoother.(Watcher**, 2008**).

Sheppard et al, (2008) started planning discharges in batches in time slots so everyone involved knows that for example 10:00 am-12:00 am is

discharge time for in patients for the day. This did not work for long as they realised discharge process can be a lot smoother if spread over the day instead of having ‘batch discharges’ every few hours.

Wilson, Gradidge (2014) conducted a project at Nepthean Hospital to improve time taken in discharge process and 30% of discharges should be before 10am. This was done to coordinate the difference between admission and discharge time at the hospital. To make sure the patients and attendants were satisfied with the admission and discharge process. By the end of the year the time taken for the discharge process had reduced significantly and 30% of the discharges were happening before 10 am. Extremely good and well thought out changes were made in the system where multi-disciplinary doctors would communicate regularly so to speed up treatment. Maintaining a ‘patient flow portal’ to understand and study the patient flow so as to forecast admission and discharge flow in the hospital. The concept of ‘transition lounge’ where patients waiting for admission can be comfortable. Before the transition lounge the patients were waiting in the accident and emergency ward. Also patients who have been discharged but are waiting for their ride back home, last dose of medication, and change of dressing can stay there. Also another good concept was ‘drop-in clinics’ where the doctor can meet with the patient after discharge for follow-ups so both patient can doctor feel assured and

confident about the discharge knowing they can come and see the doctor and patient again.

Columbus Regional Hospital in Columbus, Indiana was facing delays and patient dissatisfaction in discharge and admission process in the hospital. **Zingkraf (2010)** did a project on "Improving Inpatient Discharge time and patient satisfaction". He used Lean Sigma and DMAIC i.e. Define, Measure, Analyse, Improve and Control which is a data driven improvement cycle used for remodelling, enhancing and maintaining business processes and flow to decrease the time taken for discharge process. The first phase of the project was to DEFINE the root cause of the problem and define the objective of doing the project.

Phase 1

An initial review bought to light that most of the procedures in a discharge process were being done on the day of discharge itself. An improvement would result in the nurses spending less time on the discharge process and instead spending more time with the patient educating the patient. At the same time making sure all there queries regarding follow ups are sorted.

1. Increase in patient satisfaction.
2. Also availability of beds for surgical and emergency cases thus no shortage of beds in the hospital.

Next phase was to measure and understand the process flow.

Phase 2

The hospital discharge flow was described understood and broken down. A high level process map is made:

Table 2.1:-

Doctor writes Discharge order	The assistant enters the order	Nurses review order	Discuss discharge plans with patient	Reconcile Medication	Provide discharge instruction and education	Discharge patient from the unit

By studying the cycle and the discharge process it was clear that Step 2 is the hold-up in the discharge process.

After recognising the blockage in the process the management went on the next phase which was MEASURE.

Phase 3

The key measure for this process is when the doctor advises discharge to when the room is ready for the next patient. The average time this process was taking was 202 minutes. The auxiliary measure was patient satisfaction.

The next step in the project was ANALYZE the data.

Phase 4

The team used the process map to analyse the failures and effects of the project. They identified the risk areas and the possible root causes of failure.

Using the information gathered in the above four phase's changes were made in the discharge process with the procedures starting before the day of discharge. The changes were implemented in IMPROVE phase.

Phase 5

During pre-admission consultation/testing, surgery patients are informed about length of hospital stay, discharge date and time. Provide printed discharge instructions and supplies needed once discharged. During in-patient stay patients receive pre-printed instructions which the hospital can keep for top 5 medical treatments provided by the hospital. The predicted discharge time and date should be conveyed to the doctor, nurse, staff, patient and patient's family. Medicines and supplies should be conveyed and purchased a day before the discharge. Nurses should educate the patient about medication, hygiene care and instructions are given once again. On the day of discharge the night nurse makes notes of any last day education needs for the patient. The discharge nurse makes sure all the medication needed is there in the discharge packet along with supplies, prescription, lab results, instructions and discharge orders. The attending doctor confirms the medication given during discharge is right. Provide

final education and plan appointment follow ups with the doctor. If patient is discharged earlier than expected the discharge process is started with prompt being sent to all the departments concerned. Once these changes were made and implemented. The next phase which was CONTROL was put into place.

Phase 6

A plan was put into place to make sure that the change and improvements would continue with the nurses not falling back into the same habit of completing the formalities for discharge process on the day of discharge.

This project managed to achieve its goals with the discharge process which was taking 202 minutes previously to 115 minutes. Within a few weeks of executing this process the patient satisfaction in feedback forms for time taken during discharge process went from 47.6% to 76% indicating ‘very good’.

Petheridge (2004) studied how team work influences or curbs decisions regarding the discharge process in a hospital. Data was collected through observation, interviewing and focus groups in two wards in the hospital. The data collected was analysed and it was concluded that team work, leadership communication effected behaviour decision making regarding discharge process in hospital. Good leadership was the centre for exchanging and giving information building and representing the team

which would lead to good planning for discharge process. Good team is all about sharing roles responsibilities, learning to work together and have trust in team members. It was concluded that discharge planning and good process flow was dependent on good leadership and team work in a hospital.

Many hospitals today are trying to adopt a number of process improvement methods to address the problems faced by the healthcare delivery. (**Kim et al, 2006**).Lean production being one such method which was used by world class automaker Toyota. Lean has helped achieved success in both service and manufacturing sectors. Lean thinking requires removing all the waste and ensuring all operations add value and serve the customer's needs. Waste can arise from too many people doing the same job, staff busy with some other work, no one taking responsibility, no standard communication, no monitoring the discharge process. Leadership is extremely important in lean thinking for requiring somebody to constantly monitor all work is being done to specification.

A number of manufacturing principles have been applied in healthcare improve efficiency; one such example is Rhode Island Health School. **Valeria et al** (2012) applied different lean principles and tools in different steps in a discharge process in the regional healthcare unit. Various changes were made once the factors causing delays were understood. Proper step to step instructions with a flow map was given to the staff, error

proofing through checklists and making sure data entry for every step was being done so staff causing delay can be held responsible. There were many benefits seen with implementation of these changes seen by eliminating wastage in the process in form of time and motion. The discharge process improved leading to patient and employee satisfaction.

There has been a lot of debate if lean methodology has been helpful for patients and provided any added value to the quality of healthcare treatment given to patients. **Linskog and Nilsson (2010)** studied the outcome of lean thinking in Swedish healthcare and came to the conclusion that the majority of cases found in paper as well as during their study indicated lean methodology have helped in improving efficiency and productivity in healthcare. But there has not been much difference in the quality or value of healthcare treatment for patients.

Parr (2010) used 'KAIZEN BLITZ' in Backus hospital in Connecticut to improve the discharge process flow which would decrease time spent by patient in the hospital, higher revenues and increased patient satisfaction. Kaizen blitz used A3 which are problem resolving processes which come from the Toyota production system of lean manufacturing and quality management. A3 processes are error free, waste free, quick response to challenges keeping individual patients in mind. Kaizen blitz or Rapid cycle improvement (RCI) is a quick improvement process taking 2 days to implement and focuses on eliminating waste, giving responsibility to staff.

Once the factors causing delays, errors and wastage were found the improvements were made. Kaizen blitz and A3 were accepted and a success in the hospital as it is continuous where small changes are made over multiple blitzes, low cost and fast. Further success in previous blitzes creates positive energy in the team and more changes are accepted faster.

Fine et al (2009) faced a lot of challenges implementing lean methodology, kaizen in a healthcare unit in Canada. There was a lot of fear seen in staff as they felt implementing lean means losing jobs so they were resistant to accepting changes. Staff was sceptical about lean, with so many previous process flow change failures. It was tough to get medical professionals to plan and talk about improvement. They were resistant as they were not comfortable with 'fees for service' or other such lean schemes being introduced. Lean is a long term commitment so continuing with it and not giving up is very important for improvement to be seen over a period of time. Tactics such as assuring the staff that no jobs would be lost cause of lean assured the staff which bought a lot of positive energy and a good response to lean. One way to get medical professionals interested is by paying them or addresses the question WITM (What's in it for me). In this project they picked on bottlenecks that were a problem for the professionals and implemented lean to show how effective lean can be. To sustain lean for longer one must make it a part of daily operations; here they held kaizen events every month.

Olive, Brown (2009) reported how healthcare organisations are changing in 21st century. The TPS (Toyota Production System) has bought on a revolution of sorts introducing lean methodology, Just in time, Kaizen events into healthcare. TPS focuses on the team and process flows. There is minimum focus on technology and tools. TPS focuses on the entire work flow in a hospital and not a single process or department. Using TPS tasks are easier, structured process flows increase efficiency with least wastage. JIT(Just in Time) was introduced there is no delay in operations by providing what is needed , when its needed and providing the quality needed. JIT ensures that the staff is always provided with what they need when they need and quantity then need to make sure they can meet the demands of the patient in the process flow. JIT is very cost effective and reduces expenses on materials. They immediately provide then store.

CHAPTER 3

METHODOLOGY

The GMC hospital is the biggest and one of several autonomous hospitals based in the Ajman, United Arab Emirates. The main objectives of this research were to analyze the patient discharge process within Inpatient Department. By receiving permission from the director of the hospital, the research process was started from data collection.

This chapter describes and explains the methodology applied for the research project. As mentioned above this thesis is a study of “Critical analysis of patient discharge process at GMC Hospital, Ajman”. The project started on the 20 April, 2015 where patient discharge flow is tracked every day. The discharges were tracked by observation and also confirmed using the HIMS. The first week on this project the discharge flow was understood. Informal interviews were conducted with the PAD Executive and Inpatient co-ordinator to understand the challenges and reasons for delay in discharge process of patients.

3.1. Study Design

It is Cross sectional Descriptive study involving the review of patient discharges.

3.2. Study Population

The patients getting discharge from the IPD in the GMC hospital were observed and tracked for the study from 20 April to 11th of May in 2015.

3.3. Sample Size

Total 150 patient discharge cases were observed and followed for the discharge process study.

3.4. Sampling Technique

Convenience Non Probability Sampling Method was adopted for the selection of samples.

3.5. Data collection techniques:

Following was the plan followed for the data collection:

Primary data was collected through

1. Direct observation of discharge process in IP Department of the hospital.
2. Discussion with treating Physician, RMOs, nurses and other service providers.
3. Billing information was collected from HIS & PAD.

3.6. Data collection tools:

Data was collected through an Observation Tracking sheet-one for PAD & one for WARD containing the following components:

1. Name of the patient
2. Mode of payment
3. Time at which consultant announces discharge
4. Summary start time and end time
5. Time at which nurse indents the medicine and receives the medicines for insurance patients.
6. Time at which bill is intimated
7. Time at which insurance approval is done
8. Time at which bill is generated
9. Time at which payment of bill is done
10. Time at which patient is discharged from the ward

3.7. Procedure

The data was collected from 20 April to 11th of May in 2015. All respondents were selected from the patients who were visited discharged from the Inpatient Department at the data collection period.

3.8. Data analysis: Microsoft Excel 2010 was used to analyze the data

CHAPTER 4

RESULTS

The data was collected for 150 patients including the cash payment and insurance payment in the GMC hospital. The duration of each process has been noted down and the total time taken for each activity was computed. The parameters which were computed are as follows:

1. Time when doctor comes for round and announces the discharge
2. Time taken for completing the discharge summaries
3. Time taken for typing the discharge summary by the ward secretary.
4. Time taken for indenting the discharge medications and receiving the medications.
5. Time taken between intimation of bill and generation of bill
6. Time taken for final insurance approval
7. Time taken between generation of bill and payment of bill.
8. Time taken when patient physically leaves the bed after clearance given by billing clerk.

- Total 150 discharges were followed. Out of which, 116 were self-payment and remaining 34 were Insurance patients.
- Following parameters were observed and computed to know the time taken for each activity.

FOR INSURANCE PATIENTS

Graph 4.1

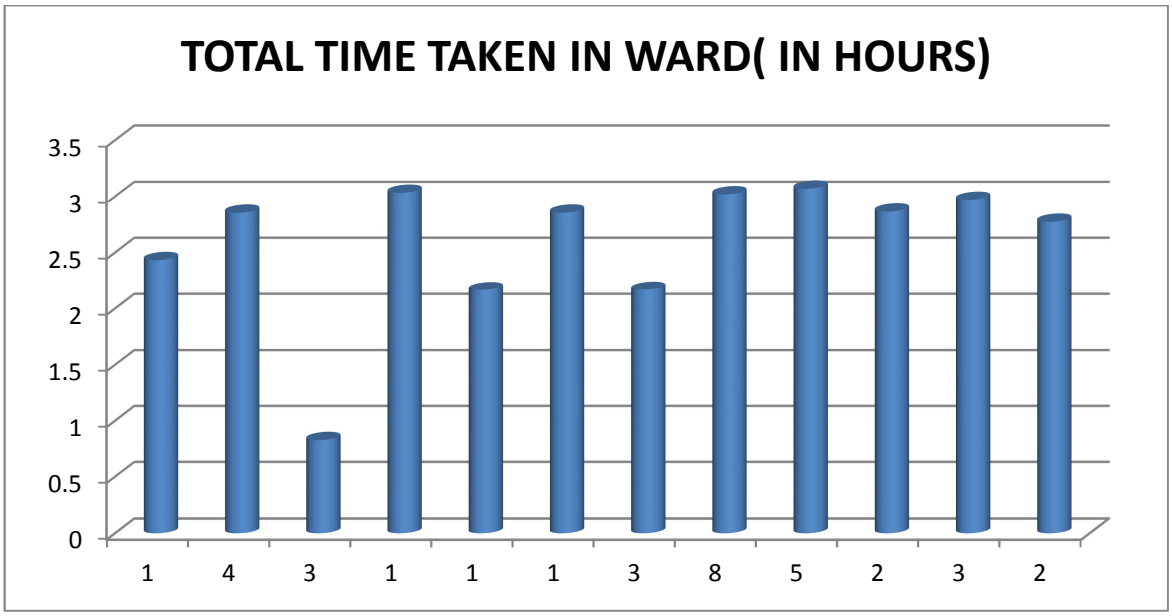


Table 4.1

NOS. OF DISCHARGES	TOTAL TIME TAKEN IN WARD (IN HOURS)
1	2.433333333
4	2.85
3	0.83
1	3.033333333
1	2.166666667
1	2.85
3	2.17
8	3.02
5	3.07
2	2.86
3	2.97
2	2.77

Average time taken by the insurance patients in ward after discharge order given by the treating physician till the patient leaves the room is 4.04 Hours.

Reasons for delay:

- In case of insurance patients so much time is taken in wards only in getting medicines from the pharmacy by the medical orderly because there is only one medical orderly assigned for each ward. She alone has to do so many things like :

- ❑ Getting insurance medicines from the pharmacy
- ❑ Changing bed sheets
- ❑ Bringing sterilized instruments to and fro from ward and to operation theatre also.
- ❑ Preparing delivery kits
- ❑ Changing pads of the patient
- ❑ Taking blood samples to the laboratory

- Nurses are assigned 6 to 7 patients and they also assist consultant on rounds and start their process after the completion of the rounds leading to delay.

Graph 4.2

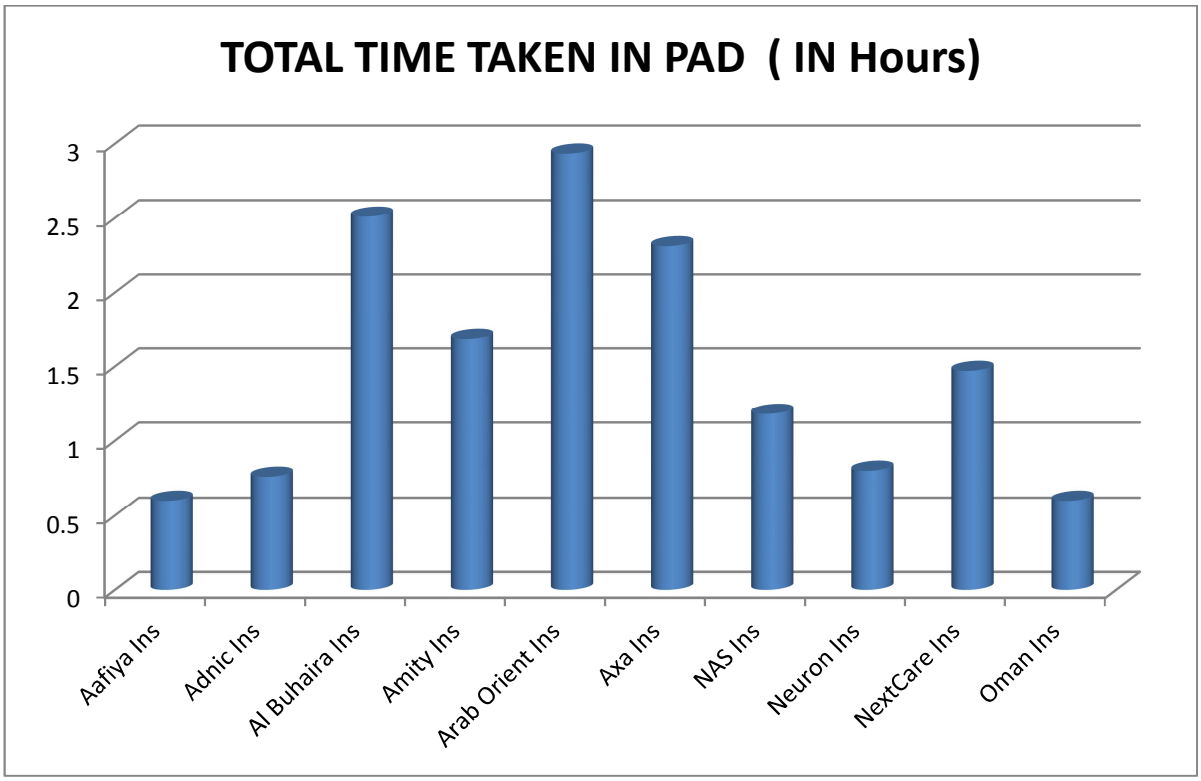


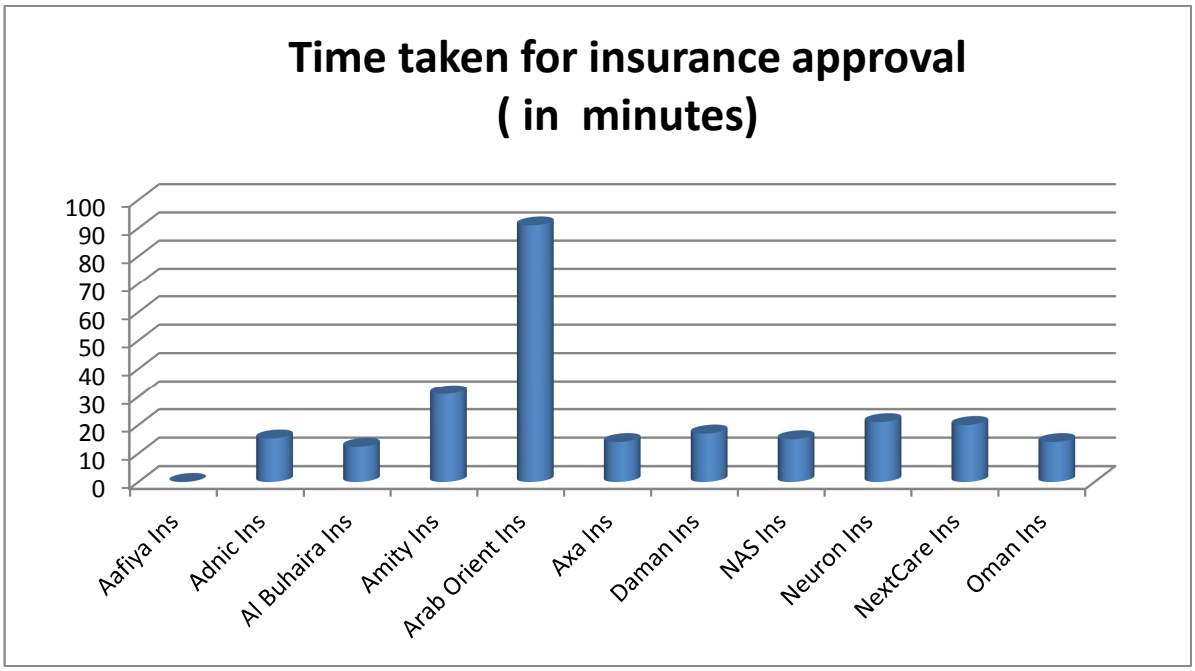
Table 4.2

TYPE OF PAYMENT	TOTAL TIME TAKEN IN PAD (IN Hours)
Aafiya Ins	0.6
Adnic Ins	0.76
Al Buhaira Ins	2.51
Amity Ins	1.683333333
Arab Orient Ins	2.933333333
Axa Ins	2.31
NAS Ins	1.18
Neuron Ins	0.8
NextCare Ins	1.47
Oman Ins	0.6

- Average time taken by the insurance patients for discharge from PAD is 2 Hours 30 min.
- Discharge from PAD requires preparation of draft for bill after receiving intimation from nurse and insurance approval from Insurance department and payment by the patient party taking final clearance from billing clerk.
- Reasons for delay:

❑ Time taken for insurance approval from the insurance department takes time.
❑ According to the study Arab Orient Insurance took maximum time for approving.
❑ Sometimes patient party delay for payment.

Graph 4.3



- Average time taken for insurance approval is 23 minutes.
- Maximum time taken for insurance approval is by Arab Orient Insurance

Graph 4.4

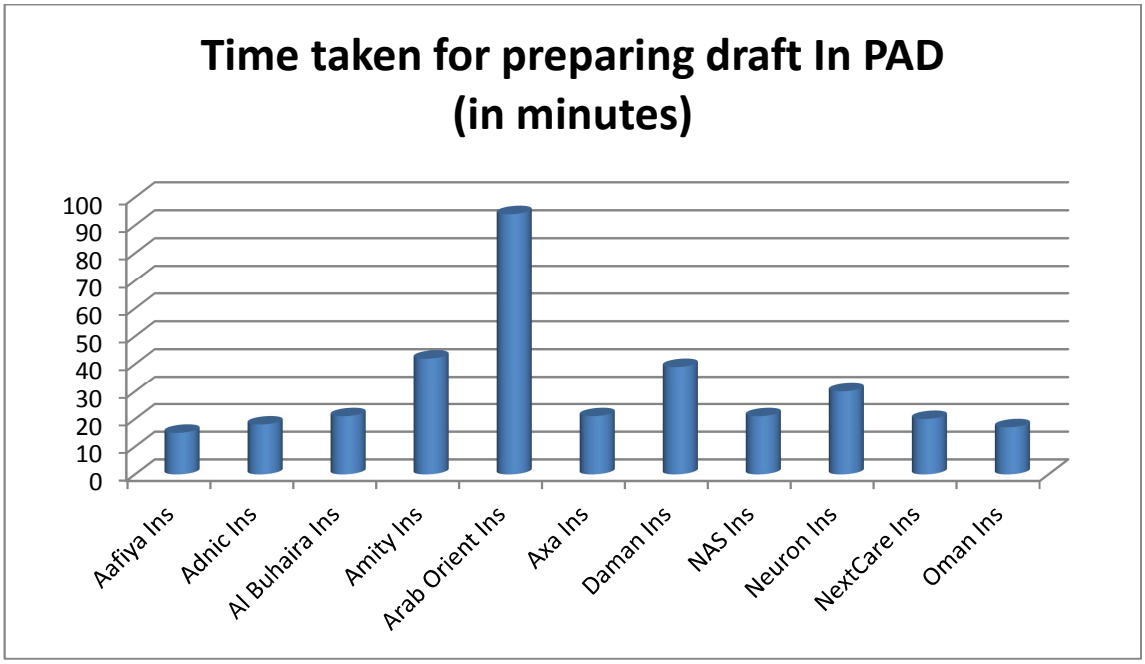


Table 4.3

TYPE OF PAYMENT	T(MIN) (time taken for preparing draft In PAD)
Aafiya Ins	15
Adnic Ins	18
Al Buhaira Ins	21
Amity Ins	42
Arab Orient Ins	94
Axa Ins	21
Daman Ins	39
NAS Ins	21
Neuron Ins	30
NextCare Ins	20
Oman Ins	17

- Average time taken by the Patient Affairs Department to prepare the draft of the bill after intimation is received from the nurse for insurance patients is 31 minutes.
- Time taken for drafting will depend upon when the insurance approval will come from the insurance department that further will depend upon different insurance companies.

Graph 4.5

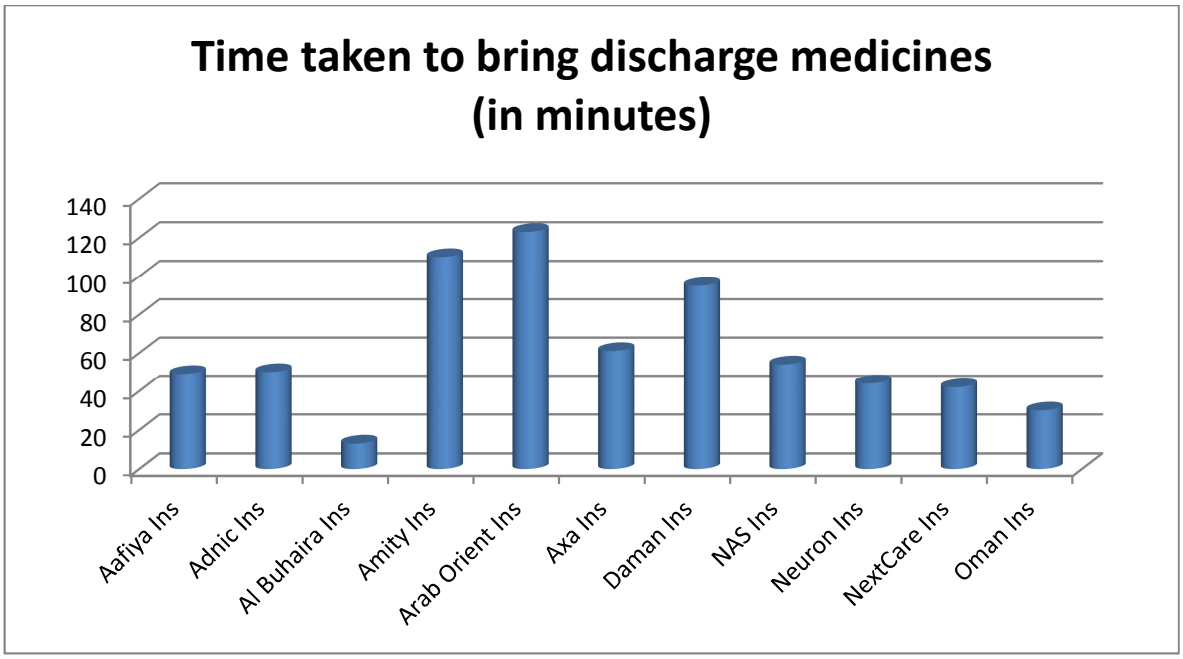


Table 4.4

TYPE OF PAYMENT	Time taken to bring discharge medicines
Aafiya Ins	49
Adnic Ins	50
Al Buhaira Ins	13
Amity Ins	110
Arab Orient Ins	123
Axa Ins	61
Daman Ins	95
NAS Ins	54
Neuron Ins	44
NextCare Ins	42
Oman Ins	30

- Average time taken for bringing the insurance medicines from the pharmacy for the insurance patients is 61 minutes.
- In case of insurance patients so much time is taken in wards only in getting medicines from the pharmacy by the medical orderly because there is only one medical orderly assigned for each ward. She alone has to do so many things like:
- Getting insurance medicines from the pharmacy
- Changing bed sheets
- Bringing sterilized instruments to and fro from ward and to operation theatre also.
- Preparing delivery kits
- Changing pads of the patient
- Taking blood samples to the laboratory

Graph 4.6

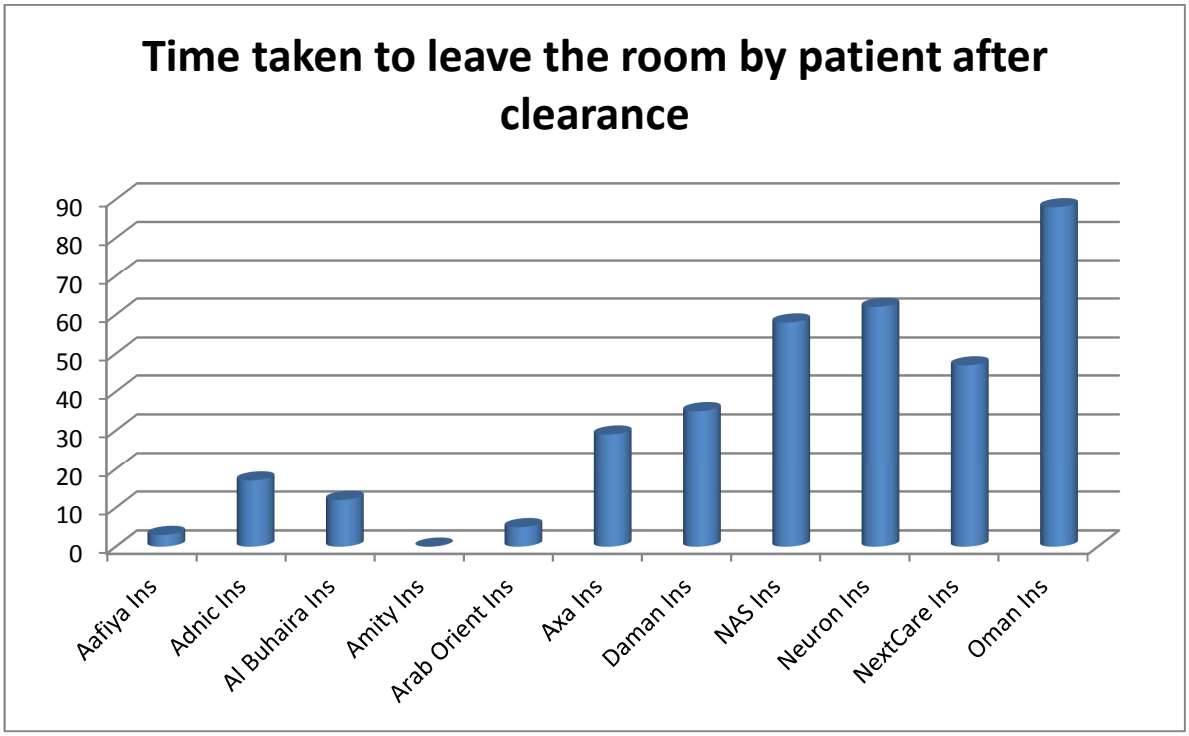


Table 4.5

TYPE OF PAYMENT	Time taken to leave the room by patient after clearance
Aafiya Ins	3
Adnic Ins	17
Al Buhaira Ins	12
Amity Ins	0
Arab Orient Ins	5
Axa Ins	29
Daman Ins	35
NAS Ins	58
Neuron Ins	62
NextCare Ins	47
Oman Ins	88

- Average time taken to leave the bed by the insurance patient after clearance given by the PAD billing clerk is 32 minutes.

FOR SELF PAYMENT PATIENT

Table 4.6

TIME TAKEN FOR PREPARING DISCHARGE SUMMARY BY RESIDENT DOCTOR	TIME TAKEN FOR TYPING DISCHARGE SUMMARY BY WARD SECRETARY	TIME TAKEN FOR PREPARING DRAFT BY PAD	TIME TAKEN BY THE PATIENT TO VACATE THE BED AFTER CLEARANCE GIVEN BY THE BILLING CLERK
25.04 MIN	36.13 MIN	16 MIN	50.38 MIN

FOR INSURANCE PATIENTS

Table 4.7

TIME TAKEN FOR PREPARING DISCHARGE SUMMARY BY RESIDENT DOCTOR	TIME TAKEN FOR TYPING DISCHARGE SUMMARY BY WARD SECRETARY	TIME TAKEN FOR INSURANCE APPROVAL	TIME TAKEN FOR PREPARING DRAFT BY PAD	TIME TAKEN BY THE PATIENT TO VACATE THE BED AFTER CLEARANCE GIVEN BY THE BILLING CLERK
25.04 MIN	36.13 MIN	22.54 MIN	30 MIN	50.38 MIN

OBSERVATION

- The Intra processing time (outside the billing department) for discharge process was more than the Inter processing time (inside the billing department).
- Average time of 25 min was taken for the Inter Process for each patient i.e. time taken for the activities within the billing department. Whereas it takes more than six times for Intra Processing time, i.e. 1:85 hours for the activities outside the billing department.

DISCUSSION

The purpose of this study is to find the bottlenecks in the discharge process and to improve the discharge process. The data was collected in 21 days time and the time taken for each activity was calculated. It was found that the duration of discharge process (5.4 hrs) for insurance payments is more than that of cash payment (3.44 hrs) discharges. The average time taken for discharge process both for insurance as well as self payment patients is about 4.5 hours. The consultants come more early for rounds for discharges but still it takes more time because the time when consultant announces the discharge, RMOs and nurses are assisting them for rounds. RMOs start writing summary after the completion of rounds. At this time, nurses are assisting them and also giving the medications to their patients so they start

the arranging documents in discharge files late and causes delay in discharge process. The time taken to write discharge summaries is around 25.04 minutes both for cash as well as insurance patients. In some cases, it was found that summaries were ready but were not signed by consultants so it takes much time to get signed. Then the average time taken by the ward secretary to type the discharge summary is around 36.13 minutes. The average time taken by the medical orderly to bring the discharge medicines from the pharmacy for the insurance patients is 1 hour 7 minutes. So much time is taken for bringing discharge medicines because of only one medical orderly in each ward. The time taken by billing staff to prepare the draft after receiving initiation from nurse station is 16 minutes for self payment patients and 31 minutes for insurance patients. Time taken for insurance approval is 22.54 minutes and maximum time is taken by the Arab Orient Insurance. Average time taken by the patient to vacate the bed after the clearance given by the billing clerk is 50.38 minutes.

Long time taken for discharge process leads to unnecessary bed occupancy, this affects both, the existing patients to be discharged and the new admissions in the hospital. Failure to synchronize admissions and discharges commonly results when discharges are not managed efficiently. Creating a more consistent and predictable discharge schedule can help improve flow.

RECOMMENDATIONS

After the completion of data collection and observing the bottlenecks, certain recommendations were made to improve the process which is as follows:

1. **TIME WHEN DOCTORS COMES FOR ROUNDS AND ANNOUNCES DISCHARGE**:

- Consultants should come early for the rounds and should see the patients first who are going to discharge as consultant's intimations is the first step and rest all depends on it.
- Number of planned discharges can be increased.
- Consultant can intimates for the patients whose discharge is planned.

2. **TIME TAKEN TO COMPLETE THE SUMMARY**:

- No. of planned discharges should be increased so that summaries can be made prior to discharge date.
- Otherwise, provisional summaries should be ready before the discharge date and daily summaries should be updated so that it becomes easy for RMOs to complete the summary on the discharge day.

3. TIME BETWEEN THE ANNOUNCEMENT OF DISCHARGE AND COMPLETION OF SUMMARY

- Consultant should intimates for the discharges as soon as they come and provisional summaries should be made before the discharge date.

4. TIME TAKEN FOR THE MEDICINE INDENT AND RECEIVEING OF MEDICINES:

- Pharmacy should be more active in delivering the medications of discharged patients.
- E prescription can be made
- Nurses should intimate for medications as soon as the summary is prepared or doctor tells about the discharge medications.
- Number of medical orderly should be increased

5. TIME TAKEN FOR THE BILL INTIMATION AND GENERATION OF THE BILL:

- Nurses should enter the charges for the medications and investigations at the time and point of consumption.
- Insurance department should be more active and bring fast approvals so that bill can be generated fast.

6. TIME BETWEEN THE GENERATION OF THE BILL AND PAYMENT OF THE BILL

- Billing staff should call the concerned nurse as soon as bill gets generated.

RECOMMENDATIONS

- Discharge planning should be initiated as soon as patient gets admitted to the hospital.
- Effective and timely discharge can only be attained by interdepartmental coordination and proper communication between all the team members involved in discharge process.
- Doctors should be advised to prepare the discharge summaries prior to the discharge date.
- Night duty RMO s should be informed about the next day discharges and should prepare the provisional summaries.
- Proper CPRS training to RMOs and HIS training to nurses should be given.
- Nursing team leader should be given the permission to intimate for the patient discharge in HIS if the concerned nurse is busy with her patients.
- Cake cuttings which lead to delay in discharge process of delivery cases can be done one day prior to discharge date.
- Update the patient assessment daily.
- Charges for the medications and investigations can be entered at the time and point of consumption and generate up-to-date interim bills and minimize billing errors.
- Return discontinued medications daily in the wards.
- Send an automatic SMS to patients and families when the bill is generate

- E-discharge summaries by Doctor/Resident Doctor itself.
- E-prescription so that no need of medical orderly
- Number of medical orderly should be increased as there is only one medical orderly leading to delay in bringing discharge medicines
- Patient by stander should be informed 1 day prior the discharge and should be made to pay if delay is from their side.
- Floating nurse
- All departments involved in the discharge process should be adequately staffed, depending on the patient load in the hospital.There should be roles and responsibilities for every step given to individual persons and they have to be held responsible if there is any delay or challenge faced in that particular step.
- Discharge process planning should start before the discharge day.
- Planning discharges in batches in time slots (for example 10:00 am-12:00 am) is discharge time for in patients for the day. This did not work for long as realised discharge process can be a lot smoother if spread over the day instead of having ‘batch discharges’ every few hours.
- One leader as a ward manager should be there to look after the whole inpatient flow as good leadership was the centre for exchanging and giving information building and representing the team which would lead to good planning for discharge process.

CONCLUSION

The aim of the hospital is to improve the quality of discharge process because an improvement in discharge process can increase patient satisfaction immensely as discharge is one of the most common reasons for dissatisfaction in the In–patients. Therefore, the timing of each step involved in discharge process was measured so that delays can be detected easily and the discharge process can be optimized. Long time taken for discharge process leads to unnecessary bed occupancy, this affects both, the existing patients to be discharged and the new admissions in the hospital.

From this study, it was found that the total average time taken for the patient to be discharged in GMC hospital of Ajman was 4 hours 05 minutes. It was observed that the Intra processing time for discharge process was more than the Inter processing time. Average time of 25 min was taken for the Inter Process for each patient i.e. time taken for the activities within the billing department. Whereas it takes more than six times for Intra Processing time, i.e. 1:58 hrs for the activities outside the billing department. According to Kulkarni in his book “Hospital Management Accounting, Planning and Controlling, he states that the Patients should not wait for more than 15 minutes at the time of discharge. This clearly indicates that there is delay in discharge process in this GMC

Hospital Ajman and is one of the factors that eventually lead to patient dissatisfaction.

LIMITATIONS OF THE STUDY

1. The study was conducted for limited period of one month only.
2. The sample size is limited to only 150 discharge cases.
3. This study is conducted to measure the average duration of only two types of discharges i.e. cash and insurance patients.

ANNEXURE

DISCHARGE PROCESS TRACKING SHEET FOR THE WARD							
S.NO	**HOSPITAL I.D**	**TYPE OF PAYMENT (Self/Insurance)**	**DISCHARGE ORDER TIME BY THE PHYSICIAN**	**TIME TAKEN FOR PREPARING DISCHARGE SUMMARY**	**TIME WHEN DISCHARGE SUMMARY IS EDITED BY THE WARD SECRETARY**	**TIME TAKEN FOR RECEIVING DISCHARGE MEDICINES (for insurance patients)**	**TIME WHEN PATIENT IS DISCHARGED FROM THE WARD**

DISCHARGE PROCESS TRACKING SHEET FOR THE PAD						
S.NO	HOSPITAL I.D	TYPE OF PAYMENT (self/insurance)	TIME WHEN THE DISCHARGE INITIATION IS RECEIVED IN PAD	TIME WHEN DRAFT INVOICE IS COMPLETED	TIME WHEN FINAL INSURANCE APPROVAL IS DONE	TIME WHEN CLEARANCE IS GIVEN BY THE BILLING CLERK

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