Chapter XIII

MEDICAL RECORDS DEPARTMENT

1. Introduction

The general principles in relation to the well being of the patients in hospital apply to those of a medical records department. Management of an organisation is nothing but effective utilization of resources to achieve its goal. Management is also defined as getting things done by others. Application of scientific management procedures in the present day hospital administration has been realised by hospital administrators throughout the world.

Present day hospitals, particularly some of large hospitals in big towns and cities are in a position to provide highly specialised medical care. The workload is escalating rapidly due to increased utilisation of hospital services. Yet, the public at large is not fully satisfied with the hospital care. This demands improvement in administration, particularly patient administration system by introducing management skills. Patient administration


system is based on an accurate information system on admissions, discharges, bed days, OPD attendance and statistical analysis of these data. The hospital medical records department deals with these information and thus play an important role in improving patient administration and through this the hospital management system.

The medical record has been defined as a clinical scientific administrative and legal document related to patient care in which is recorded sufficient data, written in sequence of events to justify the diagnosis and warrant the treatment and end results. It is a document of facts which contains statement by trained observers. The observations are of the conditions found, examination and therapy applications and end results and indicate whether or not the efforts of the doctors supplemented by hospital and related facilities are in accordance with reasonable expectations of present day scientific medicine.

Medical records are primary tools for evaluating the quality of care provided to patients in a hospital. There

is one resource that all health care institutions have to aid them in targeting and that is medical records. Every institution and individual professional keep a plethora of records on each patient. Records of incidence of diseases and injuries are also maintained by government agencies, local and state hospital boards and others with indirect relationship to health care delivery.

Statistics of morbidity and mortality particularly statistics of cause of health is considered very important everywhere for formulation of National Health Policies and programmes. The 'health intelligence' branch (CBHI) of the Ministry of Health and Family Welfare is such an agency which collects this information. It gets data from all the hospitals and health centres. There is another governmental agency to collect this data from the birth and death registration offices all over the country.

In a hospital, the medical records department is singularly responsible for furnishing this data. Even though the oldest records in the most primitive forms date back to 25000 B.C. which were very different from the present day records, the development of medical records department in a hospital is fairly a modern concept. It reflects the need created by changes in modern society and in the hospital for aiding the patient, the physician, the nurse, the hospital
administrator, medical education and research. A medical record is used as an instrument for providing:

1. the best possible patient care,
2. education for medical nursing and paramedical staff,
3. base for comparative studies and research, and
4. legal protection for all concerned.

This department is the custodian of all the data on the progress of a case from day to day, and presents clinical notes, details of investigations, treatment and advice rendered. These records are of immense value for reference on subsequent occasions if needed. The occasion can be medico-legal proceedings, material for research, evaluation of services and for statistical studies relating to morbidity and mortality pattern.

The Medical Records Department (MRD) in Safdarjang Hospital has been studied in detail with an aim of analysing the existing medical records system for the improvement in the hospital administration by providing necessary information for making important decisions.

The objectives of the study were as follows:

a) To carry out detailed study of the organisation

and functioning of medical records system of the Safdarjang Hospital.
b) To analyse the general information generated by this system and its utilisation by the management, medical staff and research workers.

Methodology

The study of the Medical Records Department was focussed on the existing medical records system of the hospital in its entirity and its role in management information system (MIS).

This was conducted by the following methods:

a) Study of documents.
b) Discussion with key personnel of MRD and hospital management.
c) Direct observation of procedures.
d) Quantitative analysis.
e) Study of interaction between MRD on one hand and medical officers, management and health authorities on the other hand.

i) Study of Documents

Hospital Information brochure, important policy circulars, daily census reports, monthly and annual statistical bulletins, quaterly information bulletins in
Hindi published by the hospital authorities were studied. This was done in order to find out organisation and functioning of the hospital in general and laid down policies and procedures of OPDs, admissions, transfers, discharges, birth and death registration, documentation by the Medical Records Department in particular.

ii) Discussion with key personnel of MRD and Management

Detailed discussions were held with officer in charge and other key personnel of the MRD. The other personnel included Assistant Medical Record Officer and Statisticians. Discussions were also held with Central administrative officers like Medical Superintendent, Assistant Medical Superintendent, Chief Administrative Officer and CMOs concerning hospital management information system and administrative interaction with the Medical Records Department.

iii) Direct observation of Procedures

Various departments concerned with preparation and maintenance of medical records were directly observed. Actual admissions procedures, documentation in OPDs, special clinics, wards and departments and the processing of medical case sheet, in all sections of medical records department were observed.
iv) **Quantitative Analysis**

Study of daily, monthly and yearly figures of admissions, discharges, birth and deaths was carried out for analysing the workload of the Department. In addition to this, the daily workload of documentation in various OPDs and special clinics was also studied.

v) **Study of Interaction with user**

A critical study of the practical problems and bottlenecks in medical records processing, both within and outside the medical records department, was carried out. Information requirement of the management as well as higher health authorities (DGHS, Ministry of Health, Parliamentary question, Regional General Office, New Delhi Municipal Committee etc. from the Medical Records Department and its abilities and limitations in fulfilling the same were studied. Study was also made of the storage procedure of medical records, their indexing, grouping and retrieval.

The interaction of medical records with users was carried out with the help of a questionnaire. A questionnaire was presented to 50 medical officers of clinical departments which makes about 10% of the total strength and statistically justified, feasible sample. Most of the writing work in medical case sheets in a ward is done
by senior and junior residents. They are also actively involved in medical research either by themselves or for heads of departments. The questionnaire was given to a selected group of senior residents, junior residents and general duty medical officers. So from the total 255 of senior residents, 15 from 135 junior residents and 5 from about 40 GDMOs were selected at random for interview. The questions were aimed at finding the interaction between these doctors and the medical records department. A copy of the questionnaire is given at Annexure XV.

2. Medical Records Department

Safdarjung Hospital is one of the few hospitals in the city of Delhi, which have an independent fullfledged Medical Records Department. In 1955 a 'Statistical Section' was established by the hospital authority to carry out statistical analysis of the records maintained in the hospital. In 1962, the Statistical section was developed and was named as Medical Records Department. In 1973, a training wing of Medical Records Department was also established for conducting training courses for medical record technicians and in addition to this, a course for medical record officers was started in 1978. The department is organised in two main wings, namely:

1) Service Wing. 2) Training Wing
2.1 Service Wing

This is the main functional wing of the MRD. It has three sections:

i) Central Admitting and Enquiry Section
ii) Outpatient Medical Records Section
iii) Inpatient Medical Records Section

2.1.1 Central Admitting & Enquiry Section

The admission and registration functions are performed by this section. All patients who need admission in the hospital come from one of the following departments:

- OPDs and special clinics,
- Emergency wards A&B,
- Emergency sections of OB & Cynae, orthopaedics, Burns Plastic Surgery and Paediatrics unit.

The admission office carries out preliminary documentation of the patients which includes identification, demographic and registration data.

The enquiry office which is located close to the admission office provides information regarding whereabouts of a patient who is admitted in the hospital, to the relatives and visitors. This section also guides members of the public regarding OPDs, special clinics, location of
wards and other departments like X-ray, laboratory, blood bank medical records etc. There is a separate public information and guidance booth in a prominent place in the hospital for directing and guiding people to various units in the hospital.

Staff in the admission and enquiry section is given in Table No.70.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Receptionists</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Bradma Operators</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Peons</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Hospital Guide</td>
<td>1</td>
</tr>
</tbody>
</table>

They work in shifts to cover the whole day. Each shift is covered by one receptionist, one bradma operator and peon.

2.1.2 Outpatient Medical Records Section

The hospital runs about 15 OPDs on all working days. The registration is done from 8.30 to 11.30 a.m. In the evening or on holidays no OPD functions. About 50 different special clinics also run in the afternoon on working days.
Emergency services on each speciality is provided round the clock. The MRD provides 12 LDCs to the more busy OPDs. OPDs maintain an account of daily attendance of patients, their age and sex. A monthly summary of OPD attendance is submitted by each OPD and special clinic to the MRD. Similar account of attendance is also maintained in all the special clinics and emergency department by their own staff.

2.1.3 Inpatient Medical Records Section

This is the main functional section of the service wing of MRD. In this section in daily census report, discharge analysis, birth-death registration processing of case-sheets, their disease coding, indexing and preparation of hospital statistical bulletins are carried out. It is organised in a number of sub-sections as follows:

1. Census and Discharge analysis.
2. Assembly section.
3. Birth-death and still birth registration
4. Incomplete document section.
5. Statistical section.
6. Coding and indexing.
7. Storage, retrieval and disposal of medical records.
8. Correspondence and medico-legal section.
Staff employed in the Inpatient Medical Records Section are given in Table No.71.

**Table 71**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>1.</td>
<td>Statistical Assistant</td>
<td>1</td>
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<tr>
<td>2.</td>
<td>Medical Record Technicians</td>
<td>7</td>
</tr>
<tr>
<td>3.</td>
<td>UDCs</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>LDCs</td>
<td>10</td>
</tr>
<tr>
<td>5.</td>
<td>Peons/Nursing Orderlies</td>
<td>6</td>
</tr>
</tbody>
</table>

2.2 Training Wing

There are only three established training centres for training in science of medical record in the country. These are:

1. Safdarjjang Hospital | Run by Central Govt.
2. JIPMER, Pondichery   | Run by Voluntary Agency

Recently the State Government of Tamil Nadu has also started a course in Medical Record Science at Madras Medical College.
The Training Wing of MRD in Safdarjang Hospital conducts the following training courses:

i) Medical Record Officer's Course

One course of one year duration is run every year. The capacity is 10-15 students. Graduates with about 6 months experience of service in any medical record are eligible for admission. Candidates are mostly sponsored by hospitals. Successful candidates are awarded a certificate.

ii) Medical Record Technician's Course

Two courses of 6 months duration each are held every year. Course capacity is 6-10 students. Candidates are sponsored by hospitals for this course. The following staff in Table No.72. are posted in the Training Wing:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>1.</td>
<td>Assistant Officer incharge</td>
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<tr>
<td>2.</td>
<td>Demonstrator</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Stenographer</td>
<td>1</td>
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</tbody>
</table>

However, the distribution of all the staff in entire Medical Records Department is as given in Table No.73.
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Main Medical Record Section</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>-</td>
<td>10</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>Central Admission cum-Enquiry Section and Census</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>9</td>
<td>5</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Outpatient Registration &amp; Statistics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Training Centre</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>31</td>
<td>11</td>
<td>60</td>
</tr>
</tbody>
</table>
2.3 Functions of the Medical Records Department

No standing instructions or consolidated policy book, spelling out the responsibilities and procedure of the Medical Records Department was available. Information regarding this was collected by interviews with the MRO, Assistant MRO and the Statistical Assistant of the Department. The functions of the department are divided among all the sections. Functions of different sections of the department are described as follows:

2.3.1 Main Medical Record Section

i) Developing, processing, maintaining and preserving medical records of inpatients.

ii) Dealing with correspondence relating to patients.

iii) Dealing with medico-legal work.

iv) Developing standard data on hospital services, morbidity and vital events.

This main Medical Record section which is the nerve centre of the Department has four main functional areas. These are as follows:

i) Admission and Discharge Analysis.

ii) Incomplete documents.

iii) Coding and Indexing.

iv) Storage and retrieval of old medical records.
i) Admission and Discharge Analysis

a) Daily Census Report

This is the most important report prepared daily by this section for information to the management. The census section prepares daily census figures and submits to the statistical assistant who prepares a consolidated daily hospital census report. The daily hospital census report gives following information:

i) Wardwise admissions, transfers in and out, discharges, deaths within 48 hrs and after 48 hours of admission.

ii) Total number of inpatients as to 0001 hour and at 24.00 hours i.e. midnight to midnight.

iii) Total number of new births.

iv) A running total of admission, discharges, deaths for the day, month and year.

v) Percentage of bed occupancy for the day.

One copy of this report is submitted to the Administrative Office for information of the Medical Superintendent and his staff.

The daily census report contributes following information towards monthly hospital statistical report:
i) Total patients admitted:
   - age-wise
   - sex-wise
   - new births

ii) Daily average of admissions.

iii) Maximum and minimum number of patients in the hospital on any one day during the month.

iv) Total patient days care to inpatients during the months.

v) Daily average number of inpatients and unitwise bed occupancy rate.

b) Discharge Analysis

The census section collects all the discharged case sheets including death case sheets and the following steps are taken in these cases:

i) All Bradma cards of these cases are taken out and checked with the actual discharges. The cards are then arranged in alphabetical order on names and inserted in appropriate stacks of cards in Alpha Index Machine.

ii) The case sheets of death cases and nonfatal cases are separated.

iii) Hospital death register is filled up and notification

* The machine has been out of order for a long time (reported by the operator) and has to be operated manually which is rather laborious process.
of death cases along with cause of death certificates duly completed is carried out.

iv) All case sheets are reassembled in a standard order and handed over to the discharge analysis sections.

v) Discharge analysis is supposed to be prepared daily, but actually it is done only once a week.

Only one discharge analysis report is prepared for the month at the end of the month. Information recorded for preparing the discharge analysis includes:

i) Agewise breakdown into adult, children and new born babies.

ii) Sexwise breakdown of each age group.

iii) Geographical distribution.

iv) Total number of days spent in hospital (day of admission is excluded).

v) Deaths within 48 hours and after 48 hours of admission.

The monthly discharge analysis contributes following information towards monthly hospital statistical bulletin.

1) **Average Length of Stay (ALS)**

   It is calculated as follows:

   Total No. of days care to patients discharged (including deaths)

   Total No. of patients discharged (including deaths)
ii) **Average bed turnover rate**, i.e., how many patients used one bed facility in the hospital. It is calculated as follows:

\[
\text{Total No. of patients discharged} \div \text{Total Bed strength}
\]

iii) **Gross death rate**:

\[
\text{Total deaths} \times 100 \div \text{Total discharges (including deaths)}
\]

iv) **Net Death rate (in%)**, i.e., death rate of institutional deaths (deaths after 48 hours)

\[
\text{Total deaths after 48 hours} \times 100 \div \text{Total discharges (including all deaths)}
\]

c) **Hospital Vital Statistics**

In addition to the above, the admission/discharge analysis section is responsible for recording and reporting the vital data and notification of the vital events to the local registration office of municipal authorities (NDMC) once a week.

ii) **Incomplete Documents Section**

A deficiency checklist is attached to each discharge case sheet in the assembly section. In the Incomplete Documents Section these case sheets are checked for
deficiencies and marked on the checklist. The case sheets which are found incomplete are separated and placed unitwise in racks. Complete case sheets are arranged in order of MRD numbers and kept separately in section. There is a timetable by which medical officers from various units visit this section once a week or fortnight and complete their case sheets. Completed case sheets then are inserted in order of MRD numbers in the bundles of already completed case-sheets. All completed case-sheets are then sent in bundles of 100 to the coding and indexing section for further processing.

In case medical officers fail to visit MRD for completing their documents, reminders are sent to the Head of the concerned department with information to medical superintendent on a standard form.

iii) Coding and Indexing

The Safdarjang Hospital provides basic as well as specialised treatment covering practically all disciplines of medicine. To facilitate preparation of a morbidity report as well as retrieval of case documents of specified diagnosis or demographic categories for the purpose of medical research, classification of diagnosis is required to be done.
a) **Coding**

Classification of diseases is done according to the universally accepted International classification of Diseases (WHO) and disease codes are given to the diagnosis. Disease codes are entered in the appropriate column in the case-sheets against each diagnosis. Index cards based on disease codes are filled up. The trained medical record technicians do the coding and indexing job. Each technician can handle about 200 case sheets a day.

b) **Indexing**

Preparation of a monthly disease-wise morbidity and mortality report showing incidence of diseases according to the International Classification of Diseases, is one of the main objectives of the Medical Records Department. Indexing is done on disease codes as per the ICD. Primarily the main diagnosis is the key for indexing. One card is made for each ICD code and disease entry. A second indexing is done on surgical operations for all cases who have undergone minor or major surgery. Classification and coding of surgical operation is also given in the ICD. Indexing for both diseases and operations is done for one year in one set of cards.
iv) **Storage and retrievals of old medical records**

After the coding and indexing are completed the medical case sheets are grouped in bundles of 100 each, arranged in order of MRD numbers. These bundles are wrapped in specially made covers on which the first and last MRD number of the case sheets and the years are marked.

Whenever a case sheet is removed from a bundle its record is maintained on a Tracer Card. For removing any case sheet a requisition slip with full particulars of the person requisitioning the case-sheet and the reasons for removal are obtained. A proper receipt is then obtained from the person. The receipt has to be signed by a medical officer only. The request slip and receipt are filed together as a record of the removal of the document.

As a policy the medical case sheets are preserved for a period of 10 years. Every year case sheets with discharge year beyond 10 years are destroyed by burning under the supervision of a board of officers convened by the order of the Medical Superintendent. There is no specific order for preserving case sheets of medico-legal cases or death cases. However, case sheets of cases under litigation are preserved in concerned files separately.
Retrieval of Medical Records

Medical records may be required to be removed from storage for one of the following reasons:

a) When a patient is readmitted.

b) When required for review in a special clinic or OPD.

c) Required for research purposes.

d) For court attendance as a piece of material evidence.

As a rule for no other reason medical records are removed from the storage.

2.3.2 Enquiry Services

The Enquiry Services render the following services to the public;

- handling their enquiries,
- providing them guidance in locating a ward/unit/department, and
- providing them any other assistance as required.

2.3.3 Outpatient Medical Record Services

The Outpatient Medical Records Services carries out the following functions:
i) Registering patient and documenting their socio-economic data in the outpatient department and special clinics.

ii) Filing and retrieving OPD/special clinics medical records wherever these are maintained.

iii) Compiling data on attendance and morbidity of OPDs and special clinics.

The pictorial presentation of the functional organisation of MRD is given in Fig. 23

2.4 Procedures and Documentation

Documentation of patients coming to the hospital is done at various stages. All these documents constitute medical records. Patients reporting to the hospital belong to one of the following categories:

a) With acute illness, accidents or poisoning, reporting to the emergency departments which run round the clock.

b) With minor or chronic illness reporting for treatment to one of the OPDs and special clinics.

c) Reporting to OPDs/ special clinics for review or follow-up care.

 d) Referred by a CCHS dispensary or one of the hospitals in or out of Delhi.
MEDICAL RECORDS DEPARTMENT
FUNCTIONAL ORGANISATION

WARD CENSUS
ALPHA INDEX
BIRTH REPORTS & STILL-BIRTH REPORTS

WARD CENSUS
BIRTH CENSUS

ALPHA INDEX

ASSEMBLY
FATAL CASES

NOTIFICATION
BIRTH/DEATH STILL-BIRTH NOTIFICATION

INCOMPLETE DOCUMENTS

CODING & INDEXING

STORAGE & RETRIEVAL

ADMISSION & DISCHARGE ANALYSIS

STRICTLY ASSISTANT

ADMISSION & DISCHARGE ANALYSIS

PRE ADMISSION FORMS

CENSUS

CENSUS DATA
SERVICE DATA

ADMISITRION SECTION

MEDICAL RECORDS DATA INFORMATION

OPDs CLINICS LABS X-RAY OTs

DAILY CENSUS REPORT
MONTHLY STATISTICAL BULLETIN

MLC & GEN CORRESPONDENCE

MEDICAL RECORDS DEPARTMENT.

FIG: No. 23.
Documentation in respect of these patients at these places and in the wards or departments are very important for developing hospital information system and statistical reports. Documentation done at various stages, is described here.

OPD Documentation

The registration clerk posted in each OPD enters patients particulars in a register maintained in the OPD. The same register is used for both old and new cases. Following details are entered:

a) Serial number (OPD No.) It is a running serial number for new cases starting from 01 January every year till 31 December. Thus at the end of the year total attendance is represented by the last OPD number.

b) Name (only for new cases).

c) Age.

d) Sex.

Diagnosis of the patient is not entered in any OPD. The patient is given an OPD slip on which OPD number, name, age and sex are entered and unit number and date are rubber stamped. At the end of each day, a summary of OPD attendance with age and sexwise breakup is entered. This
data is used for preparing monthly summary which is submitted to MRD at the end of the month.

The orthopedic, obstetric and burns and plastic surgery OPDs, maintain a more detailed record and file OPD documents of patients to facilitate review and follow-up care. These OPDs run their own internal record section. The diagnosis is however entered in special clinics and OPD documents of patients are retained in clinics for review purpose.

Documentation and Emergency Department

A register is maintained in each emergency department in hospital. The following particulars of all patients reporting, are entered in the register.

a) Serial Number: This is a running serial number starting from 01 January every year till 31 December.
b) Name.
c) Father's /Husband's Name.
d) Age.
e) Sex.
f) Provisional diagnosis (not in all departments).
g) Whether medico-legal case or not.
h) Disposal.
A separate medico-legal case register is maintained. This has a separate MLC number (a running number from 01 January to 31 December). In casualty department in addition to the patients particulars the following information is also recorded:

a) Religion.
b) Occupation.
c) Residential address.
d) Name of the person who brings the patient.
e) Marks of identification.
f) Number and date of police docket.
g) Number and Name of constable.
h) Date and hours of report sent to the police.
i) Detailed account of all injuries.
j) Kind of weapons or poison.
k) Nature of injury—simple, grievous or dangerous.

All these documentations in the casualty department are done by the medical officer on duty.

Documentation in Emergency Wards A & B

Patients reporting to casualty department needing admission or observation for more than 2 hours are initially sent to emergency wards A or B. In these wards a register is maintained by entering following particulars of the patients:
Documentation of Admission Section

All the patients admitted report to the Admission and Enquiry Section of the Hospital. A 'pre-admission form' is prepared by the reception clerk with the following particulars:

a) MRD Number.
b) Unit and ward to which admitted.
c) Whether CGHS beneficiary or not.
d) Name of the patient.
e) Father's /Husband's Name.
f) Address.
g) Age in years, for infants in months and for newborn in days.
h) Sex.
i) Marital Status.
j) Religion.
k) Date of admission.
l) Time of admission.

The hospital uses a Bradma equipment system for registration purposes. Patients' particulars are embossed on a thin aluminium plate (Bradma plate) 2" x 5" with the help of Bradma machine by an operator. This plate can be used for printing patients particulars on any document. In admission section the particulars are printed on the preadmission form, admission register, a blank case sheet and on an Alpha Index card. A metal plate print looks like the following:

```
068623  5 03 N 0
Kajal  22  F M H
w/o Anil Pawar
H.No. 57 Ber Sarai New Delhi
24 11 87 1522
```

The patient or attendant is handed over a blank case sheet and Bradma plate and directed to report to concerned ward. All the Alpha index cards are kept in a stack by

* Since last year all the three Bradma machines are not functioning.
the receptionist in alphabetical order for handling enquiries about the patient's whereabouts. On discharge or death of a patient, the census clerk removes his alpha index card for final indexing in the Medical Records Department.

**Documentation in the wards**

A complete clinical record of a patient from the time of his admission till the time of his discharge or death is maintained. All entries in the medical case sheet except clinical chart and in-take/output record are required to be maintained by a medical officer. In all the normal discharge cases, the senior resident is required to sign the discharge record, whereas the discharge records of death cases are signed by the head of the unit. The medical officer enters the final diagnosis, operative procedures in the case sheets and as well as prepare discharge summary.

In cases of births, deaths and still births, the nursing staff and medical officers prepare birth report, death report and still birth report respectively in duplicate. One copy is handed over to the patient and second copy is sent to MRD for necessary vital events registration and notification. In addition to the medical case sheets the following documents are maintained by all wards:

a) **Admission Register**: All the patients particulars as
identification data are entered in the register at the time of admission.

b) Death Register: A separate register is maintained for all death cases. The same identification data are entered for all death cases. A note is also made of whether the death occurred within or after 48 hours of admission and whether it was a medico-legal case.

Besides these several other registers like drug indent books, linen register, diet book, nurses report book etc. are maintained by the nurses in each ward.

2.5 Reports and Returns

Ward Census Report

Like most of the hospitals the census in Safdarjang Hospital is also maintained from midnight to midnight. A nurse on duty in the ward prepares following reports at midnight covering a period of 24 hours:

a. Number of patients at the start of the day (00.01 hrs).
b. Total number of admissions.
c. Total number of discharges and deaths.
d. Total number of transfers in and transfers out.
e. Number of patients remaining at midnight at the time of preparing the report.
The ward census report is made on a standard form. A census report is also made on a standard form. A census clerk from MRD collects census report along with discharge/death case sheets next day in the morning.

Based on data received from the medical case sheets and various departments and units like OPD, emergency laboratory, radiology etc., the Medical Records Department prepares reports which contribute to management information system of the hospital. These can be broadly classified into three categories:

a) **Routine** - Daily census report, monthly hospital statistical bulletins and annual hospital statistical report are prepared for the information of hospital management.

b) **Periodic Reports and Returns** - Periodic reports are submitted to Hospital Management, Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare and local Municipal Authorities.

c) **Information as and When Required by Higher Authorities**

Information required for replying to queries raised in Parliament from time to time and by the court of evidence, is furnished by the Medical Records Department.
3. Interaction Between Medical Officers And Medical Records Department

Medical Records in a hospital have two main uses. One is source of information for the management information system and the other is an aid in medical and health research.

Data collected by the Medical Records Department from all units and departments as well as in the medical case-sheets is very large and multifaceted. Thus a large amount of information, processed, sorted, and stored in the MRD is disseminated periodically. It is felt that very little use of this data base is made by medical officers and research workers as well as by the hospital management. Lack of knowledge about the working of the MRD and lack of confidence in MRD regarding retrieval of desired up-to-date information may be some of the reasons for this under use of MRD.

With a view to ascertain the facts, a questionnaire was administered to 50 Medical officers (30 senior residents 15 junior residents and 5 CDMOs) Forty-eight medical officers responded to the questionnaire. The responses received have been summarised in Tables 74, 75 & 76.
### Table 74

**Knowledge Of Medical Officers About MRD Procedures**

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Degree of Knowledge</th>
<th>Number of Doctors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Know everything in detail</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Have general knowledge but not the details</td>
<td>19</td>
<td>39.6</td>
</tr>
<tr>
<td>3.</td>
<td>Know very little</td>
<td>29</td>
<td>60.4</td>
</tr>
<tr>
<td>4.</td>
<td>Know nothing</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>48</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

### Table 75

**Frequency Of Visits To MRD For Completion Of Medical Records**

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Frequency of visits</th>
<th>Number of Doctors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Once a week</td>
<td>1</td>
<td>2.1</td>
</tr>
<tr>
<td>2.</td>
<td>Once a fortnight</td>
<td>21</td>
<td>43.75</td>
</tr>
<tr>
<td>3.</td>
<td>Once in three months</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>4.</td>
<td>Only on getting a reminder</td>
<td>14</td>
<td>29.15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>48</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 76

Data Retrieval From MRD For Academic Purposes

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Frequency</th>
<th>Number of Doctors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Five times or more</td>
<td>31</td>
<td>64.6</td>
</tr>
<tr>
<td>2</td>
<td>Less than five times</td>
<td>16</td>
<td>33.3</td>
</tr>
<tr>
<td>3</td>
<td>Never</td>
<td>1</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>

None of the medical officers admitted full knowledge of the functioning and procedures of the MRD. 19 (39.6%) had a general idea but not the details and 29 (60.4%) knew very little.

As per the standing instructions the medical officers should visit MRD for completion of case sheets at least once a fortnight or a week. It was found that only 1 (2.1%) visited once a week and 21 (43.75%) visited once a fortnight which makes 22 (45.85%) visit as per instructions. The rest 54.15%, i.e., more than half visited either in three months (25%) and 29.15% visited only on getting reminders.

It was also found that a large number of senior residents did use MRD for academic purposes. 31, i.e., 64.6% of the respondents visited MRD more than five times and 16 (33.3%) visited less than five times, only one mentioned
that he had never visited MRD for academic or research purposes. All these medical officers stated that MRD was prompt in giving desired information.

A separate record is maintained by MRD for the requests for data retrieval. From this record it was observed that majority requests for data retrieval are in connection with medico-legal cases for court attendance. Other requests are made for patients review on readmission or OPD/clinic by the medical attendant, by researches and by hospital administrative authorities in connection with complaints by patients or relatives. Number of instances of specific requests by doctors, hospital administrators during the year 1987 has been shown in Table No. 77.

Table 77

Requests For Data Retrieval During 1987

<table>
<thead>
<tr>
<th>Month</th>
<th>Medical Review</th>
<th>Admn. Authority</th>
<th>Research</th>
<th>Court Attendance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>February</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>March</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>April</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>May</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

Contd ...
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>5</td>
<td>2</td>
<td>8</td>
<td>13</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Sept</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>20</td>
<td>25</td>
<td>51</td>
<td>129</td>
<td></td>
</tr>
</tbody>
</table>

From the discussions with the administrative authorities of the hospital it was found that MRD is considered by the management as an independent department, and there is no need for daily or routine interaction with it. However, the management does keep a track of daily census report, monthly statistical bulletins and annual statistical report. But no machinery has been developed for critical analysis of these reports or information as a routine. This information is very useful for the queries made by DGHS and other authorities.

4. Conclusions

The detailed study of the Medical Records Department in Safdarjung Hospital revealed that this Department in the Hospital is well organised covering all the functional areas.
of the medical record service. The three principles of medical records viz., i) they must be accurately written, ii) properly filed and iii) easily accessible, are very well followed by the Department. It has developed a mechanism for controlling the system which is established around these principles. It's main purpose is welfare of patients mainly by helping the professionals to provide patient care effectively, promptly and in favour of the patients. But no evaluation system has been developed by the Hospital Administration for evaluating the functioning of the Department.

The procedures and documentation are well developed and well known to the staff working in the MRD. But it has been observed that all the efforts for automation have failed. The machines like Bradma Plate Machine, Alpha Index Machines were used only for a short time. These machines were found in nonfunctioning condition. It was found out from the staff working in the respective sections that these machines were not maintained properly and adequately, resulting in their disuse.

It was also found that there was no standard pattern in ward documentation which varied from ward to ward. There is duplication of certain documentation like the entries in admission registers, death registers, etc. There is no
clerical staff provided in any unit or ward for this documentation purpose. As a result the nurses are busy with this clerical work and remain away from the patients.

In the procedural set-up, the Burns and Plastic Surgery Department maintain their own records and the medical case sheets are submitted to main MRD only once in a month. This affects the discharge analysis.

The major bottlenecks in the medical records processing procedure were found to be the Incomplete Documentation Section and Coding Indexing Section. It was observed and reported by the staff that the entire process of completing case sheets takes about six months.

There is no process to ensure completeness of investigation reports. X-ray films, ECG etc. are not attached with the case sheets. These are handed over to the patients on their discharge.

Next to the Incomplete Documents Section, Coding and Indexing was found to be a major bottleneck in the processing of medical records. Index cards are prepared in sets for documents of one year. It was observed that the job of coding and indexing was one year or more behind the schedule. Thus submission of up to-date disease wise morbidity report and retrieval of medical research of recent
period was not possible. This is considered as a major drawback in the present annual system of the Medical Records Department.

Reports

With the present system of working, the daily census report can never be ready on the next day and can be prepared only on third day. The events are shown wardwise and not unitwise. Looking at the report one cannot discover occurrence of the events of admission, discharges, deaths and transfers in and out in a particular unit. This does not help the Hospital Administration to understand the utilisation, under-utilisation and over-utilisation of beds in a particular unit. Even though the census report is submitted daily to the management, the latter is apparently in no position to derive any inference and take any corrective action.

The MRD is also required to submit a monthly report on number of inpatients and deaths due to any communicable diseases to DGHS. But the MRD submits this report only once a year.

It was generally observed that most of the reports and returns which the MRD was required to submit to higher authorities, were either submitted late or not submitted as
a routine but, submitted only when asked for a specific period.

It was also found that even though the main users of the medical records were medical officers, still more than 50% of the medical officers interviewed, showed less interest in completing medical case sheets, and in helping the MRD for timely processing and providing relevant information. They found it boring, stereotype and non-innovative procedure.

The management functionaries use the information provided by the MRD least. The annual statistical report is referred to for preparation of budget for the next year.