SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCE & TECHNOLOGY

Thiruvananthapuram – 695 011

LIST OF PROCEDURES DONE

PROJECT REPORT

NAME : **MS. JEEVA .K.H**

PROGRAMME : **D.M.R.S**

MONTH & YEAR OF SUBMISSION : **DECEMBER -2004**

CERTIFICATE

I .....JEEVA.K.H..... hereby declare that I have actually, performed all the procedures listed/carried out the project, under report.

Signature

JEEVA.K.H.
Name in Capital Letters

Place: THIRUVANANTHAPURAM
Date: 16-11-2004.

Forwarded she has carried out the minimum requirement of procedures/etc.

Signature
Head of the Department

P. KRISHNAMOORTHIA PILLAI
SMRO-Cum-Lecturer
Sree Chitra Tirunal Institute For
Medical Sciences & Technology
Trivandrum- 695 011, Kerala

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PREFACE

This workbook, I have done as a part of my training in the department of medical records for the diploma in medical records science (DMRS) course. This book includes brief details organization of medical records department, records maintaining in a scientific way, records control, OPD functioning and other accessory functions maintained in this department.

DMRS is a two year full time residential program in most advanced techniques of record maintaining and control for graduate students of biology or statistics. Selection is done by national level entrance examination, interview and medical examination. At present the institute offers two seats. The medical record libraries of our country became dimmed in its function and action. The training programme conducted by this institute is a blessing for the medical records departments of our country. The need for such department and its smooth functioning can be studied from her.

The students are posted in the department of medical records and OPDs. Both the places were computerized. This enables easy information handling for all. The course schedule consists of theory classes, practical training, observation of various departments and frequent examinations. Diploma is awarded after the successful completion of two-year term and a written examination and viva-voce.

ACKNOWLEDGEMENT

First, and fore most, I would like to thank our Head of the Department Sri. P.Krishnamoorthia Pillai, MA, SMRO-cum –Lecturer, Medical Records Officer Sri. N.G.Thampi, MA, BMRSc, Assistant Medical Records Officer Sri.P.J.Varghese and all medical records assistants who had guided me through the different phases of my studies encouraged and helped in all aspects of my training.

I thank the Director of the Institute Dr.K.Mohandas, Dean, Dr.K. Radhakrishnan and the Registrar Dr. A.V.George, for their advice and kind attention towards me. Also I am very thankful to Dr. KrishnaKumarNair, Dr.Sharma for their greatest contribution to my study by conducting classes.

I extend my heartful thanks to all the staff members of different departments for their help during my stay in this institute. I am thankful to all the patients whose informations become valuable tools for my study.

THE INSTITUTE

Sree Chitra Tirunal Institute for Medical Science and Technology, Thiruvananthapuram – 11 is an institute of national importance under department of science and technology, Government of India. The institute is empowered to grant medical degrees, diplomas and other such distinctions. Such titles are recognised and are included in the first schedule to the International Medical Council Act in 1956 as per circular MCI – 24(1) 18(491) med. Dated 11th May 1998. It is one of the common wealth universities in India. This institute has connection with World Health Organization also.

This institute has a hospital wing which is a tertiary referral centre providing advanced facilities for cardio-thoracic and neurological diseases. A Bio Medical Technology wing working at poojapura to promote bio medical technology and research. The research wing co-operate with various companies and agencies and make various types of bio-materials. A centre for public health, science studies is working near the hospital complex. The institute offers various degrees, diplomas, certificates programmes and training programmes.

INTRODUCTION

Medicine is advancing explosively day by day and it demands higher standards of facility, technique and knowledge. Today the health care systems become a business and there is competition among them to withstand and overcome these difficulties, there should be proper and adequate patient care, higher facilities an technologies.

Medical Information system is one of the vast branch comprises of medical libraries, computerised medical information storage system, LAN, internet facilities, medical records libraries etc. Among this, a hospital or healthcare facility is concerned, medical record libraries are more important. Medical record library is the pool of medical information, about all the aspects of patients. Apart from medical texts, medical record is written facts of 'how' the patient is and 'what' the physician should found.

In some hospitals, various functions are cordinated only through Medical Records as it is a common tool and information pool. Various hospital administration committee like hospital management committee, medical audit committee, Medical Records committee, peer review organisations, tissue committee etc. use medical record as a tool for assessment. Various paper presentations and research works are directly or indirectly depends on Medical information.

Through this workbook submitted as a part of my academic training programme, I could depict the need and maintenance of a good medical records library.

HISTORY OF MEDICAL RECORDS

The history of Medical Records runs parallel with the history of Medicine.

I. STONE AGE

About 25,000 B.C. the surgical notes were appeared on the walls of Paleolithic Caverns of Spain. The earliest records were primitive in form and very different from present medical records, but they served to record medical achievements for later generations. As time went on Medical Records become more detailed, and in Egypt, Greece and Rome Physicians wrote important medical and surgical treatises.

II. EGYPTIAN PERIOD

In Egypt Thoth credited to the authorship of 36 to 42 books. Six books were medical subjects. They discussed the human body, diseases, instruments and appliances, drugs, diseases of eyes and gynaecological ailments.

The first real physician of Record in Egypt was Imhotep. He lived in the Pyramid age (about 3000-2500 B C). He has the authorship of a Papyrus, which is one of the most valuable ancient medical documents. This Papyrus, now in possession of the New York academy of Medicine, is the oldest of the Six Egyptian Papyri dealing with surgical subjects. It is a roll over 15 feet long by about 13 inches wide and is made up of 12 sheets of the usual size. It is written on both sides and consists of 48 cases of clinical surgery.

III. GREEK PERIOD

Early 1134 B.C Medicine in Greece was cultivated by Aesculapius. There is evidence of Aesculapius was widely recognised throughout Greece and even in Egypt. He was credited with curing many, who were so ill that they were not anticipated to live. It is believed that he practiced medicine at Delphi where remains of the temple, which he used, can be seen today near Mount Parnassus. The sculptors and artists of ancient times always depicted him with a serpent entwined around a staff. The serpent and staff now serve a symbol of the Medical profession.

It was on the Greek island of Cos near Asia Minor that Hippocrates known as the "father of Medicine" was born about 460 B.C. Even though his knowledge of Anatomy was limited, his keen observation of the history, symptoms, and physical signs of disease made him an outstanding clinician. He wrote voluminously on subjects relating to medicine and propounded many

medical theories. His works have been translated into many languages. He kept detailed case reports of his patients and instructed his sons in the art of recording all findings.

IV. GRAECO-ROMAN PERIOD

600 years after the time of Hippocrates a physician named Galen appeared in Rome. He had many pupils and took them on his rounds. He maintained bedside records and his teaching were found on basis of these records. He is the one who first realised the function of arteries and it contains blood. Before his time it was believed that the arteries contains air.

V. BYZANTINE PERIOD

The work of recording being done at that time by the conscientious monks who copied the writings of Hippocrates, Celsus and Galen and many of other early physicians.

VI. JEWISH PERIOD

The principal sources of information regarding Jewish medicine are the Bible and the Talmud. The Talmud contains more detailed medical information than the Bible.

VII. MOHAMEDAN PERIOD

Rhases (865-925 A.D.) in his treaties on smallpox and measles is said to have been the first accurate study of infectious disease and the first effort to distinguish between the two diseases. He is also thought to have been the first to use the twisted intestines of sheep for sutures and to cleanse wounds with alcohol. During Byzantine, Jewish and Mohammedan period few medical records were kept.

VIII. MEDIEVAL PERIOD

St. Bartholomew's hospital, London was founded during 1137. Medical records were kept for the patient treated from the very beginning. The book of "Foundation" published by the Early English Text Society contains about 28 original case histories.

IX. RENAISSANCE (14th-17th Century)

With the renaissance of Europian civilization and the reign of king Henry-VIII (1509-1547) conditions in St.Bartholomew's Hospital improved and rules were drawn up for its Government. The privacy of medical records and the importance of keeping records were realised. Thus St.Bartholomew's Hospital took the lead in establishing a Medical Record library and a Medical library.

X. SEVENTEENTH CENTURY

Captain John Graunt made the first study of vital Statistics in 1661. He published his observations "Bills of Mortality". There were lists of burials, marriages and baptisms. In this study he pointed out two facts, which still apply. (1) Urban death rate is normally higher than the rural.(2) Even though male births exceed the female there are approximately equal numbers of both sexes in the population due to a greater proportion of male deaths.

XI. EIGHTEENTH CENTURY

The Pennsylvania Hospital in United States was established in the year 1752. Benjamin Franklin as the Secretary of the Hospital, and many of its earliest records are in his handwriting. For the first 50 years the records were kept in the register. In 1803, it was decided to maintain the detailed records of interesting cases. The first patient's Index was started in 1873, but was not kept on cards until 1906.

The New York hospital opened in 1771 and started its first register of patients in 1793. This register gives interesting notes concerning the patients. The earliest attempts at indexing of diseases and conditions in New York hospital were made in 1862, but it was not until 1914 that a disease nomenclature was adopted.

XII. NINETEENTH CENTURY

The famous Massachusetts general Hospital at Boston (U.S.A.) was opened. It has the distinction of having a complete file of clinical records for the cases from the day it was opened. This hospital is the first one to appoint a Medical Record Librarian, Mrs. Graece Whiting Myers (1859-1957). She was the first President of the Association of Record Librarians of North America and the honorary President of the American Association of Medical Records Librarians.

The first record written in ink in folio volumes of 18" length and 12"wide and 2 ½" thick bound in boards covered with dark red leather. The records show the days prior to the discovery of Ether, 164 patients undergone surgery and

following its introduction 487 patients were operated upon. This fact alone proves the values of keeping medical records for research and statistical purposes.

XIII. TWENTIETH CENTURY.

In 1902 the American Hospital Association discussed Medical Records for the first time at a convention. The problems brought out that there was no uniformity in methods, no single type of person in charge of records and the indifference on the part of the older doctors were chiefly responsible for failure to obtain good record.

In 1905 Dr.George Wilson at the 56th Annual Meeting of the American Medical Association, read a paper entitled "a clinical chart for the record of patients in small hospitals". This paper was published in the journal of the American Medical Association. This was given serious consideration by all types of hospitals for keeping Medical Records for reference purposes and Medico-legal needs. It was also printed out by Dr.George Wilson and emphasised the difficulties encountered in getting doctors to write records because they did not like detail records and clerical work. Even today it is interesting to note that majority of physicians still do not like this phase or responsibility, even though they acknowledge the necessity for accurate and adequate medical records and accept their compilation as part of the routine daily care of the patient.

1913:

Improvement of Medical Records through introduction of standardization.. This stated not to maintain case records properly is like running a factory without maintaining records of its products. The standardization made, candidates for fellowship should submit some case histories before the examination. In 1918, it emphasized to keep accurate and complete Medical Records and to file in an accessible manner. Out of 5329 hospitals the medical records could be standardized only 89 hospitals. In 1954, 3513 hospitals standardized medical records.

Steady improvement both in the quantity and quality of medical records, on the initiative of Dr. Franklin.H.Martin and Dr. Malcolm.T. Mac Eachern, director of Hospital activities of the American College of Surgeons, subjects pertaining to medical records were put on the hospital standardization programmes. The subjects ranged from discussions regarding the medical record itself and its care. Round table conferences were devoted exclusively to the subject of medical records.

1930:

First Bulletin was published in 1930 known as the journal of the American Association of Medical Record Librarians. In 1962 the name was changed as Medical Record News.

1935:

Educational Programme on Medical Records and 4 schools for Teaching Medical Records were opened at (1) Boston, (2) New York, (3) Minnesota and (4) Chicago. The author for the Manual for Medical Record Librarians Edna K. Huffman was the instructor for Medical Records at St.Joseph Hospital, Chicago.

1952:

The Australian Federation of Medical Record Librarians was organised. The first International Congress on Medical Records was held in London with representatives from 9 countries.

1956:

The second International Congress on Medical Records was held in Washington and 12 countries were participated.

1960:

Third International Congress on Medical Records was held at Edinburgh and 17 countries were participated.

INDIAN HISTORY OF MEDICAL RECORD DEVELOPMENT

Indian history of Medical Records goes back to the period BC 213-273,during the regime of Ashoka the emperor. After this time there is a wide gap till 1957.

Even though early in 1950's importance was given for Medical Records development in India, but much steps were not taken for the establishment of Medical Records department till Mudaliar Committee report in 1961.

During the year 1957 Dr.J.R.McGibony sponsored by Rock Feller Foundation, U.S.A., visited India and he made the following recommendations for Medical Records maintenance.

1. Medical Records should serve good patient care as well as medical education.
2 There should be desirable and attainable uniformity.
3. Contents of Medical Records should be studied.
4. Pay attention to compilation of hospital statistics.
5. Completion and adequacy of Medical Records.
6. Unit filing of records and cross indexing.
7. Evaluation of care through Medical audit by establishing Medical Record Committees.
8. Establishment of a school for training of Medical Record Librarians.

In 1958m Dr. Dauglas E.Burdic came to India and worked as a specialist with the planning commission. He submitted a report containing proposals as under.

1) To improve general teaching hospitals record by establishing a centralised Medical Record System in leading teaching institutions (Hospitals) in each state to serve as a model for other hospitals in that state.
2) Need for development of standards of minimum requirements in the teaching hospitals.
3) He arbitrarily recommended a minimum number of staff for 500 bed hospital.
4) The status of the person in charge of Medical Record in the hospital.

In the year 1958 Dr. Forestelinder, U.S.A, Director, National Health Survey, working with U.S. Aid mission (Health Division) came to India. He recommended in his report that:

1. Organisation of Health statistics in India, Directorate General of Health Services is done.
2. A pre-requisite to the collection of any useful and accurate morbidity data relating to inpatients, will be the establishment and improvement of record systems in the hospitals from which reports are to be received.

During 1959-1961, Dr. McGibony, Director of Hospital Administration Programme, Pittsburgh University, worked as a consultant in the Hospital Administration to Government of India, Ministry of Health. His recommendations were accepted by the Central Council of Health in 1961. He organised orientation training programme for Deans of Medical Colleges/Medical Superintendents with a view to improve Medical Records. He organised a seminar in the year 1961 and laid emphasis on Medical Records. He also recommended that a well trained individual, a specialist in Medical Records be included as the chief of the proposed.

During 1959-1961 a Health Survey Committee proposals known as Mudaliar Committee recommended in their report as follows.

1. Medical Records in OPDs should be properly kept, so that morbidity statistics of the population of that area could be obtained from these records.

2. These records will be of great value to the patients, hospital and to the physicians.
3. Medical Audit in each hospital should be done.
4. The members of the Audit Committee should look into the Medical Records and they should be well informed of the functioning of the hospital.

The Indian Medical Association must grant recognition to the Medical Institutions for teaching the undergraduates and postgraduates in Medicine and accordingly they have laid down some norms under the heading ***"REQUIREMENTS FOR UNDERGRADUATE AND POSTGRADUATE INSTITUTIONS" that "AN ACCEPTABLE SYSTEM OF RECORDING AND FILING SHOULD BE INTRODUCED CENTRALLY OR IF PREFERRED DEPARTMENTALLY FOR INPATIENTS AND OUTPATIENTS".*** Any postgraduate student should have the facility to make comprehensive review of any specific clinical problems, from hospital records for a period of 5 years or more.

JIPMER started maintenance of inpatient as well as outpatient Medical Records from February 1962 under decentralised system with a view to organise a centralised Medical Record Department at the time of the inauguration of the permanent building for JIPMER Hospital. Dr.S.G.Vengsarkar, Principal, Dr.M.Balasubramanian, Vice Principal and Prof. of Pathology,Dr.C.K.P.Menon, Medical Superintendent and Professor of Surgery and Mr.S.Ramasamy, Administrative Officer of JIPMER too keen interest in the development of Medical Records maintenance in JIPMER. When JIPMER Hospital shifted to its own building from the Pondicherry State General Hospital on 3rd April 1966, a separate Medical Records Department was organised to maintain centralised medical records both for inpatients and outpatients under the able guidance of Dr.D.J.Reddy, Principal and Dr.D.B.Bisht, Medical Superintendent.

In the year 1962 C.M.C Hospital, Vellore started training courses for Medical Records Technicians and Medical Records Officers.

The Central Council of Health in its 12th meeting a Srinagar in October, 1964 passed a resolution for utilising the available training facilities and to provide adequate provisions in the 4th Five Year Plan for establishing proper Medical Records Departments in all teaching and major hospitals in the country.

The first meeting of Medical Record review committee constituted by C.B.H.I., under the chairmanship of Dr.Patnaik, Director of C.B.H.I., was held at New Delhi on 18th to 20th February 1966 and the review committee considered the following aspects.

1. Development of Medical Records.
2. Standardisation of procedures.
3. Standardisation for record forms.

During 1966-1971, training for Medical Records Librarians was conducted by Trivandrum Medical College, Kerala.

Southeast Asia region of the World Health Organisation conducted training course for Medical Records Officers at Bangkok during 1966 and at Rangoon during 1967.

On 28th February 1973, training programme for Medical Records Technicians started at Safdarjang Hospital, New Delhi.

During 1977 training for Medical Records Officers started in JIPMER, Pondicherry.

During 1978 training for Medical Records Officers started at Safdarjang Hospital, New Delhi.

In July 1979, training for Medical Records Technicians started in JIPMER, Pondicherry.

A workshop on training in Medical records science was organised by C.B.H.I. from 3rd to 15th September, 1979 at C.M.C. Hospital, Vellore. The workshop recommended a uniform curriculum for one year Medical Record Officer and 6 months Medical Record Technician courses.

One year B.M.R.Sc. (Bachelor of Medical records Science) course for Medical Records personnel those who possess a graduate degree with same curriculum prescribed for Medical Record Officers course, were recognised by the University of Madras and started in JIPMER, in the year 1980 and at C.M.C. Vellore during 1982.

In 1988, C.B.H.I. conducted another workshop at JIPMER, Pondicherry in order to the formation of a standard syllabus for the trainees of Medical Records Technicians and Medical Records Officers. Representatives from Chandigarh, New Delhi, Madras, Bangalore, Kerala and C.M.C. Vellore were participated in the workshop.

DEFENITION OF MEDICAL RECORDS

Medical Record is defined as "Clear, concise and accurate history of a patients life and illness written from the Medical point of view".

The Medical Record is an orderly written report consisting of:

1. The patient's complaints
2. The diagnostic findings.
3. Treatment given.
4. Progress of the diseases or complaint and finally.
5. End results of the treatment.

The term "Medical Records" is used in the departmental contest to identify a some what specialised branch of hospital administration. It is that part of a necessarily complex organisation which is concerned not only with the custody and processing of a variety of clinical documents but also a wider range of administrative procedures associated with patients activity in hospitals including

such things as inpatients admission and discharge, maintenance of waiting lists, outpatients appointments and reception, registration, follow up procedures and statistics as well as training of medical record personnel are involved in the custody and classification of medical records department.

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DEFENITION OF MEDICAL RECORDS BY DIFFERENT PERSON

According to ***Mc Gibbony***, Medical Record is a clinical, administrative, scientific and legal document relating to patient care written in a sequence of events to justify the diagnosis and warrant treatment and end results.

According to ***Edna.K.Huffman***, Medical Record is the compilation of facts of a patient's life and health history including past and present illness and treatments written by health professionals contributing to patient care. Medical Record is the store house of knowledge concerning patient.

According to ***Kipling Stalwarts***, Medical Record is the WHO, WHAT, WHY, WHERE, WHEN and HOW of patients care during hospitalisation.

PURPOSE OF MEDICAL RECORDS

The primary purpose of the medical record is to accurately and sufficiently document the health history of a patient, including past and present illness or illnesses and treatments prescribed, with special attention of the events affecting the patient during the current episode of care. To provide a means of communication between health care providers and serve as a basis of planning individual care. Protect the data contained in the medical record and make it available whenever it is necessary. Serve as a tool for analysis, study and evaluation of quality of care rendered to patient. Assist in protecting legal interest of patient, hospital and physician. Protect privacy of patients data and provide data for researchers, teachers, insurance agencies, legal authorities etc.

OWNERSHIP OF MEDICAL RECORD

The medical record is developed in the hospital or its branches is considered to be the physical property of that hospital. However, the data contained in it is the property of the patient, and thus, must be available to the patient and or the patient's legally designated representative on request, according to the rules. The medical record is the personal document of the patient whenever his identity is retained.

CHARACTERESTICS OF GOOD MEDICAL RECORDS

It is often said that a good medical record indicates good patient care, and conversely, a poorly documented medical record reflects poor care. So the medical record is the mirror of medical care given to the patient. In most of the health care facilities, the care is good but the documentation is poor. That will sometimes leads to legal actions against that facility. So the documentation is as important as the care given to the patient. If there is no documentation there is no evidence to medical care. Good documentation helps the patient, physician, paramedical staff, students, researchers, public health workers, legal authorities, hospital administrators etc. Characterestics of good medical records are the following.

1.COMPLETE

To be complete, the medical records must contain sufficient data written in sequence of events to justify the diagnosis and warrant the treatment and end results.

2.ACCURATE

The contribution of all the staff concerned (Doctors, Nurses, paramedical staff) should be thoroughly checked and the opinion given by them must be spotted by findings.

3.ADEQUATE

The physician and his assistants should mark the progress notes as often as necessary till the patient is discharge. We can judge the Medial Record standard through the quantitative analysis which is done by the Medial Records Department, one of the most important functions assigned to Medical Records Department.

4.APPROPRIATE DOCUMENTATION

The information documented in the medical record by the medical professionals determines the quality of medial record. The medical record at all times contain enough information which will enable the physician to continue the care and assess the state of patient at any time. Only valid data sources were used in medical records. Wrong interpretation of terminology, wrong selection

of diagnosis/procedures will dim the clarity of medial record. The entries should be in accepted medial terminology and the abbreviations used should be accepted to the institution. Do not use abbreviations to write final diagnosis and procedures.

5.APPROPRIATE AUTHENTICATION

Every entry in the medial record should be dated and signed with time. Telephone orders are acceptable in the case of emergency. But is should be entered and signed by respective personnel. Unauthenticated data is considered as invalid.

6.TIMELINESS

Because human memory can easily fail, it is imperative that entries regarding the patient care be made as close as possible to the time of occurrence of the event and it is documented. For example records such as history, physical examination, lab reports, radiology reports etc. should be complete within 24 hours of admission. Progress notes must be written immediately and continuously from the time of admission to the time of discharges. The discharge summary may be written two to three days after discharge.

7.LEGIBILITY (CLARITY)

The entries made in the medical records should be readable. Because a number of health care providers are engaged in the care of a single person. So one who makes entry should be readable to others also. Some of the records were typed for very good clearance. For example , discharge summary, operation record, some of the lab reports and radiology report etc.

8.CORRECTION OF ERRORS AND OMISSIONS

One should gave special attention to avoid errors and omissions in the medical record. Errors are corrected by drawing a single line through the mistake, writing the word "error" near it and recording correct information. The corrected person should dated and signed. Errors should not erased or painted. If an entry is omitted, the entry is made after the last entry of that day with an explanation regarding the omission. If the entry is made in another day, it is added between the lines on the proper day with date of entry and sign. The errors and omissions should corrected and entered before the facts about the patient are forgotten.

9.LOW DATA REDUNDANCY

On close observation, we can found that the same data items are recorded in several places in the same record. This leads spending more time unnecessarily, and the information is stored and microfilmed caused great expenditure of money. It is noted that the risk that the recording two individuals of the same data element will conflict thus increasing the risk of lawsuit against the hospital if any unexpected event occurred during hospitalisation. Eliminating data recorded more that once in the medical record ensures data quality and results in efficiency. Keen record form design data redundancy.

10.RELIABILITY

Reliability means constancy. I.e., A discharge abstract compiled on a patient case record today and the discharge abstract compiled on same record two months later should be identical.

MEDICAL RECORD - USES AND VALUES

USES OF GOOD MEDICAL RECORDS

1. Provide communication between a physician and another health care professionals.
2. It helps to plan in the patient care.
3. It is a documentary evidence of the course of patients illness.
4. For scientific analysis , evaluation and study of the patient care.
5. For medico-legal purposes.
6. For research information.
7. For use of third party claims like life insurance, employees, state insurance etc.

VALUES OF GOOD MEDICAL RECORDS

1.Patient.
2.The Doctor.
3.The Hospital.
4.Medical Research.
5.Teacher and the student.
6.National and international public health agencies.

I. TO THE PATIENT; ' PATIENT FORGOT RECORDS REMEMBER'

1. Continuity of Medical care in case of re-visits.
2. Repetition of tedious examination , expensive and ink same tests can be avoided.
3. Saving of time. ie. save a life also
4. Saving expenditure.
5. For the purpose of certificates.

A] Certificate of Birth, Leave, Hospitalisation, Insurance, Reimbursement, Workman compensation etc.

[All the above certificates are required during the life time of the patient].

B]Certificate in case of death.

{I} Death certificate.

{ii} certificate of hospital treatment , Medical attendance certificate etc, for life insurance corporation, medico-legal involvement.

II.TO THE DOCTOR

1.To continue treatment.
2.Evaluation of results of new drugs, treatment etc.
3.Compare the results with similar results obtained in the country or abroad.
4.Publish results.
5.Medico-legal involvement.

III. TO THE HOSPITAL

1.Serves as a measuring instrument to judge the quality and quantity of work done by the doctor, Nurses, paramedical staff.
2.Whether the services rendered were according to the set standards.
3.Promotion or any incentive to those workers.
4.Utilization of the data compiled from records for planning of :

a)Services

b)Budget

c)Staff

d)Equipment

5.Medico legal purposes.

IV.MEDICAL RESEARCH

Research can be done only on the basis of written data, for which the medical records are important base.

V. TEACHER AND THE STUDENT

1.Teacher can present all the symptoms (subjective/objective) of a disease to the students.
2.Learning the art of writing Medical Records (national pattern of recording.)

VI. NATIONAL & INTERNATIONAL PUBLIC HEALTH AGENCIES

Compile stastical data on diseases from discharged records and outpatient records for:
1.Director of Health services (state level)
2.Director general of Health services (national level)
3.World Health organisation (international level)

MAJOR SECTIONS OF MEDICAL RECORD

A medical record has been devided into three sections.

1.IDENTIFICATION SECTION:(Looked after by Central Admitting Office)

Socio-economic data viz., (Identifying nature) Name, age, sex, married/single, income, father/husband's name, full address, next of kin, date and time of admission, provisional diagnosis.

2.MEDICAL SECTION: (Physician and His Team)

Certain statements on the studies, observations, conclusions and activities of the attending physician and other doctors of his team, and of any Physician consulted. The information is recorded on the following forms:

i) History (chief complaint, present illness, family history, personal history, inventory by system)
ii) Physical examination
iii) Other Medical Reports (X-ray, lab reports, E.E.G., E.C.G, Consultation reports, Anaesthesia and Operation record, Physical/occupational therapy and any other reports which may be essential in a specific care.
iv) Doctors orders
v) Progress notes
vi)Discharge slip/orders of patient (final diagnosis or follow up)

3.Nurses Section:(Nurses attending to patients)

It is a report of their observation and care of the patient as directed by the Physician. The information is recorded in the following forms:
i) Nurses bedside record
ii) Intake and output record
iii) T.P.R.Chart

CONTENTS OF MEDICAL RECORDS –BASIC FORMS AND SPECIAL FORMS

BASIC FORMS

1.Admission Record
2.Case Summary and Discharge Record
3. History
4. Physical Examination
5. Laboratory Report master
6. Progress Record
7. Physicians Orders
8. Nurses bed side record
9. T.P.R. Chart

These forms themselves do not guarantee accuracy and adequacy of Medial Records unless:

- ✶ Forms with proper space for recording essential data are used.
- ✶ The Physician carefully record the information
- ✶ Head entries on each form must be completed as soon as the patient is admitted.
- ✶ Titles given lower right hand corner or coloring of forms are to facilitate identify and location, when searching through a record.

ADMISSION RECORD

This form is also called the social history record, the social data record, identification sheet or face sheet. It contains information of identification nature and space for provisional diagnosis (Tentative diagnosis/Working diagnosis/Admitting diagnosis), final diagnosis, secondary diagnosis, result, signature of the chief physician and the back side the space for authorisation for treatment and operation etc.

PROVISIONAL DIAGNOSIS

This is an opinion given with incomplete knowledge of the case.

FINAL DIAGNOSIS

It is defined as a statement of opinion arrived at after extensive study of the case. It should be complete and accurate. The wording of the diagnosis should confirm to the accepted terminology of the International classification of Diseases.

SECONDARY DIAGNOSIS

The secondary diagnosis is a diagnosis produced by a primary cause or one disease following a previous disease.

CASE SUMMARY AND DISCHARGE RECORD

Case summary and Discharge record is also called as discharge summary. This is a brief note of the entire Medical Record of a patient. It is a valuable aid for the attending physician on e-admission of a patient or followup treatment at the O.P.D. He can quickly scan the report to have a clear picture of the patient's illness, treatment and advise at the time of discharge.

The Discharge summary should be concise and contain only essential information regarding the patients illness, investigations and treatment. It should also include the recommendation given regarding further visits to the hospital. It is usually filed immediately under the face sheet. The discharge summary sheet should be signed by the attending physician or the chief of the unit.

USES:

1. It can be used to make photo copies to send to insurance companies or others qualified to have this information concerning the patient, thus saving the time of making an abstract.
2. A copy shall be kept in the Outpatient record of the patient for easy reference when patient reports for follow up treatment.
3. A copy may be sent to the referring physician or consultant for his official records.
4. Copies may be made for the residents who wish to keep a record of the case at which they have assisted for their study purposes.

HISTORY RECORD

The primary purpose of a history and physical examination is to assist the physician in establishing a diagnosis and decide the further care and treatment of the patient. It is recommended by the national health agencies that the history and physical examination records be prepared to fit the case rather than to have the case prepared to fit the records through stereotyped forms. The instructions in the left margin of the history and physical examination reports do not measure their adequacy. The essential factor recorded within 24 hrs in a concise and progressive manner and condensed into the briefest reports consistent with the presentation of all essential detail required for the proper care of the patient in the present ill ness and if needed for reference in future ill ness.

PHYSICAL EXAMINATION RECORD

This is the result of a thorough examination of the patient by the physician and is a statement of his observation and findings supplemented by diagnostic aids.

At the conclusion of the examination, a brief summary is recorded and the doctors impression. i.e., the working diagnosis is written.

In a small hospital it should be written or dictated by a physician as it is a record of his observation. In a major teaching hospital it can be recorded by the intern, residents and approved by the attending physician.

LABORATORY REPORT MASTER

Laboratory examinations are ordered by or under the direction of the attending physician. These reports are prepared by the medical Technologists and send to the ward where these are included in the Medical Record of the patients. The number and type of tests are determined according to an individual case.

1. Original reports are pasted on the Master sheet which becomes a part of Medical Record of the patient. In some hospitals the reports are copied on to the master sheet. The above procedure is mostly preferred in order to avoid errors in copying the original reports.
2. The reports should be pasted in chronological order according to the date or investigations ordered.
3. Columns for reports are used for easy identification and location.
4. All reports must be checked for accuracy of hospital Number, Name, Date and Signature of Technologist.
5. Similar procedures should be adopted in case of E.C.G., E.E.G., etc.

PROGRESS RECORD

Progress notes are specific statements written by the physician or his assistant. They provide a summary of the condition of the patient on admission and a chronological record of the patients progress written every day, or even every few hours during a critical condition. They are very important in the day to day care of the patient and in medico legal need. They must be signed by the attending physician or his assistant.

PHYSICIANS ORDERS

This is a record of all orders given by the physician and it is also known as treatment record. All orders should be written on this order sheet and signed by the physician. Orders are sometimes given orally or on telephone and this is transcribed by his assistant or nurse to the order sheet. The physician countersigns them on his next visit, in order to establish is responsibility for the orders given orally or on telephone.

NURSE'S BED SIDE RECORD

The Nurse's record their observation and treatment and services rendered to the patient during the absence of the physician on the Nurses bed side record. It serves as a means of communication between the doctor and the nurse, as the nurse change shifts and do not always see the doctor. It serves 4 major purpose.

1. As a record of the patients condition during the absence of the physician.
2. As a time saver and an eliminator of errors.
3. As a proof of work done.
4. To complete the Medical Record

All nurses notes should be signed by the nurse who rendered the service. Initials are not sufficient because they are not reliable and accurate identification. Because of the frequent changes of nurses on duty, it becomes necessary at times to identify who has given certain treatment.

GRAPHIC CHART

This record is started on admission of the patient to the ward at the same time the nurses bed side record is started. It helps the physician to have a quick picture of the temperature, pulse and respiration of the patient. It also provides space for recording the stools, column of urine and blood pressure.

SPECIAL FORMS

1. Anaesthesia Record.
2. Operation Record.
3. Labour Record.
4. Neonatal Record .
5. Consultation Record.
6. Blood Transfusion Record.
7. Intake and Output chart.

FORMS DESIGN AND CONTROL

Medical record practitioners are responsible for assisting in the design and implementation of effective forms for data collection and use . Well-designed medical record forms are important communication tools and ready references inpatient care and in review of care provided. Good forms can accomplish several purposes. They can i.) reduce writing time and avoid duplication of information and ii.) standardise the information that is provided. Well-designed forms are also easier to complete.

The medical record practitioner assists the forms committee and hospital department by

1. Making available the various requirements and status that may control content of the form in a particular state.
2. Being knowledgeable about rules governing forms design such as quality of paper, spacing, printing styles, logical sequence of material
3. Collecting sample medical record forms to assist in developing the hospital forms.

FORMS ANALYSIS

A logical approach to form analysis is to review all the forms used in a certain procedure. Reviews should understand the procedure so that their analysis can be complete. One should need to know the answers to the what, when, where, who how and why questions for each step of procedures involving the form.

For back ground information related to procedures, the following source should be checked.

a. manuals, regulations which are describe functional responsibilities and procedures that relate to the forms.
b. Forms history file and forms subject file.
c. Completed forms which will show the types of errors made in completing.
d. Organisations charts which will show the relationships of the department responsible for the forms to other department.

The reasons for forms analysis are

a. Existence of operational problems of backlogs, unusual time lags, repetition of numerous errors.

b. Areas suggested for potential savings and improvement

c. Suggestions made by the operating staff.

FORMS COMMITTEE

Because the authority to enter the information in medical records granted by the medical staff, medical record forms should be approved by a representative group of medical staff, usually the medical record committee. A hospital forms committee may be appointed to maintain an effective forms design and control programme. The medial record director may serve as chairman of the forms committee or co-ordinate all the tasks involved.

The committee should review forms, recommended changes in content, make changes in design to conform to an established basic record format, and eliminate forms for which there is no need. A forms numbering system is necessary for easy identification and stock control. Samples of all editions of approved forms should kept on file and a brief statement of its purpose and use should accompany each form. The form number, the approval date and athe number ordered should be printed on each revision to ensure identification. In the development of new forms, it is advisable to have only a small supply of form prepared for trial use. Forms should be kept simple and the variety few in number , to provide flexibility and reduce record bulk.

A form should be designed to meet the requirements of the system for which it is to be used. The design should be clear and the form easy to complete to save on clerical labour and to increase office efficiency.

PRINCIPLES OF FORMS DESIGN

Five major components usually exist on all forms. They are as follows,

1. Healing: It include the tile and form number.

2. Introduction: It explains the purpose of the form. Sometimes the purpose identified in the title.

3. Instruction: It includes the items on how to fill in the form and what to do with the form.

4. Body: It consists of the grouped or sequenced items for specified information desired.

5. Close: Space for approving signatures.

The following principles are basic to good form design

1. A uniform size of paper should be used. Standard size is 81/2 inch by 11 inch.
2. A uniform binding edge should be maintained.

3. a uniform margin should be maintained. Chart holders on the nursing unit should accommodate the uniform margins.
4. Depending on whether the forms are to be typewritten, handwritten, line spacing, as forms should be designed.
5. The quality and weight of the paper should be selected according to the expected life of the record, the amount of use it will received and whether both sides are to use.
6. Coloured forms should be selected carefully because problems can occur in photocopying or microfilming coloured sheets.
7. Whether feasible, the use of a rubber stamp as an existing forms can be used to eliminate the need for a special form that is not regularly.
The following principles are basic to good forms development
a. The study the purpose and used of the form and design it with the user in mind.
b. Design the form as simple as possible, omit unnecessary information and lines.
c. Items should be listed in logical sequence.
d. The horizontal space allowed for typewritten entries should accommodate the type size.
e. all forms should have the identification of the patient in a standard location
f. When uniform placement is possible, there should be a uniform sequence of common items on related forms.
g. Use standard terminology for wording instructions.
h. Form that require recopying from other parts of the record should be avoided.
i. The name of the hospital should be pre-printed on all forms
j. forms should be designed to provide instructions on completion, which are placed on top whenever possible.
k. Answer boxes can save time in completing the data for a form and can reduce errors as well as provide uniformity of statistical items.

SOME FEATURE OF EVERY FORM

- ✶ Titles and subtitles: The title may appear in one of several places like top left, top right, left or right bottom or at the top central
- ✶ Form Number: The lower right margin or lower left margin is the best location for the form number and edition date
- ✶ Edition data: The edition date should appear on each form. This date assist the user in determining whether the current edition is being used.
- ✶ Page Identification: when there are multiple pages of a form, page number should be given in a numerical or alphabetical order. If pages are continually added during treatment course, the forms should be provided with space for entering page number.

- ✶ Instruction: General instruction should be brief and placed at the top of the form. The user should be able to determine immediately, how many copies required, who should submit the form, and where, when and to who copies should be sent.
- ✶ Working area and Arrangement: It is the part of the form that it devoted to the substantive work of the form. If different persons are to enter data on the same form, the data to be completed by each person should be grouped. Related items should be placed in a sequence, which will eliminate unnecessary writings. Data on the form should be arranged to facilitate the flow of writing from left to right.
- ✶ Margins
- ✶ Spacing
- ✶ Box design

The features to avoid

1. Heavy ruled lines.
2. Line that bleed off the edge
3. Narrow margins.
4. Crowded entries
5. Lack of symmetry
6. Mixture of design styles
7. Unconventional type of styles
8. Type too large or too small.

RESPONSIBILITY FOR MEDICAL RECORDS

The primary function of the hospital is to provide adequate care and treatment to patients. It is the responsibility of the facility to provide a record for each patient and safeguard the record and its content. The responsibility is scattered on all who engaged in the care of the patient. It can be studied under the following headings.

A) GOVERNING BODY

Each hospital has a governing body aims at the management of hospitals. As a final authority, it is legally responsible for determining that patient received high quality medical care, documented by a complete and accurate medical record.

B) HOSPITAL ADMINISTRATION

The administrators of hospital ensuring that the medical staff adopts rules and regulations providing for maintenance of timely complete maintenance of medical record.

C) MEDICAL RECORD COMMITTEE

The major functions of this committee is to change of form/formats of a medical record if necessary. Insure that details are recorded in proper manner to accommodate sufficient data about a patient. Insuring that there is a proper filing, indexing, storage and availability of medical records. Advising and developing policies with the aid of legal council to guide medical staff, medical record director etc.

D) MEDICAL STAFF

Medical staff are the heart of the hospital. They have the responsibility to contribute to medical records. Accurate recording of them helps to run the patients course in the hospital smoothly.

E) THE PHYSICIAN

The major responsibility for an adequate medical record lies with the physician. Recording of informations like history, physician examination, discharge summaries etc. written by interns, residents and other house staffs must be reviewed, corrected and countersigned by attending physician. If the medical record is inaccurate, incomplete or insufficient, the patient, physician and the hospital are affected.

F) THE NURSING STAFF

In the absence of doctors, nurses are the care provider to the patient. Accurate recording of their observations helps the physician in taking decisions. The nursing staff should document what they did for the patient.

G) MEDICAL RECORDS PERSONNEL

The medical record practitioner works with medical staff for good medical records. The medical record personnel assist the physician in reviewing the records for completeness. This analysis checks for omissions and discrepancies and insure that the medical record comply with policies and standards established by the hospital. The medical record staff should pay special attention to store and retrieve files in most secured manner and providing to whom in need of medical information.

MEDICAL RECORDS DEPARTMENT /MEDICAL RECORDS LIBRARY

Every health care facility should have a proper place for lodging the medical records for storage and security. The medical records section should be logically located to facilitate easy transport of records. The location of department should be in a proper place to provide medical information to health care providers quickly.

Based upon the storage of records, they are of two types – centralized and de-centralized .

Centralization refers to filing of patients files in one location. If out patient clinic care is regularly provided in a hospital, a unit record is most practical. This type is most preferred in many of the hospitals. In de-centralized filing system, files of different sections filed in separate areas.

Major functions of medical records department are

1.REGISTRATION OF PATIENTS

Each and every patient who came in a health care facility should be registered before consulting with medical care providers. The important registration details usually recorded are name of the patient, father's/husband's name, age, sex, full postal address, facility of speciality in which he is registered, referral doctors name and address, referral diagnosis etc. The medical record starts in registration office. A identification number is given to the patient at the time of registration.

2. ADMISSION

If a patient is admitted by the physician's advice, the admission formalities are completed in the admitting office, which is a part of medical records department. In addition to registration details, other informations taken are date of admission, time, name of care unit(ward/ICU), name of head of the unit, provisional diagnosis etc.

3.CENSUS

The census helps to know the position of a patient. Usually census have taken at mid night-end of a day. Through the census we can know about the admission, discharge, death, ward transfers etc. Census is one of the tool for statistics. Hospital in-patient census is the number of in-patients occupying beds in hospital at a given time. Census is usually prepared by the nursing staff. But its data presentation is through MRD.

4. ANALYSIS

After the discharge of a patient, the medical record is directed to MRD by the concerned people. Then the record is analysed for deficiencies.

MEDICAL RECORD DOCUMENTATION ANALYSIS

The medical record is the permanent, legal document, which must contain sufficient information to identify the patient, justify the diagnosis and treatment, and record the results. As such it must be accurate and complete. But because documentation in the medical record is performed by a variety of health care providers-physicians, nurses, therapists, and other-and because it is performed as a secondary activity following the rendering of patient care, documentation may not always be as accurate or complete as necessary and desirable. Regular analysis of the documentation in the medical record should be performed to manage the content of the medical record . So it fulfils its purposes.

TYPES OF MEDICAL RECORD DOCUMENTATION ANALYSIS

In quantitative analysis medical record practitioners use a list of recording requirements to identify deficiencies in medical record documentation. Medical record practitioners may also identify inconsistencies that are incomplete or inaccurate. This is quantitative analysis. Qualitative analysis applies knowledge of disease process and the policies and standards established by the health care administrators.

Quantitative and qualitative analysis should be distinguished from quality assurance. Quantitative and qualitative analyses are reviews of documentation in all medical records designed to provide assistance to health care providers in improving their documentation. Quality assurance is the programme performed by peer groups of health care providers designed to ensure that the health care delivered is optimal within the available resources of the health care facility and consistent with achievable goals. The analysis providers background information for the focused studies of documentation problems, which is a part of quality assurance. The function of quality assurance programme is to evaluate the quality of patient care.

The important features of quantitative analysis are:

- Identify obvious that are incomplete or inaccurate
- Use a prescribed list of recording requirements
- Applies a knowledge of medial record content to the analysis

- ✶ Performed by a person trained for this job
- ✶ Result is a list of deficiencies, which can be completed by the health care providers in the normal course of facility procedures

The important features of qualitative analysis are:

- ✶ Identities inconsistencies and omissions that may potentially be incomplete or inaccurate
- ✶ Performed by application of general principles of documentation or specific criteria
- ✶ Applies knowledge of medical record content, disease process, and policies and standards established by the facility administration and medical staff and various licensing, accrediting and certifying agencies to the analysis
- ✶ Performed by credentialed medical record practitioner
- ✶ Results include:

1. A list of deficiencies which can be completed by the health care providers in the normal course of facility procedures.
2. Identification of patterns of poor documentation practices for which improvements should be sought through individual discussions, referral to quality assurance programme or by educational means.
3. Identified of potentially compensable events to be reported to the faculty's risk management, quality assurance programme, or legal counsel as applicable for further review.

QUANTITATIVE ANALYSIS

Definition

Quantitative analysis is a review of prescribed areas of the medical record for identifying specific deficiencies in recording. Because the analysis is specially prescribed, specially trained clerical level employees may perform it.

Purpose

The purpose of the quantitative analysis is primarily to identify obvious and routine omissions that can be easily corrected in the normal course of the hospital procedures. This procedure makes the medical record more complete for future patient care references, for protecting legal interest of the patient, physician and hospital and for meeting licensing, accrediting and certifying requirements.

Results

The result of the quantitative analysis is identification of specific deficiencies. The health care provider within a short time of their identification should complete these deficiencies. Medical record department personnel may also aid in completing the medical record through assembling all medical record

forms, through filing late reports and by recording patient identification on all forms, which obviously belongs to a particular record.

COMPONENTS OF QUANTITATIVE ANALYSIS

It includes a review of medical record for
1. Correct patient identification on every form
2. Presence of all necessary reports
3. Required authentication on all entries.
4. Good recording practices.

1.Review for Identification

Quantitative analysis usually begins with the placement of the medical record forms in a prescribed order. This arrangement will aid in ensuring fast and easy retrieval of information during subsequent patient care. It will also aid in checking the missing reports.

2.Review for Necessary Documents

There are certain reports that are common to all medical records(basic forms). Other reports will be necessary depending on the patient's course in the hospital. If the patient had diagnostic test, consultation or surgery reports of these procedures will be required. The procedure for quantitative analysis should specify which reports to check for, at what times and under which circumstances. It should be noted that, however, that if a report of an action is missing because the action was not done, the report cannot be considered a deficiency.

3. Review for authentication

Quantitative analysis should also check that preserved entries are authenticated. Authentication may be a signature, rubber stamp in sole possession of the owner, initials if identifiable or computer access code or key and should include the professional title of the author. Someone other than the author should not sign an entry.

4.Review for Recording Practices

The quantitative analysis can aid in noting where entries are not dated, where errors have not been approximately corrected, where there are skipped spaces that should be lined through to prevent subsequent tampering. Error correction is particularly important aspect of documentation.

By ensuring that all forms are present in the correct arrangement and that all entries are authenticated and reflect minimum standards of good recording

practices, quantitative analysis is an important part of improving the accuracy and completeness of medical records.

QUALITATIVE ANALYSIS

Definition

Qualitative analysis is a review of the content of medical record entries for inconsistencies and omissions, which may signify that the medical record is inaccurate or incomplete. Such an analysis requires knowledge of medical terminology, anatomy and physiology, fundamentals of disease process, medical record content, and the standard of licensing, accrediting and certifying agencies. A qualified medical record practitioner usually performs it.

Purpose

Purpose of qualitative analysis include making the medical record complete for reference in patient care, protecting legal interest, and meeting regulatory requirements. It also contributes background or supporting information for quality assurance and risk management activities. Quality assurance also assists in diagnosis and procedure coding specificity and sequencing which is important for on going medical research, administrative studies and reimbursement.

Results

The result may be identification of correctable deficiencies, patterns of poor documentation practices and potentially compensable events. Where qualitative analysis identifies patterns of poor documentation or potentially compensable events, neither of which can be corrected after the fact, the documenting health care provider should made aware of the faculty documentation and offered assistance or suggestions for future improvement.

COMPONENTS OF QALITATIVE ANALYSIS

1. Complete and consistent recording of diagnostic statements
2. Consistency in entries by all health care providers
3. Description and justification for the course of the patient's hospitalisation
4. Recording of all necessary instances of informed consent
5. Application of good documentation practices.
6. Occurrence of potentially compensable events.

1. Review for Complete and Consistent Diagnostic statements:

Upon admission there should be an admitting diagnosis stating the reasons for admission. The result of the history and physical examination should document and impression or provisional diagnosis and generally must confirmed through additional diagnostic studies. In certain cases the provisional diagnosis may be rather several possible diagnoses with similar symptoms. This comparison is called diffential diagnosis. A pre-operative diagnosis is a statement of the reason for surgery. A post-operative diagnosis states the clinical findings of the surgery. Both pre-operative and post-operative diagnosis should be included in the operative note. A great difference in these diagnoses may be suggestive of inadequate diagnostic workup or other issues related to quality of care. A pathological diagnosis may be required to provide a definite post-operative diagnosis. A pathological diagnosis is a description of the morphology or cellular characteristic of the tissue removed during surgery.

Upon termination, all final diagnosis and procedures should be stated on the face sheet in the discharge summary. The final diagnoses will include the principal and primary diagnoses, any complication etc. Principal diagnosis and primary diagnosis should carefully distinguished. The principal diagnosis is that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital. The primary diagnosis is the most important or significant condition of a patient in terms of its implication for the patient's health, medical care and use of hospital resources. Secondary diagnoses are complications or co-morbidities. A complication is a condition arising during hospitalisation that modifies the course of the patient's illness or the medical care required. Co-morbidity is a condition existing at the time of admission, which has a potential for affecting the course of the illness or medical care provided. Co-morbidities are active conditions for which the patient is receiving treatment or is being monitored.

Procedures are needs to be listed completely. When listing procedures they should also be sequenced with the principal procedure first. The principal procedure is one "which is performed for definitive treatment rather than one performed for diagnostic or explanatory purposes or was necessary to take care of a complication". The principal procedure is that procedure most related to the principal diagnosis.

2. Review for Entry Consistency

Consistency refers to agreement or harmony of parts one to another and to a whole. Diagnostic statements should be consistent from admission through discharge, i.e., they should reflect progressively more information about the

condition. Difference between primary and principal diagnosis may mean that the reason for admission was not documented correctly, or that there was inadequate work up prior to admission or that a potentially compensable event occurred during hospitalisation. Diagnostic statement should also demonstrate consistency among the operative report, tissue report, diagnostic studies, results and consent form. Three common areas where inconsistency can result in miscommunication of patient care information are among a)progress notes written by different members of health care team,b)among order, medication records, Progress notes and among admitting and discharge information recorded by different health care personnel.

3. Review for Description and justification of Hospital Course:

The medical record must describe and justify the course of the patient's hospitalisation. Therefore it must document the results of diagnostic studies, treatment, patient education and patient location fully. The medial record should also display the thought process-the reasoning that leads to each decision, even if the decision is to take no action. Not only should the alternative treatment be described, but also the purpose for new treatment should also be explained.

4.Review for Recording Informed Consent:

Each hospital has a policy consistent with legal requirements on informed consent.

5. Review for Documentation Practices:

Other characteristics, which are qualitatively analysed include evidence of timely recording of entries, legibility, use of approved abbreviation throughout the content and avoidance of extraneous remarks. The medical record should contain no unexplained time gaps. This is especially important in emergency situations. Illegible entries and use of abbreviations not on the list of approved ones are as useless as if nothing were recorded. The medical record should never contain critical comments.

6. Review for potentially Compensable Events:

A sample of criteria used for checking any potentially compensable events.

INCOMPLETE MEDICAL RECORD CONTROL

The result of quantitative and qualitative analysis is the identification of specific deficiencies, patterns of poor documentation, and potentially compensable events.

DEFICIENCY NOTIFICATION

Health care providers need to know they have incomplete medical records and what deficiencies they contain. When concurrent analysis identifies deficiencies, the deficiencies can be noted directly on the medical record, commonly by a form inserted within the medial record. The next time the provider documents in the record, it is expected the deficiency will be corrected. In addition to that the health care facilities have different ways of getting medical records completed. In some facilities health care providers are expected to routinely visit the medical record department to attend to record deficiencies. In other facilities, providers may be notified in writing that they have incomplete medical records and to visit the medical record department or in other facilities, to request the records to be brought to a specified location within the facility.

FILING OF INCOMPLETE MEDICAL RECORDS

When incomplete medical records are kept in the medical record, department, they may be filed in one of three ways: in the permanent file, in a separate incomplete file by a provider name, or in a separate incomplete file by medical record number. Filing incomplete medical records in permanent files makes them less accessible to providers but saves retrieval time if the medical records are very active after discharge. The means of filing which is most accessible to providers is in separate file by provider name. Filing incomplete medical records in a separate file by number is a compromise between filing them in a permanent file and separately by provider name.

Computerized incomplete systems can be very helpful for controlling all aspects of incomplete medical records. Once specific deficiencies are input into the computer, several outputs can be generated.

FLOW OF MEDICAL RECORDS

The medical record for the inpatient usually originates in the admitting department of the hospital. Here the patient or the representative provides identifying and financial data and signs consent forms for treatment and release of information. A medial record number (Hospital Number), which is used on a medical record forms for the patient is assigned. Generally this is a permanent identification number assigned by the hospital and used whenever the patient receives care at the hospital. A patient account number (Admission Number) may also be assigned. This is a unique number that differentiates each hospitalisation or other episodes of care for willing purposes.

The admitting department sends relevant portions of the information collected on admission to other departments in the hospital and informs them. The patient is

being admitted. The departments usually receiving data are the business office, data processing, medical records, nursing service etc.

Then the case file goes to the ward, here a medical record of basic form is compiled for the patient when orders for various tests, treatment and consultation are provided by the patient's physician, nursing service generates and routes or transmits via computer the request to the appropriate department. Nursing service responsible for filing test results and making entries regarding nursing care on certain forms within the record. Many aspects of medical record documentation may be computerized.

The attending physician who admits the patient is primarily responsible for the patient's care. He generates the data by compiling a history of the patient, performing a physical examination, and recording the results. The physician also generates the data regarding the patient when orders for diagnostic and therapeutic services are made, when the patient's condition and response to treatment are assessed through progress notes, and when the patient's course at the end of the episode of care is summarised. During hospitalisation data may be generated by other physicians who give care to the patient such as in providing consultation, surgery and other specialized evaluations of treatments. Data a developed by various physicians may be transcribed and entered in the medical record. Medical record employees who type patient's history, physical examination, consultation, operation records and discharge summaries. The physician who generates each of these reports must review and sign them.

When the patient is discharged the record returns to the medical records department. The arrangement of the medical records re usually made by the medical records personnel. They collect and checks the daily ward census reports for discharge details. The records received by the medical records staff analyses in a standard pattern. It includes, assembling , deficiency checking, coding and indexing. After quantitative and qualitative analysis the incomplete records are shifted to special areas for the completion by the physician, nurses etc. Incomplete chart control is thus very necessary for the smooth functioning of the medical records department. After completion the charts go to the filing section.

When a person goes to the hospital for ambulatory care the patient is considered as an Out-patient. The maintenance of out patient records are very essential as in patient records, because this provide the true picture of the morbid condition in the community, which helps the government to organize the special services like out patient statistics in hospital and classification of diseases can represent the exact picture of the health problems of our country. The out patient record contains hospital name on the top and space for recording sociological data such as name of patient, out patient number, age, sex religion of the patient, address, diagnosis and finally the complains are written below specifying the date. This serves the purpose as an identity card as well as an out patient record. The out patient records finally returns to medical records department. After deficiency analysis, coding and indexing it goes to the filing area.

In the filing section the out patient files as well as inpatient files are received. They are arranged for filing in definite areas on the basis of the filing method, which is followed by individual hospital. This arrangement includes sorting, serial

arrangement and filing of individual charts. When the patient re-visits the hospital for check up, admission, test etc., the record send to the out-patient department.

MEDICAL RECORDS – FORMAT TYPES

Medical record format means organization of forms within the medical record. There are 3 types.

- Source oriented medical records
- Problem oriented medical records
- Integrated medical records

SOURCE ORIENTED MEDICAL RECORDS

Hospital medical record is organized in sections according to patient care departments (eg. pathology in a section, lab reports in another section, nurses records in another section).

PROBLEM ORIENTED MEDICAL RECORDS

This format is introduced by Lawrance L. Weed in 1960.This provides a systematic documentation to reflect the part of physician directing the care of patient. The physician defines and follows each clinical problem individually and organizes them for solution. The POMR must contain 4 basic components – the data base, the problem list, initial plans and progress notes.

INTEGRATED MEDICAL RECORDS

In this format, the information is organized strict in chronological order in which the most recent entries in the beginning of the record.

ORGANIZATION OR MEDICAL RECORDS DEPARTMENT

Organization of a good , smooth running and efficient department is very hard task. Before starting a department, there should be proper perception about the hospital and its coming future. Following are very important matters in the case of organisation of department. There should be a medical record manager for guidance and supervision.

1.PERMISSION

The medical record manager consult with the higher authorities of the hospital and obtain permission to start a department. He should be talented to know the authorities about the importance of such departments in hospitals.

2.PLANNING

After getting permission, there should be proper planning about its location, facilities, staffing etc. The centralized medical record department is more preferred. The department should be in a logically locate to facilitate the transport of files to various sections. The OPD'S must be organized near the reception. All the investigations, accounting facilities etc. should be available near the OPD. There should be proper guidance to patients, for which name boards should be enough space to file the records properly and its easy retrieval. The racks must be arranged in such a way that the filing clerks can pull out records without using a ladder, which saves time work. Adopt filing methods to satisfy hospital needs. Before starting the department, the nature of filing (Unit, unit serial or serial) and numbering pattern etc should be understood. Plan a department based on the need of a hospital.

3.ORGANIZING

All the members of the hospital should co-operate to organize the department. During organizing, the major thing came into account is the physical facilities of the department. Chairs, tables, filing racks, clips, storage area, file folders etc. should make available for the department. Medical record committee is responsible for the design of medical record forms.

4.STAFFING

There should be adequate staff for the smooth running of the department. The department needs more staffs it the OPD case files are also used. Based on the OPDs the number of the staffs increases. Computerization reduces staff strength and filing works.

5.CO-ORDINATING

Proper co-ordination of the department with other departments is necessary for record control and maintenance of proper medical records. MRD needs information from all departments. Proper co-ordination should be maintained within the department also.

6. EVALUATION

Hospital management committee and medical records committee are responsible for evaluate the function of each department. If there is any deficiency in the function of medical records department, special attention of medical record manger is needed in that field.

7. DIRECTING

After organize a department, the medical record manger should direct the department under his direct supervision for smooth running of the department.

8. ASSESSING

Assess the function of the department in general and point out the changes if necessary.

9. MODIFICATIONS

If any modification is necessary after assessment of a department it should be made.

10. INTEND

Inform hospital management authorities about the needs of the department timely.

Aware of the space management of the medical record department. If the space provided is not adequate, there is the possibility of department transfer, records transfer to a remote area etc happened. The records should be kept in an area devoid of dust, excessive heat, excessive cold, attack of insects and attack of fire. There should be fire extinguishers in the department and everybody knows how to operate it. If the department is computerized, the staff strength should be reduced.

The important things to be discussed with hospital administrators and HOD's of other departments before organizing a medical record department are as follows.

- Nature of department – Centralised or de-centralised.
- Type of record to be maintained – source oriented, problem oriented or integrated.
- Whether OP records were kept or not.
- Numbering system – unit, serial or serial unit
- Is any emergency service or medico legal case service.
- Retension period and destruction of records.
- Coding and indexing
- File control
- Record completion
- Admission and discharge formalities.
- Requests for medical records.
- Forms design
- Registration – with reference or without reference
- Birth and death registration
- Census
- Correspondence and reimbursement or claims.
- Important statistical data needed by the hospital.

- ✶ Any ancillary services like certificate issue, medical social work service etc.
- ✶ Staffing and their dress.
- ✶ Inter department, Intra departmental, Inter hospital disciplinary manners.

ADMINISTRATION OF MRD THROUGH MEDICAL RECORD ADMINISTRATOR

The MRD director must be more than a skilled technician. He must be both a leader and innovator in building up a well organized department. He should have imaginative approaches to problem solving.

Leader challenge is a demanding one and to some extend depend on talent. Management of MRD needs planning, organizing, controlling and activating abilities. Various types of plans must be formulated by the department head. They include objectives, policies, procedures, and departmental rules and regulations. Objective dictate the basic functions or characteristic activities of MRD and policies and procedures are planned to implement basic functions. Policies provide guidelines for making decision. Eg. A typical hospital policy is that medical record is the property of hospital. Rules and regulations are statements which spell out acceptable behaviour patterns. The prime function of every hospital department should be the care of sick and injured.

Duty distribution employees – should be evenly distributed and pre-planned.

Work standards – It is an established level of acceptable performance. Equipments, physical standards, budget and budgetary control – The medical record administrator have the complete details of physical facilities and equipments of his department.

INTERDISCIPLINARY RELATIONSHIPS

Hospital is an organization that mobilizes the skills and efforts of a number of diversified groups of professional, semi- professional and non-professional personnel. Good communication is basic to good understanding. Communication means process of passing information and understanding from one person to another. Medical record department head should have better communication with all other department. The medical record practitioner must know how to disagree with other departments without making enemies. He does this by not making arguments personnel and not attacking the other person's integrity or intelligence. He should know his responsibilities and commitments. Serve his employer loyally and honourably. Discharge the duties and responsibilities entrusted to him. Avoid malpractices and if noted, report to proper authorities. Preserve the confidential nature of professional determinations made by staff committee which he serve. Strive to advance the knowledge and practice of medical record keeping techniques including continued self improvement. State truthfully and accurately

Indexing manually means that diseases and operation code numbers are entered by hand or posted on each appropriate indeed card. Small hospitals may find its cost effective to retain manual indices because of a low rate of request for information . When setting up or revising a manual index file, there are three factors to be considered in designing the index card .

- The data will be indexed on the card
- The sequence of this data on this card
- Spacing and printing requirements

This system will minimize eyestrain and speed up the indexing operation.

5.PHYSICIAN'S INDEX

The physician index provides every medical staff member a record of the patient he has treated. Entries on the physician's index cards are usually the name and the hospital number of the patient, but may include other data such as the hospital service and the length of stay. It may also indicate those cases for which a physician served as surgeon or consultant, the end results of hospitalisation and any other information which might be desirable. In a computerized indexing system, a code number is essential to safeguard the confidential nature of the indices.

INDEXING METHODS

Index cards are always filed in strict numerical order. Periodically the clerk should audit his index to correct any misfiles. For a neater, more readable index all captions should be made in ink or by typewriter and computer. The disease and operation indices are the most compensive indices in the department to maintain.

USES OF INDICES

- The expense of retrieving data from the index.
- Various sizes of vertical files may be purchased and mechanised vertical files, which require considerable less physical work by the indexer, are also available.
- Retrieval from indices: If a physician requests charts for a certain diagnosis, care must be taken to insure that all records with that diagnosis are secured. Pertinent records may be found under more than one code number; therefore medical record personnel should discuss with the physician all of the code numbers which might provide records relevant to his study.
- Research files: Records removed from the permanent file for research files should be signed out in the usual manner, leaving an out guide. If a record

in any official transaction. Serve the need of other rather than pursuing personal gain.

MEDIAL CODING

Coding is transferring verbal descriptions of diseases, injuries, procedures and surgeries into numerical designations which is an exact translation of the meaning of the diagnosis according to some established criteria. Placing of a diagnosis in a class or group of diagnoses related to each other is called classification.

Classification systems are sued to organize health care data for easy and meaningful retrieval. Coding is performed to meet internal and external demands for medical information. Third party payers and outside agencies use this information to forecast health care data, evaluate utilization of health care facilities and the appropriateness of health care costs and conduct epidemiological studies.

HISTORY OF CLASSIFICATION OF SYSTEMS

During the Sauvagean period a person named Francic Bossier de Lacorix attempted to classify diseases systematically and a treatise was published under the title "Nostalgia Methodica". In the 17th century Captain John Graunt of London began directing the attention of the world to morbidity and mortality statistics in his "London Bills of Mortality". This was the first real attempt to study diseases from a statistical point of view. In 1837, Farr, Registrar General of England and Wales worked to achieve better classification and International uniformity in the use of statistics. This has survived as the basis of international cause of death.

INTERNATIONAL CLASSIFICATION OF DISEASES (ICD)

Dr. Jacques Bertillon developed the Bertillon Classification of causes of death in 1893. In 1898, the American Public Health Association recommended that the Bertillon classification adopted by registrars in Canada, Mexico and USA and that the classification be revised every ten years.

ICD-9TH REVISION

ICD-9th revision was published in 1979. ICD-9 is primarily a universal classification system for grouping illnesses. Its secondary purposes is for use in hospital disease indexing. ICD-9 consists of two volumes – Tabular list & alphabetical list of diseases.

Volume 1 consists of 17 chapters and 2 supplementary classification schemes. The chapters are

Sl. No.	*NAME OF THE CHAPTER*	*RANGE OF CODE NUMBERS*
1	*Infectious and parasitic diseases*	*001-139*
2	*Neoplasm*	*140-239*
3	*Endocrine, nutritional and metabolic diseases and immunity disorder*	*240-279*
4	*Disease of blood and blood forming organs*	*280-289*

5	*Mental disorders*	*290-319*
6	*Diseases of nervous system and sense organs*	*320-389*
7	*Diseases of circulatory system.*	*390-459*
8	*Diseases of the respiratory system*	*460-519*
9	*Diseases of digestive system*	*520-579*
10	*Diseases of genito-urinary system*	*580-629*
11	*Complication of pregnancy, child birth and puerperium*	*630-676*
12	*Diseases of skin and subcutaneous tissue*	*680-709*
13	*Diseases of the musculo-skeletal and connective tissue*	*710-739*
14	*Congenital abnormalities*	*740-759*
15	*Certain conditions originating in the pre-natal period*	*760-779*
16	*Symptoms, signs and ill defined conditions*	*780-799*
17	*Injury and poisoning*	*800-999*

SUPPLEMENTARY CLASSIFICATION SCHEMES ARE

Sl. No.	*NAME OF THE CLASSIFICATION*	*RANGE OF CODES*
1	*Supplementary classification of external causes of injury and poisoning*	*E800-E999*
2	*Supplementary classification of factors influencing health status and contact with health services*	*V01-V82*

The volume 2 consists of alphabetical index. The alphabetical index is essential to the tabular list for clear coding. Alphabetical index consists of 3 sections.

Section 1 is the index of diseases, syndromes, pathological conditions, injuries, signs, symptoms, problems and other reasons for contact with health services (includes 001-999 & v01-v82). Section 2 is the index of external causes of injury i.e. description of the circumstances under which the violence occurred (fire, explosion, fall, assault, collision, submersion etc. E8000-E999). Section 3 is the index of drug and other chemical substances giving rise to poisoning and other adverse effects.

CODE NUMBERS

The code numbers are those of 3 digit categories to which the terms are classified. In some cases the fourth digit is replaced by a dash. It indicate that the

4th digit exist and should be used and that it will be found either in a note in the index or by reference to volume 1. Eg. Burn trunk 942.

Index term is one of the diagnostic statements for which there is a dual classification according to aetiology and manifestation. Both codes are given, the first dagger code and second asterisk code. Eg. potts disease 015.0+730.4. Asterisk code is usually taken into account for coding (site/manifestation)

MULTIPLE DIAGNOSIS

Both tabular list and index have code numbers for one or two or more conditions jointly reported.

CHARACTERESTICS OF ICD-9

- In the 9th revision of ICD, WHO accepted the pattern that was available in the eighth revision of ICD with some additional details.
- The diagnostic categories were formulated at 3 digit level. Ie.001 to 999.
- The 3 digit level code number can be expanded to 0.0 to 0.9. eg. bronchial asthma 493.9
- In certain places fifth digit were also provided, as in the examples for the mode of diagnosis of TB, method of delivery, for disease in the anatomical site in the musculo skeletal disorders and for external codes or E code in accidents.
  Eg. accidental fall from a ladder E881.0
- Four digit coding system was provided for the histological classification of neoplasms, prefixed by the letter M – denoting morphology and followed by a fifth digit indicating behaviour. Eg. CML M9863/3.
- E code is adapted as a supplementary classification parallel to the code numbers ranging from 8000-999 prefixed by the letter E. eg. formic acid poisoning – accidental E864.1
- the ICD 9th revision includes the dual classification of certain diagnostic terms. This is due to the demand to classify diseases according to aetiology and manifestation.
  Eg. mumps encephalitis 072.2+323.4
- A new chapter was provided for mental disorders.
- The V code is a supplementary classification of factors influencing health status and contact with health services.

INTERNATIONAL CLASSIFICATION OF PROCEDURES IN MEDICINE(ICP)

At the meeting of a working party convened in April 1971 in Chicago, USA, under the auspices of AHA, the following consensus was reached on certain requisites be fulfilled by the classification. To include all types of procedures to be recorded for statistical, administrative, clinical, research purposes the ICP was formulated.

The ICP includes 9 chapters

- Procedures for medical diagnosis
- Laboratory procedures

- ✶ Radiology and certain applications of physics in medicine
- ✶ Preventive procedures
- ✶ Surgical operations
- ✶ Drugs
- ✶ Medicaments and biological agents
- ✶ Other therapeutic procedures
- ✶ Ancillary procedure

The ICP in medicine has the structure similar to that of ICD. Each volume has a tabular list and alphabetical index. The complete series of categories for the 9 chapters are numbered from 1-100 to 9-823. the first digit denotes the chapter number. The important abbreviations used are NOS (not otherwise specified) and NEC (not elsewhere classified.)

ICD-10TH REVISION

In the 10th revision of ICD, it was decided that the ICD should no longer be confined to disease classification alone. It was suggested to have movement to a multidirectional approach in coding schemes and this leads to the 10th revision.

ICD 10th revision has 3 volumes.

Volume 1- main classification – alpha numeric code numbers
Volume 2- Guidance to users
Volume 3- Alphabetical index of alphanumerical codes

Volume 1 includes 3 digit characters and subcategories of 4th character. This is called core classification and include 21 chapters.

Sl. No.	*NAME OF THE CHAPTER*	*RANGE OF CODE*
1	*Certain infectious and parasitic diseases*	*A00-B99*
2	*Neoplasm*	*C00-D48*
3	*Diseases of the blood and blood forming organs and certain disorders involving the immune system*	*D50-D89*
4	*Endocrine, nutritional and metabolic diseases*	*E00-E99*
5	*Mental and behavioural disorders*	*F00-F99*
6	*Diseases of the nervous system*	*G00-G99*
7	*Diseases of the eye and adnexa*	*H00-H59*
8	*Diseases of ear and mastoid process*	*H60-H95*
9	*Diseases of circulatory system*	*I00-I99*
10	*Diseases of respiratory system*	*J00-J99*
11	*Diseases of digestive system*	*K00-K93*
12	*Diseases of skin and subcutaneous tissue*	*L00-L99*
13	*Diseases of musculo skeletal system and connective tissue*	*M00-M99*
14	*Diseases of genito-urinary system*	*N00-N99*

15	*Pregnancy, childbirth and puerperium*	*O00-O99*
16	*Certain conditions originating in the perinatal period*	*P00-P96*
17	*Congenital malformation, deformation, chromosomal abnormalities*	*Q00-Q99*
18	*Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified*	*R00-R99*
19	*Injury, poisoning and certain other consequences and external causes*	*S00-T98*
20	*External causes of morbidity and mortality*	*V01-V98*
21	*Factors influencing health status and contact with health services.*	*Z00-Z99*

CHARACTERISTICS OF ICD – 10

1. Use alpha-numerical coding system ranging from a00.0 to z99.9
2. The 4th character follows a decimal point
3. The letter "U" is reserved for future diagnostic and research works.
4. Each letter A to Z in the coding system denotes a chapter except D and H.
5. Consists of 3 volumes – Tubular list, instruction manual and Alphabetical index.
6. Dagger and asterisk coding is retained.
7. External causes of injury is indicated by code numbers x 00 to x 99 and Y 00 to Y 99.
8. Z code numbers (z00 – z99) used to code factors influencing health status.
9. V and W codes are the external causes of morbidity and mortality.
10. includes 21 chapters.

ICD – ONCOLOGY (ICD – O)

ICD – O was developed as an adaptation of ICD – 9th revision. This classification is upon 3 axes – Topography, Morphology and alphabetical index.

USES OF ICD

1. Ensure easy retrieval of information.
2. Collection of data can be done periodically and saves time.
3. Direct the user to a library file if more information needed.
4. Enables cross reference facility and maintain confidentiality.

GUIDELINES OF ACCURATE CODING

1. Each individual diagnosis or procedure must be assigned correct and complete codes.
2. Coders must be familiar with diagnostic and procedual terminology , anatomy and disease processes.
3. Use the alphabetic index (vol.2) as the primary coding tool. But always refer back to tubular list (vol. 1) to ensure the particular assignment.
4. Code diagnoses that affect the current stay. Exclude diagnoses that relate to an earlier episode of care if they have no bearing on this episode.
5. Read the respective pages for abbreviation and special use of paranthesis and colons.
6. If the document reveals two or more diagnoses, and of which could be the principal diagnosis, the diagnosis, using the most resources (diagnoses assigned to highest reimbursement) may be assigned as principal diagnosis.
7. In the case of acute, sub acute or chronic conditions, Acute is the principal diagnostic condition.
8. Late effects – the code for current condition is sequenced before late effect code.
9. Multiple injuries – The most severe injury is principal.
10. Poisoning to drug – the poisoning code is sequenced before the manifestation and E code.

INDEXING

The indexing is mainly done for increasing need for utilization of medical data. The indexes facilitate the maintenance and retrieval of medical information. Index denotes something serves to guide and point out. Indexes helps in the statistical preparation of data for various authorities. In addition to this indexes helps to locate records for patient care management, research, third party prayers, accrediting and licensing agencies, hospital administration etc. The following are the important indexes widely used.

MASTER PATIENT INDEX FOR ADMISSION/REGISTRATION

It is used to locate patient records manually. It is an alphabetical arrangements of cards according to name of patient admitted / registered. The master patient index for registration is mainly used to locate OP record while the other is for IP record. This card is 5" * 3" in size with details of patients sociological data with data of registration, admission, discharge, unit, major diagnosis etc. This index cards are usually arranged alphabetically in a vertical file.

DIAGNOSTIC INDEX

This index is made according to code numbers assigned by medical record personnel. It is a key to locate records of a particular diagnosis or when only diagnosis is known. This index is very useful in the case of study and reference purposes.

OPERATION INDEX

This is an account of all operation performed in the hospital. This index also helps for study and reference.

The major content of diagnostic and operation index are patient's sex, age, name of attending physician, service, date of admission, date of discharge, length of hospital stay, hospital number, admission number etc.

PHYSICIAN'S/SURGEON'S INDEX

A physician/surgeon index is used to locate records of patients treated/operated by him. In some hospitals each physician is assigned a code inorder to keep confidentiality. This index is arranged according to alphabetically or according to code numbers.

Group indexing is a method in which instead of having one card for each code number, a range of code numbers is included on each disease and operation index card. This keeps the index cards limited in number and easily manageable. Cross indexing is another method mainly used for research purposes. In this method more than one disease is considered for indexing. Eg. if a doctor wants records of patients with CAD and stroke.

Registers are also an important tool for retrieving information . Registers also gave statistical data. The important registers are mentioned below.

1. Registration register (OP register)
2. Admission register
3.Discharge register
4.Operating room register
5. Important procedures register
6. Anaesthesia register
7. Birth and death register
8. Emergency service register
9. Autopsy register
10.Register for MLC
11.Cancer registry
12.Medical certificate register
13.Record issuing and returning register
14.Register for records received from wards
15.Sofisticated investigations register

CANCER REGISTRY

The two main objective of cancer registry are to provide lifetime follow up of the cancer patient and to provide meaningful information to the physician for patient care evaluation and research.

NUMBERING, FILING STORAGE AND RETENTION OF MEDICAL RECORDS.

NUMBERING

In considering methods of numbering the first point to be determined is the kind of numbers to be used in filing medical records, that is, whether it may be admission number or discharge numbers. Filing by discharge numbers generally proves to be unsatisfactory, because other important records or registers generated in the facility are concerned exclusively with admission numbers. So the loss of indices card, makes difficult to locate the record. For this reason alone admission number, even if the patient's index card is lost, the admission number could be obtained either by knowing the patient's name or admission number.

Regardless of which of these system is utilized, medical records requiring new numbers should have them assigned chronologically, and this number should be common to all departments of the hospital. The important systems are

1.SERIAL NUMBERING

In this method, the patient receives a new number on each time he is admitted or treated by the hospital. The use of serial number for filing patients records results in the filing of records in one or more places in the file rack. So the medical record personnel should have to spend much time in gathering a patient's medical record. All the number assigned to a patient must be recorded on the card in the master index card.

2.UNIT NUMBERING

In this method the patient receives a number during his first admission or visit to a hospital. He retains that number on all subsequent admission or treatments. This method automatically attains a unit record. All admissions records are filed together in one folder and under one number.

3.SERIAL UNIT NUMBERING

In this system filing all the records of the previous admission of the patient are brought forward and filed under the latest number. The empty chart folder marked with a referral to the new number is a satisfactory out-guiders to indicate the number under which the old record is filed.

FILING

There are three types of numeric filing commonly used for filing of medical records

1.STRAIGHT NUMERIC FILING

The straight numeric filing of medial records is the strict chronological order of filing according to the hospital number in an ascending order. This is very simple method to adopt and easy to operate, easy to train a new staff and retrieval of records are also easy. The disadvantage of this system is all the records need to arrange serially before filing. Otherwise chances of misfiling are more. The highest number, which are the most recent, represent the greatest amount of retrieval and filing activity. Therefore, more activity and personnel will be concentrated in one part of the file area.

2.TERMINAL DIGIT FILING

Terminal digit filing is a method that providers equal distribution of medical records in filing units through out the file area. By providing an equal occupancy rate for shelving the records, terminal digit filing also permits a more even workflow pattern. It is simple speedy and accurate method of filing, based on mathematical principle. In this system a six digit number is used and divided in to three parts, each part contain two digits. The last two numbers on the right hand side is called primary digit, the middle number are middle digit or secondary digit and the first two numbers on the left side are tertiary digit.

In a terminal digit file section there are 100 primary sections ranging from 00 to 99. When filing records, the filing clerk considers the primary digits first, taking the record to the corresponding primary section. Within each primary section, groups of records are matched according to secondary digits. After locating he correct secondary digit section the record is being filed in numerical order by tertiary digits. The following sequence will occur in a terminal digit filing

Example,

00-01-84	00-02-84	00-03-84
01-01-84	01-02-84	01-03-84
02-01-84	02-02-84	02-03-84
03-01-84	03-02-84	03-03-84

04-01-84 and so on 04-02-84 and so on 04-03-84 and so on.

A file area will require a guide for every secondary in each primary section (10,000 guides). Thus there will be one guide for every secondary number, 00,01,02,03, etc. in each terminal digit section. For example in particular section for primary number 84,the guide would read 00/84,02,84 etc.

The advantage of this method is the records are evenly distributed among 100 primary sections. Only every 100th new medical record will be filed in the same primary section of the file and the distribution is perfect and extensive. The work allocation to each clerk is proper and the supervision is easy and also effective. Misfiling substantially can be reduced. The disadvantages are training of new staff may takes long period of time that straight numerical system.

3.MIDDLE DIGIT FILING

In this system the filing clerk files according to pairs of digits as in terminal digit filing. However, the primary, secondary and tertiary digits are in different positions. The middle pairs of digits in a six-digit number are the primary digits, the digits on the left are the secondary digits, and the digits on the right are the tertiary digits.

The sequence of a middle digit file will be as follows.

56-78-96	99-78-96
56-78-97	99-78-97
56-78-98	99-78-98
56-78-99	99-78-99
57-78-0	00-79-00 etc…

From the first example it is seen that blocks of 100 records are in straight numerical order (567890 through 56789). This has several advantages. It is simple to pull up to 100 consecutively numbered records for study purposes. Conversion from a straight numerical system to a middle digit system is much simpler that conversion to a terminal digit system. Middle digit filing provides a

more even distribution of records than straight numerical filing. The misfiling is reduced as in the terminal digit filing.

STORAGE

The medical record department must include sufficient space and equipments to store patients records so they are easily accessible when requested. Adequate filing equipment, lighting, temperature, control, supplies, and attention to safety in the file room all contribute to the productivity of filing clerks.

Open-shelf file units and five-drawer file cabinets are the most commonly used storage units for medical records. Open shelf units are recommended over cabinets for the following reasons.

- They are less expensive than file cabinets
- Personnel can file or pull records faster because there is no opening or closing of drawing
- Most importantly, open shelves accommodating more records in a given floor area, as well as requiring less aisles space.

Guides should be placed throughout the files to expedite the filing and finding of records. The number of guides needed depends upon the thickness of the majority of the medical records in the file. There are two basic methods of filing records – centralized and decentralized.

Centralization means that all materials and information about a patient are funnelled into a single file held in a central location. A centralized file usually means that the patient's inpatient, ambulatory care, and emergency records are filed in a single file in a central location.

Decentralized files result when certain parts of a record are filed in another location away from central file area. In hospitals this usually means the emergency record of a patient is filed where emergency records are stored, or ambulatory care records are filed in the ambulatory care area. Centralization has many advantages, some of which are listed here:

- There is less duplication of effort with regard to creation, maintenance and storage of records
- There is less overall expenditure on space and equipment
- A composite record containing all available information is of greater help to the health care team than one in which parts are scattered in several places
- Procedures and policies for record activity are standardized
- Personnel may become more proficient in various file room functions and procedures
- Record control and security are easier to maintain
- Supervision of file room personnel is more consistent.

However when clinic patients are being seen frequently on an out patient basis; so it is easier and more efficient to store the record in the clinic. Another situation in which decentralization might be justified is when a health facility operates from several buildings or locales, and a decentralized record system would require far less transportation time and effort.

Routine requests for records should be delivered to the medical record department by a specified time of day established by the hospitals administration or medical staff policy. The exact time set for the deadline is dependent on (1) the volume of requests received daily and (2) the number of filing from personnel available to pull requisitioned records.

RETENSION POLICIES

The length of time a medical record is retained in active and inactive storage will greatly depend on the type of health care facility and the activity of the medical staff. In developing a record retention policy, a health care institution must be guided by its own patient care and research activities, taking into consideration the possibility of future legal actions by patients.

A definite plan for handling inactive records must be established in order to provide filing space for a continuously expanding active file. If there is no more space for active record storage, an effort should be made to systematically retire older records to inactive status at the same rate as new records are being added. Inactive records can be stored in another area of facility, they can be microfilmed, they can be commercially stored, or they can be destroyed in compliance with the record retention statutes.

Since a hospital or other health care institution is seldom requested to produce medical records older than ten (10) years for clinical, scientific, legal or audit purposes, it is ordinarily sufficient to retain the medical records of cases ten years after the most recent patient care usage in the absence of legal consideration. After the retention period inactive records may be destroyed provided that the institution performs the following activities.

1. Retain basic information such as dates of admission and discharge, names of responsible physicians, record of diagnoses and operations, operative reports, pathology reports, and discharge resumes of all records so destroyed.
2. Retains complete medical records of minors for the period of minority plus the applicable statue of limitation as prescribed.
3. Retains complete medical records of patients under mental disability in like manner as those of patients under disability of minority, and
4. Retains complete medical records for longer periods of time when requested in writing by one of the following

a. an attending or consultant physician of the hospital
b. the patient or some one acting legally in his behalf

c. legal counsel for a party having an interest affected by the patient medial records

INDEXES AND REGISTERS

Indices and registers are the tools employed to facilitate the maintenance and retrieval of the health information. It contains much valuable information and the type of requests and uses vary. For a neater, more readable index all captions should be made in ink or typewriter and computer. The disease and operation indices are the most expensive indices in the department to maintain. There are many manually maintained indices. They are the following.

1.MASTER PATIENT INDEX

The master patient index identifies all patients who have ever been admitted or treated by the hospital or health care facility. The master patient index is the key to locating patient 's records and is one of the most important tools in the medial records department. The medical record personnel arrange the index cards alphabetically. When the patient come for registration or admission or the data is entered in the computer. The content of these indices are, full name, address, identifying number, birth, death(date, month and year). Additional information that might be listed on the patient index includes admission and discharge date, result and attending physician name etc.

2.THE NUMER INDEX

The number index is important in the medial record department as the patient identification number control. It is the origin of the numbering system whether it be serial, unit or serial-unit. It is a chronological list of the hospital numbers issued to patients, and the name of the patient assigned each number. The hospital keeps this card file or if computer facility can be programmed to store the number index and automatically assign a hospital number when a patient is being registered for admission.

3.DISEASE AND OPERATION INDICES

In disease index list, the disease and conditions according to the classification system or code number assigned by the medical records personnel. The listing of surgical and procedural code numbers comprises the operation index. A physician or medical staff committee might use the disease and operation indices to retrieve the medical records for the purpose, that is., to review, previous cases of a given disease in order to provide insight into the management of a current patients health problems, to the test theories and

compare data on certain disease and for treatment in order to conduct research and prepare scientific papers etc. Contents of this index are the following

- Sex
- Age
- Race
- Name of attending physician, surgeon
- Service on which the patient was hospitalised
- End results of hospitalisation
- Date of admission/discharge/length of hospital stay
- Associated disease and operations

4.MANUAL INDICES

is temporarily removed from the research file, as in the case of a clinic appointment, the record should be conspicuously tagged so it will be returned to the researcher.

REGISTERS

The need to maintain certain types of registers or logs may be determined by the requirements for record control measures or by state regulations imposed on the hospitals.

The patient register or admission register is a chronological list of patient names by date of admission as inpatients. Minimum data items required are date of admission, time of admission if needed, patient name, and medical record number. Additional items may include room assignment, sex and attending physician's name. If the admitting or medial record department prepared a daily list of admissions and hospitals births, a copy may be filed to serve as an admission register. In some states, the hospital licensing laws may include requirements for a patient registration log (admission register).

It is important to maintain a control register or log of medical record number assignments. This register is a chronological list of medical record numbers with the name of the patient to whom each number was assigned. This control measure ensures that two or more patients have not been assigned the same medical record number. Immediate steps must be taken to correct errors in medical records number assignments.

The operating room register is a chronological list of all operative procedures performed in the hospital's surgical suite. It is usually maintained in the operating room suite area and contains the date and time of the procedures, the name of surgeon and anaesthesiologist. The operating room register may be required by state regulations; however, it serves the hospital as a valuable reference for certain types of statistical data on utilisation of services and human resources.

A chronological list is maintained on all hospital births. This birth register may be kept in the delivery room or obstetrical area or in the medical record department. It may be simple or detailed, depending on the needs of the obstetrical service and the hospital. The minimum data would be data and time of birth, sex of newborn, whether baby was born was born live or still born, name of mother name of physician or staff member in attendance at the time of delivery, and date when birth certificate was mailed to the register of vital records. State vital record law may require a birth register.

A death register may be maintained in the medical record department, pathology department, or admitting office. It is a chronological list of all patients who died in the hospital or who were dead on arrival at the hospital. It contains the date of death, name of deceased person, name of physician who completed the medical portion of the death certificate, and the name of the mortician, coroner or medical examiner that removed the body from the hospital. The mortician has the responsibility for completing the remainder of the death certificate and for filing it with the register of vital records. When the coroner or medical examiner for

examination removes the body, the examiner completes the medical portion of the death certificate.

A register is maintained in the emergency department to record patient's encounters by date. The minimum data items to be entered in the emergency service are the date and time of arrival, name of the patient, means of transportation to the emergency service, treatment or advice given, disposition and time of departure.

The emergency department register does not preclude the need of an emergency service record on every patient treated. An entry in the emergency department register is needed on all dead on arrival cases, but an emergency service record is not opened when medical care is not given. Statistical data can be complied monthly from the emergency department register to gauge utilisation of emergency service.

Hospitals with computerized programs of processing admitting, discharge and health care data should be able to produce most of these registers or logs. When registers or logs can be handled as a part or product of health data system, manual registers should be eliminated.

CANCER REGISTRY

The cancer registry requires maintaining an index of patient names and address for follow up studies on the outcome of malignancy, a statistical index on the type and site of malignancy with cross-referencing to the patient's medical record and a patient's record of history and treatment, when applicable. A hospital that has no formal cancer programme need not maintain a cancer registry. In some states the cancer registry program is carried out at the state level and hospital co-operate by submitting abstract data from patient medical record.

MEDICAL AUDIT

Medical audit is account to evaluate the performance of those engaged in the care of the patients. It is an objective method for applying a yardstick to the quality of professional work in a hospital. It is a systematic and objective way of evaluating the quality of care rendered by the medical care team.

Every patient entering a hospital expects a high quality of medical care. He has the right to demand it and it is the responsibility of every hospital to provide it. The hospital can guarantee the best medical care to its patients only if there is periodical evaluation of the work of the medical care team. Medical audit assures the public that there is some monitoring of the clinical standards. Consumer protection act questions the negligence and low quality treatments.

In 1918, Dr.George Greyward, a noted Gynecologist at the Women's hospital New York have consideration to the medial audit in a systematic review and analysis of all patient going through his service. This was probably the first organised medical audit in the country. For every hospital there should be the periodical evaluation of care given to the patient. It enables enhancement of

patient care and utilization of maximum hospital facility for the betterment of patients. The major tool used in the medical audit is the medical record.

LEGAL ASPECTS OF MEDICAL RECORDS

Medical record is a legal document and it is the property of health care facility. Each medical record tells us a story and this is always centred around a patient. The legality of medical record can be studied under the following headings.

1.MEDICOLEGAL IMPORTANCE OF THE RECORD

The medical record is composed of at least two distinct parts, the first part can be called the information section of the record. It is compiled in the ordinary case upon admission; it details the pertinent particulars of the patients history such as name, age, reason for admission. The second part is the clinical section of the record. It is a continuously maintained history of the treatment afforded the patient in the hospital. This part of the record incorporates the results of physical examinations, treatment administered, progress reports, physician's orders, clinical laboratory reports, x-ray reports, consultations reports, anaesthesia reports, operation records, signed consent forms, nurses notes and like.

2.COMPLETION OF MEDICAL RECORDS

a) RESPONSIBILITY OF TRUSTEES

The trustees of a hospital also have a great responsibility to see that the medical record is promptly and properly written on every patient admitted to the hospital and must be assured that the patient is receiving the best of care. This can never be known without adequate medical records.

b) PROBLEM OF INCOMPLETE MEDICAL RECORDS

- The attending physician is responsible for seeing that the medical record is written promptly and accurately. Unfortunately he sometimes neglects this duty, is one of the greatest problem in hospital getting members of the medial staff to write medial records as they should be written.
- The patient go to operation without an adequate medial records is dangerous. The regulation or policy of no operation proceeding without the medical record being completed and accompanying the patient should not be overlooked except, of course, in extreme emergency. It will cause the accuracy of the records to be questioned.
- The incomplete medical records may be kept in a specified areas like in doctors incomplete file, death file, in the record committee file, in the autopsy secretary's file etc.

c) TIME LIMIT FOR COMPLETING RECORDS

The common hospital operating procedures for the medical staff to insist that all medical records be completed within 7 days after discharge of the patient, except 90 days for autopsy protocol.

3. REMOVAL OF RECORDS FROM HOSPITAL

Medical records should never be removed from the hospital, not even for purposes of completion. The medical record is a potential legal document. Therefore, it should be put away for safe keeping and should be preserved under strictest possible rule so as to preserve its legal validity on behalf of the patient. The should be written policy that medical records may be removed from the hospitals jurisdiction and safekeeping only in accordance with a court order, subpoena, or statute.

4. REMOVAL OF PORTION OF MEDICAL RECORDS

Removal of portions of a medical records is a serious thing, even if the purpose is to make certain corrections. The information content of the medical record must be safeguarded against lost, defacement, tampering, or use by unauthorized persons. The loss of the sheet may raise the inference that they were removed deliberately in order to suppress evidence. This may be true

particularly in cases in which the physician is being sued for malpractice or when an action has been bought against the hospital in negligence. The attorney representing the patient will be quick to advantages of the absence of the sheet by pointing out the inferences to the jury.

5.MEDICAL INFORMATION AS CONFIDENTIAL COMMUNICATIONS

According to Hippocratic oath," whatever in connection with my professional practice or not in connection with it, I see or hear, in the life of men, which ought no to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret.

a) PURPOSE OF CONFIDENTIAL RELATIONSHIP

In various states to protect the patient from the disclosure of such confidential communications by the physician except upon consent of the patient. These statutes are intended to encourage full and frank disclosures to the physician by the patient, by relieving the letter from the fear of embarrassing consequences. The

legal relationship of privilege, as distinguished from the ethical, exists only by statute and is subject to change by the state legislatures. Confidential status of hospital record is the responsibility of the hospital and its personnel to safeguard the clinical records of patients and to see that such records are available only to properly authorized individuals or bodies.

6) CONFIDENTIALITY OF INCIDENT REPORTS

There are specific questions covering data to be recorded in the event of an accident to be filed in the patient record and a copy included in the administrator's accident report file. These should be available to the hospital safety committee or copy may be provided for the members if the administrator wishes and used as evidence is a matter for court decision if the document is relevant to the litigated issues.

c) CONFIDENTIAL STATUS OF PUBLIC HEALTH RECORDS

Records of disease are regarded as administrative or departmental records to be kept confidential in the interest of the public. It may be against public policy to permit. The records to be produced in court at the request of litigant, when the patient received treatment, the dates of admission and discharge, or the names of physician can be disclosed in such cases. In vital statistics include original reports of births, marriages and deaths are not open to public inspection,

access to them for any purpose, even for legitimate scientific research must be authorized.

6. CONSENT FOR TREATMENT

Each doctor the diagnostic and therapeutic procedures form an integral part of the practice of medicine, it become more important than even to make certain that patients give their consent to these procedures with understanding of their import moreover, diagnostic methods are becoming increasing complex and formidable. Each doctor, based on his own training and experience, will decide whether or not a given procedure entails substantial risk for a specific patient. Although the responsibility for securing consent is that of the operator for the sake of expediency the nursing staff sometimes secures the permission of the patient.

Written consent is valuable only as evidence that the patient gave consent to the procedure. It is of no value against charges that the procedure was unnecessary or that the operator was guilty of professional negligence. In addition, it is of questionable value if the patient can demonstrate that he could not

reasonably have been expected to understand, in general, that to which he was asked to consent.

Consent is defined as a free rational act which presupposes knowledge of the thing to which consent is given. The patient need not know all the minutiae involved in his cure, but his consent is not free and rational when it is based on ignorance of the essential, which means that consequences of the treatment or operation. Informed consent, which means that the signer knows what he is signing and knows what is to be done and understands the risks involved.

- Name of the hospital in which the operation or procedure is to be performed, and date consent is signed.
- Name of the patient an whom operation or procedure is to be performed.
- Statement of the nature of the operation or procedure to be performed
- Authorization to perform such additional operations or procedures are considered necessary or desirable in the judgement of the surgeon or physician.
- Consent to dispose o tissues or parts removed at operation.
- Statement that the signer is aware of the contents of the form he is signing.
- Signature of patient or person legally authorized to give consent on patient's behalf
- Signature of witness.

TYPES OF CASES USING EVIDENCE FROM MEDICAL RECORDS

- Insurance cases
- Workman's compensation cases
- Personal injury suits
- Malpractice suits
- Will cases
- Criminal cases

INSURANCE CASES

If patient knowingly concealed his medical history and the insurance company, having learned of the fraud, sue to void the contact, the patients history is usually used as a proof of the duration and character of his prior to disability.

Medical records are also used in cases were actions are brought against an insurance company to collect for disabilities or medical expenses or personal accident liability policies.

WORKMEN'S COMPENSATION CASES

In most states a person injured in the course of his duties and while acting with in the scope of his employment is entitled to compensation for badly injury and disability. The medical record such an instance is used as evidence before the state industrial commission to show the date of injury, the type and severity of injury, period of disability and the prognosis.

PERSONAL INJURY SUITS

In this type of suit the plantiff in a personal injury suit claims to have been injured through the fault or neglect of another and brings his suit to recover damage thus sustained. The defendant to show how the plantiff contended the injury was sustained when giving his history on admission to the hospital may use the medical record here. The patient may show the extent of injuries, the treatment rendered and duration of the care required.

MALPRACTICE SUITS

In a suit of this kind the plantiff claims damages from a physician, a hospital, or the nurses for negligence in rendering care or for giving improper treatment. The record here used to show whether there was negligence and that treatment rendered was not adequate and proper.

WILL CASES

A patient might have made a will during his hospital stay. After the death of the patient an attempt may be made to set the will aside by seeking to prove the patient was mentally incompetent. The record is used here as evidence in such a case of show the mental state of patient at the time of making the will.

CRIMINAL CASES

All cases of accidents, assaults, serious injuries, suicide, homicide, poisoning, rape, drowning etc. are considered as medico legal cases. These cases whether brought by police or not, must be registered as medico legal cases.

Hospital records have been used in the following types of criminal cases

- In murder cases to show that death did not result from natural causes.
- In assault cases, to prove the viciousness of the assault and extent of the injuries sustained.
- In rape cases, to prove the condition of the prosecutor on admission and also her history as related on admission
- In mischievous acts cases, to prove the history given by the patient on admission and the character and extend of the injuries sustained.
- In certain cases, to prove a difficult mental condition and to show that the defendant should be confined in an institution for the mentally ill or feeble minded rather than imprisoned in a penal institution.
- In conspiracy case, to show that a fraud was perpetrated on a person being sued for damages.

PROCEDURES FOR MEDCO-LEGAL CASES

- When the medico-legal case sheet and medico-legal reports are received from the casuality, affix the MLC rubber stamp. Check the medico-legal report duly filled in.
- Send the medico-legal intimation to the police along with one copy of the medico-legal report.
- Inform the police station regarding the admissions, discharges and death.
- Attend the court after obtaining permission from hospital authorities and produce records in the court of law as and when summons are received. In case, records have to be produced, make entry in the prescribed register, regarding number of sheet, number of laboratory investigation reports, summon number, asked by whom how despatched etc.
- Keep all the medico-legal documents in the safe custody under the lock and key. The lock should be sealed and the key should be deposited with the medical record officer.

PRIVACY AND CONFIDENTIALITY

The primary purpose of the medical records are to document the course of the patient's health care and to provide a medium of communication among health care professionals fro current and future patient care.

Medical records contain information, which is both sensitive and confidential. Individuals have differing perceptions of the sensitivity of information about themselves. For some an address may be sensitive, for others it may be the nature of their illness. It is generally accepted that information exchanged between

patient and doctor should be confidential and there is an ethical expectation that doctors will respect confidentiality. If either the patient or the doctor suspects that the records may not remain confidential, the quality of the medical record, and hence the quality of care may be suffer. Patients may be unwilling to divulge sensitive information that could compromise care decisions and put them at risk. Clinicians may hold back from recording sensitive data so as to protect the patient and in some circumstances themselves.

In order to fulfil these purposes, significant amounts of data must be revealed and recorded. The patient must be assured that the information shared with health care professional will remain confidential, otherwise, the patient may with hold critical information, which could affect the quality of care, provided, the relationship with the provider and the reliability of the information maintained. Health records are used to provide a medium of communication for current and future patient care for a variety of legitimate reasons.

The medical record is used as a personal document and impersonal documents.

AS A PERSONAL DOCUMENT

The patient's record is a form of document, a historical record, the contents of which is not only for diagnostic purposes but it has legal value too. As a confidential and privileged communication, the patient has a personal interest on the record and therefore it is not available to outside agencies such as insurance companies, compensation carriers or any other similar organisations, except upon receipt of an authorisation signed by the patient. Neither relatives or friends nor even husband or wife have any right to review the record of a patient unless an authorisation received from the patient.

If the patient should be hospitalised under the care of another physician the second physician, should be allowed access to the record of previous hospitalisation. If the patient subsequently admitted to another hospital, a summary may be sent upon request from the hospital. In such instance an authorisation is not generally considered necessary as the information is being released in the best interest of the patient. When a patient personally requesting information, it is not always in the best interest of the patient to know all details concerning his illness. In such instances an wise policy is to consult the attending physician before releasing any information to the patient.

AS AN IMPERSONAL DOCUMENT

When a medical record is used for the study or research it is considered as an impersonal document. In such instances the medical record personnel need not exercise such caution as when it is used as personal document. Moreover only the physician and other medical staff, students, use it all of then are bound by the code of professional secrecy.

While compiling monthly hospital statistics the medical record staff use the medical record as an impersonal document. It is also an impersonal document in compiling case reports and the physicians use it for research. The users of the information may not divulge any information of the personal nature acquired by them in the practice of their profession. I the record is being studies for publication, the permission of the attending physician is necessary because the attending physician may require the data for his own publication. Regardless of use or users, the patient must be assured that the information shared with health care professional will remain confidential.

RELEASE OF INFORMATION

Health care facilities receive and respond to numerous requests for information from the health records in their custody. The request may be written, by telephone or in person, from a broad spectrum of users. The
Responses are frequently summaries or photocopies of patient records or verbal information given in emergencies, or on-site review of the record. Clinical information that is considered confidential and requires the patient's written permission to release. These data include all items in the record
relating to the patient's diagnosis and treatment and it is highly confidential.

The identification data consists of entries in the record, which do not specifically relate to the patient's diagnosis or treatment, such as admission to a facility, sex, spouse. Many health care facilities consider this information as confidential and needs permission from the patient for the release.

Secondary health information as previously defined includes patient identifiable information abstracted from the medical record for indices and statistics. As with clinical information, this information is considered confidential and release must be granted by permission from the patient or by law.

The goal of obtaining the patient's fully informed authorisation to release information is complicated by several practices that are inconsistent with recommended policies and which do not install a sense of responsibility in the collectors, stores and users of patient data.

All requests for health records or health information, including requests for information on patients currently under treatment, shall be directed to the health record department. Release of information from the health record shall be carried out in accordance with all applicable legal, accrediting, and regulatory agency requirements, and in accordance with written institutional policy. All information contained in the health record is confidential and the release of information will be closely controlled. A properly completed and signed authorisation is required fro release of all health information except the following.

- As required by law
- For release to another health care provider currently involved in the care of the patient and for medical care evaluation.
- For research and education in accordance with certain conditions.

In keeping with the tenet of informed consent, a properly completed and signed authorization to release information shall include at leas the following data

- Name of the institution that is to release the information.
- Name of individual or institution that is to receive the information
- Patient's full name, address and date of birth
- Purpose and need of information
- Extent or nature of information to be released, with inclusive dates of treatment.
- Specific date, event or condition upon which authorization will expire unless revoked earlier.
- Statement that authorisation can be revoked but not retroactive to the release of information made in good faith
- Signature of Patient's legal representative with data.

Information released to authorised individuals/agencies shall be strictly limited to that information required to fulfil the purpose stated on the authorisation. Authorisations specifying any and all information or other such broadly inclusive statements shall not be honoured. Release of information that is not essential to the stated purpose of the request is specifically prohibited.

Following authorized release of information, the signed authorisation will be retained in the health record with notation of the specific information released, the date of release and the signature of the individual who released the information.

Public attention to confidentiality and privacy of health information at an all-time is high. But although most would agree that private health information should be handled appropriately, there is much disagreement over what that

really means. For example, when families gather at a hospital where an elderly parent has been admitted, it is common for the adult children to assume that they should have automatic access to any and all health information about their parent. However, if that patient is competent, he or she should be deciding what information, if any, is shared with the children. There are operational difficulties in protecting the confidentiality of health information. In a medical practice, all employees of practice might have potential to the information. In computerised health information systems, the system design sometimes does not bar unauthorised staff from accessing a particular patient's information.

IMPACT OF INFORMATION TECHNOLOGY ON CONFIDENTIALITY

The growth of computerised health information systems brings a new urgency to the need to assure patient confidentiality. One of the benefits of computerising to access and also possess a potential threat to confidentiality.

In a manual record keeping environment, the labour involved in retrieving information from paper records served as a deterrent of sorts. To gather information on a group of patients would require manually retrieving the records through the data and recording or copying what was needed. In an electronic

system without carefully designed access and audit controls, retrieving data on a group of patients may be accomplished almost instantaneously and invisibly. Few would argue that the risk of computerization outweigh the benefits. Still, careful thought must be given to the design of safeguards for computerised patient data so that these systems enhance rather than detract from security and confidentiality.

The growth of information technology is not the only force affecting societal concern for privacy and confidentiality in health care. The growth of integrated delivery systems , in which previously independent health care providers and facilities are grouped under a single corporate umbrella, has resulted in certain health information being compiled in corporate database for management purposes. For example some integrated delivery systems collect data on unusual occurrences or incidents at their member facilities for use in detecting patterns and trends that may indicate the need for new procedures, policies, or staff training. Patients are rarely aware that the details of their treatment could end up in a home office database across the country from where they received their treatment.

The deepening penetration of managed care into the health insurance market place has also created new demands for information. New instead of merely receiving a coded bill for service already provided, utilization management staff at the managed care organizations contacting the health care provider while treatment is under way, requesting information to justify that treatment, and in many cases, influencing the actual treatment provided.

How much information enough to justify payment of the bill? This is a problem many health care case managers struggling with as they attempt to protect the patient's privacy while avoiding a payment denial.

COMPUTERISED MEDICAL RECORD SYSTEM

Till date medical record is mostly on paper. All the papers which are produced during the say of the patient in the hospital are being entered in the chart because there is no other appropriate place to put them. Any piece of paper added to the chart is being kept even if the document lacks long term significance. This makes the Medical Record cumbersome.

Initially computerisation of Medical Record meant developing a computer record that can duplicate the manual information entered in the paper. Data were being filed by doctors in check sheets and were entered in the computer. The computerised Medical Record with all its component like medical history, physical examination findings, laboratory evaluation and medication etc., is more legible, complete, and locatable than the paper chart. It has advantage of being available simultaneously at all the places in the hospital. Through more terminals different users can use these data.

To get the maximum usefulness from the computerised medical system, it is essential to make some deviation from the traditional medical chart. Information should only be kept if that is going to effect the decision making. Data which are required for temporary span should be achieved at regular intervals. The way in which the information should be kept is also very important, as if the diagnosis is

stored by doctors, the best way to keep it is in doctor's words. But this approach has got one disadvantage, it does not allow standardisation. Another way is to codify the acceptable questions and answer, the doctor has to choose one out of the standard answers. It allows data retrieval and analysis in wide spectrum and combination.

The clinical decisions are usually based on the information gathered from the patient in light of medial knowledge gained by the doctor while taking care of the patients of similar nature. It has been found that data which are present in medial administrator's file is different from what is there in doctor's record but both the records are about the patient, their evaluations and about the treatment. Computer Networking plays the vital role at this point. Classified relevant information can be made available to the concerned person at their desk top.

Generally after the doctor's prescription is entered into the computer, the programme may print the patient education report consisting of the list of all the medicines that the patient is taking. Use of this not only saves manual work but eliminates the possibility of the test which are being done without being recorded. If the result are not entered within reasonable period, the programme will notify the laboratory that these tests are overdue so that those can be located or repeated. Once the test results are entered a set of reports can be generated to

assist clinical decisions, for example the programme reports all the past and present finding in the form of the flow chart which eliminates the need to go back to previous medical data and compare it. It can also print the action plan which will highlight the areas, those need immediate attention. A message can also be generated for both the doctors whether any change in therapeutic programme is required or not.

If the doctor finds that the patient has developed a new problem or the doctor wants to know that how this patient arrived at the particular diagnosis, he can review the record in a problem oriented fashion. In case a trend is suspected he can have graphical representation. If the doctor wants how different symptoms, findings, therapies are related, he can generate a time domain flowchart, where the entire record can be displayed as a flow chart.

The basic use of computerised medical record is to support day to day care of the patient, but it has got a tremendous potential for clinical research, where the doctor can ask past questions quickly and economically, the data can be listed, analysed statistically. The computer data bank can be used to define the natural course of a disease process and to identify deviations from expected outcomes. In a computerised Medical Record system the clinical experience can be reviewed without placing the increased emphasis on the last patient seen or on the patient who has responded very good/poor to the treatment.

The system has the facility to identify a group of patient who require a specified therapeutic regimen. By comparing how other patient have responded to different treatment modalities, the system suggests which treatment is better. Analysis of computerised medical record allows one to determine the items that are critical and thus reduces the number of data collected against a protocol, also

the programme can tally the patient's data in the background of a protocol and suggests the doctor whenever action is required.

The benefit of computerised Medical Record system is dependent on the amount of interaction and information which is being fed by the doctors and nurses into the compute, and analysis done on the data. The data should be entered directly via a video terminal, on line. The accuracy of data should be verified/cross checked and feed backed to the system. HELP (Health Evaluation through Logical Processing), COSTAR-5(Computer-stored ambulatory Record Special data-retrieval Language),MQL(Medical Query Language), TMR(The Medical Record), PROMIS(Problem oriented Medical Information System) are the few computer based medical record system in use in different hospitals world wide.

MEDICAL RECORD AS A PERSONAL DOCUMENT OR IMPERSONAL DOCUMENT

The medical record is used as a personal document or as an impersonal document.

AS A PERSONAL DOCUMENT

The patient's record is a form of document, a historical record, the contents of which is not only for diagnostic purposes but it has legal value too. As a confidential and privileged communication, the patient has a personal interest on the record and therefore it is not available to outside agencies such as insurance companies, compensation carriers or any other similar organisations, except upon receipt of an authorisation signed by the patient. Neither relatives or friends of the patient, not even husband or wife have any right to review the record of a patient unless an authorisation received from the patient.

When a record has to be produced in a court of law, after acceptance of a subpoena, a representative of the hospital must take the record. The representative should be some one well acquainted with the procedure of the medial records department and hospital.

If the patient should be hospitalised under the care of another physician the second physician, should be allowed access to the record of previous hospitalisation. If the patient subsequently admitted to another hospital, a summary may be sent upon request from the hospital. In such instance an authorisation is not generally considered necessary as the information is being released in the best interest of the patient.

When a patient personally requesting information from his own record, it is not always in the best interest of the patient to know all detail concerning his illness. In such instances a wise policy is to consult the attending physician before releasing any information to the patient.

It must always be kept in mind that laws differ in the various states, therefore the Medical Records Officer must acquaint himself with the legal requirements of that state.

AS IMPERSONAL DOCUMENT

When a Medical Record is used for the study or research it is considered as an impersonal Document. In such instances the medical record personnel need not exercise such caution as when it is used as personal document. Because it has no connection with the patient as an individual. Moreover it is used only by physicians and other medical staff, students, all of them are bound by the code of professional secrecy.

While compiling monthly hospital statistics the medical record staff used the medical record as an impersonal document. It is also an impersonal document when interns and other professions allied to medicine use it in compiling case reports, and physicians use it for research. Even though the name and hospital number remain on the record when it used for reference, it must be remembered that those who are authorised to review a medical record realise that it is a confidential communication. They know that they may not divulge any

information of a personal nature acquired by them in the practice of their profession.

If the research is being done by a staff physician which is not for any publication, it is not necessary to obtain permission of the attending physician to use the record. If the record is being studied for a publication, the permission of the attending physician is necessary because the attending physician is necessary because the attending physician may require the data for his own publication.

STATISTICS

Preparation and presentation of statistical data is one of the important function of medical records department. Most of the hospital management functions depends on the statistical data. Statistics simply defined as the collection, analysis, interpretation and presentation of data in a quantitative (numeric) method. The interpretation of data for statistical preparation should be made according to the use of the hospital. External agencies involved in management of health also needs statistical data for study, projects etc. The data can be presented as numbers, figures, graphs etc., it should generate interest among the readers/hearers. Vital statistics is a branch of bio-statistics which includes details about birth, death, foetal death etc. Vital statistics are very important tools for government agencies. Usually statistics is prepared monthly and yearly.

The important statistical data prepared are follows.

1.Registration

2.Inpatient admission

3.Inpatient discharges (including death)

4.Hospital death

5.Hospital birth

6.autopsy

7.Surgery/procedures

8.Bed occupancy

9.Average length of stay

10.Hospital infection

11.Investigations

CALCULATION OF STATISTICAL DATA

1.GROSS DEATH RATE:

The proportion of inpatient hospitalisation that end in death, usually expressed as a percentage.

$$\text{Gross death rate} = \frac{\text{No. of death in a period x 100}}{\text{No. of discharges in the same period}}$$

2.NET DEATH RATE:

The ratio of total number of deaths for a period occurring in the hospital 48 hours or more after admission to the total number of discharges and deaths in 48 hours and over that period.

$$\text{Net death rate} = \frac{\text{(Total deaths – those under 48 hrs) x 100}}{\text{Total no. of discharges – death under 48 hrs}}$$

3.POST-OPERATIVE DEATH RATE:

The ratio compares the deaths within ten days after surgery to the total number of patients operated upon for the period.

$$\text{Post op. death rate} = \text{Total P.O. deaths within 10 days x 100}$$

Total no. of patients operated

4.MATERNAL DEATH RATE

This ration represents maternal deaths for a period to the total number of obstetrical patient discharged. It includes only patient whose death is a result of an obstetrical complication of pregnancy, labour or the puerperium or intervention, omissions or treatment. This is called direct obstetrical death.

MDR = Total number of direct maternal death x 100

Total number of obstetrical discharges

5.NEONATAL DEATH RATE OR INFANT MORTALITY RATE

This ratio reflects the deaths of infants born in the hospital to the number of infants discharged. Foetal deaths are not included because they are not new born inpatient. Infants born outside of the hospital and admitted should be recorded as child inpatients.

NDR = Total number of newborn death x 100

Total number of newborn infants discharged

6.ANAESTHESIA DEATH RATE

This is ratio of death caused by anaesthetic agents for a period to the number of anaesthetics administrated for the period. An anaesthetic death is defined as a death that takes place while the patient is under anaesthesia or which anaesthetics or other agents cause used by the anaesthetist or anaesthesiologist in the practice of his/her profession

ADR = Total number of deaths caused by anaesthetic agents x 100

Total number of anaesthetics administrated for the period

7.FOETAL DEATH RATE OR STILL BIRTH RATE

This ratio computes the number of foetal deaths to the total number births in a given period

FDR = Total number of intermediate foetal deaths x 100

Total number of births (intermediate and late foetal deaths)

Other significant rates are as follows

1.Gross Autopsy rate = $\frac{\text{Number of inpatient autopsies x 100}}{\text{Number of inpatient deaths}}$

2.Net Autopsy Rate = $\frac{\text{Number of inpatient autopsies x 100}}{\text{Inpatient Death – Unautopsied coroner}}$

3.Inpatient Bed Occupancy Rate = $\frac{\text{Total inpatient service days x 100}}{\text{Total inpatient Bed count x No.of days}}$

4.Average Length of Stay = $\frac{\text{Total length of stay}}{\text{Total discharges}}$

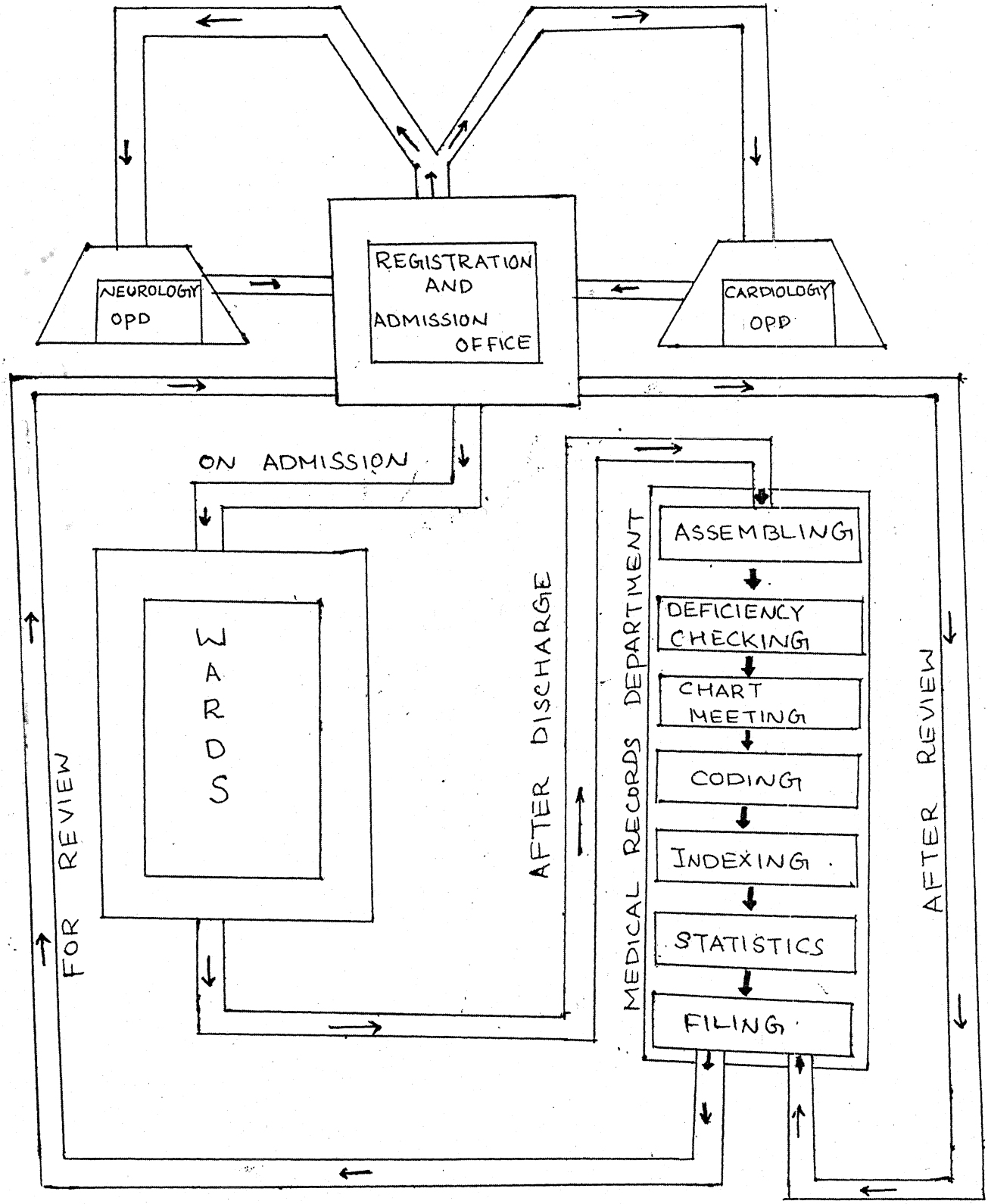
5.Average Daily inpatient Census = $\frac{\text{Number of Inpatient Service days}}{\text{Number of days}}$

6. Post-operative Infection Rate = $\frac{\text{No. of infection in post Op. cases x 100}}{\text{Number of surgery}}$

7.Admission Rate = $\frac{\text{Number of patients admitted x 100}}{\text{Total Registration + Reviews}}$

8.Caesarean section rate = $\frac{\text{Number of caesarean performed x 100}}{\text{Number of deliveries}}$

FLOW OF MEDICAL RECORDS



AN INTRODUCTORY NOTE ON THE MEDICAL RECORDS DEPARTMENT IN SCTIMST, TRIVANDRUM

I. INTRODUCTORY NOTE OF MRD AT SCTIMST

Medical record department in SCTIMST is highly organised, modernised, well equipped and smooth functioning. Here the department is centralised and all the medical records were kept in the main department. The department is logically situated at the midst of medical and surgical blocks of this institute. The department is spacious, airy and with all physical facilities. About 3.5 lakhs of records were kept in the department in filing racks. With the advancement of computer, it replaces technology the Bradma system. It made the work easy and smooth functioning.

The functioning of the institute was started in 1976 with 60 bedded inpatient-medical centre as a referral hospital. The medical records department had registered the first referral patient, Mr. Baburaj, hospital hospital number:00001 under cardiology department on 11/09/1975 with a diagnosis of Rheumatic mitral stenosis. The referral cards of this Institute were distributed to all the government and private hospital to refer the patients of Cardiology and

Neurology for making use of the advanced facilities of this Institute. The computerisation in this department is making the MRD a fast and efficient one. The department also providing training to medical records persons from various institute. To catering the need of doctors, the bed strength was enhanced step by step to 239 as below.

As the department located in middle of two main blocks, easy transportation is possible among different sections. The department has a sub-department where the admitting office, registration office and OPD control office working. The department is computerised. Training programmes were conducted by the department.

There is 11 staff and 3 students working in this department. SMRO is the head of the department. Under his, MRO, AMRO, 8 MRAs and 3 students are working. Duty place is divided into 5 – IP (3), OP (3), filing (4), and relieving. The various functions of department is co-ordinated through the HOD and officers. Three OPDs are working under main medical records department. One is for cardiology, one is for neurology and the other is for cardiac, neuro and thoracic surgery. All the OPDs are computerised. The whole institute is computerised and the information is available through the terminals.

FUNCTIONING OF MRD IN SCTIMST

1.OPDs

OPDs are located in the entrance blocks of this institute. As this is a referral hospital, the newly coming patients with referral letter are directed towards medical social workers. There they do the income category assessment and put a hospital number for the patient after entering name, sex, age, registration date and service (CM, NM, TS, NS & NR). So the first part of the registration was done by them. A registration form filled by the patient is given to OPD and it is entered by the medical record assistant. The important information are name, age, sex, full address, referral doctors name etc. A registration card is given to each patient after registration. In the OPDs, dates for next review has given according to doctors instruction. If a patient is admitted, admission order should reach the respective OPD and IP number or MRD number has given. After IP advance payment, complete and correct address has taken and admission procedure was completed by entering name of ward, admission date and name of HOD. A consent was taken from the patient and patient's relatives. A temporary visiting pass has issued from the OPD to the patient's relative.

The records of patients who were came for review is issued through the OPD after entering in the issuing register. The records which are returned after review are properly assembled, deficiency checked and new records are coded also. OP diagnosis coding is characteristics of SCTIMST.

2. IP:-

IP duty is devided into 3 – (a) CM (b) NM, NS (c) CVTS,NR. The discharge details entered in computer by AMRO from census. Each persons in IP duty take printout from computer and receive the records from the wards. Charts are come in MRD within 72 hours after discharge. The received records were assembled, deficiency checked and coded. Incomplete charts were returned to ward for completion or kept separately for completion. Reminders were sent to respective persons for completion of records through SMRO(first), MS(second) and finally through director. The completed records were sent for filing after signing an officer.

IPs were checked quantitatively and qualitatively for deficiencies. The deficiencies were timely corrected and completed and sent for filing. There is a deficiency list for cross checking. The person who check the deficiencies should sign and dated. The discharge summaries which are not given to patient at the time of discharge are sent through MRD. Coding is done with the help of computer.

3.FILING

4 persons were posted in filing. The appointments for review and admissions were taken from the computer. It is devided into 4 and given to them. The list is strictly in numeric, so facilitate the file retrieval. The retrieved files were sorted according to clinic wise (CM, NM, NS, CVTS, Speciality). These records sent to respective OPDs a day before the appointment date. The records came from OPDs and IP desks were sorted, serialled and write in a register. The whole number is devided into 4 and each part is filed by a person. The records needed by doctors and records for correspondence are taken according to the instruction from any one of the officers. Correspondence letters and loose record forms were collected and devided into 4 and filed by MRAs.

The filing system is unit. That is only one hospital number is given to a patient regardless of number of admissions. The numbering system is straight numeric from 1974 to 1986. Then it is changed to year wise up to 2000. In this method the whole number is 7 digit and the first 2 digit is reserved for representing the year. In 2000, the first 2 digit becomes 00. It create problems in statistics and accounts etc. So the total number of patients who registered here are counted as 180000. In 2000 the first registration number given in 180001. This method continues.

4.PRUNING

Pruning/thinning is one of the job of the department to avoid bulkness of the files and for space management. Each record is examined and remove unnecessary and unimportant papers from it. Most of the forms in the OP record were kept. But in IP, the admission record, discharge summary, admission & discharge order, consultation records, important investigation records, procedure or operation records, anaesthesia records, histopathology records, death certificate, autopsy reports etc. alone kept. All the other papers were destroyed.

5.RELIEVING

Due to the absence of any one staff the reliever did his duty.

6.SUBSIDIARY FUNCTIONS

Most of the correspondence of patient were scrutinised in this department. The requests for review dates, appointment postponement, Insurance claim papers etc. were considered and replied. The requests need doctors opinion are kept for doctors with file.

Various certificates like financial assistance, advance, telephone connection etc. were given by head of this department.

Active and inactive separation of records is a method for space management. Here the records of patients w who are not in current contact with this institute for the past 10 years were separated as inactive and kept apart from the filing racks. This files are the inactive files and the rest are the active files.

Computerisation of the department make its functions very easy. All the details about registration, major complaint, admission and discharge details, operations etc. are obtained from computer. Computer eliminates the need of indexing completely. All the statistical reports were taken from the computer.

Death reporting is one of the important functions gone through this department. Here we take the lists of patients who were unfortunately died during hospitalisation, from the computer every 15 days. The records of died persons are immediately collected from ward/ICU and fill all the parts of death certificate carefully and sent to corporation office.

During my course period I had cover all the above mentioned fields with the help of the staff and friends. Regular classes were conducted by HOD and MRO regarding various topics and working of this department. Proper direction has

obtained from all staff of this department in discharging the duties entrusted upon me.

7.ASSISTING DOCTOR'S STUDY

post graduate students need the support of MRD for their study and thesis presentation. It is the duty of MRD personnel to make the charts available for them according to diagnosis wise, procedure wise etc and issuing necessary statistical information to them from the medical records preserved for the past 25 years manually or through computer. An average 10,000 charts are retrieved for this purpose every year. MRD saves the doctors and institution from the consumer protection council. Doctor patient correspondence is done by MRD.

8.TRAINING PROGRAMME

Even though CMC, Vellore is the pioneer of medical record science, or MRD is considered as one of the best MRDs in quality wise because of the advanced computerised medical records system. Our MRD is an informal and formal training centre to many hospitals. 350 medical records personnel were offered informal medical record training before our PGDMRS training was started in 1998. A national conference on health information system was conducted by our MRD with 120 delegates from throughout India in 1994, which has highlighted the importance and need of starting medical record departments in all hospitals.

9.PATIENT'S CERTIFICATES

Except doctors medical certificates for leave, all the following certificates are issued by SMRO

1. Financial assistance from Prime Minister's relief fund.
2. Financial assistance from Chief Minister's relief fund.
3. Financial assistance from Organisations.
4. Estimate for advance from departments
5. Train concession certificates
6. Treatment certificate for telephone, electricity etc.
7. Attendance certificates.

10.STANDARISED FORMS CONTROL

Forms in a stock room and issued to wards, ICUs and OPDs once in a month. Medical Records Committee's approval is required whenever a new form is to be introduced. Annual Indent is prepared by AMRO who controls the consumption

of it. He issued the forms to all wards and OPDs once in a month according o the convenience of everybody.

11.CONDUCTING MEDICAL AUDIT

One Medical Audit Committee was constituted in 1983 in SCTIMST with following members.

Medical Superintendent	Chairman
Prof. of Cardiology	Member
Prof. of CVTS	Member
Prof. of Neuro Surgery	Member
Prof. of Anaesthesiology	Member
Prof. of Radiology	Member
Prof. of Pathology	Member
Prof. of Biochemistry	Member
Prof. of Microbiology	Member
Nursing superintendent	Member
Senior Medical Records Officer	Convenor

All the committee members meet once in month in the conference room of Medical Records Department for discussion the following items.

- Discussion about the negligence, if any, in death cases
- Prolonged stay in the ward and ICUs
- Hospital Infection rate
- Hospital statistics
- Complains of suits, if any

ADDITIONAL FUNCTIONS OF MRD

FAMILY INCOME ASSESSMENT

There was no assessment system when the Institute was started. A committee consisting of Director, Medical Superintendent, FA and CAO and MRO was formed and offered the income assessment responsibility to MRO who designed a format and successfully carried out this system up to 1987 by assessing 87,000 patients. Medical social Workers were trained by MRO and offered this work to them.

REIMBURSEMENT SYSTEM

When patients find it difficult to get the essentiality certificates for re-imbursement, a system was introduced in 1976 by MRD. All the applications from state and central government employees were promptly attended and issued

within a week with the co-operation of doctors. This is handed over to office of Medical Superintendent subsequently.

RELIEF FUNDS TO THE POOR PATIENTS

At present SMRO issues certificates for poor patients to get financial assistance from Office of the Prime Minister and also Chief minister.

MISCELLANEOUS TOPICS

1.REASONS FOR ABSENCE OF HEALTH RECORD PROFESSION

Failure to realize the importance of medical record as a tool for patient care. Ignorance to health care professional regarding medical audits, hospital standards etc. Not all the doctors are aware of the importance of medial record for the cure of patients. Lack of interest in genuine research. Lack of training and trained personnel's in the field.

2. CAUSE OF DEATH

The cause of death to be tabulated should be the underlying cause defined as (a) disease or injury which initiated the train of morbid events leading directly to death (b) the circumstances of the accident or violence which produced a fatal injury.

DISEASE OR CONDITION DIRECTLY LEADING TO DEATH

This is the condition, which was the direct cause of death. The entry does not mean the mode of dying like heart failure, respiratory failure etc. These conditions denotes death occurred and provides no useful information. If the direct cause of death is a complication, such as peritonitis or septicaemia the antecedent cause will have to be entered. In the case of violent death, the direct cause of death is an injury resulting from external causes.

ANTECEDENT CAUSE

Next consider whether the direct cause arose as a consequence of any antecedent disease or injury of which it was a complication or delayed result, was there is an intermediate step or stage between normal death and development of direct cause of death. If a condition is believed to have prepared the way for the direct cause by damage of tissue or impirement of function. It can be entered as antecedent eventhough a long interval of time has elapsed since its onset or gave

rise to symptoms. In the case of injury, the form of external violence or accident producing its antecedent to injury.

UNDERLYING CAUSE

If there is no antecedent cause at all, the underlying cause can be entered.

OTHER SIGNIFICANT CONDITIONS

If there was any other condition that though not a part of causal sequence, contribute something to fatal outcome. Such a condition must no be related to direct cause of death. Eg. A chronic disease in a person who dies from an accidental injury. Interval between onset and death shows duration of illness, sequence cause of death etc.

3.PRINCIPAL DIAGNOSIS

This is determined after a patient is discharged. It is defined as the diagnosis that necessitated a patient's admission. The principal diagnosis was written after careful examination of the medical record and group discussion of consultants.

4. PROVISIONAL DIAGNOSIS

Diagnosis of gues. It may be an opinion.

5. SECONDARY DIAGNOSIS

Disease produced by primary cause or disease following a previous disease.

6. EMERGENCY

A condition which involves serious and immediate risk to the life is considered as emergency.

7. MORBIDITY

Diseased condition or state. The incidence or prevalence of a disease or of all diseases in a population.

8. MORBID

Affected with/diseased/unhealthy condition.

9. ACUTE(SHARP)

Having short and relatively severe course.

10. CHRONIC

Persisting over a long period of time

11. EPIDEMIC

Occuring suddenly in numbers in excess of expectancy especially of infectious diseases.

12. HOSPITAL PATIENT

A person who is house hold in a hospital for observation, care diagnosis or treatment (IP) or one who makes use of diagnostic and therapeutic facilities without hospitalisation(OP). IP patient use hospital bed, cribe or bassinet.

13.BED COMPLEMENT

Total number of IP beds except newborn bassinets, labour beds, emergency department beds, diagnostic beds like x-ray, anaesthesia beds, recovery room beds etc. are not IP beds.

14.MISPLACED FILE

This is a medical record in which its position is shifted to another new place instead of normal place. This is due to mistake in filing as the system is numeric. As the number of digits in the hospital number increases, the chance for misplaced filing increases. If one record entangled within the other one, the misplaced filing increases. So there should be proper checking and proper filing.

15.MISSING FILES

These are medical records permanently lost from filing area.

16.MICROFILM/MICROFICHE

Micro filming is a new technique for space management. The data stored in it can be retrieved through a reader cum printer. It is easy for the doctors to study the records through the reader and it is also possible to take copy of the required pages. Nobody can do any alternations in the microfilm. The advantage in microfiche is additional informations after review can be added and unnecessary datas can be removed also. This may occupy $1/10^{th}$ of filing area and reduce staff strength.

17.TRACER CARDS

These are indicators of records, which are removed from the filing racks.

18.MEDI-TAGS

Small tag, half adhesive on the back, which is placed on the chart page where the doctor needs to sign. The free half extends out allowing to be seen in the stack of papers.

19.TABS AND TAB-DRIVERS

These are thick and easily identifiable materials in the record used to sectional identification. Eg. Consultation, section, nurses bedside records section, progress notes etc.

20.ABSTRACT

Summary of patient medical data as an in-patient and as an out patient.

21.AS-SCORE INDEX

Severity of illness classification system based on five factors – age of patient, system involved in illness, stage of disease, complication and patient's response to therapy.

22.COMORBIDITY

Because of the presence of a pre-existing condition with a specific principal diagnosis, cause an increase in length of stay.

23.COMPLICATION

A condition that arises during the hospital stay that prolongs the length of stay due to primary disease or procedure or therapy.

WORK PERFORMACE AND CONCLUSION

Two students are selected for the DMRS course. During the initial days we got enough time to familiarised with the routine work of the department like what is necessarily of a proper and complete medical record in the field of a patient care? , How an OPD is functioning ? , what is the role of medical record personnel's in OPD services ? , How the MRD helps the smooth functioning of various other departments etc.

Routine classes in subjects like medical records science, medical terminology and coding , anatomy and Bio-statistics were available from the initial period onwards. And we students also got a chance to attend the anatomy class held in Medical College, TVM. And also we got an opportunity to visit various departments like Blood bank , Microbiology, Pathology , Biochemistry etc.

From the 2nd month of the first year onwards we students got opportunity to perform different duties like Filing , Pruning , Relieving , OPD duties , and in IP Analysis Desk (which include Assembling , Deficiency Checking(Quantitatively & Qualitatively), Coding , Feeding , Indexing etc) and in this duty we thoroughly go through the analysis of records of Cardio-Medical , Cardiac surgery , Thoracic surgery , Neuro-Medical , Neuro-Surgery and Neuro-Radiology types . During the filing duty we filed more than 40,000 files independently.

In addition to all these routine duties we also performed Emergency Night Call Duties .All the night call duties are given to DMRS students only. In case of emergencies the students had to issue the old records if he/she is already registered and also the admission procedures also done. In case of new cases we also perform the registration procedures including assessment.

CONCLUSION

As I am a student of medical records science, I know the validity of such a department in a hospital. In this workbook I had mentioned about the medical records and medical records department in SCTIMST shortly with my mere knowledge. I got very good training from this institution in this field. I have touched all the fields of medical records department functions in this institute. Theoretically and practically the training in this institute have very high degree of standards. The lack of experienced persons in this field make this field a very dimmed one. We should try to enhance the training programmes for the betterment of this filed and making trained professionals.