SHRIMATI INDIRA GANDHI COLLEGE

(Nationally Accredited at 'A' Grade(3rd cycle) by NAAC)

TIRUCHIRAPPALLI - 02

DEPARTMENT OF HOSPITAL ADMINISTRATION



LEARNING MATERIAL

ADMINISTRATION OF HOSPITAL STAFF AND MEDICAL RECORDS MANAGEMENT



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M.Sc HOSPITAL ADMINISTRATION – IV SEMESTER ADMINISTRATION OF HOSPITAL STAFF AND MEDICAL RECORDS MANAGEMENT

UNIT-I

Ward management: Ward, ward nursing, ward level, inventory, receipt of patients, types of beds, bed space requirements, discharge procedures, specific requirements for specialties, preventing of hospital infections.

UNIT-II – Risk Management & Disaster Management

Meaning of risk management, general principles of risk identification, risk management philosophy, implementing risk management, legal implications, common disasters-national level, hospital level-guiding principles in managing the situations, formation of disaster management groups.

UNIT – III – Recent developments

Challenges for the hospital administrator, vital role of hospital administrator, telemedicine, health tourism, medical transcription, joint venture hospitals, emergence of corporate hospitals, ISO, Health insurance, TQM.

UNIT – IV – Hospital Statistics

Outpatient statistics – daily average outpatient attendance, average out patient attendance etc.

Inpatient statistics- Bed occupancy rate, bed turn over rate

Hospital morbidity mortality- gross & net death rate, Institutional death rate, anesthesia death rate, post operative death rate, MMR, IMR.

UNIT-V – Medical Records

Definition-Importance with reference to patient, doctor, hospital & research.

Brief mention about ownership rights & privileges, policies governed, procedures with reference to numbering system, unit system, International Classification of disease & its usage.

Medical audit committee-Constitution, functions and limitation. Service by service discussion in medical audit.

UNIT – I

Inpatient department (IPD) is that department of the hospital in which the patients are generally kept for more than a day for close monitoring. The patients of OPD's and emergency who need extra care, which cannot be delivered at home, are advised to get admitted. These patients once they have a accepted the consultant's advice have to get themselves enrolled as inpatients of the hospital. These patients once they have been admitted remain under the watchful eyes of the consultants and receive round the clock care from the trained nurses.

In this way patients can be monitored carefully and can be subjected to various investigations as per doctor's advice.

Need for ward management:

The management principles and techniques have to be applied. The important need for ward management is to provide satisfied care for sick. It includes the following characters;

1) Care for sick and injured

If we reduce the discomfort of the patients we can create good satisfaction and idea about hospital care for sick and injured starts from ward. It must be economic.

2) **Promoting health -** It is the area to provide health in maximum.

3) Preventing disease

By giving vaccines and immunization after identifying the catchment area must be identified.

4) Teaching

It is essential to reduce discomfort such medical negligence can be avoided. By evaluating the performance, the concerned personnel's who need training is identified.

5) Research and development

Majority of time is spent in ward by patient (Marketing special activity)

Principles of ward management

- ❖ Identify the personnel of the organization as its greater assets.
- ❖ Make profit in order to continue the rendering services
- ❖ Approach every task in an organized way so outcome will be succeed.
- ❖ Establish definite long and short range plans and objective hence every activity will be in proper code.
- ❖ Secure full attainment of objectives through general understanding and acceptance by others.

- ❖ Keep individual member of the team be well adjusted by seeing each one knows what he is supposed to do, what his authority and what his work.
- Concentrate on individual improvement through regular review of performance and potential.
- ❖ Provide opportunity for assistance and guidance in self duty as a fundamental of institution growth.
- ❖ Maintain adequate and timely incentives and reward for increase in human efforts.
- Supply work satisfaction for those who perform the work and those whose are served by it.

Functional goals of Ward Management

1. Medical care:

The important functional goal of medical industry is to provide quality patient care. Each and every treatment or steps taken in hospitals must improve the condition of patients because patient spent most of their time in ward.

2. Patient environment

For the improvement of the patient the treatment alone is not enough. Along with the treatment there must be pleasant and comfortable environment to their needs and complaints, good equipments, proper ventilation, cleanliness, peace, good ward facilities, etc.

3. Degree of job satisfaction

To create satisfaction in patient the staffs that provide care must be in satisfied condition. So they do their work completely and efficiently. For their satisfactions their must be restroom, separate toilet facilities, proper salary, providing the snacks during intervals, incentives and leave allowances, etc.

4. Visitors Satisfaction

Visitors are only agents of creating image of the hospital, so their satisfaction is achieved only by proper management. It includes allocation of visiting time in regard to their convenience; their questions about treatment, investigations, and diagnostic procedures must be cleared to them politely.

Discharge Procedure

Organizing care on discharge of the patient (discharge from the ward)

The needs of the patient still remain though be is ready for discharge, be needs a knowhow be can prevent the condition or disease with which he was suffering and also the period of a few days before should be utilized for health teaching. He and his relatives also are in need of instructions about further care and follow up the facilities and equipment at home may be quite different from that in the hospital. The patient and relatives have to be taught how to

improvise the equipment available at home fro carrying out the treatment. If the community health personnel who can take follow up service to patients at home are available the patient can visit the patient's home and give continued care.

Many times patient may want to ask questions which arise in her mind. It is important to make sure that the patient and his relative understands instructions about medication, period of taking rest, excessive and type of activity to be carried out. He would want to know what diet and how much calories he must consume. He would be instructed about the date where and when to see the doctor again. If there is possibility of any complications he should know what signs to watch for and report them to his doctor.

It is good nursing staff can know few days in advance about the discharge of the patient so that the patient and relatives can be given instructions about making arrangements regarding finance the care of the patient at home.

The community health nursing department also in informed about the follow up care is such facilities are available.

It should be seen that the discharge report containing the details of the patients and his investigations, diagnosis and treatment given. Instruction to be carried out after discharge. For example with regard to diet follow up exercise etc. should be accompany the patient at the time of discharge. No patient should leave the hospital without the report except in emergency situation.

Prevention of Hospital Infection

- 1) The greatest single factor in the spread of nosocomial infections is the failure of health care workers to wash their hands often enough. **Conscientious washing of hands between patient contacts** effectively prevents most of the cross-infections which tend to occur between patients.
- 2) Adequate disinfection of the environment and provision of properly sterilized materials for all diagnostic and treatment procedures is a necessity. Sterilization of instruments and consumables is more effective when carried out in a Central Sterile Supply Department (CSSD). Use off pre-sterilized packs, disposables, and routine disinfection of ward, equipment, furniture, linen, etc. is important in preventing nosocomial infection. The use of a large number of disinfectants, especially without knowing the proper concentration and antimicrobial spectrum, should, however, be discouraged. In situations when the use of disinfectant is indicated, it is important to ensure that:
 - * The choice of the disinfectant is appropriate
 - ❖ The concentration used must be adequate
 - ❖ The contact time should be enough.
- 3) Adhere strictly to **aseptic techniques** while performing various surgical and instrumentation procedures. These include:
 - ❖ A strict 'no touch' technique while changing surgical dressings, insertions or removal of a drain, catheterization, etc.
 - Use of adequately sterilized packs

- ❖ Periodical removal and reinsertion of sterilized catheters, drains, etc.
- ❖ Proper handling of catheter and suction tubing's and related equipment.
- 4) Segregate contaminated instruments: keep them aside for disinfection, cleaning, repacking and resterilization. Infected materials should be discarded and incinerated wherever possible. Soiled infected linen should be sluiced, washed separately using steam and sterilized. Sputum cups to be incinerated (if disposable) or disinfected and autoclaved. Bedpans and urinals to be washed and disinfected between uses.
- 5) Isolation facilities and procedures must exist in critical areas (intensive care unit, newborn nursery, burns unit, etc), both for patients with communicable infections (source isolation) and for those who are particularly vulnerable to infection (protective isolation). Source isolation should ensure that the patient should be isolated. The transmission mode of a given infection determines the necessary precautions; single room cubicle, wearing of gowns and / or masks and / or gloves by anyone entering the room, hand washing by everyone upon entering and leaving the room, special attention to articles taken into and out of the patient's room. Isolation ward facilities should be available for admitting patients with communicable diseases.
- 6) Indiscriminate and inappropriate use of antibiotics should be thoroughly discouraged as this leads to spread of drug-resistant strains of bacteria. The following guidelines may be considered in determining an antibiotic policy:
 - Use of antibiotics only when clearly indicated
 - ❖ Use of antibiotics in adequate dosage, for sufficient period of time.
- 7) Precautions with staff: Immunize staff periodically against typhoid, and, if possible, against other common infections such as hepatitis-B. Screening of staff working in dietary and canteen is essential to rule out carries of organisms causing amoebiasis, typhoid and diarrhoeas. Personnel harboring significant number of coagulate staphylococcus aurous in nose and throat should be discouraged from operating on a patient. Monitor personnel employed in high-risk areas bacteriologically.
- 8) Surveillance patients and procedures to determine the types of nosocomial infections occurring, and why and how they are occurring. It requires the active follow-up of specific infections in terms of morbidity in time and place, keeping track of the sources and spread of the infecting agent, and the study of conditions that may favour or inhibit the spread of infection in the hospital. Outcome surveillance focuses on results of practices and procedures, provides a profile of endemic infection rates and pinpoints increases. Process surveillance involves on-the-spot checks to see whether or not these infection control policies and procedures are being carried out.

Surveillance of either type must be actively pursued to be fully effective in recognition as well as prevention of nosocomial infection. These include the operation theatres, delivery room, various nurseries, intensive care units, dialysis unit, transplantation unit, isolation units/wards, CSSD, IV manufacturing unit and source of water supply. Beyond taking swabs for culture on a monthly basis from the environment, equipment, instruments and consumables in these areas for checking the bacterial load, type and antibiotic-resistance, it is also important to check the sterility of fluids prepared or used in these areas. Statistics of cross-infection involving patients in these areas should be reviewed periodically, as also adherence to recommended procedures and routines.

Ward Ventilation

There are two types of ward ventilations:

1. Mechanical Ventilation

It is costly and lacks flexibility. Mechanical systems are employed, in special circumstances, for example, in wards where the air must be filtered because of atmospheric pollution. If such a complete mechanical system is installed, it should be designed to give three air changes an hour.

2. Natural Ventilation

Natural ventilation is cheap. Natural ventilation has the great advantage of simplicity and economy, and the vast majority of hospitals depend on windows and fans for their ventilation. Natural ventilation is also more acceptable to the patients.

Ward lighting

The lighting of patients' rooms and other areas in the ward has to satisfy the needs of the patients as well requirements of the nursing staff.

The total lighting effect should be such as to contribute to the general décor and be free of glare to the recumbent patient.

Lighting installation in a ward calls for:

- General lighting
- Reading lighting
- ***** Examination lighting
- **❖** Night lighting

Ward Nurse

Good nursing services in the hospital result from and are a part of coordinated administrative and clinical planning. The primary purpose of the nursing department is to give comprehensive, safe, effective and well organized care to the patients.

Nursing care is extremely important for good patient outcome. While the physician plans the treatment and carries out some of the procedures, such as surgical operation, it is the nurse who implements most of the management of the patient. A doctor sees a patient for a short time. The nurse is present all the time, caring for the patient and looking after the needs of the patient throughout 24hours. The success of patient cares and therefore of the hospital depends on the nursing staff acumen and competence of the nursing staff.

The performance of the nursing staff can be assessed on the following parameters:

- Job knowledge
- Attendance

- Punctuality
- Communication
- ❖ Initiative and interest to learn
- Interpersonal relationship
- Health and physical condition
- Leadership
- Planning and organizing judgment
- Dependability
- ❖ Ability to handle pressure / crisis
- Overall performance

Number of Nurses

Generally, it is assumed that an acute care general hospital requires a nurse: patient ratio 1:3 on the average bed occupancy.

More nurses are needed in Intensive Care Units and the proportion is usually 1:1.

Responsibilities of a nurse

The fundamental responsibilities of the nurse are four fold:

- ❖ To promote health
- **❖** To prevent illness
- ❖ To restore health and functions
- **❖** To alleviate suffering

Qualifications

Nursing Superintendent:

- Diploma in General Nursing and Midwifery.
- **Experience**: 34 years worked as Ward Sister in a recognized hospital in New Delhi.

Six weeks ICCU training from a recognized institution.

Sister In charge - General Nursing and Midwifery Course

Experience: After working as staff nurse fro a period of 12 years the staff nurse becomes sister In charge.

Staff Nurse - General nursing and Midwifery course.

ANM - One and half years ANM course

Nursing Aids - Class 10th pass.

Job Descriptions

Nursing Superintendent:

- General administration of the nursing services in the superspeciality hospital.
- ❖ Deputing appropriate nursing staff to different departments according to its needs.
- ❖ Continuous evaluation of the efficacy of nursing care provided to the hospital patients. Supervision of the work of all personnel working in all patient care areas.
- Developing and monitoring of the policies, organization and procedures in nursing.
- ❖ Staffing the services adequately, ensuring proper distribution to cope up with the nursing needs in various areas.
- ❖ In consultation with the Principal, Nursing School, assignment of the nursing students for clinical experience in the hospital.
- ❖ Establishing and maintaining harmonious and effective relationship with other departments in the hospital.
- Overview of the nursing records.
- Monitoring supplies and equipment.
- **!** Ensuring good nursing ethics.
- ❖ Daily round of wards.
- Granting leave to the nursing staff.
- Grievance handling of nursing staff.
- ❖ Special duty arrangement of nursing staff for VIP patients.
- ❖ Counter signing of experience certificate of nurses issued by Medical Superintendent.

Sister In charge

- * Responsible for overall administration of the ward.
- **❖** Making monthly indent
- * Keeping the inventory of permanent and consumable ward articles.
- Forwarding leaves applications to the Nursing Superintendent.
- * Responsible for overall cleanliness of the wards.
- Organizing duty schedules for staff nurses and students.
- Clinical teaching to the student nurses in the wards.

Staff Nurse

- * Responsible for overall cleaning of the ward.
- * Responsible for the total nursing care of the patients.
- * Responsible for giving medications and injections to the patients.
- * Responsible for copying prescriptions for the drug stores.
- * Responsible for round with doctors.
- * Responsible for checking the patient files and carrying out the orders.
- Orientation to the patients and relatives.
- ❖ Taking blood samples and starting IV trips in case of emergency
- * Responsible for the articles in the wards.

- Supervise and help students in nursing procedure.
- Completing patient files and other records.

Auxiliary Nursing Midwife (ANM)

- * Responsible for general cleaning of the department.
- ❖ Give nursing care to the patients.
- **.** Give medications and injections.
- Helps doctors in doing minor procedures.
- * Responsible to the assigned ward and patient if staff nurse is not there.

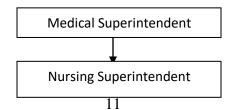
Nursing Aid

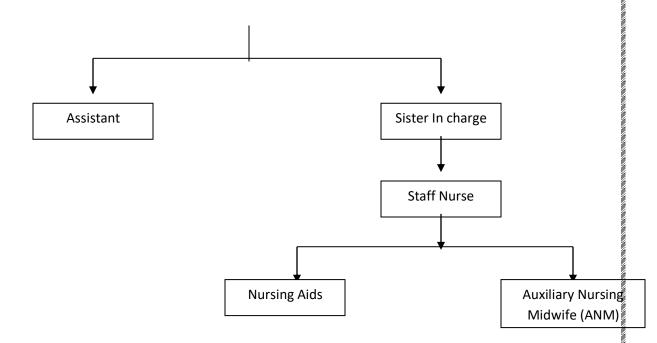
- * Responsible for general dusting of department.
- ❖ Tidy up duty room (mopping telephone, tables, arranging registers, patient's files etc.)
- ❖ Helping ward ladies /ward boys to take patient to different departments for investigations.
- ❖ Helping nurses to take patients and to bring in wards from OT.
- Helping nurses to do the nursing care procedures.
- * Taking TPR (temperature, pulse, respiratory rate), BP(blood pressure) of patient.
- **&** Bringing articles from the stores.
- ❖ Getting articles exchanged from CSR (central supply room).
- * Taking samples to the laboratory for investigation.
- ❖ If necessary giving bed pans and urinals to the patients.

Records maintained in nursing department:

- Attendance Registers
- Relievers Duty Register
- Leave Account Register (Casual Leave, Annual Leave, Sick Leave Etc.)
- Absentee Statement
- Circular Register
- Experience Register
- Indent Register
- Breakage Book
- Uniform Register
- Medical Superintendent Book filled by Sister In charge, verified by Nursing Superintendent; it indicates bed occupancy, mortality in wards.

Organogram





Procurement of articles from stores:

Monthly indents are filled by sister in charge and are verified by the Nursing Superintendent and are then sent to the stores. The articles issued against the indents are brought to the wards by Nursing Aids.

Types and benefits given to nursing staff:

- Sister Incharges are given 15 casual leaves, 10 sick leaves and earn leaves in a year.
- 4 rest on Sunday in rotation.
- OPD nursing aids and sister in charge have holiday on Sunday.

Meetings

Once a month meeting is held of the chief executive of the hospital to solve any problems and to do future planning of the hospital services in order to improve their efficiency and effectiveness. Nursing Superintendent attends this meeting

Nursing Superintendent holds meetings with nurses if there is any problem that needs discussion.

Recruitment and selection of nursing staff:

Medical Superintendent does the recruitment and selection of nursing staff.

Disciplinary actions and termination of nursing staff:

Medical Superintendent takes disciplinary actions against nursing staff if it is needed. Termination is also done by him.

GENERAL

In-patients ward concept is fast changing due to policy of early ambulation and in reality only a few patients really to be in the bed.

Nursing care should fall under the following categories:

- **General Wards**: Wards of patients who are not critically ill but need continuous care or observation and have to be in bed. These include wards for medical, surgical, ENT and eye disciplines
- Ward for specialties: Wards for patients who are suffering and needs hospitalization in particular specialties like orthopedics, pediatrics, psychiatry, skin, obstetrics and gynecology etc.
- **Intensive care unit**: Wards for acute coronary, post operative and critically ill patients. The Basic consideration in placing wards is:
- To ensure sufficient nursing care.
- segregating patients according to three categories
- Locating them according to the needs of treatment in respective medical discipline and checking cross infection.

Location:

- Wards should be relegated at the back to ensure quietness and freedom from unwanted visitors
- General ward units are of repetitive nature and hence they may be piled up vertically one above the other, which will result in efficiency easy circulation and service economy.
- Wards for particular specialties, should be located closed to their respective department to act as self contained centers. In such case post operative ward may be placed horizontal to operation theatre and maternity ward to the delivery rooms.

Types of Ward:

Wards may be either nightingale or rigs type. In the former, beds are arranged at right angle to the wall with the feet towards the central corridor and in the latter 4 to 6 beds are arranged parallel to the longitudinal walls and facing each other. A rigs type ward is recommended from socio environmental stand point.

GENERAL WARD FACILITIES:

Each word unit should have a set of ward ancillaries, requirement of such facilities are given below:

• Nursing Station

- Treatment Room
- Ward Pantry
- Ward Store
- Sluice room
- Day space
- Sanitary

Ward Unit for particular specialties:

The provision recommended for general ward unit shall apply with additional requirements as given below:

- Post Operative and Orthopedic Wards: Bed space should be 8.75 m2 to accommodate treatment apparatus and wheel chair. Post operative ward should be located close to the operation theatres department. Air Conditioning of the post operative ward is essential.
- **Pediatric Ward:** A separate ward units shall be provided in hospital of category C, D and E. The ward unit shall have at least 25 percent of patients in isolated cubicles in single and two bedded rooms. These cubicles should be separated by glazed partition for better supervision. Each pair of cubicles may be provided with a common toilet of 5.25 m2 having WC bath and wash basin. Further 25 Percent of beds extra space for mother's bed along with sick pediatric cot. Floor space per bed, therefore shall be 10.5m2.
- **Psychiatry Ward:** All windows and verandahs opening should be protected with steel grill or concrete jail. The ward shall be located on the ground floor or lower floors. All electrical fittings and fixtures shall also be suitable protected.
- **Skin ward:** Twenty five percent of the beds in the wad shall be in the form of 2 and 4 bedded rooms for segregation. Arrangement for long bath should be provided in the toilet.
- **Infectious Disease Ward:** This unit should accommodate both male and female patients suffering from infectious ailments. It should be planned as a separate building connecting the main building through a covered passage. The unit may be placed in the main ward block itself but should be separated by an air gap and shall be provided for 4 to 6 percent of male and female patients. Additional ward ancillaries to that of general ward are a sink room of 10.5 m2 two staff changing room 10.5 m2 each and a discharge room 10.5m2.

ADMISSION POLICY

Beds in the wards are for patients suffering from a particular type of illness for instance patients with general medical problems are admitted to the General Medical Ward, patients suffering from critical conditions are admitted to ICCU and patients suffering from surgical problems are admitted to surgical ward etc. The beds are allotted in each ward to different consultants.

ISOLATION WARD

Those patients who are too ill are kept in this ward and they should be separated from the routine patients so that no cross infection occurs.

TRANSIT WARD

If the bed that has been allocated for a particular doctor in a particular ward is occupied then the patient of this doctor is kept in this ward for a short time. Then he is transferred to the bed against the name of the concerned consultant as soon it becomes vacant.

The patient reports to the IPD with admission record and OPD record etc. The patients attending the emergency if needed are also admitted to the IPD.

IPD COUNTER/ ADMISSION PAYMENT COUNTER

It is located on the right side of the reception / enquiry. It is computerized and computerized billing is done here. At this counter, the admission and billing of IPD patients is done if patient is admitted then the advance is taken from him.

TRANSIT WARD

The total bed strength of Transit Ward is 23. In this ward patients of any consultant can be admitted, if the regular beds allocated against him are not vacant. Patients are kept here for a short duration and as soon as the regular bed of that consultant gets vacant the patient is transferred.

PEDIATRIC WARD

The total bed strength of Pediatric Ward is 21. The patients admitted to this ward are of pediatric age group. The ward has the following equipments:

- Infusion Pump
- Ox wood to give oxygen to babies
- Suction Apparatus
- Oxygen cylinder
- IV Drip stand
- ECG Monitors
- Patient beds
- Side Tables

MATERNITY WARD

The total bed strength of the Maternity Ward is 18. It's a ward where pregnant females as well as females suffering from gynecological disorders are admitted. It is well equipped with a Labour Room with all facilities for the delivery. The Room for patients have beds, side tables etc. There is seating arrangement for the attendants in the balcony and in the corridor.

The following types of records are maintained here:

- Admission and Discharge Register
- TPR Register
- Day and Night Register
- Handing and Taking Books
- Baby Tickets

Types of Records Maintained in the ward

- OPD File Folder
- Doctor's order and diagnosis Chart Sheet
- Operation Records
- Anesthesia Chart
- Inpatient Charge Slip
- Convent Forms of patient
- Admission Slips
- Nurses Daily Record
- Fluid balance Chart
- Temperature Chart
- Investigations
- ECG
- Sonography Report
- Admission and Discharge Register
- Laboratory Investigations Book
- Day and Night Report Book

NEPHROLOGY WARD

It has bed strength of 8 and patients suffering from kidney diseases are admitted here. The important records maintained in this ward are:

- Haemodialysis Register
- Admission and Discharge Register etc.

CARDIOTHORACIC WARD

It has total bed strength of 16 and patients suffering from cardiac ailments are admitted here. Patients once stabilized in ICCU are transferred here. Patients who have undergone cardiac surgery are also admitter here.

The important records maintained in this ward are:

- Admission and Discharge Register
- Complete patient File
- Doctor's Duty List
- Daily Duty Record of Nurses
- Indent Book

ISOLATION WARD

It has total bed strength of 16 and patients suffering from cardiac ailments are admitted here. Patients once stabilized in ICCU are transferred here. Patients who have undergone cardiac surgery are also admitted here.

The following are not admitted in this ward:

- Patients suffering from open Tuberculosis
- Patients suffering from Rabies

UROLOGY WARD

It has a total strength of 16 beds and the patients coming under the purview of the Urologist are admitted here.

Staff

- 2 Consultants
- 1 Resident doctor
- 1 Sister In charge
- 4 Staff Nurses
- 2 Nursing students
- 1 Ward boy
- 3 Sanitary Attendants

Types of Records maintained in the Ward:

- Admission and Discharge Register
- Laboratory Investigation Register
- Handling and Tasking Book
- Laundry Book
- Glucose Strip Book
- Injection Book
- TPR Register
- Day and Night Book

MATERNITY WARD

Delivery Suite Unit:

The delivery suite unit should include the facilities of accommodation for various facilities as given below.

Reception and Admission:

As the patients many a time arrive in a state of imminent delivery, the registration counter should open into the entrance lobby.

Examination and Preparation Room:

The room should accommodate one or two beds and provide space for the doctor with the work table etc. A charge room, with attached toilet facilities shall be provided with the examination cubicles. The provision of lockers for keeping the personal clothes and articles may also be kept in view.

Labour Room:

Labour rooms should preferable be in the form of cubicles two labour rooms for 10 maternity beds. As birth follows labour the labour room should be placed adjacent to delivery rooms. In hospitals of category A and B the examination – cum- preparation room and labour room may be combined into single room.

Delivery Rooms:

Delivery rooms shall be of the following types:

- Clean delivery room for normal deliveries
- Operation theatre for caesarean
- Septic delivery room

Delivery room shall be provided at the rate of every for 20 maternity beds. The size or the operation theatre for caesarean room shall be the same as that of the operating theatres.

Sterility and other requirements shall be maintained like operation theatres department.

Sterilizing Rooms:

The facilities for sterilizing of the equipment in the delivery suites should be made. This room should house a work counter, sink, small, high-speed pressure instruments sterilizer etc

Sterile Store Room:

Close to the sterilizing room, a room to store sterile material should be provided. it should be provided with issue windows.

Scrubbing Room:

Scrub up facilities may be provided between two delivery rooms similar to those provided in operation theatre department.

Dirty Utility:

For collection and transferring of blood stained clothes to the laundry unit, a sluice room should be provided. It is desirable to install mechanical aid for washing of bed pans, urinals, etc.

Other Facilities:

Other Facilities for the unit should include change room for doctors' nurses. Technicians, an anesthesia room, pack preparation rooms, instrument and linen storage, recovery room, etc., and these should be arranged in the same degree of aspects.

Maternity ward in the super specialty hospital provides the service to the following types of patients:

• Patients reporting for DNC

Equipment in Maternity Ward:

- Sphygmomanometer
- Clinical Thermometer
- Torch
- Stethoscope
- Forceps Outlet and midcavity
- Delivery sets
 - o Clamps
 - o 1 Sponge holder
 - o 1 Kidney tray
 - o 1 Bowl with cotton and swab
 - Green cutting sheath
 - Doctors gown

Functioning

Once the pregnant case has reached the labour room she is taken care of by the Gynecologist and Nurses on duty. They perform the delivery and later the mother and baby are shifted to the beds available in the ward. They are kept under observation and Pediatrician takes care of the baby. If everything remains normal then they are discharged after a few days.

Records Maintained in Nurses Duty Room

- ♦ Admission and Discharge Register
- ♦ Indent Book
- ♦ Patients File
- ♦ Investigation Register

Types of Beds

A hide way bed, invented by Sarah E. Goode in response to the needs of apartment dwellers, folds up into another piece of furniture, such as a shelf or desk when not in use.

A hospital bed is specifically designed to facilitate convalescence, traditionally in a hospital or nursing facility, but increasingly in other settings, such as a private residence. Modern hospital beds commonly have wheels to assist in moderate relocation, but they are larger and generally more permanently placed than a gurney. The hospital bed is also a common unit of measurement for the capacity of any type of inpatient medical facility through it is just as common to shorten the term to bed in that usages

Flower Beds

- The head portion can be raised.
- The foot portion can be lowered.
- Trendelbung portion can be made.
- Side rails are present in beds.
- Wheels are present for easy movement.
- Made of steel.

INVENTORY

An inventory is a detailed. List of all articles on the ward they are specification . A standard number of quantities. The specifications make it possible to identify the article by size. No, or description. The standard indicated the quantity that should be kept on the floor. sometimes the condition on cost of items are included not only does the taking of inventory give a opportunity to determine whether the standard has been maintain but it provides a good chance to dispose of excess a absolute material to recommended changes in sit Unexpendable do to determine the condition of articles or equipments if necessary. It also is an ideal time to return equipment to its proper place. Articles borrowed from a central supply ward or another ward may be located a returned.

Frequent pounds are an aid in maintaining tracing equipments. Such articles a flash lights scissors, needles, hypodermic syringes, stethoscope, sphygmanometers, may required a daily count. These items disappear or are easily broken a yearly discovery laws makes tracing the article easier some article may be counted weekly or monthly. For others such as furniture probably on annual or semi-annual inventory is sufficient.

The actual count article which is made on the ward is known as physical inventory. If an annual invent his taken every item on the ward is counted on a given day or within a certain interval, furniture, may be intentioned one day, liner on medical equipment on a different way until all have been courted. Inventory of most items may be taken at night if day period seems impractical.

ORGANISATION FOR THE INVENTORY

- o Preferably the day or days selected for in are those in which the nursing load is lightest. Time assignments are planned to that all personnel may assist in the court. each individual is assigned a certain of group of items to count
- Ousually those which are related by location checklists by room for articles such as furniture a individuals bedside equip are setup.
- o All medical equip is gathered together in one central place, office equip in another and so on
- o When the totals for all articles are assembled figures are compared with the standard.
- o Their maybe is replaced in the book to keep a record of monthly annual accounts.

REQUISTIONS:

Requisitions is a written order for supplies a equip or their repair Requisitions are made by the individual who is responsible for the supply or the head, N or someone else specifically delighted the responsibility she should be wholly familiar with the needs of the order. A method of ordering. it is that same individual to the ordering from week to week for as possible because she will have better knowledge of the wards needs.

SUPPLES AND EQUIPMENTS:

There must be adequate supply to provide optimum. Nursing are. Insufficient ill functioning equip in increase work a waste of time by the staff a may even prone danger to pts life. There should be a method where Requisitions for necessary equip one pair a maintenance are available easily. Constantly moving the place for keeping g articles causes confusion a waste of time.

The keys must be in the ward all the time a all staff members should where a with whom hey are available maintaining a central supply of equip also helps to reduce the total amount needed in the + charge N should ensure all the equip in good working conditions to prevent waste or misuse by a education these staff in economical a appropriate use of all equip a materials. Three steps to be taken to ensure an adequate stock of available supply on the ward or unit.

Setting up a std for the quantity of each item to be maintain on the ward all the time Having a satisfactory system replacement of broken or worn out equip.

Make regular inventory of all items is a program me for inventories

INDENTING (Inventory)

An inventory is a list of all the articles on the ward the list should give detailed description of every article and quantity, amount or number that should be in the ward. It is best policy to group the articles while listing that is linen furniture of bed dead stock, metal ware, glassware perishable articles etc. The frequency at which articles are control once or twice the year may be often enough for dead stock. Eg. Mattresses, furniture etc. Some articles should be counted monthly, weekly where as item such as thermometer, syringes, needles instruments may be counted daily. The regular coaching of the stocks helps to store articles in their proper places to return borrowed articles to note damage broken or last articles to get ride off excess or unnecessary articles from the stock to give the stock update.

Questions:

- 1. Explain about the Ward management.
- 2. Explain briefly about the levels of ward.
- 3. Write note on duties and responsibilities of Nursing Superintendent
- 4. Explain about the prevention of Hospital Infection.
- 5. Explain about the Inventory.

Unit-II

Risk Management

Every working day there are several work related injuries. Most accidents occur as a result of an unsafe system of work. A lack of clear policies, poor working practices, vaguely defined responsibilities and inadequate communication are all parts of an unsafe system that may lead to a wide range of injuries that occur by accident rather than by design.

An employer is required to do what is reasonably practicable to ensure the health, safety and welfare of person at work.

Directors or mangers can be held personally responsibilities for failure to control health and safety. There are four basic steps to practical risk management;

- 1. Identify risk
- 2. Organize control measures
- 3. Implement on training
- 4. Monitor and auditors.

Meaning of Risk management:

Risk management is a mechanism for managing exposure to risk that enables as to recognize the events that may results in unfortunate or damaging consequences in the future their severity and how they can be controlled. A working definition of risk management that applies

generally and not specifically to health care could be: the identification, analysis and economic control of those risks which can threaten the assets or earning capacity of an enterprise. The policy should:

- Focus on resources available for implementation
- State clear responsibilities for implementing the policy
- State who is responsible for specific areas of health and safety
- Provide clear understanding that employee cooperation is essential
- State an expressed commitment to health and safety.

Identifying Risk:

The primary aim of risk management is to be proactive in the reduction of risks to the lower level 'reasonably practicable'. Administrators of a health facility are required to undertake formal risk assessments of the workplace. To do this, one must identify hazards and assess the risk involved.

- A hazard is something with the potential to cause harm.
- A risk is the likelihood of the hazard occurring.

Essential risk management responsibility is usually devolved to the line manager but identification of risks may come from several sources. These may include:

- ✓ Ouestionnaires
- ✓ Analysis of accident figures
- ✓ Analysis of sickness figures
- ✓ Observation by staff with specialist skills
- ✓ Review of policies already in place
- ✓ Formalized risk management.

Principles of Risk identification:

The following point represents the general principles of risk identification regardless of the technique used:

- 1) One particular method of identification is unlikely to cover all the problems of risk posed in any organization or situation. Using one or two particular techniques to the exclusion of all others is not a good practice, and a combination of methods is considered a through approach.
- 2) Some methods suit certain situations. Flow chart, for example, are appropriate tools for identifying risk in a process that involves goods, services, materials or people moving

- through several different stages. When flow is not the main activity, as in an office, other identification tools may be appropriate. Matching the method to the perceived risks is important. Firm guidelines for doing this are not available, but risk managers are helped by a clear understanding of the organization.
- 3) Understanding the organization and its work fully is greatly helped if as many people as possible within the organization but outside the risk management department are consulted. Before embarking on risk identification a risk manager should identify all those who could be of help.
- 4) A large scale risk identification exercise will always discloses risks. But however well the task has been done, further risks will emerge in the following weeks and months. Thus, a continuing programme of risk identification is crucial for monitoring the continued identification of new risks, and such a programme entails careful planning.
- 5) Accurate record-keeping is an important component of risk identification. The form of record keeping should be agreed at the start of the programme and the relevant data must be recorded so that they are easy to refer to later.

Risk management philosophy

The risk management philosophy should be the one clear statement of where the organization stands on the issues of risk and its management, and is often expressed as a risk management.

The process of generating the philosophy should involve several executives within the organization and could represent good public relations for the risk management department. Deciding a corporate philosophy towards risk brings several distinct advantages, as shown below.

- 1. The long term objectives of risk management are thought out by the organization. The organization declares what it believes to be the optimum approach with the information available and in this way is seen to have a positive attitude to risk rather that a reactive attitude.
- 2. Declaring a philosophy focuses attention on the work of the risk management department. The organization is likely to have a declared philosophy in several of its activities-from marketing to product design, investment to diversification- and placing a risk management philosophy alongside all these others could heighten the profit of risk management and bring with it an increased awareness of risk itself.
- 3. The philosophy can also act as a useful bench-mark against which to measure the effectiveness of the risk manager and the department. Without a philosophy it becomes difficult for risk managers of their bosses to know if they are performing satisfactorily. The task of measuring effectiveness would become very subjective.
- 4. The philosophy represents the organization's view of the management of risk and is essential for long-term planning and for the evolution of risk management within the organization as a whole. A philosophy may be described as permanent in the sense that it is the corporate view, but it should not be inflexible.

Implementation of Risk Management:

The principles of industrial and commercial risk management, identification, analysis, control and funding can be applied to the clinical arena.

Funding is at present largely outside the control of individual provider units, through the creation of a central fund may go some way towards providing the opportunity for prudent financial management. However, identification and analysis of risks and the steps taken to reduce and control risks are at the heart of clinical risk management.

Several key issues must be addressed when a risk management system is established, and these will be discussed in the following sections.

Practical issues of implementation:

Reporting System:

Central to any clinical risk management system is an adverse outcome reporting system which has the confidence of all members of the organization. Adverse events are identified from staff reports, though this process may be supplemented by a systematic screening of records. Reports of serious incidents are made before claims are initiated and while memories are still fresh.

The reports are used to create a database to identify common patterns and prevent future incidents. Ideally patients and relatives are also informed about adverse incidents and action is taken to minimize both the physical and psychological trauma.

Implementation Process:

Implementation is best achieved by the following steps;

- Identify key result areas
- ❖ Take the message to those key areas
- ❖ Allows the health care providers to identify trigger events
- ❖ Institute a reporting system
- ❖ Monitor and analyze results
- Investigate when appropriate

Identify key result areas:

In any provider unit the risk areas will usually be self-evident. In a district general hospital they are likely to be the accident and emergency department (by volume the biggest risk area); obstetrics, particularly in the labour ward (by quantum the biggest risk area); and the operating theatres.

Take the message to those key areas:

The risk management team takes the programme of education to the risk areas. For instance, a half-day seminar arranged in the accident and emergency department is attended by the key health care providers (consultant staff, junior medical staff, senior nursing staff, and main users, for example, orthopedics, gynecology, pediatrics, etc). the principles of risk management are explained with due emphasis on the advantage to the quality of care which will accrue.

Allows the health care providers to identify trigger events:

During the seminar the health care providers create their own trigger list of incidents which they think are worth reporting to a risk management system. They would also be encouraged to modify it with experience so that the list constantly changes. The same process is repeated in the labour ward and in the operating theatres. The box below shows the kind of list of trigger events which might result for an average labour ward.

Trigger events in a labour ward

Apgar score ≤ at 5minutes

Fetal malformation undiagnosed before birth

Injury to the baby at the time of birth

Blood transfusion > 3 units

Caesarean section: decision to delivery interval > 40 minutes

Third stage or emergency hysterectomy

Failed forceps delivery

Unscheduled return to operating theatre

Still birth or neonatal death

Unexpected or late admission to special care baby unit

Thirty degree teat

Institute a reporting system

Having established a list of the trigger events likely to give early warning of patient harm, the risk management department introduces a system of reporting which, above all, must be simple.

Non medical staffs quickly see the advantages of the adverse outcome reporting system and seldom need much encouragement to implement it. Without the doctors the risk management programme will not be effective, and it is essential that the medical staff should understand what is in it for them. Reporting adverse outcomes or near misses to a risk management reporting system should be associated with reward, not punishment.

Monitor and analyze results

The forms are sent initially to the manager at local level-the service manager or equivalent. The service manger has the discretion to decide whether the incident is trivial and of no consequence, when no further action need be taken. If the incident seems to be an important indicator of a quality issue but is unlikely to have harmed a patient on this occasion the manager will take local action but may not forward the form. Only those incidents which relate to harm that might potentially lead to litigation need be sent to the central risk management department. There they are scrutinized again. Some will be rejected as being important to quality but not to the risk of litigation. Only those important for the risk of litigation will be entered on to the database. The advantages of such a simple system are that it allows the local manager to assess quality issues, and enables identification of clusters and fuller investigation of the real exposure to litigation.

Investigate, when appropriate

When an incident is sufficiently important to be entered on to the database a full investigation will take place. The risk management department will require local managers to obtain statements from all health care providers involved with the patient. This enables the clinical director and the medical executive director to take an early view on whether an action, if brought by the patient, could be defended. When, months or years later, the 'letter before action' arrives, the risk management department can instruct solicitors in an effective and timely manner without the unseemly and usually fruitless search through the archives for members of staff who have long since left not only the trust but, usually, the country.

DISASTERS:

A Disaster is a sudden, greed misfortune. It is the situation arising from the event where disruption of great magnitude occurs in:

- Life (human, animal and plant);and
- Life supporting systems (water, air, food)

Disasters have been classified as "natural" and "man- made". There is a complex relationship between them.

Natural Disasters:

Earthquakes, floods, cyclones, landslides, drought, etc.

Manmade Disasters

Riots and violence, terrorism, accidents (chemical, nuclear, transport) dam collapse, building collapse, food poisoning, fires, etc.

Manmade disasters is caused by human failures or accidents or violence. Sometimes, a clear distinction between man-made and natural disasters may be difficult.

In an earthquake the poor construction of building can contribute significantly to loss of life and damages. The failure of authorities to warn people adequately and of people to respond promptly can contribute to the increased loss of life and damages. Fires may or may not be started by people. Every health care institution must be prepared and ready to tackle the crisis situation developing as a result of the disaster in its area. The Hospital Administrator must anticipate the crisis. It can save death and misery. The sudden increase in demand on the services of the health care facility must be met.

PLAN OF ACTION:

A plan of action to effectively manage any crisis should be worked out in anticipation. Absence of a plan will add to the chaos and confusion which will come on whenever large numbers of people are affected. That will paralyze the services to be provided by the institution. What would have been possible ordinarily would become almost impossible. All the concerned people the hospital administrator, medical, nursing, and other personnel, the victims the relatives and public become frustrated. Lives may be lost unnecessarily because of lack of preparedness.

A hospital administrator must be ready to the extent possible within the resources available, to manage the crisis as and when it occurs. The hospital administrator should always be in control of the situation, foreseeing what could happen and be prepared to meet the situation.

Different Types of Crisis:

Certain areas are more prone to certain types of disasters, for example, cyclones, earthquakes, fires, etc. East coast of India is prone to cyclone, the Himalayan ranges to earthquake. The needs to be met would also depend on the size of the city, town or village and the population and presence of other health care institutions in the area. The past experience will help Specific action plans can then be drawn up apart from general preparedness.

Steps to be taken:

The action plan should give the various steps in handling crisis. This would give the personnel and the activities, in the proper sequence. As the health care institution tackles problems, the experience will help in reviewing the plan to make it more effective and efficient.

Crisis Team:

The Hospital Administrator must develop a crisis team. The members of the team, Consisting of doctors, nurses, paramedical and supportive staff and other should be carefully selected and trained. Each one must be aware of his/her responsibilities, what to do and whom to contact, should they need assistance.

This crisis team should be capable of being assembled quickly, at any time of day or night. Hence, in the selection of people, priority should be given to those who are available easily and live close by in the campus, in the neighborhood, having telephone connections and own transport.

The crisis team should be able to secure the help of others in the area. This would include practitioners and other volunteers, skilled and semi-skilled. A donor list of people willing to donate blood at a short notice should be ready, with their correct addresses and telephone numbers.

Linkages:

Crisis management in disasters might involve large numbers and specialist requirement beyond what is available in the particular institution. Hence, linkages must be formed and be in place for proper referral system.

Training and Reinforcement:

The crisis team needs training and retraining. Some members of the team may leave and new persons will have to be inducted. They will have to be trained and assigned responsibilities. As they have to work with the team, they will have to be trained with the team.

Rehearsals are necessary periodically to ensure that the plan will work smoothly, should disaster strike. The members of the team should always be in peak condition.

The leader should ensure that there is proper communication.

- Between the members of the team.
- With the anxious relatives and friends of the victims,
- With the public
- With the authorities, and
- With the media

Usual Sequence:

• Information received at the health care institution.

- The team leader and members of the team are informed.
- The team gets ready and is in position with all the necessary facilities.
- Victims are received.
- Preliminary examination and sorting(triage)
- Brief documentation.
- First aid is given to all, attending to those seriously injured first. Observation Investigations – diagnosis – treatment.
- Referral, where necessary:

Hospital Administrator should always be at hand, even if he she is not the leader of crisis team. The Administrator's presence, lends support to the team. And he she ready to ensure that the entire hospital and its resource are at the service of the afflicted.

Psychosocial consequences:

Our focus is always on the physical aspects of disasters, the loss of life, physical injuries and damages to property. It is seldom on the psychosocial effects.

The emotional reactions may be:

- Immediate, during the disaster and
- Occurring after the event (soon after or later)

Immediate Reactions are to:

- 1. Physical injury,
- 2. Exposure to extreme danger,
- 3. Witnessing death of close ones,
- 4. Traumatic experience of helplessness and hopelessness,
- 5. Separation from near ones, and
- 6. Need to choose between helping others and fighting for own survival

The adaptation reaction may not function properly:

- Paralyzing anxiety.
- Uncontrolled flight behavior; or
- Group panic

The immediate post – disaster reaction or "disaster syndrome" may be present in 25-75 percent of the victims, during the first hours or days following the event.

Reactions after "the Event":

- 1. People feel numb or reliever, often with strong positive feelings about having survived; later stress effects may show.
- 2. Intense feeling of anxiety (frightening memories of the experience).

- 3. Nightmares.
- 4. Post-traumatic stress disorder.

Occasionally, the symptoms may not appear for several months. Spontaneous recovery occurs in the majority of the cases. All these reactions may cause perceptions of being physically ill and may need health care: Physical and psychological. Facilities must always be available in the right place. Certain equipments and materials should be earmarked for dealing with disasters. They must be checked periodically. It must be ensured that they can be used without any delay.

Oxygen cylinders, full with pressure gauge, flow meters and tubing for connections, spanner for opening. Stretchers, wheel- chairs, trollies, splints. Medicines (verified for date of expiry); IV fluids, with giving sets; blood collections and giving sets. Dressing and sutures materials, gauze (sterile). Instruments (sterile). Ambulances and other transport.

Guiding Principles- Disaster Management

We believe in planning for disasters by using some basic disaster medicine principles. Those are outlined in detail in Auf der Heide: Disaster Response: Principle of Preparation and Response.

1. Learn from past disasters:

Disaster planning must anticipate and plan for recurring difficulties that studies identified in past disasters.

2. Communication during a disaster is often inadequate:

Disaster poses unusual demands for coordinating between organizations. For this reason, a substantial portion of disaster communications problems are related to the exchange of information among organizations. The Poison Centre's ability to acquire and disseminate information in ca crisis makes it a critical information resource.

3. For disaster planning to be effective, it must be inter – organizational.

The typical response to a disaster includes multiple independent organizations from the private sector as well as from agencies of city, country, state, federal, and special district governments. Often, they have planned independently and end up responding that way, with little grasp of how each fits into the overall response. In contrast to most routine emergencies, disaster introduces the need for multi- organizational and multi- disciplinary coordination. The regional poison center is uniquely positioned to bridge many of these organizations together during a crisis. We want to continue to build relationship with agencies so that we improve our day – to – day responses to problems, such as food born illnesses or rabies exposures. According to Dr Auf der Heide, "Those who work together well on a daily basis tend to work together well in disasters."

4. Base disaster pains on what people are likely to do rather than what they should do.

During a crisis, people (victims, worried- well, first responders, and health care providers) will look toward familiar and trustworthy resources for information and guidance. Even for events not considered "poisoning" people seek advice from the regional poison centers. For example the Blue Ridge Poison Center received per 75 calls in the weeks following the anthrax attacks in 2001. We want to improve out capabilities for what people are likely to do.

5. Rely on local resources for up to 72 hours after a disaster.

Our goal is to provide practical and accurate health care information hub to assist state and federal agencies to distribute information. Ideally we strive to disseminate" best available information" before the first patient arrives to a treatment facility. We want clinicians to have the best available information; at the moment they need it, to make critical decisions about patient care.

6. Strive for "single - Voice" messages for the public

Chaos, panic confusion and fear will occur in large disasters, especially related to terrorists' acts. Coordinating health information released to the public creates an image of being in control. Conflicting message create on opposite reaction that leads to greater anxiety, fear and even mistrust in the leadership of the disaster responses. The position center would like to be a team player in sending a coordinated message regarding chemical health- related questions and provide our services to other agencies for disseminating information during incidents requiring their expertise.

7. Make Preparedness Adaptable to a Wide Variety Circumstances

Whenever possible, it is advantageous to adapt disaster procedures for use in daily routine emergencies. Although it is not possible to prepare for every disaster contingency there are some problems that occur with such regularity as to be quite predictable. It is these that are the most amenable to planning. For example, almost every major disaster requires procedures for the centralized gathering and sharing of information about the overall disaster situation and the responding and available resources'. This idea of the concept of Comprehensive emergency management" which the Federal Emergency Management Agency (FEMA) has used in its "Integrated Emergency Management system.

Review Questions:

- 1. Define Risk and explain about the principles of risk management.
- 2. Explain in detail about the risk management philosophies.
- 3. Explain about the Disasters in hospital level.
- 4. Write note on national level disasters.
- 5. Explain about the principles of Disaster management.

UNIT - III

The Hospital Administrator - Role and Responsibilities

The Hospital Administrator is the key executive of the hospital the executive that everyone looks up to for directions. It is he who sets the tone for performance and largely determine how efficiently and effectively the hospitals will function. It is therefore, the Hospital Administrator who is to be finally held responsible for success or failure of the hospital.

In the past, in India and in most other countries, it was the general tendency for a hospital to be headed by a doctor. A clinician rose in stature to be ultimately appointed a s the Director or Chief Executive of the hospital. But being relatively untrained in management, he was unable to cope with general administration personnel laws ad labour relations, finance, planning, materials, management, etc. Consequently, the hospital lost an excellent clinician but gained a poor administrator. Further, such a clinical administrator was often supported by an untrained (not incompetent) non medical administrator; a bureaucrat in Government hospitals, a clergy representative in the case of hospitals run by religious organizations a confidante of the owners in the case of proprietary hospitals. With Hospital Management as established disciple it is now possible to have medical nursing and non medical persons undergo hospital management training and are able to function effectively as Hospital Administrators.

Depending on one's background (medical or non medical) ownership of the hospital, and appointment of to her top management executives, a Hospital Administrator – as chief executive may be designated as Chief Executive officer(CEO), Director, Hospital Administrator, or medical director/Superintendent.

In medium and large hospitals there is need for more than one Hospital Administrator, in which case the senior – mist non medical administrator will function as the CEO / Director, while a Medical Superintendent at times a practicing clinician- may be appointed to look after medical administration. Alternatively, the CEO may be a Medical Director / Superintendent assisted by a non medical Hospital Administrator. In large hospitals there may also be need for one or more. Assistant Hospital Administrators', each overseeing a group of ancillary and support service departments.

The role and responsibilities of a Hospital Administrator therefore vary depending on the job little availability of their medical non medical administrators, and the specific duties assigned to him or her by the management (Government / Governing Board/ Trustees / Owners) of the hospital.

Duties of a Hospital Administrator

In general, the duties of a Hospital Administrator functioning in the capacity of a CEO / Director include the following:

• Being the legal representative of the management the CEO:

- o is responsible for compliance by the hospital of all Government rules, legal, ethical and statutory requirements;
- Under the principle of 'respondent superior' (let the master answer), he is responsible for acts of all staff of the hospital full time part time, visiting.
- As the executive arm of the Governing Board:
 - o has a general duty to oversee every activity taking place in the hospital;
 - o has ultimate responsibility to ensure that the mission/ Philosophy and
 - o objectives of the hospital permeate to its departments and staff;

Transmits, interprets and implements the Management decisions, and rules of the hospital.

- o keeping with the policies of the management, he formulates major rules regulations and supervise their implementation;
- o promotes effectives utilizations of hospital resource human money, materials, physical facilities and space;
- Coordinates long term and annual plans for the hospitals and an approval of the Management, directs their implementation
- Submits to Governing Body on an annual basis budgetary proposals, performance reports and audited statement of accounts;
- O While a hospital is in the construction / equipping stage, liaises with the Management architects and engineers on the side and with the medical / nursing professionals on the other in establishing the need for departments, facilities, equipment, furnishing and staffing
- o Ensures financial viability of the organization by promoting proper marketing efforts high turnover, and economy in use of resources.
- The CEO is also official link between the Management and the employees and hence
 - Advices the Governing Board on the salary structure, service benefits, major staff grievances;
 - o it is he who is ultimately responsible for healthy employer employee relations and negotiations with employee union
- As the leader of the organization:
 - o Creates a favorable organizational climate, resolves major organizations conflicts, and promotes high employee morale and job satisfaction.
 - Works closely with other key executives, including the Medical Superintendent, Nursing Superintendent and Asst Hospital Administrators forming a cohesive management team to deal with day-today affairs.
 - o Selects other senior executives, department heads and senior staff, appropriately delegates duties and responsibilities to them, and makes them accountable.
 - o Ensures that these executive and administrative staff function efficiently and thereby run the hospital smoothly and responsible

- o Is responsible for effective communication within the hospital between departments and sections, and between the hospital and its employee- and thus issues circulars and attends inter-departmental and departmental meetings, and reports to the Management on relevant activities of the hospital.
- As employer, the CEO has major responsibility for personnel management
 - Appoints staff as required and as recommended by the heads of the respective departments, and fixes their remuneration in accordance with their qualifications and experience relative grads / level in the organization, approved salary scales and budgetary limits;
 - o contracts out those services which can be more efficiently and economically performed by firms specialized in that activity;
 - o Is responsible for the personnel policies, adherence to service rules and staff discipline, and maintenance of accurate personnel records.
 - o Is the final disciplinary authority in the hospital.
- Being the custodian of hospital funds and property
 - Establishes a good system for the careful economical and proper use of hospital finances develops adequate financial controls ensures proper upkeep of accurate financial records, and prevents misuse of hospital funds and property.
 - o Advices the Management on the fees / charges for various services.
 - o oversees the acquisition of facilities and purchase of equipment and materials, and ensure their proper use;
 - o takes action to prevent / cope with disasters, fire, theft;
 - Ensures that medical records are properly maintained, and that written records of all business transactions correspondence, and reports are properly safeguarded.
- Since the hospital exists primarily to provide care, even if not of medical background the CEO has fundamental responsibility for the **quality of care** provided
 - o Takes all necessary steps to ensure high standard of service- professional technical and supportive.
 - Ensures that proper procedures are in place for the efficient admission, care and discharge of patients.
 - o Monitors the performance of the hospital its turnover, efficiency, effectiveness and quality of medical and nursing care provided.
 - o ensures that physical facilities and equipment are adequately available and functioning properly to support good and speedy patient care;
 - Implements a system to periodically review and improve the professional competence of staff through quality assurance, on-the job training, and their continuing professional enrichment by involvement in continuing education, scientific activities and research.

- Being the official representative of the hospital, CEO has responsibility for external activities too:
 - o promotes a positive image of the hospital and develops good public relations with the government, Official agencies, vendors and the public at large;
 - o maintains close contact with the community served by the hospital;
 - o liaises with Government and non-Government organizations in developing and implementing health policies and in solving health problem of the community
 - o Takes active interest in and encourage professional forums, publications, and educational activities.
- He/ She carries out such other duties as may be reasonable called upon to discharge as the CEO of the hospital.

As it is not physically possible for the CEO to personally attend to all the above duties, some of them may be delegated to other key executives such as the Medical Superintendent, Hospital Administrator, Asst Hospital Administrator/ s. However, the ultimate responsibility rests the CEO / Director

A Hospital Administrator with a designation of Medical Director/ Superintendent has additionally direct responsibility for the following activities in medical administration.

- Heads the medical staff organizations and is responsible for the effective functioning of clinical and ancillary services.
- Works closely with the heads of clinical and ancillary service department in developing and improving the quality and range of clinical services, diagnostic and treatment facilities, and protocols for efficient patient care.
- Works closely with the nursing service in developing proper procedures for good nursing and supportive care to patients.
- Assists in the appointment of technical faculty, and approves clinical privileges, which define their scope of work.
- o Adopts systems to monitor and improve the quality of care, utilization of facilities, turnover, and performance of staff.
- o Develops policies and procedures to safeguard staff and patients against iatrogenic injuries and nosocomial infection.
- Organizes committees for clinical audit, operation theatre, and control of hospital infection, drugs and therapeutics, patient research.
- Ensures proper upkeep and confidentiality of medical records and patient documentation.
- Overseas the medico- legal, ethical and research issues concerned with patient care and coordinates with the respective clinicians in the regard.
- Promotes continuing professional education of medical nursing and paramedical staff.

If the Medical Director/Superintendent is the CEO, many of the non medical activities- general administration, personnel, finance, materials management, maintenance of physical facilities – are more specifically delegated to a non medical Hospital Administrator.

Medical transcription:

Evolution of transcription dates back to the 1960s. The method was designed to assist in the manufacturing process. The first transcription that was developed in the process was MRP, which is the acronym for Manufacturing Resource Planning, in 1975. This was followed by another advanced version namely, MRP2. But none of them yielded the benefit of medical transcription.

However, transcription equipment has changed from manual typewriters to word processors to computers and from plastic disks and magnetic belts to cassettes and endless loops and digital recordings. Toda speech recognition (SR), also known to continuous speech recognition (CSR), is increasingly being used, with medical transcriptionists and or "EDITORS" providing supplemental editorial services, although there are occasional instances where SR fully replaces the MT. Natural- language processing takes "automatic" transcription a step further, providing an interpretive function that speech recognition alone does not proved (although MT s do).

In the past these medical reports consisted of much abbreviated handwritten notes that were added in the patients' file for interpretation by the primary physician responsible for the treatment. Ultimately, this mess of handwritten notes and typed reports were consolidated into a single patient file and physically stored alone with thousands of other patient records in a wall of filing cabinet and delivered to the requesting physician. To enhance this manual process, many medical record documents were produced in duplicate or triplicate by means of carbon copy.

In recent years medical records have changed considerable. Although many physicians and hospitals still maintain paper records, there is a drive for electronic records. Filing cabinets are giving way to desktop computers connected to powerful servers, where patient records are processed and archived digitally. This digital format allow for immediate remote access by any physician who is authorized to review the patient information. Reports are stored electronically and printed selectively as the need arises. Many MTs now utilize personal computers with electronic references and use the Internet not only for web resources but also as a working platform. Technology has gotten so sophisticated that MT services MT departments work closely with programmers and information system (IS) staff to stream in voice and accomplish seamless data transfer through network interfaces. In fact, many health care providers today are enjoying the benefits of handheld PCs personal data assistants (PDSs) and are now utilizing software on them for dictation.

Overview

Pertinent up-to-date confidential patient information is converted to a written text document by a medical transcriptionist (MT). This text may be printed and placed in the

patients' record and / or retained only in its electronic format. Medical transcription can be performed by Mt s who are employees in a hospital or who work at a home as telecommunicating employees for the hospital; by MTs working as telecommunication employees or independent contractors for an outsourced service that performs the work offsite under contract to a hospital, clinic group or other healthcare provider; or by MTs working directly for the providers of service(doctors or their group practices) either onsite or telecommuting as employees or contractors. Hospital facilities often prefer electronic storage of medical records due to the sheer volume of hospital patients and the accompanying paperwork. The electronic storage in their database fives immediate access to subsequent departments or providers regarding the patient's care to date, notation of previous or present medications, notification of allergies, and established a history on the patient to facilities healthcare delivery regardless of geographical distance or location.

The term transcript or "report" as it is more commonly called, is used a the name of the document (electronic or physical hard copy) which results from the medical transcription process, normally in reference to the healthcare professional's specific encounter with a patient on a specific date of service. This report is referred to by many as a "medical record". Each specific transcribed record or report, with its own specific date of service, is then merged and becomes part of the larger patient record commonly known as the patients' medical history. This record is often called the patient's chart in a hospital setting.

Medical transcription encompasses the MT, performing document typing and formatting functions according to an established criteria or format, transcribing the spoken word of the patients care information into a written, easily readable form. MT requires correct spelling of all terms and words, (occasionally) correcting medical terminology or dictation errors. MTs also edit the transcribed documents, print or return the completed documents in a timely fashion. All transcription reports must comply with medico - legal concerns, policies and procedures, and laws under patient confidentiality.

In transcribing directly for a doctor or a group of physicians, there are specific formats and report types used, dependent on that doctor/s specialty of practice, although history and physical exams or consult are mainly utilized. In most of the off- hospital sites, independents medical practices perform consultations as a second opinion, pre surgical exams, and as IMEs (Independent Medical Examinations) for liability insurance or disability claims. Some private practice family doctors choose not to utilize transcriptionist, preferring to keep their patients records in a handwritten format, although this is not true of all family practitioners.

Currently, a growing number of medical providers send their dictation by digital voice files, utilizing a method of transcription called speech or voice recognition. Speech recognition is still a nascent technology that loses much in translation. For dictators to utilize the software, they must first train the program to recognize their spoken works. Dictation is read into the database and the program continuously "learns" the spoken words and phrases.

Downward adjustments in MT pay rates for voice recognition are controversial. Understandably, a client will seek optimum savings to offset any net costs. yet vendors that overstate the gains in productivity do harm to MTs paid by the line. Despite the new editing skills required of MTs, significant reductions in compensation for voice recognition have been reported. Reputable industry sources put eh field average for increased productivity in the range of 30% - 50% yet this is still dependent on several other factors involved in the methodology. Metrics supplied by vendors that can be "used" in compensation decisions should be scientifically supported.

Another unresolved issue is high - maintenance headers that replace simple interfaces to become the platform of choice. Pay rates should reflect this lost - opportunity cost for the MT.

Operationally, speech recognition technology (SRT) is an interdependent collaborative effort. It is a mistake to treat it as compatible with the same organizational paradigm as standard dictation, a largely: standalone: system. The new software supplants an MT s former ability to realize immediate time savings from programming tools such as macros and other word format expander's requests for client vendor format corrections delay those savings. If remote MT s cancel each other out with disparate style choices, they and they recognition engine may be trapped in a seesaw battle over control. Voice recognition managers should take care to ensure that the impositions on MT autonomy are not so onerous a s to outweigh its benefits.

Medical transcriptions still the primary mechanism for a physician to clearly communicate with other healthcare providers who access the patient record, to advise them on the state of the patient's health and past / current treatment, and to assure continuity of care. More recently, following Federal and State Disability Act changes a written report (IME) became a requirement for documentation of a medical bill or an application for worker's compensation (or continuation thereof) insurance benefits base on requirements of Federal and State agencies.

As a Profession

A medical transcriptionist working in a medical transcription in known as a transcriptionists outsourced environment. An individual who performs medical transcriptionists or an MT. An MT is also known as a Medical Languages specialist or MLS. The equipment the MT uses is called a medical transcriber. The individual who performs medical transcription should always be called an "A medical transcriptionists is the person Responsible for converting the patient's medical records into text from recorded Dictation. The term transcriber describes the electronic equipment used in performing medical transcription, e.g., a cassette player with foot controls operated By the Mt for report playback and transcription. There have been industry Discussions centered on whether or not medical transcriptionists should Be called something else; no other industry-wide term has been adopted.

Education and training can be obtained through certificate or diploma programs, distance learning, and/or on-the-job training offered in some hospitals, although there are countries currently employing transcriptionists that require 18 months to 2 years of specialized

MT training. Working in medical transcription leads to a mastery in medical terminology and editing, MT ability to listen and type simultaneously , utilization of playback controls on the transcriber 9machine), and use of foot pedal to play and adjust dictations-all while maintaining a steady rhythm of execution .

Experience that is directly related to the duties and responsibilities specified, and Dependent on the employer (working directly for a physician or hospital facility).

- Knowledge of medical terminology.
- ❖ Above-average spelling, grammar, communication and memory skills
- ❖ Ability to sort, checks, count, and verify numbers with accuracy.
- Skill in the use and operation of basic office equipment/computer; eye/hand/foot coordination.
- ❖ Ability to follow verbal and written instructions.
- Records maintenance skills or ability.
- ❖ Above-average to excellent typing skills.

Basic MT knowledge, skills and abilities

- ❖ Knowledge of basic to advanced medical terminology is essential.
- Knowledge of anatomy and physiology.
- Knowledge of disease processes.
- * Knowledge of medical style and grammar.
- Average memory skills.
- ❖ Above-average memory skills.
- ❖ Ability to sort, checks count, and verify numbers with accuracy.
- Demonstrated skill in the use and operation of basic office equipment/computer.
- ❖ Ability to follow verbal and written instruction.
- * Records maintenance skills or ability.
- Above-average typing skills.
- ❖ Knowledge and experience transcribing 9from training of real report work in the Basic Four work types: History and Physical Exam, Consultation, Operative Report, and Discharge Summary.
- ❖ Knowledge of and proper application of grammar.
- * Knowledge of and use of correct punctuation and capitalization rules.
- Demonstrated MT proficiencies in multiple report types and multiple specialties.

Duties and responsibilities

- Accurately transcribes the patient-identifying information such and medical Recorded or Social Security Number.
- Transcribes accurately, utilizing correct punctuation, grammar and spelling, and edits for inconsistencies log.
- ❖ Maintains/consults references for medical procedures and terminology.
- Keeps a transcription log.

- ❖ Income countries, MTs may sort, copy, prepare, assemble, and file record and charts (though in the United States (US) The filing of charts and records are most often assigned to Medical Records and collects dictation tapes.
- ❖ Follows up on physicians missing and/or late dictation, returns printed or electronic
- Report in a timely fashion (in US Hospital, MT Supervisor performs).
- Performs quality assurance check.
- May maintain disk and disk backup system (in US Hospital, MT Supervisor performs).
- ❖ May order supplies and report equipment operational problems (In US, this task is most often done by Unit Secretaries, Office Secretaries, or Tech Support personnel).
- ❖ May collect, tabulate, and generate reports on statistical data, as appropriate (in US, GENCERALLY PERFORMED BY MT Supervisor).

The medical transcription process

When the patient visits a doctor, the latter spends time with the former discussing his medical problems, including past history and / or problems. The doctor performs a physical examination and may request various laboratory or diagnostic studies; will make a diagnosis or differential diagnoses, and then decides on a plan of treatment for the patient, which is discussed and explained to the patient, with instructions provided. After the patient leaves the office, the doctor uses a voice-recording device to record the information about the patient encounter. The information may be recorded into a hand- held cassette recorder or into a regular telephone dialed into a central server located in the hospital or transcription service office, which will 'hold' the report for the transcriptionists. This report is then accessed by a medical transcriptionist, it clearly received as a voice file or cassette recording, who then listens to the dictation and transcribes it into the required format for the medical record, and of which this medical record is considered a legal document. The next time the patient visits the doctor, the doctor will call for the medical record or the patient's entire chart, which will contain all reports from previous encounters. The doctor can on occasion refill the patient's medications after seeing only the medical record, although doctors prefer to not refill prescriptions without seeing the patient to establish if anything has changed.

It is very important to have a properly formatted, edited, and reviewed medical transcription document. If a medical transcriptionist accidentally typed a wrong medication or the wrong diagnosis, the patient could be at risk if the doctor (or his designee) did not review the document for accuracy. Both the doctor and the medical transcriptionists play an important role to make sure the transcribed dictations correct and accurate. The doctor should speak slowly and concisely, especially when dictating medications or details of diseases and conditions and the medical transcriptionist must possess hearing acuity, medical knowledge and good reading comprehension in addition to checking references when in doubt.

However some doctors do no review their transcribed reports for accuracy, and the computer attaches an electronic signature with the disclaimer that a report is "dictated but not read". This electronic signature is readily acceptable in a legal sense. The transcriptionist is bound to transcribe verbatim (exactly what is said) and make no changes, but has the option to

flag any report inconsistencies. On some occasions, the doctors do not speak clearly, or voice files are garbled. Some doctors are, unfortunately, time-challenged and need to dictate their reports quickly (as in ER Reports). In addition, there are many regional or national accents and (mis) pronunciations of words the MT must contend with. It is imperative and a large part of the job of the Transcriptionist to look up the correct spelling of complex medical terms, medications, obvious dosage or dictation errors, and when in doubt should "flag" a report. A "flag" on a report requires the dictator (or his designee) to fill in a blank on a finished report, which has been returned to him, before it is considered complete. Transcriptionists are never, ever permitted to guess, or 'just put in anything' in a report transcription. Furthermore, medicine is constantly changing. New equipment, new medical devices, and new medications come on the market on a daily basis, and the Medical Transcriptionist needs to be creative and to tenaciously research (Quickly) to find these new words. An MT needs to have access, to or keep on memory, an upto-date library to quickly facilitate the insertion of a correctly spelled device,

Medical Tourism:

Medical tourism, medical travel or wellness tourism is the act of traveling to other countries to obtain medical, dental, and surgical care. The term was initially coined by travel agencies and the media as a catchall phrase to describe a rapidly growing industry where people travel to other countries for seeking medical care. The concept of medical tourism is gaining importance in developing countries. The main reason for that; is the treatment facilities being provided in these hospitals are world class, particularly in context to India, and at the same time, the treatment cost is too much less in ,most of the cases in comparison to the western countries or the developed part of the world and also almost no waiting time. In addition to it, India is known for its natural treasure and rich cultural heritage. Thus, the tourism is serving both the aspects; tourism and cost effective procedures as well as complex specialized surgeries such as joint replacement (knee/hip) cardiac surgery, dental surgery, and cosmetic surgeries. The provider and customer use informal channels of communication-connection-contract, with less regulatory or legal oversight to assure quality and less formal recourse to reimbursement or redress, if needed.

Ministry of tourism brochures advertise cardiac surgery, minimally invasive surgery, oncology services. Orthopedics and joint replacement, and holistic health care, provided by about 45 hospitals promoted as "centers of excellence". Medical tourism is often hailed as a sector where developing countries, such as India, have huge potential due to their comparative advantage based on providing world-class treatment at low prices combined with attractive resorts for convalescence. The medical care and tourism can be naturally combined in India. India has rich cultural heritage, known for hospitality, diversities not only in culture but the systems of medicine as well. India has developed medical fields in alternative system of medicine like panch karma (Ayurveda). Naturopathy, herbal treatment, Yoga, spiritual health, all these disciplines have become quite popular in the western countries also. People come to India to learn and get treatment under these systems of medicine. In India, the combination is popularly known as Ayurveda, Yoga, Unani, Siddha, Homeopathy, [AYUSH].

FACTORS AFFECTING MEDICAL TOURISM

Factors which are responsible for the increasing popularity of the medical tourism are as follows

- 1. High cost of medical care in developed countries.
- 2. Long waiting time for operative procedures.
- 3. Affordability, accessibility, and availability of international travel.
- 4. Improved health care in developing countries with on demand service at affordable cost.
- 5. Scope for travel with medical care.
- 6. Developed tourist industry in India and other developing countries at affordable cost.
- 7. Medical tourism for knee joint or hip joint replacement has attracted many countries, as most of the insurance companies do not add such treatment in their package and treatment cost is much less in developing countries, without any waiting time.
- 8. Medical tourism providers have developed as intermediaries to unite potential medical tourists with provider hospitals and other organizations. The companies that focus on medical value travel typically provide nurse case managers to assist patients with pre-and post travel medical issues.

Risks and Benefits of Medical Tourism

- 1. Patient may not be covered by insurance in that country.
- 2. Patient might not be able to get protected and seek malpractice.
- 3. Quality of care may not be up to the mark as stated as most of the hospitals are not accredited as per the international standards, particularly post operative care.
- 4. The prevalence of communicable diseases is very high in developing countries including India; the hospital infection rate is also on higher side in most of the hospitals, that may pose a threat to medical tourism.
- 5. Travel soon after surgery may also increase the risk of complications.
- 6. Follow up treatment is a real problem in the country of origin as well in the country, the patient was operated upon.

Sponsored Medical Tourism

As a new concept certain US based companies have started providing package for their employees for travel and medical care as medical tourism outside United States. The medical benefit package can integrate all types of health insurance.

Destinations for Medical Tourism

The preferred countries for medical tourism are enlisted below:

S. No	Name of destination/country	Benefits of Medical Tourism
1.	Canada	In comparison to US the patient can
		save 30 percent on health care cost

Administration of Hospital Staff and MRM				
		with internationally comparable		
		Standards of care.		
2.	Dominican Republic	Popular destination for plastic surgery the		
		health Care cost is about 75 to 80% less than		
		USA.		
3.	Mexico	Popular specialties are dentistry and plastic		
		Surgery, the charges are one fifth to one fourth of US prices.		
4.	Brazil	Destination for cosmetic surgery.		
5.	Colombia	Cosmetic surgery, eye surgery		
		Cardiovascular Surgery, Colombia has such an organ donor and Banking system which makes organs available to foreigners with certain legal restrictions.		
		Orthopedic surgeries, such as knee and hip replacement are done in Colombia with US-made, (FDA- Approved) prosthetics at a fraction of the cost.		
6.	India	India is known for heart surgery. Hip joint/knee Joint replacement. Chennai has been		
		declared as Health capital of India, as it nets		
		in 45% of Medical Tourists. Kerala is destination for Ayurveda, Yoga		
		and herbal treatment including Naturopathy.		
7.	Malaysia	The country has excellent hospitals.		
		Malaysia has a national accreditation scheme (MSQH). Few Hospitals also go for international accreditation scheme.		
8.	New Zealand	The cost of care is cheaper than UK and		

USA.There are packages fosr airfare, accommodation,Medical service etc. For procedures like hip Joint replacement, Coronary artery bye pass Surgery

The total cost is 40% less than US cost.

9. Philippines

The cost of medical care is much less than in

USA. They have developed a system of accreditation of Hospitals by Philippines department of health.

In addition to that some hospitals are accredited By JCI.

10. Singapore

The health care is affordable with clean

cosmo-politan city. Many hospitals are accredited by JCI.

11. Spain

Strong economy and modern hospitals with

Well Trained manpower making it an up coming tourism

It is here that promotion of medical tourism can prove to be a blessing. A part of the higher private healthcare revenue can be tapped to increase public health spending.

Besides, promotion of medical tourism would have positive spill over effects. Some of These are: Benchmarking and streamlining healthcare delivery (this includes the development of treatment protocols, standardization of costing of various procedures, accreditation of hospitals and so forth): checking brain drain from India; increasing employment opportunities; and concomitant expansion of the aviation sector.

The promotion of medical tourism requires a multitrack approach. In the international arena, it requires providing an impetus to trade liberalization in the sector within the multilateral (or General Agreement on Trade in Services) framework, seeking harmonization of health standards, facilitating cross-border mobility and consumers promoting health services trade with neighboring countries. Progress on these fronts is bound to attract greater FDI into this sector. On the domestic front, this calls for enhancing coordination between states to develop uniform regulation of healthcare, which is essentially a state subject. The very nature of these interventions enjoins upon the government to play a pivotal role in the promotion of medical tourism, at least in the initial stages of its development. The logic of investment and profitmaking in healthcare, which is no different from any other sector, will ensure a repeat of IT in

healthcare, which can be made to work for the betterment of all, foreign and domestic residents alike.

Types and Classification of Hospitals

WHO has defined hospital, and if we apply this definition, only very few hospitals will qualify to be called as hospital. There is a wide range of hospitals. Some hospitals are small, are big, some imparting teaching and training facilities, some are owned by private bodies, some are specialty hospitals and so on. These hospitals can be categorized or classified in several manners. Some of the methods of classification of Hospitals are given below:

According to Ownership and Control

a. Public Hospital: The hospitals run by Central or State governments, local bodies

and public sector undertakings. The hospitals are purely service organizations and Non-profit making hospitals. Examples and Civil hospitals.

b. Voluntary Hospitals: These hospital are registered under the societies act or

Public trust act. They are run by trusts and on non-commercial basis examples,

charitable hospitals.

c. Nursing homes: Generally owned and managed by individual doctors. These hospital generally do not a admit cases of medicolegal importance and the patient care services are usually provided in some of the specialties of Medicine. Some of the nursing homes provide only maternity care. Some hospitals can provide tertiary care in some super specialties like Cardiology, Nephrology. Examples are Mayo Medical Centre, Awadh Hospital at Lucknow city, etc.

d. Corporate Hospitals:

These hospitals are run on the basis of profit earning and are registered under companies act. Examples are Hinduja Hospital. Apollo Hospital, etc.

According to Directory of Hospitals

- 1. **General Hospital**: These hospitals usually provide medical care in more than one broad specialty and there is no strict departmentation.
- 2. **Rural Hospitals**: The Hospitals located in rural areas.
- 3. **Specialty Hospital**: Hospital providing medical care usually in one or more specialty like TB Hospital, Eye Hospital, Cancer Hospital, Heart Centers, etc.
- 4. **Teaching Hospital**: Usually the hospitals attached to medical college.
- 5. **Isolation Hospital**: Hospitals providing patient care to communicable

Diseases.

According to Systems of Medicine

Various systems of medicines like Allopathy, Ayurvedic, Unani, Tibb, Homeopathy, have their own hospital.

According to size of Hospital

The hospitals can be classified as small, medium or large size depending upon the bed strength of the hospitals. Hospitals having more than 500 beds are usually called hospitals. Hospitals having bed strength from 200 to 500 are called medium size hospitals and hospitals having less than 200 beds are small hospitals.

According to clinical Basis

The hospital can be classified as general hospital or specialized hospital.

According to Level of Care

The hospital can be classified as primary care hospitals like PHCs, CHCs, secondary care hospitals like district hospitals and tertiary care hospitals like regional hospitals or hospital associated with medical college.

According to Teaching Facilities

The hospital can be classified as teaching hospital or non teaching hospital.

Based upon Accreditation

Now on times to come, the hospital will be classified as accredited hospitals and non-accredited hospitals. In USA and Europe, this classification is more relevant as far as the Quality of medical care is concerned. In India also the steps are being taken in this regard.

Based Upon the Gender

Some of the hospital are also classified on the basis of male hospital and female hospital,

Particularly in the public sectors, at district level.

According to Length of Stay

It is not an interactive media but suitable for passive health education. Various TV channels have started a combination of the TV with Telephonic conferencing, but right now that is

Health Promotion and Prevention of the Diseases: Mass media has great role to play in educating the people particularly in diseases like HIV/AIDS.

- **a. Medical Records Maintenance**: Patient's records can be maintained, stored And retrieved through
 - i. Project management
 - ii. Training and development of the staff
 - iii. Evaluation of project.

Other issues:

National standards and strategies.

Barriers to Telemedicine

The telemedicine has got number of challenges to overcome before it can be integrated

With national health care delivery system.

- 1. **Infrastructure**: The infrastructure development in the telemedicine is very Costly and it needs up gradation and updates, very frequently which is very frequently which is very costly.
- 2. Quality of transmission.
- 3. Cost
- 4. Compatibility between hardware and software
- 5. Dispersion of liability
- 6. Privacy and confidentiality
- 7. Acceptability to providers and beneficiaries.
- 8. Reimbursement of consultations.
- 9. Patient's fear and unfamiliarity.
- 10. Government support is not up to desired level at present.

Challenges of Health and Hospital Administration

Hospitals have grown both in size and direction, making its management a challenging task. With the coming in of poly-clinics and big hospitals in private sector. The problems of hospitals administration have compounded. What are the problems that are likely to be encountered by hospitals I new millennium? What can done to make them serve the cause of health of the community? How can we translate the definition of health given by WHO to make the lives of people healthier. Let us discuss some of the potential problems and their solutions that the hospitals are likely to face in the new millennium. We may keep the following words in mind. We canno0t continue doing what we have always done. Tomorrow cannot be just more of yesterday. We need flexibility and pragmatism as much as innotation. But the stress must invariably be on action.

Let us discuss important problems and their solutions.

1. COMPLEXITY OF HOSPITALS CREATED BY EVER INCREASING SOPHISTICATED DIAGNOSTIC TOOLS RESULTING INTO HIGH COSTS BEYOND BUDGETARY ALLOCATION: NEED OF ANALYSIS AND PLANNING

The developments in science and technology has resulted into the designing of complex medical equipments which can help medical experts in easy and accurate diagnosis and treatment. The development is so fast that old instruments become out-dated after 3-4 years. All these equipments cost heavily and are mostly beyond the reach of many hospitals. Even if some hospitals acquire them, they have to cut on essential items, thus badly affecting the efficiency of hospital services. It is a paradox as to how to get the best of medical equipments as well as remain within financial constraints. This is a dilemma for many planners and of the hospitals. Based upon personnel observation,

Discussion and study, we suggest here some points to come over this serious problem.

- (a) Need of Defining the objective of the Hospitals
- (b) Need of ensuring the Technical Manpower to Handle Costly Equipments
- (c) Need of maintaining the Output Ensure benefits
- (d) Essential use of these Equipments should be encouraged but not a Routine Affair
- (e) Private Laboratories may be identified and Contracts Entered to facilitate Cheap and Efficient Services.
- (f) Indigenous Equipment of Quality Need be preferred

2. DECLINING PROFESSIONAL ETHICS AMONG SPECIALISTS AND OTHER HOSPITAL STAFF-NEED OF DEVELOPING ETHIC STANDARDS

The tendency to make money is on the increase in the profession. Medical professionals attend on priority the wealthy and influential people who can compensate them directly or indirectly while neglecting the common man.

Large scale bureaucratic management, particularly when equipped with the most refined calculational techniques, can develop – to use Erich Fromm's words-a spirit "inhospitable to life, joy, independence, love, compassion, meaningful human relations, real intimacy and sharing between people". If the public administrators, managers and political leaders in developing countries cannot develop non-bureaucratic methods and institutions, "the result will be increasing loneliness, boredom, aggressiveness, competition, consumption-from cars to sex, liquor and drugs- and cruelty as the result of a lack of compassion".

We suggest here some points to make ethical standards practicable and feasible:

- (i) Top leadership should follow high ethical standards to serve as guide for the health functionaries at the lower levels.
- (ii) We should encourage professional standards to inject in the medical team the spirit of service.
- (iii) New entrants need be supervised properly so that wrong be corrected in the initial stages.

- (iv) There should be code of ethics which should be followed by all.
- (v) Environment of the hospital should be such which can inspire confidence and loyalty.
- (vi) Medical team should be respected and given due status.

3. ABSENCE OF REFERRAL SYSTEM CAUSING MISUSE OF RESOURCES

We have explained the referral system in a separate chapter. However, we may mention here that we cannot afford the scarce resources for health services being wasted in duplication, overlapping and management.

There is at present no proper referral system in place. Once a patient is received at a particular institution, the doctor examines the patient and decides whether he/she can be managed there itself, or needs a referral to a higher level facility. There is complete lack of coordination among the peripheral institutions, on the one hand, and between the institutions and district hospitals, on the other. There are no guidelines or procedures that govern the peripheral institutions and the higher-level hospitals in a referral chain. No written or unwritten conventions exist as to what types of conditions are to be treated, from where and when. There is also no prioritization of referred cases, either from private or government institutions. Lower-level facilities lack even basic facilities, equipment and major specialists, leading to a large number of self-referrals and overcrowding in the higher level facilities.

4. HOSPITAL WASTE CAUSING ENVIRONMENTAL POLLUTION AND LEADING TO NEGATIVE RECYCLING WITH SERIOUS MEDICAL AND HEALTH CONSEQUENCES-NEED OF SERIOUS THINKING AND ACTION

Hospital waste is causing great health hazards especially in metropolitan and big cities where large number of hospitals are located. Hospital wastes includes both infectious and non-infectious substances coming out of different wards, OTS,OPD, Emergency services, etc. Such wastes can create hospital infection as well pose major cause of environmental pollution.

Hospital waste will contain injurious items such as: ineffective exudates, tissues, or dressings: radioactive materials; and contaminated syringe and needles. Special care must be exercised in disposing of these items by incineration, burial, or other means. In particular, disposable syringes and needles may be sought by drug abusers, and should be rendered unusable. The channels for disposing of hospital waste will depend on local circumstances and legislation.

There is a need for every hospital to set-up hospital waste system. The hospital waste can cause infectious problems to:

- (a) Patients and their relatives who come to the hospital.
- (b) Personnel providing hospital services from doctors to sweepers.
- (c) Impact on environment causing many health problems-where hospital wastes are dumped, it becomes an ideal breeding ground for rodents, mosquitoes, bacteria, virus, flies, leading to many complex diseases. These can contaminate the water and air and can cause serious health problems for the residents.

5. MUSHROOM GROWTH OF PRIVATE HOSPITALS WITH NO NORMS-NEED OF DEFINITIONS

Private hospitals are coming in a big way to make good the inefficiency of Government hospitals but with a heavy price. Ravubder siid, reporting from Palampur (H.P) said (The Tribune, May 22, 2000) that health services in this remote corner of the state has received a big boost with the setting up of a private hospital in the town.

There is no harm in supplementing health services by private hospitals but with some state laws, norms and controls. State must help in providing various inputs in setting up private hospitals and also exercise its regulatory authority in respect of the following through medical council of India:

- (a) Doctors engaged by private hospitals should be paid at least as per the government pay scales.
- (b) Security of service must be ensured through service rules.
- (c) Fees from patients need be approved by government for various services.
- (d) Regular inspections need be done by experts to ensure quality of essential services.
- (e) Hospital should be located away from residential complexes.
- (f) Mechanism of redressal of grievances of patients must be devised.
- (g) Hospital must report on a pre-designed Performa after a regular interval of time.
- (h) Parameters for setting up private hospitals/ nursing homes need be defined so that they may not become nuisance to people living nearby.
- (i) Norms of services should be spelt out.

6. LACK OF ARRANGEMENTS FOR KEEPING THE HOSPITAL STAFF EQUIPPED WITH LATEST KNOWLEDGE IN NEW MILLENNIUM IN CLINICAL TECHNICAL AND MANAGERIAL COMPETENCE – NEED OF DESIGNING NEW METHODS

There is no doubt that the efficiency of the hospital services depends to a substantial extent on the clinical, technical and managerial competence of the hospital staff. However, it has been seen that doctors/ technicians, supporting staff, hospital administrators, once appointed, go on working in their narrow grooves. New millennium is unfolding many new skills in every area to make hospital system efficient and effective. We suggest here some points which can keep the hospital staff effective and efficient.

- (i) There is a constant need of in –service training both for the government and Private practitioners.
- (ii) Teaching-cum-research institutions like PGI, AIIMS etc, should start some Evening classes or a fortnight course where doctors can undergo training in latest techniques. Medical associations, specialty associations and alumni associations of medical colleges can also play a significant role in this direction.
 - (iii) Teaching -cum-research institutions can send the specialists in the concerned

Field to make doctors in the field aware of latest development as well as distribute literature in the area concerned.

- (iv) An Open Medical University may be set up where courses in all areas are available. This can benefit in a big way. Modern techniques like tele-conferencing; computers may be used to reach the health and medical personnel in the remotest area.
- (v) Telemedicine, a new technique can help the doctors to be in touch with the latest developments in the institutions in the entire world benefiting both the doctors and the patients.

7. INCREASING COST OF HEALTH SERVICES: NEED OF RESOURCES MOBILISATION AND COST CONSCIOUSNESS

We suggest here some facts and suggestions:

- (i) Hospitals should set-up an economy committee which should scrutinize the current activities, their mode of financing and their utility. An examination would indicate a scope for curtailment of unwanted expenditure.
- (ii) The Director/Medical Superintendent through financial experts apply the modern management techniques like performance budgeting. Zero-base budgeting cost accounting, etc. to ascertain the genuiness for expenditure and its utility.
- (iii) Hospital staff should be made cost-conscious so that they should use hospital resources judiciously and economically. They should use only those services which are essential.
- (iv) Since a large part of the hospital expenditure is on the salary of medical and supporting personnel there is a need to ensure optimization of their services. It has been seen that a lot of time is wasted by the hospital staff in non-medical activities. By making use of method study, work measurement, activity analysis we can improve upon the utilization time of hospital staff.
- (v) For resource mobilization, there can be users charges. The appropriateness of adopting cost sharing principles depends on the type of service provided. Hospital services are mostly patient-related curative services.

8. DETERIORATING QUALITY OF HOSPITAL SERVICES-NEED OF INTRODUCTING HOSPITAL ACCREDITATION

Quality of health care in hospitals is deteriorating. The hospital system suffers from major handicaps. It was reported in The Tribune (June 2, 2000) that Doctors prescribes medicines of non-standard companies. To quote "The Government Zonal Hospital has not been supplied stationery for a long time and various things like the OPD slips, indoor patient charts, X-ray prescriptions are being sought on donations. The hospital laboratories too are in a sorry state.

The ambulance service is also reported to be miserable. The three drivers have been posted on shift duties, but usually two of them remain on furlough. The only driver on duty takes his own time for attending emergency calls. The group found the following advantages of accreditation:

- Stimulates improvement of care.
- Strengthens community confidence.
- Reduces unnecessary costs.
- Increases efficiency.
- Promotes personnel training
- Provides credentials for education.
- Can protect against lawsuits.
- Provides comparative data.

9. NO HOSPITAL REVIEW: NEED OF STUDY AND RESEARCH IN DIFFERENT AREAS OF HOSPITAL ADMINISTRATIN

Hospital administration is being run by hit and trial methods without going in-depth studies in various areas of administration affecting hospitals services.

In the new millennium, the hospitals should be run on scientific lines. This would require research and in-depth study of various administrative issues impinging on the medical services. Some of these areas may be mentioned here:

- The effective use of hospital services e.g. X-rays, beds and of imaging and Other services
- Staff issues such as job satisfaction and the retention of staff members, particularly, nurses and other highly trained personnel,
- Patient satisfaction.
- Clinical data, such as readmission rate, length of stay for various illnesses, and the effectiveness and efficiency job referral to and from the hospital and health centres,
- Cost-benefit analysis of different programmes,
- The incidence, etiology, and prevention of infection,
- Design of new aids and gadgets for the care and comfort of patients, especially the disabled.
- Quality assurance in hospitals,
- Cost accounting of various services,
- Utilization time of different categories of persons, and
- Transport efficiency.

10. NEGLECT OF HOSPITAL MAINTENANCE: NEED OF MAINTENANCE AND BEAUTIFICATION

The first impression of the visitors to the hospital depends upon the proper upkeep of buildings, equipments, water supply, electricity supply, etc.

- (i) The surroundings of the hospitals are covered with congress grass and is full of dirt. Even in many hospitals there are no boundary walls. It is suggested that green grass and plants should be grown to make the hospitals clean and greener.
- (ii) Buildings of the hospitals are in bad shape. Because of the shortage of Funds, these are not maintained properly. These become the breeding ground of insects and cause infection in the hospitals, buildings must be maintained properly at regular intervals of time to avoid deterioration.
- (iii) Sweepers and ward boys must be encouraged to keep the hospital clean. They must be told that cleanliness is very important for the recovery of patients.
- (iv) Lavatories' are in bad shape and even stinking. Hospital authorities must attend to it seriously otherwise the four smell make the whole environment of the hospital unpleasant.

11. NEED OF HARNESSING POTENSTIALITIES BEING OFFERED BY NEW DEVELOPMENTS IN THE FIELD OF REGENERATIVE MEDICINE AND INFORMATION TECHNOLOGY

At the dawn of 21st century we find the most important development in medicine is development of the science of Human Genome, involving human genetic engineering which will change the contents of medical science.

- Molecular medicine Lead to improved diagnosis of disease; earlier detection of genetic predispositions to disease, rational drug design; gene therapy and control systems for drugs; and pharmacogenomics "Custom drugs"
- **Microbial genomics** explore new energy sources (bio fuels); environment monitoring to detect pollutants; protection from biological and chemical warfare; and safe, efficient toxic-waste clean –up.
- **Risk assessment** assess health damage and risks caused by radiation exposure, including low-dose exposures; assess health damage and risks caused by exposure to mutagenic chemicals and cancer-causing toxins; and reduce the likelihood of heritable mutations.

12. NEED OF STREAMLININF THE UPKEEP OF HOSPITALS THROUGH METICULOUS PLANNING OF HOSPITAL SERVICES

It has been seen that specialists and other staff are handicapped because of non-availability of minor facilities which indicate callousness on the part of hospital authorities. For example, many a times, it has been found, trolleys are either not available or out of order, services of barber, bearers, communication facilities, transport facilities are not available. There is need of planning in Toto and not for some services only, as the absence of small services can lead to the death of a patient. Poonam Bath Reporting about the death of a girl in (Chandigarh Tribune, dated July 2 2000), mentioned the following factors responsible for it:

- Ambulance not available,
- CT scan machine out of order, and
- No barber to shave patient's head.

13. CONSTRAINTS WITH WHICH MEDICAL PERSONNEL WORK AND LIMITATION IN SUCCESS OF TREATMENT

The adverse outcome of cases involved in serious injuries, often leads to sudden grief, manhandling of the medical and paramedical personnel and eventual media headlines, showing the medical profession/hospital in bad light. This requires education to public on a continuing basis, besides providing security/insurance against outbursts of violent/anger leading to danger and risk to the life and property at the hospital.

It is suggested that local NGOs like Red Cross play important role in planning of utilization of services available and provide personnel services like transport, wheel chairs, drug, stores, barbers, bearers, etc. This can cut down on un-necessary delays, thus savings vital time between the onset of emergency situation and active intervention.

Any undue adverse publicity in the media against premier hospitals, will lead to greater stress on the minds of treating physicians/ surgeons and prove counter-productive. However, the hospital administration should take seriously to healthy criticism and effect efficiency and improvement, whenever possible.

CONCLUSION

Besides, in the new millennium, the hospitals should attend to maintenance of buildings, equipment, die try services, security services, registration services, etc, to maintain the prestige and dignity of the hospital as well as to ensure quality health care in new millennium. In this great venture, hospital authorities may seek the involvement and co-operation of the people to make the medical services, patient oriented. Hospitals in the new millennium should provide an environment of extended family where the patients can get professional and expert medical care and homely environment. Patients should be welcomed in this extended family type hospital services, rather than exposed to sullen or greedy or indifferent faces.

A spirit of service and dedication must pervade among the providers of the health care as they are considered second God on earth by the receivers of health care. In the new millennium, we must empower the patients by looking after them carefully and making them feel important.

The progress and achievements of the post 50 years are solid foundations for a healthier and better world. It is already time to build on them. Life in the 21st century could and should be better for all. We can pass no greater gift to the next generation than a healthier future. That is our vision. Together, the people of the world can make it a reality.

TELEMEDICINE

INTRODUCTION

Telemedicine is essentially the combined use of both information technology and telecommunications to provide health services. The rapid advances in information technology and telecommunications technology are revolutionizing life and business around the world. The impact is also being felt in the health sector with many new applications of these technologies.

This can be very helpful in the developing countries like India, where the resources are scarce and the beneficiaries are too many. This is relevant in distance health care to the community. The main purpose of the study of telemedicine in the field of the health administration is to outline the major new health uses of these technologies, describe the technologies, and provide a guide covering the key principles in planning a project for the primary Health care delivery system and role of the tertiary care institutions in providing support system in the field of telemedicine. Telemedicine has been defined by the WHO as "The delivery of healthcare services, where distance is critical factor, by the healthcare professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of diseases and injuries, research and evaluation and for the continuing education of healthcare providers, all in the interests of advancing the health of the individuals and their communities.

DEFINITION

Broadly defined, Telemedicine is the transfer of electronic medical data(i.e. high resolution images, sounds live video, and patient records) from one location to another. This transfer of medical data may utilize a variety of telecommunications technology, including, but not limited to ordinary telephone line (POTS) ISDN,ATM, the internet and satellites.

SPECIALITIES

- Cardiology
- Home care
- Radiology
- Emergency care
- Surgery
- Dermatology
- Psychiatry
- Oncology
- Pathology
- Ophthalmology
- Hematology
- ENT
- Nephrology
- Pre-hospital care

HISTORY OF TELEMEDICINE

The idea of performing medical examinations and evaluations through the telecommunication network is not new. Shortly after the invention of the telephone, attempts were made to transmit heart and lung sounds to a trained expert who cold assess the state of the organs. However poor transmission systems made the attempts a failure.

1906: ECG TRANSMISSION

Einthoven, the father of electrocardiography first investigated on ECG transmission over telephone line in 1906: He wrote an articles "Le tele cardiogramme" at the "Achieves Internationals physiologic".

1920: HELP FOR SHIPS

Telemedicine dates back to the 1920s. During this time, radios were used to link physicians standing watch at shore stations to assist ships at sea that had medical emergencies.

1924: THE FIRST EXPOSITION OF TELE CARE:

Perhaps if was the cover showed below of "Radio News" magazine from April 1924. The article even includes a spoof electronic circuit diagram which combined all the gadgets of the day into this latest marvel.

1955: TELE PSYCHIATRY:

The Nebraska Psychiatric Institute was one of the first facilities in the country to have closed-circuit television in 1955. In 1971 the Nebraska Medical Centre was linked with the Omaha veterans Administration hospital and VA facilities in two other towns.

1967: MASSACHUSETTS GENERAL HOSPITAL

This station was established in 1967 to provide occupational health service to airport employees and to deliver emergency care and medical attention to travelers.

1970s: SATELLITE TELEMEDICINE

Via Ats-6 satellites in these projects, paramedics. In remote Alaskan and Canadian villages linked with hospitals in distant towns or cities.

A story of Telemedicine in Action:

In mid-November, 1998, a Russian sailor on his completion yacht in the stormy south Atlantic 400 miles from cape town had an accident. Victor Yazykov had injured his arm and if become badly infected. He was in serious danger. Fortunately, he had satellite-bead e-mail powered by solar energy, in a small inexpensive system on board. Over a period or days he exchanged messages with Dr. Daniel marlin at the New England Medical centre, and was able to successfully perform minor surgery on his arm by getting detailed email instructions encouragement and support. Yazykov survived, and is expected to make a full recovery. "The arm getting better" he wrote. "very grateful to doctor".

A Demonstration of Telemedicine:

A Scenario is outlined which shows in a vivid and easily - understand way how advanced technology can make direct, person al medical diagnosis and treatment available to anyone, anywhere. This involves a two - way live view conference over a local network

between a patient and a doctor, discussing a simple medical condition of tendentious, the patient receives diagnosis, treatment prescription and follow-up.

Telemedicine Usage Models

Real tine

- This is the most common use in Telemedicine like the example above, live video allows the provider patient and specialist to all communicate together to achieve the best outcome for the patient.
- In or outpatient specialty consultation
- Generally require higher band widths.

Store and Foreword

Used when both health providers are not available or not required at the same time. The provider's voice or text dictation on the patient's history, including pictures and for video, radiology images, etc., are attached for diagnosis. This record is either emailed or placed on a server for the specialists access. The specialist then follows up with his diagnosis and treatment plan.

For live video Telemedicine

The following are reasons why PCPs use live video Tele medicine consultations:

- The patient's primary care physician decides that a specialist is needed and that it may be Best to use telemedicine equipment.
- The patient agrees to a telemedicine appointment rather than going to the specialist is person.
- The presentation site schedules the Telemedicine appointment and provides all of the information to the specialist.
- The specialist makes recommendations to help the patients.

For store and forward Telemedicine

The following are reasons why PCPs use store and forward Telemedicine consultations:

- The patient's primary are physician decides that a specialist should know about the patient's condition.
- The patient agrees to have an electronic image taken of his/her medical condition.
- The presentation site forwards the patient's information and image to the specialist for review.
- The specialist makes recommendations about the patient's condition to the presentation site.

Home health Telemedicine

When a patient is in the hospital and he is placed under general observation after a surgery or other medical procedure, the hospital is usually losing a valuable bed and the patient would rather not be there as well. Home health allows the remote observation and care of a patient. Home health consists of vital signs capture, video conferencing capabilities and patient status can be reviewed and alarms can be set from the hospital nurse's station, depending on the specific home health device.

Telemedicine Usage devices

- 1. Digital still camera
- 2. X-ray scanner
- 3. Blood Pressure measurement device
- 4. Stethoscope
- 5. Thermometer
- 6. Electrocardiogram
- 7. Basic workstation without peripherals
- 8. Microscope
- 9. Ultrasound probe
- 10. Ophthalmoscope
- 11. Endoscope
- 12. Retinal camera
- 13. Digital video camera

Benefits of Telemedicine

Economic development and quality of the perspective:

- **❖** Advancements in delivery of services
- * Keeps dollars in the local economy
- ❖ Aids business recruitment and retention
- Work fore development / jobs
- Quality of life and cognitive gains are worth a lot

Patient's perspective

- ❖ Access the health care
- ❖ Saves time, travel and other expenses
- ❖ Health care at home
- Health provider integration
- Comfort level with the technology

Provider's perspective

- ❖ Emergency Room "Front Line "support
- ❖ Accuracy of diagnosis / reduction of medical errors
- ❖ A multifold increase in efficiency
- Continuing Medical Education / Lifelong learning.

Telemedicine improves the quality of care we provide to patients and families by:

- * Facilitating equitable access to our specialists for all patients regardless of their location.
- ❖ Increasing active participation in patient / family education.
- **!** Enhancing family satisfaction by reducing the costs and time.
- ❖ Providing opportunity for patients and families to receive quality time with their specialist.
- **A** Reduce duplicate testing.
- ❖ Improving continuity of patient care through enhanced communications between healthcare providers

Health Insurance

The term Health Insurance is generally used to describe a form of insurance that pays for medical expenses. It is sometimes and more broadly to include insurance covering disability or long-term nursing or custodial care needs. It may be provided through a government-sponsored social insurance program, or from private insurance companies. It may be purchased on a group basis (e.g. by a firm to cover its employees) or purchased by individual consumers. In each case, the covered groups or individuals pay premiums or taxes to help protect themselves from high or unexpected healthcare expenses. Similar benefits paying for medical expenses may also be provided through social welfare programs funded by the government.

History of Health Insurance

In 1694, the concept of health insurance was proposed by Peter Chamberlain family. Accident insurance scheme started in late 19th century. The accident insurance was offered by Franklin Health Assurance Company Massachusetts in1850, in organized manner. The first employer sponsored group disability policy was started in 1911, in USA. Hospitals and medical expenses policies were started during the period 1920 individual hospital started offering services to individuals on a pre-paid basis, leading to development of Blue Cross organization. In India, the health insurance schemes were started on experimental basis as schemes, to the employees working in private sector and government sector. The ESI scheme was started under the ESI Act 1948. The ESI scheme covers the private sector and the scope is extended to the following categories of employees.

The act extends to whole of India. The act of 1948 covered all the power using factories other than seasonal factories, wherein 20 or more persons are employed excluding mines, railways and defense establishments. 1975 amendment extended to the following establishments.

- 1. Small power using factories, employing 10 to 19 persons and non power using factories employing 20 or more than 20 people.
- 2. Shops
- 3. Hotels and restaurants
- 4. Cinemas and theatres
- 5. Road motor transport establishments'

Similarly, the Central Government Health Scheme (CGHS) was started in the year 1954. The beneficiaries are:

- 1. Employees and their dependents (of central govt.)
- 2. Retired employees
- 3. Windows receiving family pension
- 4. MPs
- 5. Ex Governors
- 6. Ex Judges of Supreme Court and high courts

The status of health insurance in different countries

S no Name of country

Type of health insurance

1. Australia

The public health system is called Medicine.

It ensures Free universal access to hospital treatment and subsidized Out-of-hospital medical treatment. It is funded by a 1.5% Tax levy. The private health system is funded by a number of private, which is government-owned, but operates as a Government business enterprise under the same regulatory Regime as all other registered private health funds. The government Coalition Howard had announced that Medi -bank would be privatized if it won the 2007 election, however they were defeated by the Australian Labor Party Under Kevin Rudd which had already pledged that it would

Remain in government ownership some private health insurers are 'for profit 'enterprises, and some are non-profit organizations such as HCF Health insurance. Some have membership restricted to particular groups, but the majority has open membership. Most aspects of private health insurance in Australia are regulated by the Private Health Insurance, Act, 2007.

Canada Most Health insurance in Canada is

2.

administered by each Province, under the collectively, the public provincial Health insurance systems in Canada re frequently referred to as Medicare. Private Health insurance is allowed, but the provincial governments allow it only for services that the public health plans do not cover; for example, semi-private or private rooms in hospitals and prescription drug plans. Canadians are free to use private insurance for elective medical services such as laser vision correction surgery, cosmetic surgery, and other non-basic medical procedures. Some 65% Canadians have some form of supplementary private health insurance; many of them receive it through their employers.

3. Netherlands

In the Netherlands in 2006, a new system of

health Insurance came into force. All insurance companies have provide at lease one policy which meets a government set minimum standard level of cover and all adult residents are

Obliged by law to purchase this cover from an insurance company of their choice

4. United kingdom

Great Britain's National Health

Service(NHS) is a Publicly Funded healthcare system that provides coverage to everyone normally resident in the UK. The NHS provides the majority of health care in England, including primary care, in-patient care, long-term health care, ophthalmology and dentistry. Private health care has continued parallel to the NHS paid for largely by private insurance, but it is used by less than 8% of the population, and generally as top-up to NHS capacity despite a large proportion of the British public opposing such involvement. According to the world Health Organization, government funding covered 86% of overall health care expenditure in the UK as of 2004, with private expenditures covering the remaining 14%

5. United States

Public programs provide the primary source of coverage for Most seniors and for low income children and families who meet certain eligibility requirements. The primary public programs are Medicare, a federal social insurance program for seniors and certain disabled individuals, Medicaid, funded jointly by the federal government and states but administered at the state level, which covers certain very low income children and their families.

Total Quality Management (TQM)

What is total quality in health care?

Total quality has been defined as doing things right the first time and every time by everyone at every workplace. However, in a hospital setup the individual expertise of any one employee alone cannot leave a positive impact unless systems are also laid down to ensure prompt and expert care in a consistent manner by the whole team.

In the past medical professionals thought that total quality was not their job-it was considered to be the foray of the administrators. They did not think that many problems could be sorted out not by investing in financial resources alone but by improving the systems and changing the mindset.

Implementing Total Quality Management in a hospital requires convincing the workers that total quality is not extra work but it envisages changed way of working, where people have to be encouraged to be creative and find solutions to their own problems.

Quality Improvement Project (QIP)

From time – to- time there will be some areas in the hospital where need for improvement will be felt.

The quality improvement project addresses a problem that is chronic, significant, measurable and for which a solution can be found, often in cross – functional areas. A step-by-step approach as under can help during the project.

Step - 1: Identification of the problem, and need to improve

Flow-process chart:

Of the system, process or action under study, to pin point bottle necks

- a) **ABC analysis:** to determine which portion of the problem to concentrate on.
- b) Cause-effect diagram: to identify important causes responsible for the problem and their effects.
- c) Root-cause analysis: to identify the basic causes responsible for the problem.

Step 2: Remedial Action:

The remedial action should spring from ideas which will be generated from brainstorming sessions of the members of the team.

Retrospective reviews and medical audit can be quite simple:

Having considered all the different aspects of quality assurance, putting it in to practice would appear daunting to many. While accepting that instituting a comprehensive quality assurance programme can be a stupendous task, it is not necessary to begin with a bang only to end in a whimper. The simplest way is to make a beginning with a retrospective medical audit on a modest scale and enlarge upon the idea gradually to incorporate large areas/ more departments as more experience is gained.

Review Questions:

- 1. Explain the Role of Hospital administrator.
- 2. What are the challenges of hospital administrator?
- 3. Explain about the Telemedicine.
- 4. Explain in detail about the Health Tourism.
- 5. Write note on Medical Transcription.
- 6. Write note on TQM & ISO.
- 7. State the health insurance in hospitals.

Unit-IV Hospital Statistics

Every hospital has to have a system which can provide management with information necessary to plan and control efficient patient care and efficiently manage the hospital. Such information will includes trends and data that will improve decision making. Occupancy, patient mix, patient movement and supportive services utilization reports form the basic ingredients of the framework for decisions with long term implications as well as short term impact. Such information offers operational and policy alternatives to the administrator.

Statistics is a science of collection of numerical facts and data and the techniques of analyzing and drawing conclusions from such data. Vital statistics are statistics relating to vital events of life namely births, deaths, marriages and sickness that occur in a community.

Vital statistics have been defined as "the facts, systematically collected and complied in numerical form, related to or derived from records of vital events. In recent years, the term "health statistics: has been used to cover a wider range of statistics related to health.

Medical records department in the hospital is mainly responsible for the collection as well as analysis of the data to ensure utilization of hospital for patient care. Such data has immense value for day to day management of the hospital and also for future planning. Here are some of the important which is used by the hospital to enhance the hospital function.

Many factors affecting utilization help in identifying aspects of complex interdepartmental relationship that are sensitive to changes, by relating their linkages to utilization. Different indices are used in the assessment of hospital utilization but, taken singly, none of them can give a proper picture of the utilization pattern.

The indices can be classified into the following:

- 1. Those related to the production under cover or community indices.
- 2. Those related to the hospital resources, viz., beds, diagnostic and therapeutic facilities and their utilization.
- 3. Hospital morbidity and mortality statistics-they are relate to patients and diseases and are collected from medical records. They encompasses personal characteristics of patients (viz., age, sex, occupation, marital status etc.,), and other data such as complications and outcome of hospital stay (viz. cured, died, improved etc.).

The purpose of the review of statistics is to assess the quantitative adequacy and appropriateness of resources. Myriad data can be collected from records, but the main problem is the compilation and presentation of the basic statistical facts in an intelligible form.

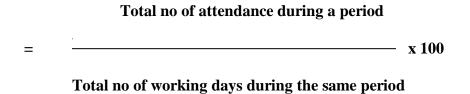
Outpatient Statistics

Outpatient services data is extracted form the registers maintained at the registration counters in the outpatient department, specialty clinics and casualty service. The data will be useful to the extent that these registers contain comprehensive information columns used statistics pertaining to outpatient services are as follows:

- 1. Number of new cases
- 2. Number of repeat cases
- 3. Specialitywise break-up of cases
- 4. Unit wise break-up of cases
- 5. Age and sex distribution of cases
- 6. Diagnostic statistics.

Average outpatient attendance Rate:

It means total no of attendance during a period divided by the total no of working days during the same period and multiplied by the 100.



Inpatient Statistics

Bed Occupancy Rate (BOR):

Bed occupancy rate indicates the relationship between availability and utilization of hospital beds. It is expressed as a percentage by either of the following:

- 1. Ratio of actual patient days to the maximum possible patient days during a given period.
- 2. Ratio of the average daily census to the bed complement

Average daily censes = _____ x 100 Bed complement

Optimum bed occupancy rate for most hospitals is considered to be between 85 to 95 percent, wherein the remaining 15 to 5 per cent beds are available for undergoing maintenance change of linen and being generally readied for the incoming patients.

A high occupancy rate indicates stretching and over-utilization of services resulting in a probable dilution of the quality of care, while as a low rate is indicative of under-utilization of facilities. Usually, smaller hospitals have lower occupancy than large hospitals. In many public hospitals, because of the perpetual shortage of beds, patients are put on the floor when a regular bed is not available in which case the occupancy rate goes even up to 110 or 120 per cent.

To find out the load of work in different areas, occupancy rates should be worked out ward wise, specialty wise and unit wise.

Bed turnover Rate (BTR):

Bed turnover rate gives the number of discharge per hospital bed over a period., i.e., how many times a bed was "turned over" during the period, say a year. It is directly related to the average length of stay (ALS) and bed turnover interval (BTI)

	Total number of patients discharged	
Bed turnover Rate =		_ x 100
	Bed Complement	

Bed turnover rate is determined by average length of stay as well as from the interval between one discharge & successive discharge. The time interval is known as 'T' Interval. Bed turnover rate and 'T' interval one all important indicators for planning, utilization of resources.

Hospital Morbidity & Mortality Rates

Post Operative Death Rate (PODR):

Gross Death Rate (GDR):

It means total no. of deaths over a period divided by the total no. of discharges including deaths for the same period multiplied by the 100.

deaths for the same period ma-	implied by the 100.
,	Total no of deaths over a period
Gross Death Rate=	x100
,	Total no of discharges including deaths for the same period
Net Death Rate (NDR):	
	means total no. of deaths over 48hours of admission in period the same period multiplied by the 100.
	Total no of deaths over 48hours of admission in a period
Net Death Rate =	x100
	Discharge over the same period
Institutional Death Rate:	
	is defined as "the no of net deaths during a period of time divided atients during the same period multiplied by the 100.
No of net	deaths during a period of time
=	x100
Total no of dis	scharged patients during the same period
Anesthesia Death Rate (ADR	R):
	inesthesia deaths for a period is divided by the total no. of patients esia during the same period multiplied by the 100.
Total n	o of anesthesia deaths for a period
=	x 100
Total no of pati	ents who were administered during the same period

67

Deaths attributed to (or) precipitated by an operation such as deaths due to hemorrhage, shocks, embolism, infection, post operative pneumonia etc., (ie) happening within 10 days of operation.

Total no of post operative deaths for a period		
= x 100		
Total no of patients during the same period		
Maternal Mortality Rate (MMR):		
Maternal death rate is defined as "the death of a woman while pregnant or within 42days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes"		
Total no of female deaths due to complications of pregnancy,		
childbirth or Within 42days of delivery from "puerperal causes"		
in an area during a given year		
= x 100		
Total no of live births in the same area and year		
Infant Mortality Rate (IMR):		
IMR is defined as "the ratio of infant deaths registered in a given year to the total number of live births registered in the same year; usually expressed as a rate per 1000 live births".		
Number of deaths of children less than 1 year of age in a year		

Number of live births in the same

x 100

Review Questions

- 1. Write note on Outpatient Statistics.
- 2. Explain about the Morbidity statistics.
- 3. Briefly explain about the IP Statistics.
- 4. Write note on Hospital Mortality ratios.

Unit-V Medical Records

Records management is a programme that involves the functions of creating, administering, retaining, submitting and destroying records. Herbert Hoover has rightly mentioned the advantages of proper records keeping when he says: "A decision is only as good as the facts on which it is based". Records are memory of the internal and external transactions of an organization. By external transaction we mean the correspondence between the organization and its client-beneficiaries as well as supporters. By internal transaction is meant the dealings on external transactions by persons in the organization at all levels. Records contain a written evidence of the activities of an organization in the form of letters, circulars, reports, contracts, invoices, vouchers, minutes of meeting, books of accounts etc.

Meaning of medical record:

The medical record is a clinical, scientific, administrative and legal document relating to patient care in which are recorded sufficient data written in sequence of events to justify the diagnosis and warrant treatment and the end results.

The medical record benefits to the patient, the doctor, the hospital, public health authorities and contributes to education and research.

Benefits to the patient:

- 1. It serves to document the story of the patient.
- 2. It serves to Avoid omission and unnecessary repetition of diagnosis and treatment measures.
- 3. It assists in the continuity of care in the event that future illness requires attention in or out of the hospital.
- 4. It serves as evidence to support or to refute the legal questions that arise.
- 5. It assists the patient and the authorities concerned in fixing the disability entitlements under the Workman's Compensation Act.

Benefits to the hospital:

- 1. It provides the management with statistical information necessary for decision making in regard to utilization of resources, planning for administrative control and future references.
- 2. It also furnishes documentary evidence for purposes of evaluation of hospital cars terms of quality, quantity and adequacy (medical audit).
- 3. It protects the hospital in the event of legal questions (Torts Suits).

Benefits to the Doctor:

- 1. It assures the doctor of the quality and adequacy of the diagnostic and therapeutic measures undertaken by him/her.
- 2. It assures the doctor of the continuity of medical care.
- 3. It protects the doctor in case of legal suits.

Benefits to the public health authorities:

It gives reliable mortality and morbidity statistics and thus helps to plan the prevention and social measures to meet the needs of the community. Early warning of the incidence of communicable diseases if often obtained from the hospital records.

Benefits of medical education and research:

Since recorded observations and case studies are the basis of all clinical research, medical records become invaluable in all research and teaching programmes.

Characteristics of Good Medical Records:

- 1. **Complete**: Sufficient data to identify the patient, justify diagnosis and warrant treatment and outcome.
- 2. Adequate: All necessary forms and all relevant clinical information.
- 3. Accurate: Capable of quantitative analysis.

Functions of medical records department:

Central Admission and Enquiry Office:

This office initiates documentation of patients, maintenance records of admissions and discharges, collects documentation after discharge and forwards the same to the Central Record Office. It keeps up-to-date information of bed-state of each and every ward. In fact, this is the hub of all administrative activities in connection with admissions, discharges, documentation and supply of information regarding in-patients of the hospital. Since this office operates round the clock, it also serves as a general enquiry/ information center for the hospital and may be entrusted with any other activities depending upon resources.

Out-Patient Section:

In the outpatient department every patient is given a registration number in the form of a card/ticket and all his records are kept in a folder bearing the same number. The folders are kept arranged in serial order in rows of shelves and are taken out as soon as the patient presents his/her registration number. The folder is deposited back at the end of the visit and stored in the appropriate place.

Central Record Department:

Assembling:

The order of arranging the medical records in the wards differs form that used in assembling for permanent filing. There need not be any hard and fast rules for the arrangement of various forms and papers of medical record. Each hospital will decide depending upon its special requirement the order in which the various forms are to be filed.

In general sequence, the order of assembling used in the wards follows the following sequence:

- 1. Graphic chart-T.P.R (Temperature, Pulse, Respiration).
- 2. Physician's order.
- 3. Nurse's bedside record.
- 4. Special reports, Lab, X-ray. Anesthesia. Operation reports.
- 5. History and physical examination.
- 6. Progress report.
- 7. Records of admissions.
- 8. Summary sheets.

The order of assembling followed in the wards may be reversed in the medical records department for convenience in meeting later demands. While most of the hospitals use the above method of assembling the medical records, some large teaching hospitals prefer to have their medical records arranged in strict chronological order. This arrangement of medical records is known as integrated record.

Quantitative Analysis:

The quantitative analysis and re-assembling of medical records are usually done concurrently. It is the responsibility of the medical records officer to check the component parts of the records and analyze the contents for completeness, accuracy and adequacy. It is done with the help of a 'deficiency checklist'.

Basic Records:

- 1. **Summary sheet or face sheet**: it is the top sheet of the medical records and contains the patient's identification data, social data, provisional diagnosis, final diagnosis, name of the physician, date and time of admission and discharge and signature of the physician.
- 2. **Admission record card**: This should show the following information:
 - The full name, address, nationality, age, marital status, religion, and occupation of the patient.
 - Name, address, phone number of the nearest relative or friend and of the attending physician.
 - Name of the father/guardian and his/her address.
 - Name, address, and phone number of the employer.
- 3. Authorization of medical/surgical treatment.
- 4. Discharge summary.
- 5. History.
- 6. Physical examination.
- 7. Laboratory reports.
- 8. Progress notes.
- 9. Physician's order.
- 10. Graphic chart.
- 11. Nurse's bedside record.

Special Record: These include reports of consultation, transfusion, anesthesia, tissue reports, ECG, X-ray, short-stay reports, obstetrical records, new-born records, consent forms for surgical intervention, abortions and operation. Other special records can conclude death certificates, correspondences and birth certificates etc.

Deficiency Check: While assembling and analyzing the record, a note should be made of all the deficiencies by entering into the deficiency checklist or on the top of the medical audit sheet or on the use of a rubber stamp form.

Completion of incomplete records: This is done by the concerned physician/nurses/unit/department

Coding: This is done according to the 'International Classification of Diseases'.

Indexing: This includes the following types of indexes:

- Patient index (Alphabetical index)
- Disease index.
- Doctor index.
- Unit index.
- Operation index.

Analysis and statistics: This involves preparation of monthly hospital abstracts and annual statistics.

Reporting: Reporting of communicable diseases and births and deaths should be furnished to the

hospital, municipal and health authorities.

Numbering and filing: The system of filing patients' records in universal use is that of filing records under admission numbers. This may be done in the following ways:

Serial Numbering: In this method, the patient receives a new number on each admission

Unit-Number System: In this method, the patient is given a number on his/her first admission to the in-patient or out-patient department of the hospital. He/she retains that number on all subsequent admissions to any department of the hospital. All admissions are filed together in one folder and under one number.

Serial-Unit Numbering: This method is a modification of the serial and unit numbering methods. The assignment of numbering is the same as with the serial numbering but the records are brought forward and filed under the latest number.

Filing system:

Decentralized system:

Under this system, the in-patient and out-patient departments have their own individual records and file them independently within the departments. There is no connection between the two sets of files; if a patient is transferred from one department to another, the records can be seen only through a loan. This duplication of records increases the amount of labour and operating cost. For these reasons, this system is being rapidly replaced by the centralized system.

Centralized System:

This is an arrangement in which all the case records a patient, whether in-patient or outpatient are filed together within a central department. Under this system, both in-patient and outpatient records are filed together under one unit number.

Methods of filing:

The modern methods of filing can be classified into the two following categories:

Horizontal Filing: Under this method, the papers are inserted in files or folders and the folders are kept in horizontal position one upon the other, and these are maintained in chronological order.

Vertical Filing: This is the most modern method of filing, in which the files are placed vertically or in a standing upright position.

This method has the following advantages:

- 1. Facility for ready reference.
- 2. Economy.
- 3. Scope for expansion.
- 4. Adaptability.
- 5. Safety of papers.
- 6. Wide applicability.

Forms:

Colored Files: Use of files different colours for different years is useful for easy identification and retrieval.

Size: Size should be uniform standard so that these can be easily filed (8inch x 11inch).

Space:

- 1. **Out-patient registration**: The average space is 2-3square feet/bed. For a 50 bedded hospital, the space required would be 150 square feet, while for a 500 bedded hospital it would be 1200 square feet.
- 2. Admitting office: 125-175 square feet.

- 3. **Medical Record office**: For 50 bedded, 100 bedded, 200 bedded, and more than 500 bedded hospitals, 175 square feet, 240 square feet, 500 square feet and 1200 square feet respectively.
- 4. **Storage**: 120-500 square feet with shelving for vertical storage; 125 patients or 300 outpatient record in one standard 36 inches shelve.

Storage (Retention):

The length of time for long the medical records will be preserved depends upon the hospital or the government policy.

Clinicians want the records to be kept for indefinite periods. Medical records office considers desirable to retain these as follows:

- a. Need of the patient upto 10 years.
- b. Medico-legal: In-patient 10years

Out-patient -10 years.

c. Teaching/Research - 5-10years.

The records older than 10 years are storage is to adopt one of the following methods:

- a. Microfilming
- b. Comprehensive summary.

The following list summarizes the functions of the three subdivisions of the medical records department:

a. **Admission office** - Repetition

- Reservation

- Initiation

- Identification

- Social data

- Assignment (to OPD or ward)

- Notification.

b. Ward/Nursing Unit - History

- Examination

- Diagnosis
- Investigations
- Treatment
- Progress notes
- Education
- Evaluation
- Discharge
- c. Record Office
- Assembling
- Checking
- Incomplete record control
- Coding
- Indexing
- Analyzing (Physician or medical audit Committee)
- Reporting (Hospital statistical abstracts)
- Filing/Storage
- Retrieval.

International Classification of Disease (ICD):

There is a wide variation among the countries in the criteria and standards adopted for diagnosis and their notification, making it difficult to compare national statistics. A system classification was needed whereby diseases could be grouped according to certain common characteristics that would facilitate the statistical study of disease phenomena. Over the years, many approaches were tired to classify diseases, John Graunt in the 17th century in his study of Bills of mortality, arranged diseases in an alphabetical order. Later, a more scientific approach was adopted in classifying diseases according to certain characteristics of the disease or injuries such as (a) the part of the body affected (b) the aetiologic agent (c) the kind of morbid change produced by the disease (d) the kind of disturbance of function produced by the disease or injury.

All the above criteria formed the basis of the International Classification Diseases (ICD) produced by WHO and accepted for national and international use. Since its inception, ICD has been revised about once every 10years; the latest revision, the 10th revision, came into effect on January 1, 1993. Earlier, the scope of ICD was expanded in the sixth revision in 1948 to cover

morbidity form illness and injury. The ICD also provided a basis that can be adapted for use in other fields e.g., dentistry, oncology and ophthalmology.

As in previous revisions, the ICD-10 is arranged in 21 major chapters.

- I. Certain infectious and parasitic diseases (A00-B99)
- II. Neoplasms (C00-D48)
- III. Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism (D50-D89)
- IV. Endocrine, nutritional and metabolic diseases (E00-E90)
- V. Mental and behavioural diseases (F00-F99)
- VI. Diseases of the nervous system(G00-G99)
- VII. Diseases of the eye and adnexa (H00-H59)
- VIII. Diseases of the ear and mastoid process (H60-H95)
- IX. Diseases of the circulatory system (I00-I99)
- X. Diseases of the respiratory system (J00-J99)
- XI. Diseases of the digestive system (K00-K93)
- XII. Diseases of the skin and subcutaneous tissue (L00-L99)
- XIII. Diseases of the musculoskeletal system and connective tissue (M00-M99)
- XIV. Diseases of the genitourinary system (N00-N99)
- XV. Pregnancy, childbirth and puerperium (O00-O99)
- XVI. Certain conditions originating in perinatal period (P00-P96)
- XVII. Congenital, malformations, deformation and chromosomal abnormalities

(Q00-Q99)

- XVIII. Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)
- XIX. Injury, poisoning and certain other consequences of external causes (S00-T98)
- XX. External causes of morbidity and mortality (V01-Y98)
- XXI. Factors influencing health status and contact with health services (Z00-Z99)

The coding system:

The first character of the ICD-10 code is a letter and each letter is associated with a particular chapter, except for the letter D, which is used in chapter II and chapter III and letter H which is used in chapter VII and chapter VIII. Chapter I, II, XIX and XX use more than one letter in the first position of their codes.

Each code contains sufficient three- character category to cover its contents. Not all the available codes are used, allowing space for future revision and expansion. The range of categories is given in parentheses after each block title.

ICD-10 consists of three volumes. Volume 1 contains the report of the international conference for the tenth revision, the classification itself at the three-and four character levels, the classification of the morphology of Neoplasms, special tabulation lists for mortality and

morbidity, definitions, and the nomenclature regulations. Volume 2 is instruction manual and volume 3 contains alphabetical index.

The ultimate purpose of ICD is to contribute to a uniform classification that can be used throughout the world to make accurate comparisons of morbidity and mortality data for decision-making in prevention, in management of health care and in facilitating research on particular health problems. The reader is referred to the Tenth Revision of the ICD for general principles and description of the ICD classification.

Ownership Rights And Privileges

The medical record is the property of the hospital and not of the patient, the clinical department or the attending doctor. Therefore, if the medical record is to be adequately protected and yet serve maximum utility, it must be considered from two points of view - **as a personal document and as an impersonal document.**

1. As a Personal document:

The medical record is a confidential and privileged communication and must not be released without patient's consent. Even though it is a confidential personal document and the property of the hospital, the following might be interested in the information contained in it, and some information has to be divulged under certain circumstances:

Patient

Although the patient has got no legal right to the custody or perusal of his record, he/she may be given a brief summary of his condition, the results of various tests and types of treatment carried out in broad terms.

Relatives and Friends:

No written information should be divulged to friends or relatives who may be informed in the following cases:

- a. Condition of the patient \rightarrow serious/very ill/satisfactory/progressing.
- b. Date of admission/discharge/death/birth of child.

Press

No member of the hospital staff give information to the press except the administrator himself/herself (confined to only date of admission/discharge/death).

In case the higher authorities feel that a press hand-out is necessary for public information, the ministry of the appropriate authorities usually asks for a brief condition of the patient from the hospital. The official spokesman may then issue suitable hand-out on the basis of the brief.

Insurance Companies

The Life Insurance Corporation (LIC) frequently requests for details of hospitalization and cause of death of the patient to dispose claims that arise out of the insurance policy. The information can be given to the LIC without his claim to this privilege by a signed declaration in the insurance policy.

Police

As soon as a case is declared medico-legal, the medical officer is required by law to give a report to the police about the patient's injuries, irrespective of whether he/she is treated outdoor or indoor.

However, police should not be allowed to record the patient's statement without prior certification by the medical officer in-charge that the patient is in a medically fit condition to do so.

In all the above cases, the hospital cannot be forced to produce or hand over the original record to the police, except by a subpoena by a court of law.

Court of Law

According to the Indian Evidence Act, the hospital documents including medical records are admissible as documents of evidence because the entries in the documents are made by persons in the ordinary course of business or in the discharge of their normal professional duty.

The court can, therefore, subpoena any document or record or summon the doctor fro purpose of evidence in the court under Law of Torts (liability for negligence).

The types of cases are

- a) Patient Vs Doctor suits
- b) Patient Vs Hospital suits

2. As an impersonal document:

The contents of the medical records can be used for education, public health and so on, where no reference is made to any particular individual and the patient's identification data is not revealed.

However, in supplying information to municipal or public health authorities regarding communicable and notifiable diseases, some personal information has to be divulged in public interest so that the authorities concerned can undertake appropriate public health measures. Normally, public health authorities are interested in impersonal information regarding the number of cases, deaths, births and so on.

Questions:

- 1. Define medical records and explain the importance reference with doctor, education, hospital and research.
- 2. Explain the polices and procedures of medical records.
- 3. Write note on numbering and unit system.
- 4. Define medical audit and its functions.
- 5. Explain in detail about the medical audit committee.