Summer Training at

(April 9, 2012 to June 2, 2012)

By
Parkhi Kumar

Under the guidance of
Dr. Seema Mehta

Post Graduate Diploma in Hospital and Health Management
2011-2013

Institute of Health Management Research,
Jaipur
2012

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CERTIFICATE

This is to certify that Miss Parkhi Kumar from Institute of Health Management Research, Jaipur has undergone Summer Training at Medanta- The Medicity Hospital , Gurgaon from April 9th to June 2nd 2012.

The candidate herself carried out all the studies related to her Summer Training. Her approach to the studies has been sincere, scientific and analytical. This summer training is partial fulfillment of the course requirement and is recommended for the award of Post Graduate Diploma in Hospital and Health Management.

I wish her success for future endeavor.

Dr. P.R Sodani
Dean, Academic & Student Affairs
IIHMR-Jaipur

Dr. Seema Mehta
Assistant Professor
IIHMR-Jaipur

Global Health
Private Ltd.

Date: 2nd June 2012

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Parkhi Kumar** student of **IHMR, Jaipur** has completed her 2 months internship in the department of **Medical Administration** from **9th April 2012** to **2nd June 2012** with **Global Health Private Limited (GHPL), Medanta The Medicity Hospital, Gurgaon (Haryana).**

Very truly yours,

For **Global Health Private Limited**

Arvinder Bagga

Vice President - HR

Regd. Office: E-18, Defence Colony, New Delhi 110 024, Ph.: +91 11 4411 4411 Fax: +91 11 2433 1433

Acknowledgement:

Apart from our efforts, the success of any project depends largely on the encouragement and guidelines of many others. I take this opportunity to acknowledge and extend my heartfelt gratitude to the following persons who have made the completion of this project possible:

First and foremost, I would like to thank my mentor Dr. Seema Mehta for the valuable support and guidance at every point of the project work.

Then I would like to thank to Mr. Pankaj Sahni, COO, for the valuable guidance and advice. He inspired me greatly to work in this project. His willingness to motivate me contributed tremendously to our project.

Deepest gratitude is also due to the Medical Director , Dr. Nalini Kaul ,Medical Superintendent, Dr. Awadhesh Kumar Dubey and Clinical Associate, Dr. Om rathore without their knowledge and assistance this study would not have been successful.

Words are inadequate in offering our thanks to the Hospital Administrators (Dr. Renuka Dewan, Dr. Richa Bakshi , Dr. Preet Verma) and Hospital Staff for their encouragement and cooperation in carrying out the project work.

Finally, yet importantly, I would like to express my heartfelt thanks to my beloved parents for their blessings, my friends/classmates for their help and wishes for the successful completion of this project, and to God, who made all things possible.

These two months of training has added a valuable and knowledgeable exposure in the development of my career and achievement of my objectives, for which I am highly grateful to the organization.

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Section -A

General Profiling of

Medanta-The Medicity,

Gurgaon,Haryana

1.INTRODUCTION

1.1 HOSPITAL PROFILE

Medanta – The Medicity is one of India's largest multi-super specialty institutes located in Gurgaon, a bustling town in the National Capital Region. Founded by eminent cardiac surgeon, Dr. Naresh Trehan, the institution has been envisioned with the aim of bringing to India the highest standards of medical care along with clinical research, education and training.

Medanta – The Medicity brings together an outstanding pool of doctors, scientists and clinical researchers to foster collaborative, multidisciplinary investigation, inspiring new ideas and discoveries; and translating scientific advances more swiftly into new ways of diagnosing and treating patients and preventing diseases. A one-of-its-kind facility across the world, Medanta through its research integrates modern and traditional forms of medicine to provide accessible and affordable healthcare.

INFRASTRUCTURE

Located across 43 acres in the new international business destination of Gurgaon, Medicity will be a 1700-bed institute of world standards with over 45 operating theatres**,** 1270-bedded IPD, with 350 Critical care beds. 24 OTs and 704 bedded IPD are functional as of now

EDUCATION

Medicity will have a full-fledged medical college, the objective of which will be to produce highly competent general physicians and specialists who are socially sensitive and fully committed to principles of medical ethics. It will also make every attempt to erase the dividing line between clinical and non-clinical areas.

RESEARCH AND DEVELOPMENT

Medicity will have a state-of-the-art research and development centre integrated with the hospital and the teaching establishment. It is planned to be one of the best funded, staffed and managed medical R&D centre in the country. Its Research Advisory Committee will

consist of 12 members from amongst the best known names in modern biology, including various areas of medicine.

TRADITIONAL MEDICAL PRACTICES

An important objective of Medicity will be to validate – and integrate with modern medical system – those medical practices in our traditional and complimentary systems of medicine such as Ayurveda, Unani, Siddha and tribal systems that are compatible with science.

SPECIAL INTERNATIONAL SERVICES

Medanta offers personalized services to International patients that include Appointment Scheduling, Treatment Packages, Visa Assistance, and Hotel Reservations, among others, etc.

TELE-MEDICINE CENTRE

Has the state of the art technology and provides continuous access to various primary & secondary health centers in the remotest locations across India. It plans to connect 700 villages across India & provide connectivity to 57 African cities. Services Offered by Tele-medicine:-

- Tele-Consultation
- Tele-Diagnosis
- Expert's Opinion / Specialist's Opinion
- Live Surgeries
- Public Awareness programs
- Case follow-ups (Post-Surgery)
- CME Programs
- Tele-Conferences

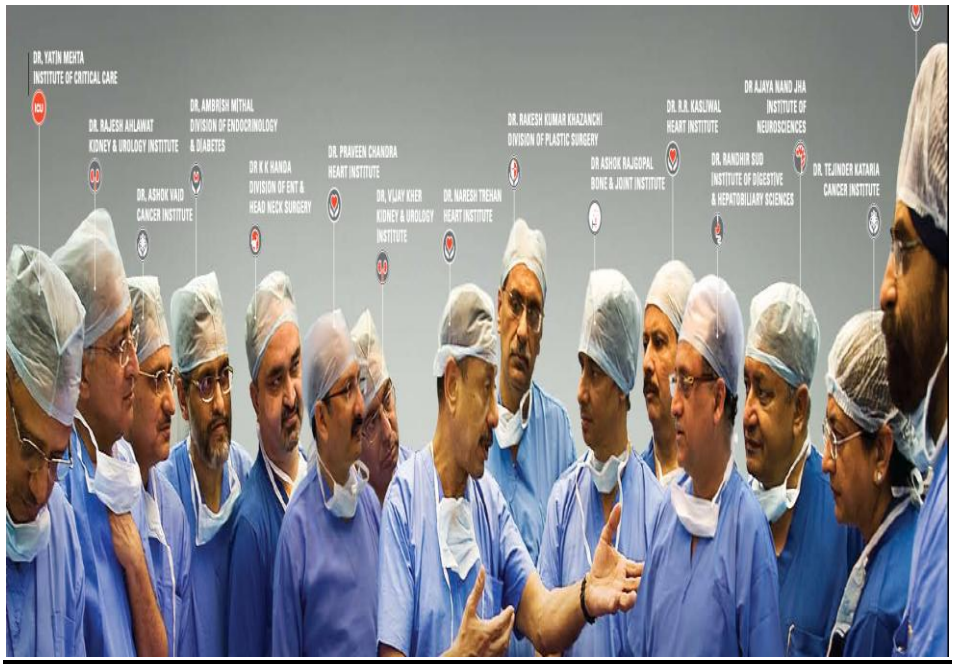
ADMISSION COUNTERS

HI TECH INFRASTRUCTURE

IN PATIENT DEPARTMENT

AMBULANCE OUTSIDE EMERGENCY

MEDANTA- WHERE WORLD'S RENOWNED DOCTORS SERVE



MEDICAL TECHNOLOGY

- 257 Slice CT
- Brain Suite, Intra-Operative Imaging Operating Theater
- Da Vinci Robot for Minimal Invasive Surgery
- Artis- Zeego Endovascular Surgical Cath Lab
- 4 Linear Accelerators (provision for IGRT/ IMRT) (radiation surgery)
- Tomotherapy
- Integrated Brachytherapy Unit with remote controlled HDR
- 3.0 Tesla MRI
- PET CT
- Gamma Camera
- Digital X-Ray, Fluoroscopy, Bone
- Densitometry
- 3D and 4D Ultra Sound
- Digital Mammography

Medanta offers cutting edge technology and state-of-art treatment facilities designed to deliver healthcare at an *affordable cost*.

1.2 HOSPITAL PHILOSOPHY

VISION & VALUES

Institute is governed under the guiding principles of providing affordable medical services to patient with care, compassion and commitment.

OBJECTIVES

- To establish integrated tertiary care services incorporating over 20 super specialties of the highest quality.
- To form an integrated approach to achieve this where Pharmaceutical research, Biotechnology research and Health care delivery are conducted seamlessly.
- To incorporate the strengths of Traditional & Modern medicine to create newer therapies.
- To exploit potential of global healthcare by leveraging technology and hospitality services (medical value travel).
- To leverage the strengths for value added service in research and development, etc.
- To provide world class education and training

1.3 HOSPITAL LOCATION

Medanta is strategically located in NCR, 8 minutes from the international airport.

Seamless integration of various super specialties is evident (1500 beds, 350 critical care beds and 45 OTs), out of which 800 beds, 78 critical care beds and 14 OTs are already functional.

Hotel/service apartments, residential and commercial complexes are also available.

AREA

Total covered area of about 4000,000 square meters.

1.4 LIST OF DEPARTMENTS & DIVISIONS VISITED

- Department of Clinical Immunology & Rheumatology
- Department of Dental Surgery
- Division of Endocrinology & Diabetes
- Division of ENT & Head Neck Surgery
- Department of General Surgery
- Division of GI & Bariatric Surgery
- Department of Internal Medicine
- Department of Ophthalmology
- Division of Plastic, Aesthetic & Reconstructive Surgery
- Department of Pathology and Laboratory Medicine
- Department of Physiotherapy and Rehabilitation
- Department of Respiratory Medicine
- Division of Radiology & Nuclear Medicine
- Department of Transfusion Medicine (Blood Bank)
- Emergency and Trauma Care
- Pharmacy

1.5.SPECIALTIES VISITED

Medanta is a conglomeration of multi-super specialties institutes which are led by exceptional medical practitioners who are leaders in their respective fields. Attracted from all over the world with the vision to reach the highest levels, these medical leaders are determined to push hard for excellence in medical care and research.

Medanta brings together state-of-the-art infrastructure, cutting edge technology, and a highly integrated and comprehensive information system, along with a quest for exploring and developing newer therapies in medicine. A one-of-its-kind facility in this part of the world, through research Medanta will integrate modern and traditional forms of medicine to provide accessible and affordable healthcare.

Medicity provides integrated primary, secondary and tertiary care services spanning over 20 Super-specialties and high-end services in:

1.6 INSTITUTES

1. Heart Institute
    a. Division of Cardio Thoracic & Vascular Surgery
    b. Division of Cardiology
2. Institute of Neurosciences
3. Bone & Joint Institute
4. Kidney & Urology Institute
5. Cancer Institute

a. Division of Radiation Oncology
b. Division of Medical Oncology & Hematology

6. Institute of Critical Care & Anesthesiology
7. Institute of Digestive & Hepatobiliary Sciences
8. Institute of Minimally Invasive Surgery
9. Institute of Transplant and Regenerative Medicine

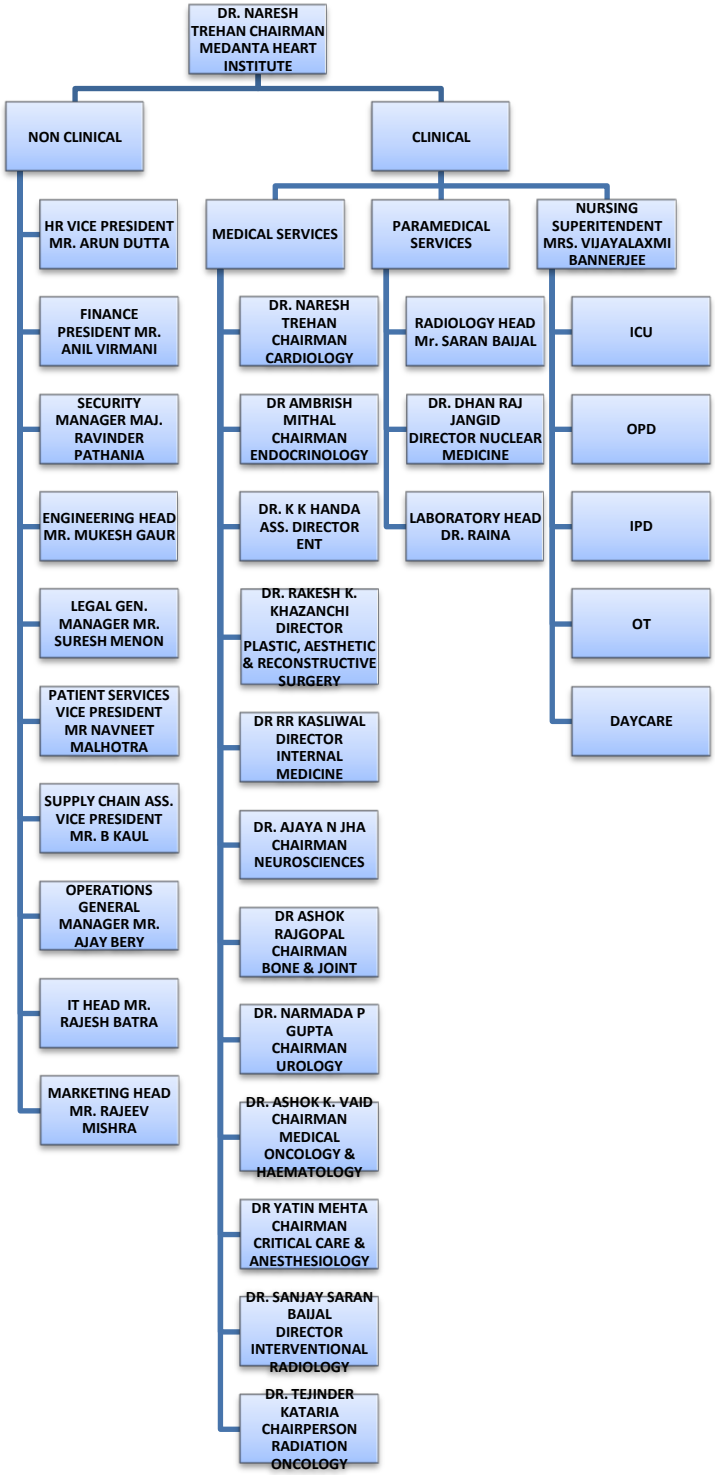
1.7 Affiliations

- Medanta-The medicity has entered into a corporate alliance with 'Duke Medicine' with the objective of providing a platform for high end research practices ,clinical trials.
- The Medanta Duke Research Institute (MDRI), a world class early phase clinical research facility at Medanta The Medicity guarantees to offer an exhaustive and conducive environment to explore the technologies of traditional medicine in synchronization with modern medicine aids for research and development in the areas of healthcare and health recovery.
- It is proposed to be a 60 bedded facility built in an area of 27,000 sq. ft. within the premises of Medanta. To unlock its potential, MDRI will be undertaking immediate early phase clinical studies in three countries with diverse populations.
- The results of such a research will be paramount for all subsequent that can play a decisive role in changing the face of healthcare across the world.

1.9 What is unique about medicity?

- Medicity aims to functionally integrate within one campus and one management the facilities of medical care, teaching as well as research and development.
- It also offers to explore the possibility of integrating knowledge of traditional and alternative medicine with modern medicine, through means of scientific research.
- Medicity is led by Dr Naresh Trehan, one of the leading luminaries in the medical world. Dr Trehanis a recipient of various national and international awards for excellence including highest national awards Padma Shri and Padma Bhushan, in recognition of his distinguished service to the nation.
- Dr Trehan has also served as personal surgeon to the President of India since 1991 and was formerly President of the International Society for Minimally Invasive Cardiac Surgery (ISMIC)
- Medicity team has attracted some of the most distinguished names in medical and non-medical fields from all over the world.

1.10 Organogram



1.11 BED CHARGES

S.no	Room Category	Amount(in rs.)
1.	Twin Sharing	3500
2.	Single bedded	6000
3.	Single bedded Deluxe	10000
4.	Super Deluxe	14000
5.	Suite	20000
6.	ICU/CCU/EMR/HCC/RR	8000
7.	DAY CARE(upto 8 hrs)	1500
8.	DAY CARE(upto 4 hrs)	1000
9.	DAY CARE(upto 2 hrs)	500

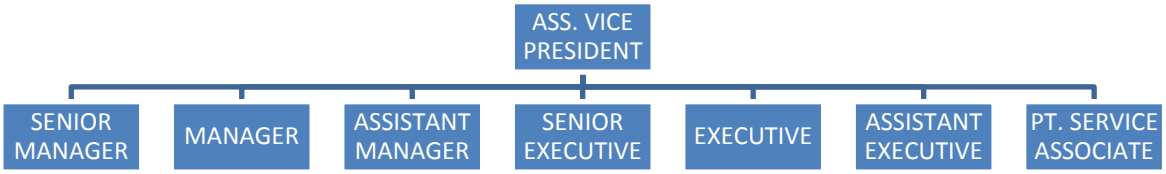
CONSULTANT VISIT CHARGES

CONSULTANT VISIT		ROUTINE	EMERGENCY	ICU
	Twin Sharing	500	800	800
	Single	500	800	800
	Deluxe	500	800	800
	Super Deluxe	500	800	800

2 . FRONT OFFICE

Front office- Ass. Vice President Mr. Navneet Malhotra

DEPARTMENTAL HEIRARCHY:



Introduction- Being the **Touch-Point** of the Hospital the Front office is one of the most important departments of the hospital as all the interactions of the patients have to go through it. This department works 24 hrs. a day and has about 90 staff members coordinating the department.

Responsibilities carried out by this department are:

- Gathering of information from within the hospital and providing the same to the patients and the employees as per their requirement.
- It facilitates good communication between the patients and the provider.
- It coordinates the working of various departments by way of scheduling the appointments, billing etc.
- It also facilitates the medicine indenting in IPD putting the records in the HIS.

Front office has being categorized into various units based upon their functions-

1-Call center: Situated at the 1 floor this department is manned by 5-6 members who provide round the clock call center facility. Their main function is to receive and answer the various calls from outside and within the hospital regarding the OPD appointments and charges, various tests availability and charges and connecting to various employees within the hospital.

2-OPD billing: All kinds of billings for the OPD patients are done at this counter. Whenever a patient arrives, he fills up a registration form and after paying the fee gets an OPD card (prescription card).Timings for the counter is from 9 am to 5:30 pm.

3-PHP Coordination: Billings for some preventive health care check-up packages available in the Hospital are done at this counter. Patients are guided here to get his/her check-up done completely in the hospital and they also collect their reports from here.

4-Emergency billing: Registration and billing for all the emergency cases is done at this counter. This counter is also connected to the other counters through HIS so as to facilitate the admission and OPD billing procedure. It is open round the clock with 2 staff members present any time.

5-IPD billing: Whenever a patient is admitted in the hospital, he is asked to deposit some money in advance and as soon as his IPD bill crosses this limit, the patient/relatives are informed of it. When a patient is to be discharged from the ward all his documents are sent to this counter for IPD billing. At present there are 9 staff members.

IN PATIENT DEPARTMENT

Introduction -The In-patient department of the Medicity Hospital is spread over the 5^{th}, 6^{th}, 7^{th} ,8^{th} , 9^{th} ,10^{th}, 11^{th} ,12^{th} and 13th floor. The IPD has three categories of rooms based on the facilities provided inside the rooms i.e., single deluxe, single room and twin sharing rooms. Each floor has reception where the patient final billing is done for discharge. Each IPD has a patient call monitor to respond immediately to the patient call from their respective beds. The bed number is displayed and the nurse responds immediately to the call. The average length of stay is 6 to 7 days. The nurse to patient ratio is 1:6.

IPD DISTRIBUTION ON EACH FLOOR:

5th FLOOR- ONCOLOGY PATIENTS

6th FLOOR- ORTHOPAEDICS PATIENTS

7th FLOOR- UROLOGY AND NEUROLOGY PATIENTS

8th FLOOR-CARDIAC PATIENTS

9th FLOOR-PRE-OP ANGIOGRAPHY

10th FLOOR – FOR REST OF THE PATIENTS

11th FLOOR- GASTROLOGY

12th Floor- LIVER AND KIDNEY TRANSPLANT

13th Floor- VIP FLOOR

Key Records in the IPD- Casualty Card, ER Physician/Surgeons Notes, Initial Assessment Form, Daily Progress Notes, Critical Care Sheet, Nurses Daily Records.

Admission-discharge tracker (AD tracker) has to be filled up once the patient has been received within the ward.

Bed distribution in IPD-

Total no. of functional beds- 245

Total no. of beds functional - 30 in cath labs and 53 on each floor.

Single bedded-11

Double bedded-24

Initial Assessment -The purpose of the assessment by qualified individuals (Doctor, nurse) is to formulate a plan of care for the patient. It also ensures that the care provided to each patient is based on patient's relevant physical, psychological, and social status needs.

CTQ Indicators : Response (Critical Patient) < 5 minutes (100 %)

Response (Non-Critical Patient) < 15 minutes (100 %)

Re- Assessment- Repeat Evaluation of patient's condition for Vitals, physical status and for deciding the change of Diagnosis / Plan of Care.

Re-Assessment is based on the following factors:

- There is a significant change in patients condition / diagnosis
- When patient's treatment is changed
- Patient's response to treatment
- At regular established intervals

Discharge policy-A patient can be discharged if after the necessary assessment by the multidisciplinary team establishes that he/she no longer requires inpatient investigation, treatment or care.

At the time of discharge the patient is handed over the following documents-

- Discharge Summary
- Patient file
- Discharge Tracker

Patient transfer to diagnostic imaging services

Any patient being transported for a procedure must be transported in an appropriate way according to the patient's medical condition and also based on the hospital policies. The patient may be ambulatory or transported in arms or by wheelchair, or stretcher. Patient safety being a priority the **side rails should be kept in the up position** during transport. Patient must be under the supervision of a responsible person during the stay. During transport the **wrist band tied on the left hand** should identify the Name, Sex, Age and Registration no. of the patients.

INTENSIVE CARE UNIT

It is a specialized section of the hospital containing the medical and nursing staff and the necessary equipment's so as to provide advanced and highly specialized medical /surgical/ pediatric/ neonatal care to the **patients whose conditions are life threatening requiring comprehensive and continuous care**.

AVERAGE LENGTH OF STAY: 8 Days

NURSE TO PATIENT RATIO: 1:1

Each of these ICUs is looked after by a Nurse in charge, 1 Team Leader and 23 nurses in each ICU. There is always a surgeon, 1 anesthetist and 1 ward secretary present 24 hrs. They work in 3 shifts accordingly.

Three aspects of patient care in ICU are-

1. **Continuous monitoring of the patient**
2. **Advanced life support for the patients**
3. **Resuscitation of the critically ill patients**

Medicity Hospital has got following ICUs with respective specialty-

- **ICU 1-** CARDIAC PATIENTS AND KIDNEY RECEPIENT
- **ICU 2-** CARDIAC PATIENTS AND KIDNEY RECEPIENT
- **ICU 3-** NEUROSURGERY AND DIALYSIS
- **ICU 4-** LIVER TRANSPLANT AND GASTROINTESTINAL
- **ICU 5-** MEDICINE AND PEDIATRICS

Total no. of beds in each ICU - 22 beds

Bed distribution:

Single bedded room - 14

- Isolated single bedded room- 1
- Isolated double bedded room-1

Double bedded room - 8

EQUIPMENTS: present in each room

- **MONITORS**
- **ECG MACHINE**
- **DEFIBRILATORS**
- **SYRINGE PUMPS**
- **VENTILATORS**
- **IABP**

Key formats and records in ICU-

A) Patient related Information

- Patient file with Admission Form / ER Form etc
- Valuable handover register
- Discharge summary
- Discharge / Transfer Register
- Transfer note
- File Handover Register
- Death Register – Death certificate

B) Patient Care

- Critical Care progress Notes + Critical Care flow chart
- Diet sheet
- Incident Register

C) Maintenance Record

- Fumigation Register
- Cleaning Register
- Inventory Register
- Equipment Breakdown Register

- Indent

D) Feedback

Patient feedback form:

Various events to be reported by the nursing staff to the management as well as the consulting doctor

- Patient fall
- Medication Errors
- Product Events
- Environmental Events
- Near Misses
  - Laboratory Errors
  - Radiological Errors
  - Prescription Error
  - Equipment Failure
  - Adverse Events

OPERATION THEATRE

Introduction- Operating theatre complex of Medicity hospital includes 21 OTs but only 14 are functional, one Recovery room, one Sterilization room, one Store room, Clean utility room, Dirty utility room and Changing rooms(male & female).

OT is a very specialized section of Hospital since it is one of the **most important source of revenues generation**. An efficiently working OT is vital to ensure smooth patient management by way of preoperative, intra-operative and postoperative care.

All the OTs of Medicity hospital are located on the 1st floor. They are well equipped OTs. Their distribution is as follows:

Neurosurgery OT - 2

Ortho OT- 2

Multi-specialty OT- 3

Urology OT-2

Cardiac OT- 5

Bed distribution:

Pre op beds: 6

Post op beds: 18

There are lockers provided in the OTs specified for doctor's personal items, nurses personal items, Electrical items, Anesthesia items. There is a store room for OT clothes, masks and caps of doctors, anesthetist and nurses. Also OTs have racks for placement of the packed sterilized items from CSSD.

Key formats & Records

OT booking register, OT requisition slip, Physician notes, OT surgery registers, Consumable sheet,

Consent forms, Pre anesthetic evaluation sheet, Post anesthetic care unit observation chart & Anesthesia recovery notes

Normal Procedures followed in the Operation Theatre-

1-Surgery scheduling- First of all the OT In-charge confirms the OT availability upon receiving the Doctor's request for surgery of a patient in elective cases. Then patient's Pre Anesthetic Check-up is done by an anesthetist and pre-operative medication instructions are mentioned. If blood is required during the surgery then a request is sent to the blood bank. Patient is shifted to Pre-Operative area 20 minutes before the elective surgery time. Patient is checked for vitals and his/her files are checked. Informed consent for Surgery /Anesthesia is taken.

2-Pre operative preparation- Trolley is set up as per the surgery requirements. After counting of the instruments all the OT personnel wear gloves and masks. Finally after doing scrubbing the patient is shifted into the OT for the surgery.

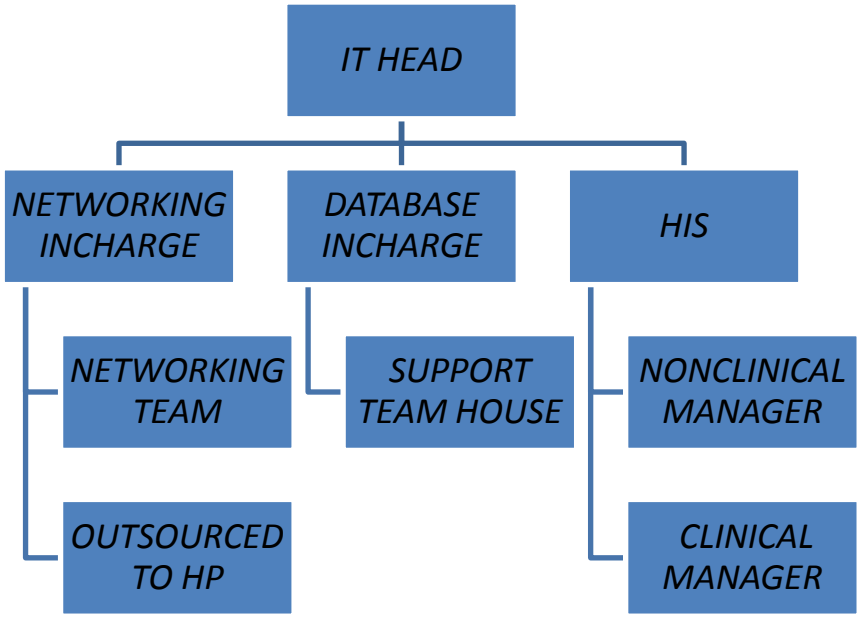
3-Intra operative procedure- The anesthesia is administrated to the patient and then actual surgery is performed under aseptic conditions. All the items used during the surgery are recorded and sent for billing later on.

4-Post operative care- Patient is kept in the recovery room and is kept under observation. All his records are updated. Patient is shifted to Ward/recovery room/ICU upon stabilization of his condition.

IT DEPARTMENT

Introduction-IT department is located in the lower ground floor. Presently the department is headed by Mr. Rajesh Batra.

HIS: IBA iSOFT



SERVERS:

- HIS DB (DATABASE)
- APP
- REPORT SERVER - HIS RPT

- PRINT SERVER –HISPRN

FIREWALL SYSTEM: HP PROCURVE

HUMAN RESOURCE DEPARTMENT

Head of the department-

Introduction – HRD is located in the LOWER GROUND FLOOR.

HR functions – The two main functions of HR department are-

1. Safeguarding patients/employee's rights.
2. Maintaining a high level of satisfaction among patients and hospital employees.

Policies- Following policies regarding the employee's rights are followed

- **Credentialing policy**
- **Grievance policy**
- **Disciplinary policy**

Processes-

Recruitment process- Recruitment for any department is done in consultation with the Respective HODs of the department. The process is commenced in the beginning of the financial year and is done on a seasonal basis.

To make sure that the Man Power Adherence is sticked to, a variation of more than 10% is not allowed. Upon joining the hospital a **New Employee Orientation (NEO)** is undertaken by the Training department and each employee is given a handbook explaining to them about their rights.

Performance appraisal- After working for a minimum period of six months, new employees are entitled to Confirmation Appraisal.

Resignation process –If any employee wants to leave the hospital he has to give a notice one month prior to his expected date of leave so that the hospital may find the suitable replacement. The management releases the dues of the employees 2 days after he has left the organization. The hospital conducts the **Exit Interviews** of employees when they leave.

BLOOD BANK

Blood bank In-charge – Dr Aseem Tewari

Location - It is situated on upper ground floor.

Donors per day: 60 donors in 24 hrs about which are mostly replacing donors and only 1% are voluntary donors.

Infrastructure of the blood bank- Blood Bank has following rooms along with a waiting room area for the donors.

A. Donor screening &counseling room- Looked after by the blood bank In-charge, patient's counseling and Blood grouping is done here.
B. Donor room/Phlebotomy/Bleeding room- Blood is collected in this room. This room also has a Bio mixer, Blood sealer, Refrigerator, Crash Cart and two beds.
C. Apheresis Room- Has an Apheresis machine and an Apheresis kit.
D. Refreshment Room- After donating the blood, refreshments are provided here.
E. Infectious Markers Room- This room has an ELISA Washer, Incubator, VDRL Shaker, Blood Kit storage freeze. Here Blood is checked to rule out any kind of infection in the collected blood.
F. Cross matching Room (Serology room) - Request for the Blood donation comes in this room-with a filled form. Here Blood is tested & cross matched.
G. Store Room/ Record Room- All the records and inventories are stored here.
H. Cold room: It maintains a temperature of 4 degree Celsius consisting of Deep freezers maintaining the temperature of -40 degree Celsius.
I. Component Room- It has a laminar air flow, centrifugal machine, deep freezer, platelet expirator and a platelet storage machine.

Guidelines for blood transfusion-

1. Blood (and its products) must be transported in a thermocol box or thermoproof box.

2. Once placed into the transportation box the blood should be **transfused within 4 hours otherwise** the blood must be returned to the blood bank

3. Blood components should be collected for only be one patient at a time by the trained personnel.

Before transfusing the blood to any patient the staff is supposed to check the unit of blood for:

- Expiry
- Clots
- Discoloration and
- Leaks

If any of these is found there the blood is **not transfused and is discarded.**

An attempt is made to make sure that the following points are adhered to by the staff of the blood bank:

- Patient is to be informed of the transfusion process & his consent has to be taken.
- Ensure the reason for transfusion is clearly documented in patient notes
- All final identity checks must be performed correctly
- The final identity checks must be an uninterrupted procedure
- If you are interrupted, you must start again!

IF ANY DISCREPANCIES ARE IDENTIFIED, DO NOT TRANSFUSE

Label Colour codes to be used -

Yellow - A

Pink - B

Blue - O

White - AB

Key Formats / Records: -

- Donor Register
- Master Register
- Blood Disposal register

Procedure for Patient Identification

- Blood requisition form duly filled – Full name, age, sex, IP no. etc in permanent ink.
- Addressograph labels not to be used. (Note: They use the patients wrist bands I don't know what they are called)
- Signature – RMO / Consultant.
- ID card to place at the patient location - Full name, age, sex, IP no.
- The ID details written should be verbally checked with patient by minimum 2 people.
- If patient identity is not confirmed by all sources do not commence the transfusion.
- Contact the Blood Bank staff immediately.

SECURITY

Security department manager- Major Rajendra Pathania

Introduction - This department is responsible for the overall security of the hospital employees and the hospital itself.

Area of operation –

- Loss and prevention
- Security of man and material
- Training of security
- Guest needs (lost and found)
- Access control
- General discipline of hospital
- Repair SOPs of various departments
- Analyze traffic and parking problems
- Premises
- Insure cooperation
- Burglary
- Violence
- Evacuation

TECHNOLOGY:

- Force multiplier
- CCTVs
- Metal torches
- Flash lights
- Fighting equipment's
- Metal detectors

FUTURE NEEDS: Medicity being a large organization has a high patient flow and many visitors everyday they would be requiring the following equipments in the future.

- X RAY MACHINE
- BAGGASE BANNER
- EXPLOSIVE DETECTORS

The security department maintains the security of every area of hospital i.e. the admin block, OTs, ICUs, etc. There is a security guard present 24 hrs in a shift of 8 hrs a day. In case of as theft the security department first try to solve the case at administration level and then police investigations are done as required.

Security is never 100 % but a deterrent and causes psychological fear

At present the total number of guards in the Medanta hospital is 160.Guards are present during the day time as well as during the night in 8 hrs shift.

“A STUDY ON DAY CARE SERVICES IN MEDANTA-

ITS CHALLENGES, SCOPE AND FUTURE PROJECTION”

1. INTRODUCTION

Day Care unit

A day care unit is where operative procedures are performed and/or treatment provided in a manner which allows the patient to return home on the same day. The procedures may be diagnostic and/or therapeutic. The unit may be stand alone, attached or shared service. Emergency cases generally should not be handled in the surgical day care unit. Some other terms for surgical day care unit includes 'ambulatory surgery' , 'day stay surgery', 'day care surgery' .

Ambulatory centre

The ambulatory health care centre will consists of such elements as medical day care, surgical day care, rehabilitation day care, private or group practices offices and a trauma centre.

Ambulatory Surgery Centres

A further innovation in hospital based care has been the development of ambulatory surgery centres. Originated in hospitals in Washington D.C. and Los Angeles, these hospital units provide one day surgical care. Patients are usually screened for acceptability by the surgeon and then at an assigned date and time for surgery. The surgeon is supported by the unit's facilities, equipments and personnel, and the patient is discharged 2 to 4 hrs after surgery when recovery from anaesthesia is sufficiently complete.

Every health care system in the world is under financial pressure. Day surgery operation costs less, saving expensive out of hours nursing costs and inpatient beds which may be closed or used for more critical and major surgery.

Many hospitals are specially geared for day care surgeries where less elaborate testing and simple treatments are required. Maintaining a patient is more expensive proposition. Longer a patient stays, more expensive is proposition unless a hospital considers itself a hotel and the billing of minor surgeries such as surgical removal of tonsils. The patients are admitted in the morning and discharged in the evening.

Advantages to the patients

- Pre booked surgeries and less likely to be cancelled
- Easy registration
- Shorter waiting lists and lesser uncertainty of long wait
- Earlier mobilization
- Minimal disruption of patient's personal life
- Early return to normal environment
- Reduced risk of Nosocomial infection
- Avoidance of disruptive nights in hospital wards
- Less loss of time at work
- Lesser chances of cancellation due to pressure of emergency surgeries in a dedicated day care facility

Patients find day care surgery much less stressful, as short recovery times allow anxious patients to be comforted soon after surgery by their relatives and they don't need to be isolated in a hospital room. Moreover patients do not suffer from separation anxiety ,as they do not need to be separated from their families overnight. Ambulatory surgery means less time away from home, less time off from work and less disruption of patients schedule.

Advantages to the hospital

- Reduced costs
- High patient satisfaction
- High volume, low risk surgery
- Lesser incidence of hospital acquired infections

Day care unit provide facilities which are effective, safe and decreased risk of hospital acquired infections.

It would be pertinent to mention that day care surgery is different from outpatient surgery in that the patients of day care surgery need some degree of post operative specialized

nursing necessitating post op observation for few hours. All day care surgical patients essentially come in the morning and after the surgery is over and post operative observation is uneventful, the patient is discharged home the same day. Whereas in outpatient surgery ,the patient is worked up in the OPD and operated either in the minor OT or under local/regional anesthesia in the OT and sent back home immediately or in half an hour.

Desirable features of a day-surgery unit

- Self contained with its own reception, ward, theatre and recovery area
- Adjacent parking
- Well laid out plan with good patient flow
- Equipped to the same high standards as in patient wards and theatres
- Protocols for selection, analgesia and discharge criteria
- Good record keeping

- Trained experienced staff
- Consultant led anaesthesia and surgery
- Clinical director in overall in charge

Economic outcomes

The financial benefits of day surgery over inpatient surgery are now well established; hospital costs are from 25% to 68% lower than inpatient surgery for the same procedures.

It is however important to recognize that substantial sums of money are only saved when cases are transferred from the inpatient unit to the day care unit and inpatient beds are released for more complex and emergency cases. The reduced risk of cancellation and earlier return to work associated with day surgery may actually reduce costs for the patient.

1.1 RATIONALE

Hospitals are institutions meant for prevention, treatment, care and management of numerous diseases, injuries and disorders. In the coming years health care industry will grow rapidly advancing into new frontiers and creating new technologies for diagnosis and treatment. A growing need of services will be observed worldwide and yet throughout the world ,the healthcare industry will face growing economic constraints.

Today hospital is just like any other industry. Present concept for the hospital is of visualization as a Business Centre, whereby each unit has to be Self Sustaining and thus Viable. While the sources of funding are limited the high and constantly escalating costs of treatment and delivery of care is a big stumbling block for all concerned. The unit must keep in purview the Up-gradation requirements, whereby the surplus is to be generated, which needs to be ploughed back, since the medical technology is constantly changing, with upgrades coming up with newer, faster equipment with better imagery/ utility.

Even the institution with the vision and philosophy of 'Not for Profit Model' need to look at the concepts of viability, with sources of funding getting meager and meager. Thus the focus shifts to the concept of Minimum Cost - Maximum Output**,** i.e., effective and efficient utilization of resources.

The number of beds any organization shall host is equally important – since this is directly related to the overheads incurred. The Mantra is for Optimization of beds – since the more the beds the more the overheads incurred to sustain the services.

The general trends of an increase in the number of admissions and a decrease in the number of occupied bed days has persisted and at the same time there is continuing a greater increase in the number of outpatient attendances, thus the emphasis has shifted in physical design and service delivery terms, from in-patient beds to ambulatory care facilities. These trends have important implications for health planners and hospital/healthcare facility designers.

Rising cost of hospitalization, shortage of hospital beds and chronic overcrowding of operating room facilities are influencing factors in the search by hospital management for a less expensive method of providing quality surgical care.

The answer is day care surgery- an innovative method of delivering health care providers a common place for patients and a workable approach to quality medical care at a reasonable cost to patient.

If patients spend a shorter time in hospital, healthcare delivery resources are used more effectively which in turn can stabilize escalating hospital costs. Day care unit services can reduce bed congestion in busy hospitals, more beds become available for more seriously ill patients.

Day Care Unit services has now come to be an accepted modality of treatment for most surgical patients and it has multiple advantages to all stakeholders as well as the patients ,besides being an economically better option for the health sector which is beleaguered with scarce resources

1.2 OBJECTIVES

- To understand the surgical day care services at Medanta.
- To identify and overcome the challenges in surgical day care unit.
- To provide a cost benefit analysis for day care unit at Medanta.
- To plan Day Care unit Requirements for future.
- To design a surgical day care unit manual.

2.0 SCOPE OF STUDY

A day care unit is where planned investigations or procedures are performed or treatment are provided to the patients who are admitted and discharged home on the day of their surgery but who require some facilities and time for recovery

Currently it has been observed that most of the educated population is working class and they have less time for their medical needs. Even if the requirement is urgent, they generally postpone it due to lack of time & less eave from their work. The study is mainly based on finding the challenges faced by day care unit in providing patient services, economic advantages of the day care unit as well as providing a plan for day care services expansion.

3.0 USEFULNESS OF THE STUDY

The usefulness of the study is summarized into following points:-

1. It helps to determine the challenges faced by the day care unit.

2. It helps to identify the necessary recommendations required to fill the lacunae in day care services.

3. The study provides a useful guidance in planning the day care unit for future expansion.

4.0 METHODOLOGY

Research design-The research approach adopted in the study is descriptive and cross sectional. It includes collection of information, opinions and attitudes directly from the subject of the study through structured questionnaire and face to face discussions with the administrative staff, project management head. The Methodology of study is divided into four different parts, each fulfilling a separate objective.

A) Objective - To identify the Challenges faced by the day care unit

Primary data was collected by giving the questionnaire to day care unit staff members of the hospital, in depth discussions with the administrative staff and through observational learning's.

-Questionnaire

Structured Questionnaire was given to the day care unit staff to understand the challenges faced in the day care unit. The type of scale used in questionnaire was rating scale

The questions were rated on the basis of :-

a) Nominal scale-Yes/No
b) Five rating parameters i.e. excellent, good, average, poor and very poor were used where 5 represents excellent, 4 represents good , 3 represents average , 2 represents poor , and 1 represents very poor.

-Observation

Observation was done while collecting the data from the Staff Members of Day Care Unit through questionnaire and during discussion with administrative staff by the help of structured questionnaire.

Secondary Data was collected from periodicals, books, journals, research studies, articles etc.

Population and sample

- **Study Setting:** Medanta – The Medicity, Gurgaon
- **Study Span:** From April 16, 2012 to May 10, 2012
- **Study type:** Descriptive and cross sectional study
- **Sampling technique-** convenient sampling
- **Sample size**- 20

  -16 day care unit staff
  - 4 administrative staff

- **Tool and Technique used-**

  Technique-survey
  Tool- Questionnaire (structured)

B) Objective – To give a Cost benefit Analysis for the Day Care Unit

A monthly cost benefit analysis was done for the day care unit where in the Average Revenue per patient per day per person employed for the day care unit and inpatient dept was calculated.

- First of all, the final bill amount of all the discharges for the month of March was added for both the day care unit as well as the inpatient dept.
- Following which the total amount generated was divided by total number of days spent by all the patients in the hospital for the day care as well as the inpatient dept to give the value of Average Revenue per patient per day.
- Then, total number of staff working in the day care unit and the inpatient department was calculated.
- The value of Average Revenue per patient per day was divided by the total number of staff to give the value of Average Revenue per patient per day per person employed for the day care unit and inpatient dept.

C) Objective -Planning of a day care unit

In order to fulfill the requirements of expanding the day care unit, planning of a day care unit was done after in depth discussions with the head of project management, administrative staff and following the guidelines given by International association of Ambulatory Surgery, British Association of Day Surgery.

D) Objective-Designing of a Day care Unit Manual and comparison with the current day care services in Medanta

Further, a Day care unit manual was prepared on the basis of guidelines given by International Association of Ambulatory Surgery. The indicators given in the manual were compared with the Medanta's Day Care Unit.

· Primary Data- In depth discussions with the head of project management and administrative staff

· Secondary Data- Studying the guidelines given by International Association of Ambulatory Surgery.

5.0 LIMITATIONS OF THE STUDY

- The sample size was small(20).
- The study is restricted only to Medanta hospital and cannot be generalized to other hospitals.
- The study is limited to day care unit staff and administrators

6.0 ANALYSIS & FINDINGS

A) CHALLENGES FACED BY DAY CARE UNIT

DATA ANALYSIS FOR DAY CARE UNIT STAFF

TABLE 1.1 –Distribution of sample based on their designation & their response on whether the protocols for selection, analgesia and discharge criteria are followed by the hospital

STAFF	YES	NO	TOTAL
NURSES	14(87.5%)	0(0%)	14(87.5%)
DOCTORS	2(12.5%)	0(0%)	2(12.5%)
TOTAL	16(100%)	0(0%)	16(100%)

TABLE 1.2- Distribution of sample based on their designation & their response regarding the awareness of nosocomial infection

STAFF	YES	NO	TOTAL
NURSES	14(87.5%)	0(0%)	14(87.5%)
DOCTORS	2(12.5%)	0(0%)	2(12.5%)
TOTAL	16(100%)	0(0%)	16(100%)

TABLE 1.3 –Distribution of sample based on their designation & their response on having adequate supporting staff

STAFF	YES	NO	TOTAL
NURSES	14(87.5%)	0(0%)	14(87.5%)
DOCTORS	2(12.5%)	0(0%)	2(12.5%)
TOTAL	16(100%)	0(0%)	16(100%)

TABLE 1.4- Distribution of sample based on their designation & their response on maintaining patient records

STAFF	YES	NO	TOTAL
NURSES	14(87.5%)	0(0%)	14(87.5%)
DOCTORS	2(12.5%)	0(0%)	2(12.5%)
TOTAL	16(100%)	0(0%)	16(100%)

TABLE 1.5- Distribution of sample based on their designation & their response on having separate surgeons for day care unit

STAFF	YES	NO	TOTAL
NURSES	0(0%)	14(87.5%)	14(87.5%)
DOCTORS	0(0%)	2(12.5%)	2(12.5%)
TOTAL	0(0%)	16(100%)	16(100%)

TABLE 1.6-- Distribution of sample based on their designation & their response on whether they want a separate admission desk and billing counter for day care unit

STAFF	YES	NO	TOTAL
NURSES	10	4	14
DOCTORS	2	0	2
TOTAL	12	4	16

FINDINGS –

Challenges Faced by Day care Unit

- Lack of separate admission desk and billing counter
- Lack of accessible washrooms for the patients.

- More than 4 hrs waiting period for surgery for 25 % of the patients per day.
- No locker facility for keeping patient's personal belongings.
- Improper Communication with the pantry

B) MONTHLY COST BENEFIT ANALYSIS FOR DAY CARE UNIT

MARCH 2012	DAY CARE	IN PATIENT DEPARTMENT
No. of Admissions	530	3600
No. of Surgeries	426	2400
Average Revenue per patient per day	18000	50000
Manpower		
Duty Doctor	2	125
Nurses	14	1300
House Keeping	4	400
Total	20	1825
Average Revenue per patient per Day per person employed	900	27.39

CALCULATIONS

Average Rev/Per Patient/Per day=

$$\frac{\text{final bill amount of all the discharges for the month of march}}{\text{total number of days spent by all the patients}}$$

Average Rev/Patient/Day/Person Employed=

$$\frac{\text{Average Rev/Per Patient/Per day}}{\text{Total persons employed/staff}}$$

For Day care unit, Average Rev/Per Patient/ Per day = $\frac{14910000}{800}$

=18,000

For Day Care unit, Average Rev/Patient/Day/Person Employed = $\frac{18,000}{20}$

= 900

For In Patient Department, Average Rev/Per Patient/Per day = $\frac{600000000}{12000}$

=50000

For In Patient Department, Average Rev/Patient/Day/Person Employed= $\frac{50000}{1825}$

= 27.39

C) Designing of a surgical day care unit manual and comparison with the current day care services in Medanta

Surgical day care unit manual included the following contents:-

- ✓ Layout
- ✓ Infrastructural Characteristics
- ✓ Functional design
- ✓ List of equipments
- ✓ Quality Indicators
- ✓ Protocol
- ✓ Discharge Criteria

Following comparison of Medanta's Day Care Services with the guidelines given by International Association of Ambulatory Surgery, the findings were :-

SHORTFALLS	IMPACT ON DAY CARE SERVICES
Lack of separate admissions desk and Billing counter for Day care Unit.	Delay in Admission process
Lack of proper signage's for day care unit.	Difficulty for patients to track the day care unit
Lack of Quality Indicators for Day care unit.	Difficulty in assessment of lacunae in the process
Congestion between beds due to lack of space	Restricted Movements of staff and breach in the privacy of patients

7.0 RECOMMENDATIONS

1. Pre-operative waiting times should be reduced where possible through better preparation and planning as unnecessarily long waiting times increase patient anxiety and reduce their satisfaction levels.
2. Provision of an accessible toilet facility in the day care unit.
3. A telephone connection for the pantry for easy communication.
4. Curtains/movable screens between the individual beds for privacy of the patients.
5. There can be separate changing rooms for males and females with lockers.
6. Take advantage of motivated surgeons and anaesthetists to lead the change and create awareness among patients regarding the day care services availability.
7. Provision of a separate admission desk and billing counter for the day care unit admissions.
8. Provision of proper signages for the day care unit to guide the patients and attendants from the main entrance of the hospital.
9. Application of quality indicators specially designed for day care unit services.
10. Discharge leaflets can be provided which address hygiene, pain relief, pain management and other FAQs.

8.0 CONCLUSION AND FUTURE DIRECTION OF THE STUDY

Day Care will be an integral component of healthcare in the future. An understanding of the scope of day care is of critical importance for hospital managers. The study reveals the challenges faced by day care unit in its day to day functioning and actions which can be taken up in order to resolve these challenges. The study also discusses the cost effectivity of a day care unit. Because the expenses incurred during a hospital stay are eliminated, day care services usually costs less than the same type of surgery done in inpatient dept. This is a benefit which everyone – hospitals, patients and surgeons greatly appreciate. It can be concluded from the study that day care unit in hospital is highly beneficial for both the providers as well as patients and generates high revenue per patient. Many factors, including medical advances, public awareness and economics are the primary driving force behind the growth of day care unit.

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10.0 ANNEXURES

APPENDIX -1

Dear Sir/Madam,

I (Parkhi Kumar) would like to conduct **"A STUDY ON DAY CARE SERVICES IN MEDANTA-ITS CHALLENGES, SCOPE AND FUTURE PROJECTION"** as a part of my postgraduate diploma course in hospital management under Institute of Health Management Research, Jaipur.

Please help us to serve you better by completing this questionnaire; we need your frank opinion. The matter will be kept confidential and if you wish to remain anonymous then please do not fill your name.

Tick only one answer for each question which you think is most appropriate-

a) Name-

b) Designation-

FOR DAY CARE UNIT STAFF

Q1. Does the day care unit follow protocols for selection, analgesia and discharge criteria?

Yes/No

Q2. Are you aware of Nosocomial infection?

Yes/No

Q3. Do you find day care services safe?

Yes/No

Q4. Does your Day care Unit has adequate supporting staff?

Yes/No

Q5. Does your Day Care Unit equipped for minor procedures?

Yes/No

Q6. Do you have separate surgeons for day care unit?

Yes/No

If no, how is the scheduling done for patients of day care? _____

_____

_____

Q7.Do you maintain separate records?

Yes/No

Q8. How many patients per day have to wait for more than 4 hrs prior to their surgery?

_____

_____

Q9.Do you have a separate toilet facility for patients?

Yes/No

Q10. Do you prefer a separate admission desk and billing counter for day care unit?

Yes/No

FOR ADMINISTRATIVE STAFF

Q1.Which type of surgical day care unit it is?

a) Hospital integrated unit
b) Hospital autonomous unit
c) Hospital satellite unit
d) Free standing unit

Q2. Has day care unit has helped in decreasing surgical waiting list in inpatient department?

Yes/No

Q3. Do you provide specialized training for day care unit staff?

Yes/No

Q4. Do you have any specific quality indicators for day care unit?

Yes/No

Q5. Day care services should be covered under insurance?

Yes/No

Q6. How would you rate the awareness level among public about day care services?

Excellent ( ) /Good ( ) / Average ( ) / Poor ( ) /Very Poor ( )

APPENDIX-2

SURGICAL DAY CARE UNIT MANUAL

- ✓ TYPES OF SURGICAL DAY CARE UNIT
- ✓ LAYOUT
- ✓ INFRASTRUCTURAL CHARACTERISTICS
- ✓ FUNCTIONAL DESIGN
- ✓ LIST OF EQUIPMENTS
- ✓ QUALITY INDICATORS
- ✓ CLINICAL INDICATORS FOR DAY SURGERY
- ✓ PROTOCOL
- ✓ STREAMLINED PATHWAY FOR SURGICAL DAY CARE UNIT
- ✓ DISCHARGE CRITERIA

SURGICAL DAY CARE UNIT

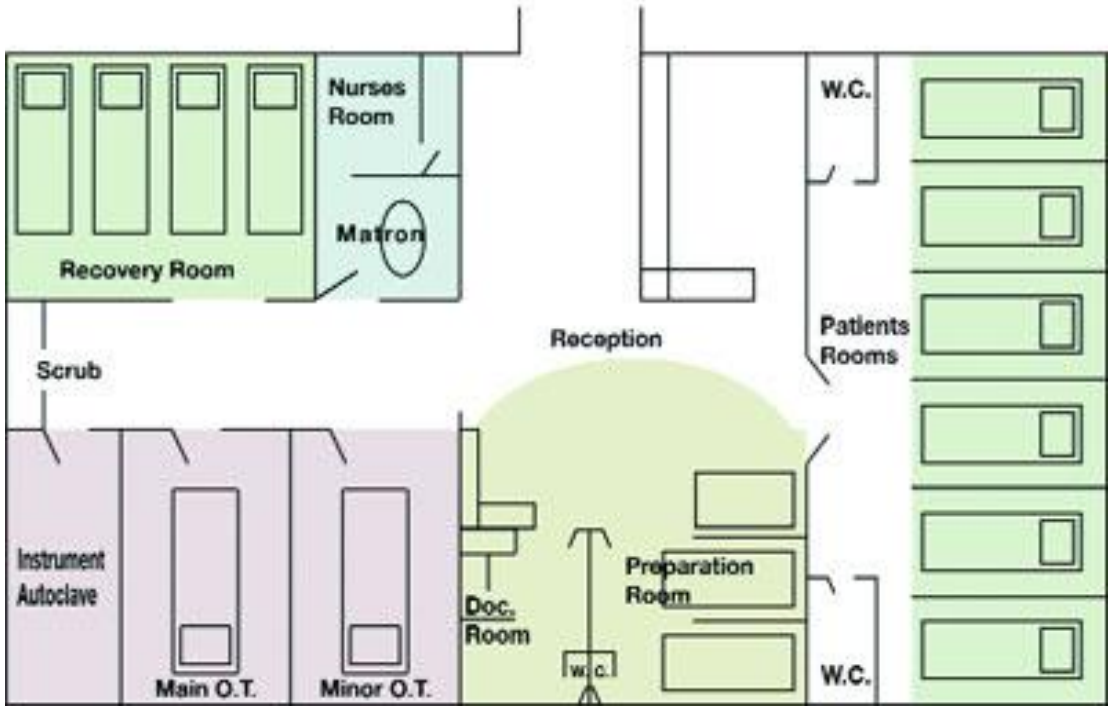
There are various different administrative classifications of surgical day care unit. Here,they have been classified in terms of their physical and organizational links with hospitals

• Integrated units (organizationally and physically part of hospitals):
    - Type I: units that share all their resources with the rest of the hospital.
    - Type II: units that are organizationally independent but that share some elements —operating theatres— with the rest of the hospital.
• Autonomous units: independent from the rest of the hospital in terms of both organization and physical structure.
• Satellite units: located at a distance from the general hospital but administratively dependent on the hospital.
• Free-standing units: fully independent, in regards with both organization and structure, of a general hospital

<u>Surgical day unit with extended pre-recovery facilities</u>

Some Surgical Day units are introducing organizational and management structures that allow them to add more complex procedures to their service portfolios (although the numbers and percentage of the total are still very limited). These procedures may require an overnight stay (time frame: less than 23 hours) or up to 48-72 hours (short-stay surgery) The International Association of Ambulatory Surgery regards units that have organized their resources to care for patients who require an overnight stay within a time frame of less than 24 hours as “extended recovery facilities”. Another reason given for Surgical day Unit to include the possibility of extended recovery is that it enables them to extend their surgical sessions into the early evening, although in this case the most appropriate solution is to have alternative accommodation available for patients (patient hotels).
However, extended day surgery facilities may reduce true day surgery activity. If used badly, as clinicians and patients may choose an overnight stay simply because the option is

available; this problem could be avoided by distinguishing between day-care beds and 23-hour beds.



The sample plan of a Day Care Centre by The Indian Association of Day Surgery

Essential organizational requisites

The following considerations are considered essential:

- ✓ **Availability of an organization and operation manual.**
- ✓ **Strict protocol observance and clear definition of responsibility chains**.
- ✓ **Comprehensive information to the patient and to the relatives/carers**, and, where appropriate, informed consent which will be produced under the terms of the legislation in force.
- ✓ **Adequate treatment** to both patients and carers.
- ✓ **Working timetable and operating scheduled so that it may minimize hospital admissions due to administrative problems** (late discharges, weekend or bank holiday closures, etc.)
- ✓ **Direct responsibility of the Surgical Day Care Unit throughout the process** even though other healthcare organizations may provide specific support (primary healthcare, A&E services, conventional hospital units, etc.).
- ✓ **Strict compliance with discharge criteria.**
- ✓ **Detailed explanation of post-discharge care**.

General characteristics of the unit

The Day Care area will be mainly an open-plan area with visual control from the nurse station. However, design should allow a certain degree of independence of chairs/beds; two of them will be completely independent.

The area will include:

- ✓ Entrance, reception, and waiting room.
- ✓ Day care beds/chairs.
- ✓ Nurse station and utility rooms.
- ✓ Staff area.

The characteristics of a day care unit are:

- Shared by the different hospital services and doctors, except from those who have their own specific areas.

- Nursing staff has a fundamental role on the coordination and organization of this area. They should be trained and qualified on the procedures and caring techniques of the processes they will be involved in.

Reception

This area is devoted to patients and escorts access as well as to reception and admission activities (included, when necessary, the discharge proceedings at the completion of the care process). It is also a waiting area for escorts, during the treatment and recovery time of patients prior to discharge.

This area will have the following physical structures:

Entrance:

- Patients and their escorts must find easily the entrance to the Surgical Day Care unit when arriving to hospital. If there is direct entrance from outside, it should be clearly signposted so that it can be easily identified.

- It is highly recommended that the unit should be located on the same level as the entrance and as close as possible to it if it is shared with other services.

- Signposting on the outside will ease access to the unit. Specific parking lots are advisable as private cars (or scheduled transport service) are required for transfers and for the arrangement of scheduled consultations.

- Entrance for staff should be separated from that for patients and escorts, and, at least, there should be an independent entrance for supplies and equipment (laundry, pharmaceutical products, waste, etc.).

- Entrance to the Day Care Unit from the main entrance should be made through automatic doors that allow visibility in both directions.

- Entrance hall should be wide enough to allow smooth flow towards the reception/admission desk.

Admission

- All Surgical Care Unit must have a dedicated reception and admission area.
- This area would have enough room to allow staff to provide attention to patients and their escorts (considering the need of a certain degree of privacy) during the admission process: recording of patient details, organization of appointments, organization of lists and anticipation of cancellations, communication with patients, etc.
- Discharge proceeding will also be carried out in this area, when necessary.
- The administrative area will have the necessary equipment for its efficient operation (electronic office, IT equipments, email, telephones, fax, and answering machine for attention out of working hours) and it should have an area planned for storing specific documents: protocols, brochures, etc.
- The admission desk should be designed so that it is accessible from the main entrance and can be easily spotted by patients and attendants. Admission staff should clearly see the main entrance and people flows.

Waiting rooms

- It should be located by the admission area and it should include a specific area for patients and relatives; it can be the same waiting area used during the procedures and recovery. It should be comfortable and must have toilets, telephone, television and a cold drinking water fountain.
- The size of the waiting room will depend on the volume of activities scheduled and on the socio-cultural characteristics of the area.
- There should be 1.5 comfortable chairs per patient of the unit (waiting times may be lengthy).

- The main waiting room will have direct access from the entrance hall, it will allow visual contact with the reception desk and will provide access to Day Care area, consultation rooms and to medical treatment and investigation units.

Toilets

- By the main waiting room there will be public toilets, including a disabled toilet. Size will be proportional to the waiting room.

Structural and functional characteristics of the reception area

Area	Purpose	Structural characteristics
ENTRANCE	Gives access to admission and waiting areas.	Adequate signposting. Separate car park desirable. Street level, if possible. Close to entrance, if shared access. Disabled access. Separate goods access.
ADMISSION	Patients and escorts attention during the admission process.	Appropriate size. Guarantee of a certain degree of privacy. Adequate equipment: electronic office, IT equipments, email, telephones, answering machine, fax, etc. Easy to find. Should allow reception staff to see the main entrance and the waiting room when seated.

Area	Purpose	Structural characteristics
WAITING AREA	It allows patients and escorts to be on the best comfortable conditions while waiting.	Comfort (lengthy waiting times). 1.5 comfortable seats per patient treated at the unit. Toilets. Telephone. Television. Newspapers. Cold drinking water fountain.
TOILETS	For patients and escorts during waiting times.	With washbasin and toilet. Must have disabled toilet. Proportional to the size of the waiting room.

Day Care Hospital beds/chairs area.

- It includes the area in which procedures are performed. It is an area of internal flow, reserved exclusively to patients and staff. Its design should be able to adapt to all treatments and thus to all their structural and functional requirements.

- The fact that there may be some patients who may attend the unit without a scheduled consultation does not imply the need of additional structural requirements though, in some cases, it may be advisable to allocate specific resources to it .

- This area will have the following characteristics:

Consultation room:

- At Day Care Unit care prior to treatment frequently implies exploration, diagnosis, patient selection after clinical evaluation and explanation of therapeutic guidelines. Moreover, it is necessary to provide the patient with appropriate information and to obtain his/her consent.

- These procedures are conducted at the consultation rooms area, being its number directly related with the volume of activity and its working hours.

- Consultation rooms must allow in unique premises both for consultation and exploration; privacy is thus improved and greater versatility is achieved in an area which is thus much more functionally flexible.

- The consultation room should have enough space to hold the doctor, the necessary nursing staff, according to the requirements of each consultation, the patient and, when appropriate, his/her escort.

- Besides consultation and exploration on these premises blood pressure will be taken and other minor diagnostic and therapeutic procedures will be performed. Therefore, apart from office furniture (table, reclining chairs, chair) an exploration bed accessible by both sides with the possibility to isolate it by means of curtains or screens, and other clinical furnishings to hold disposable material and equipment are necessary.

Day Care unit

- Cubicles for Day Care Unit should have oxygen and vacuum connections; adjustable beds or reclining chairs, according to the necessities; a table with enough room to keep personal belongings and overbed frame; enough room for an extra chair (for an escort, if suitable).

- Each cubicle will have all the necessary electric systems both for lighting and for the medical-electric equipments which treatments may require. Patients should have a control to call nursing staff, to regulate lights

- Location of windows is especially important. When possible, patients should have natural lights and views to the outside of the building, though they should always guarantee patients privacy when treatment implies the patient being undressed

- Cubicles may be fitted out in common wards or in individual rooms according to treatment. In common wards each bed/chair should have, at least, 3x2.5m around and it should be conveniently isolated by means of curtains, folding screens

Changing rooms

- Changing rooms will be placed by the treatment units.
- They will be separated by sexes and they will have enough room for lockers, to keep clothes and personal belongings safe.

Patients toilets

- Specific for patients, placed by the changing rooms with similar equipment to the public ones and with a proportionate size to the unit.

Physical and functional characteristics of the Day care area.

Area	Purpose	Structural characteristics
CONSULTATION ROOM	Exploration, diagnosis, patient selection after clinical evaluation and explanation of therapeutic guidelines. Information and support.	With the necessary equipment and facilities to assure its operation and with the adequate privacy conditions. Flexible structure appropriate to the needs of the different specialities performed at the unit. Surgery consultation rooms, minor surgery rooms and information offices could be fitted out according to necessities.
DAY CARE AREA	Treatment administration and, when necessary, patient recovery.	It may undergo different shapes using as main support treatment chairs and beds, according to the characteristics of the procedure. In common wards (equipped to guarantee privacy and dignity) or in individual rooms. With the necessary equipment and facilities for its operation, with flexible structure, adequate to give support to the broad range of procedures, according to their functional requirements.
	For patients to get	By the treatment units and the

CHANGING ROOMS	changed and for keeping personal belongings safe	consultation rooms. Independent (men and women). With lockers for personal belongings.
TOILETS FOR PATIENTS	For patients and escorts during waiting times.	Placed by the changing rooms. With WC and basin. It must include a disabled toilet. Proportionate number to the number of consultation rooms and places at the Day Care Unit.

Functional design programme (all areas in meter sq.)

20 beds/chairs Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
RECEPTION	1. Main waiting room	40	1	40	For 20 people and connected to the unit reception. Equipped taking into account lengthy sessions and with an adequate capacity directly related to the size of the Day care unit. Telephones and mobile charging facility. Cold water vending machine.
	2. Public toilet.	8	2	16	According to the general organization of the unit. Toilets for visitors and patients. With washbasin and WC.
	3. Disabled toilet.	4	1	4	Integrated within the public toilets block. Disabled toilets for

					visitors and patients. With washbasin and WC.
	4. Reception.	18	1	18	Reception of patients and relatives. Administrative processes: registration and discharge. The counter should not represent a barrier and should be accessible to wheelchair users. Computers and telephones.
TOTAL RECEPTION AREA			78		

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
DAY CARE UNIT	5. Consultation room.	18	2	36	It includes exploration area and office. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.
	6. Nurse consultation	18	1	18	Same characteristics and facilities of the

	room.				consultation room
	8. Minor surgery room.	24	1	24	For minor surgery, apart from medical treatment and investigation units and recovery units. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.
	9. Patient toilets.	8	2	16	Between the entrance and the Day Hospital area. For patients. With washbasin and WC.
	10. Patient changing rooms.	10	2	20	By the patient toilets or within the patient toilet block. Changing room and lockers for personal belongings.
	11. Day care area (common ward).	10	20	200	Cubicles for treatment administration and, if necessary, for patient recovery. Open-plan area, distributed guaranteeing direct visual control from the nurse station; with the possibility of closing off for privacy (never compromising patient

					safety).

TOTAL DAY CARE WARD AREA-314 sq mts.

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
NURSE STATION & GENERAL UTILITY ROO MS	12. Nurse Station	20	1	20	Located in the centre of the open area, so as to reduce distances and ease control. Large counter with broad working area. Adequate command and control. Accessible to the wheelchair users. Fitted with patient/nurse communication system via warning lights and buzzers. Pneumatic tube terminal. Safety and fire alarm control panel. Computers and telephone.
	13.Clean Utility Room	8	1	8	Storage for clean equipment, medicament preparation with counter ,fridge and medicine dispenser unit. Connected with the nurse station. double sink unit.

	15. Laundry Room	6	1	6	For Clean Laundry .Area for laundry carts.
	16.Equipment Storeroom	12	1	12	For Apparatus & equipment. With Metallic shelves to fit equipment
	17.Dirty Utility	10	1	10	For dirty laundry and waste disposal.sink

TOTAL NURSE STATION AND UTILITY ROOMS AREA-56 sq. mts.

LIST OF EQUIPMENTS

PREMISES	EQUIPMENT
ENTRANCE AND LOBBY	
RECEPTION	➢ Work stations/computers ➢ Printer ➢ Counter. ➢ Drawers ➢ Shelves ➢ Ergonomic Office Chairs ➢ Telephones ➢ Waste Bin
ADMISSION	➢ Ergonomic office chair ➢ Shelved closet with doors. ➢ Picture. ➢ Work station / computer. ➢ Laser printer. ➢ Desks with drawers. ➢ Telephone. ➢ Waste bin. ➢ Chairs

	➢ Filing cabinet. ➢ Wall-mounted notice board.
WAITING AREA	➢ Chairs and other seats ➢ 3-seat benches. ➢ Pictures. ➢ Low tables. ➢ Waste bins
PUBLIC TOILET	➢ Paper Dispenser ➢ Paper Towel Dispenser ➢ Mirror ➢ Toilet brushes ➢ Swing lid waste bin ➢ Soap dispenser ➢ Hand dryer
DISABLED TOILET	➢ Same as above, hand rails added
RECEPTION	➢ Work Station/computers ➢ Printer ➢ Counter ➢ Drawers ➢ Shelves ➢ Ergonomic office chairs ➢ Fax ➢ Telephone
CONSULTATION ROOM	➢ Consultation room cabinet ➢ Chairs ➢ Ergonomic office chair ➢ Exploration bed ➢ Pen torch ➢ Modular desk with drawers ➢ Front lamp

	➢ Portable digital sphygmomanometer ➢ Telephone ➢ Computer ➢ Vacuometer ➢ Flow meter ➢ Paper towel dispenser ➢ Antiseptic liquid dispenser ➢ Waste bin

MINOR SURGERY ROOM	➢ Instruments for minor surgery ➢ Vacuo meter ➢ Flow meter ➢ Stand for intravenous drips ➢ Auxiliary table ➢ Exploration lamp ➢ Stainless worktop with sink and accessories ➢ Exploration bed ➢ Aspirator ➢ Cabinet for sterile equipment ➢ Multi box storage system for disposable material ➢ Paper towel dispenser ➢ Soap dispenser ➢ Swing lid waste bin
PATIENT CHANGING ROOM	➢ Individual lockers ➢ Chairs ➢ Shoe rack
DAY CARE AREA	➢ Recliners ➢ Aspirator with filter for inhaled medication ➢ Electric beds with accessories ➢ Self inflating resuscitation bag

	➢ Crash cart ➢ Flow meter ➢ Defibrillator with paddles for adults and new borns ➢ Working stations ➢ Equipment(iv stands,ceiling hooks) ➢ Table with overbed frame ➢ Multiparameter monitor ➢ Emergency cart ➢ Blood pressure monitor ➢ Oximeter ➢ Transport ventilator ➢ Perfusion pump ➢ Vacuometer ➢ Chair
NURSE STATION	➢ Counter ➢ Ergonomic office chairs ➢ Laser printer ➢ Filling cabinet ➢ Metal shelves ➢ Communication system ➢ Modular desk with drawers ➢ Waste bin ➢ Computers
CLEAN UTILITY ROOM	➢ Clinical unit with double sink above storage ➢ Wall mounted glass case(80 x90x35cms)
LAUNDRY ROOM	➢ Clean laundry trolleys ➢ Metal shelves
DIRTY UTILITY ROOM	➢ Double sink and waste disposal unit
EQUIPMENT STOREROOM	➢ Metal shelves

	➢ Double box storage system

Quality indicators.

Quality dimension	Indicator	Calculation
Scientific technical quality and efficiency of the day care unit	1. Cancellation of procedure. 1.1 Patient fails to appear. 1.2Cancellation after patient enters Day care unit	% [(cancellations / patients with appointments)]. % [(cancellations due to non-appearance of patient / patients with appointments)] % [(cancellations after patient enters DSU / patients with appointments)].
	2.Unplanned overnight stay. (surgical reasons, administrative reasons, anesthetic reasons)	% [(unplanned overnight stays / patients undergoing surgery)].
	3.Readmission to hospital (In the first 24 hours. Within 24 hours and 28 days)	% [(admissions / patients undergoing surgery)].

	4. Adverse events.	4.1. Rate of transfusion reaction.	% [(transfusion reaction / procedures in which blood or haemoderivatives transfusions have been performed)].
Quality perceived by DAY CARE users	5. Satisfaction index.		% in each response category.

INDICATORS	GOOD PRACTICE IMPLICATION
1.Are patients given a specific date and time for the procedure when the decision to go ahead with the procedure is taken?	1.Given the planned nature of day surgery, patients should be given definite times for their appointments in advance.
2Are patients given individual appointment times or booked to arrive in blocks throughout the day?	2.Patients should be given individual appointment times as much as possible. This minimizes their waiting time in hospital.
3 Are patients contacted in advance by telephone to remind them of their appointment?	3.Doing so may help to avoid wasted Appointments.
4 Are patients seen and assessed for the procedure between the decision to admit and the day of the procedure?	4.Doing so may help to avoid cancellation by the hospital on the day and thus a wasted appointment.
5 Are patients given written information in advance, before the day of their procedure?	5.Essential to keep patients fully informed and to help ensure the day surgery process works well and efficiently for all concerned.
6 Does the written material include: a) What to expect when they arrive at the day surgery unit? This should include a description of the procedure and the sequence of events that will take place in the unit. b) Who to contact for further help and advice? c) Who to contact if they have a complaint?	6. a)It is important that patients are fully aware of what will happen in advance so that they are less anxious. b)Peace of mind for a patient should a problem arise. c)So that it can be dealt with and action taken to avert the problem in future.
7 Are patients given written information	

at discharge? 8 Does the written material at discharge include: a) Advice on what to expect that specifically addresses the procedure they have had? This should include information on likely speed of recovery and common problems. b) Advice on how to deal with common postoperative problems such as control of pain, nausea and vomiting? It should include what to do themselves and when to seek further advice. c) A telephone number at the hospital for queries and emergencies. 9 On discharge are patients telephoned when they are at home to check progress? 10 Have you conducted a patient satisfaction survey in the last two years? This is defined as a questionnaire or interview given to a minimum of ten patients asking them about their experiences whilst in the care of your unit.	7.Essential to reduce patient anxiety and avoid unnecessary use of other health services. 8. a)It is important that patients know what to expect so that they are less anxious and can take appropriate action if routine or unexpected problems arise. b)So that patients can take action themselves to avoid contacting the hospital unnecessarily. c)Peace of mind for a patient that they can contact an informed source should a problem arise. 9.Just to check that everything is going well and no further action is needed by the health care services. 10.An essential part of a well-managed unit to ensure that services are properly reflecting the needs of patients

International Association for Ambulatory Surgery

Clinical Indicators for Ambulatory Surgery

The following Clinical Indicators have been derived from the Australian and French Clinical Indicators and approved by the General Assembly in Boston 2003

Indicator 1. Cancellation of booked procedures.

1.1 Failure to attend the day surgery centre/unit.

- Acute medical condition.
- Decision of the patient
- Organisational reasons.
- Other reason (explain. ..)

1.2 Cancellation of the booked procedure after arrival at the day surgery centre/unit.

- Pre-existing medical condition.
- Acute medical condition.
- Organisational reasons.
- Other reason (explain ...)

Indicator 2. Unplanned return to the operation room on the same day.

Indicator 3. Unplanned overnight admission.

- Surgical reason(s)
- Anaesthetic/medical reason(s)
- Social/administrative reason(s)

Indicator 4. Unplanned return of the patient to an ambulatory surgery unit or hospital.

- < 24 hours
- > 24 hours and < 28 days

Indicator 5. Unplanned readmission of the patient to an ambulatory surgery unit or hospital.

- < 24 hours
- > 24 hours and < 28 days

Additional clinical indicators considered inappropriate.

- Mortality rate.
- Infection.

PROTOCOL

1.	The concerned doctor's admission note or prescription, indicating the type of surgery, date & time, is to be handed over to the receptionist so as to make it easier for them to make patients stay comfortable. At the admission desk, preparation of admission paper, deposit as applicable, issue of receipt, allotment of bed / room number, consent for surgery / procedure, that is, all the preliminary formalities will be completed. Patient provided with a file and guided to room / bed. The ward sister / concerned doctors will be informed.
2.	The ward sister cross-checks the admission file .Patient made to change into OT clothes, and all valuables and metal objects on your person should be removed and handed over to your accompanying attendant .cross checking of the pre-operation instructions, a check list will be used to follow the basic requirements for pre-operation instructions. This would include to check if patient is fasting, patients Blood pressure, pulse, FP blood sugar (if indicated) will be checked, shaving the operation site (if not already done), administration of enema or medications as instructed by the operating surgeon. History of patient taken by the duty doctor and required counseling done. The ward sister will inform the theatre staff, who will call for the patient when required.
3.	In the operation theatre, re-checking of the pre-requisites of surgery is once again

	gone through, the nature of the procedure, the type of anesthesia and the effect of the immediate post-operative period will be explained to patient. This will be explained either by the doctor on duty or the anesthetist or the senior nurse, and they will try to answer all the patients questions to the best of their ability. Before taking you to the OT, you will be sent to the toilet and a use of wheel chair / trolley may be made, especially if you are sedated or apprehensive to walk.
4.	Once in the OT, again the procedure may be explained. If possible, every step of the preparation explained, e.g., taking of a IV line, patient may feel the prick of the needle. The fixing of the cardioscope, placement of the cautry pad, exposing of the operating site, etc, will be done by a nurse. In short, care should be taken to maintain the modesty and dignity of the patient at all time. Reconfirmation on the side and site of surgery will be done as a safe guard.
5.	After the procedure, depending on the type of surgery / procedure and type of anesthesia, patient may be sent to the recovery room or direct to the room allotted. Post-procedure, details of the surgery will be explained.
6.	Periodic check of BP, pulse and level of consciousness, administration of IV fluids and / or drugs, as required, will be done by the ward sister.
7.	Completion of the discharge papers, instructions regarding medication, precautions, complications and their management will be explained to patient and attendant. Written and verbal instruction with all the contact numbers possible will be given. referring physician will be informed regarding the post-operative care, either via a note or telephone, so that there are no lacunae in patients care and recovery.
8.	Settling of bills and refund or receiving payment will be smoothly done.
9.	Remember: All the paper work at every level should be complete with meticulous maintenance of records / notes taken down carefully, as this would be required for future reference as well as, for legal purpose. Also, it is mandatory by insurance companies, that, attested copies of all the papers should be submitted.

10.	Any queries can be asked before patient is going home. Depending on the nature of the surgery and anesthesia, patient should keep in mind that he/she should avoid driving for at least 24 hours, or perform any type of work that requires precision and concentration.
11.	patient should be able to walk without support.
12.	Nausea or Vomiting means that patient has to stay just a bit longer in the recovery.
13.	One of the criteria's for patients discharge from the hospital is passing of urine.
14.	Checking of dressing for soakage, and the need for it to be changed, will be done.
15.	Contact numbers will be given to patient so that patient can contact hospital in case of any query.

THE STREAMLINED PATHWAY

Discharge Criteria Following Day Surgery

There are 3 phases of recovery following anaesthesia:

1. Early recovery - awakening and recovery of vital reflexes.
2. Intermediate recovery - recovery to point of 'home readiness'.
3. Late recovery - recovery to point of 'street fitness'.

Patients are fit for discharge from the day unit when they have completed the intermediate phase of recovery .

Medical criteria to be met prior to discharge from the day unit

Essential invariable criteria

- Stable vital signs
- Orientated to preop. stage
- Minimal nausea and vomiting
- Controllable pain
- No significant bleeding having regard to the procedure

Variable criteria

- Micturition prior to discharge. Essential following epidural or spinal anesthesia. May be deemed essential following certain surgical procedures.
- Fixed length of stay in day unit following surgery .Plays no part in the generality of surgical procedures. May be deemed necessary after certain procedures to minimize the risk of reactionary haemorrhage at home eg: tonsillectomy, thyroidectomy.
- Individual for certain specific procedures

Disputed criteria

- The ability to take and retain oral fluids prior to discharge is increasingly disputed. It may in fact provoke nausea and vomiting.

Non-medical criteria to be met prior to discharge from the day unit.

- An adult to accompany the patient home and to be with them at home for the first 24-hours following surgery .
- Access to a functioning telephone at home.
- Patient to be given:
    - Printed post-operative instructions
    - Printed information on whom to contact in case of emergency .
    - Appropriate discharge drugs
    - Follow-up information.
    - A summary of the treatment they have received.

Who should assess fitness for discharge?

- Surgeon and/ or anaesthetist
- Senior nurse against a medical approved printed protocol. Surgeon and/ or anaesthetist only involved in cases of doubt or when there is a problem