

MANAGING PUBLIC  
SECTOR RECORDS

A Training Programme

# Managing Hospital Records



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INTERNATIONAL  
COUNCIL ON ARCHIVES



INTERNATIONAL RECORDS  
MANAGEMENT TRUST

MANAGING PUBLIC SECTOR RECORDS: A STUDY PROGRAMME

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## MANAGING HOSPITAL RECORDS

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## A STUDY PROGRAMME

General Editor, Michael Roper; Managing Editor, Laura Millar

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### Managing Hospital Records

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### **International Records Management Trust**

12 John Street  
London WC1N 2EB  
UK  
Tel: +44 (0) 20 7831 4101  
Fax: +44 (0) 20 7831 7404  
E-mail: [info@irmt.org](mailto:info@irmt.org)  
Website: <http://www.irmt.org>

# **MPSR Project Personnel**

## **Project Director**

Anne Thurston has been working to define international solutions for the management of public sector records for nearly three decades. Between 1970 and 1980 she lived in Kenya, initially conducting research and then as an employee of the Kenya National Archives. She joined the staff of the School of Library, Archive and Information Studies at University College London in 1980, where she developed the MA course in Records and Archives Management (International) and a post-graduate research programme. Between 1984 and 1988 she undertook an onsite survey of record-keeping systems in the Commonwealth. This study led to the foundation of the International Records Management Trust to support the development of records management through technical and capacity-building projects and through research and education projects.

## **General Editor**

Michael Roper has had a wide range of experience in the management of records and archives. He served for thirty-three years in the Public Record Office of the United Kingdom, from which he retired as Keeper of Public Records in 1992. He has also taught on the archives courses at University College London and the University of British Columbia, Canada. From 1988 to 1992 he was Secretary General of the International Council on Archives and since 1996 he has been Honorary Secretary of the Association of Commonwealth Archivists and Records Managers (ACARM). He has undertaken consultancy missions and participated in the delivery of training programmes in many countries and has written extensively on all aspects of records and archives management.

## **Managing Editor**

Laura Millar has worked extensively not only as a records and archives management consultant but also in publishing and distance education, as an editor, production manager and instructional designer. She received her MAS degree in archival studies from the University of British Columbia, Canada, in 1984 and her PhD in archival studies from the University of London in 1996. She has developed and taught archival education courses both in Canada and internationally, including at the University of British Columbia, Simon Fraser University and the University of Alberta. She is the author of a number of books and articles on various aspects of archival management, including *A Manual for Small Archives* (1988), *Archival Gold: Managing and Preserving Publishers' Records* (1989) and *A Handbook for Records Management and College Archives in British Columbia* (1989).

## **Project Steering Group**

Additional members of the Project Steering Group include

Association of Records Managers and Administrators (ARMA International):	Hella Jean Bartolo
International Council on Archives:	George MacKenzie
Project Management Consultant:	Tony Williams
University College London:	Elizabeth Shepherd
Video Production Co-ordinator:	Janet Rogers

## **Educational Advisers**

Moi University:	Justus Wamukoya
Universiti Teknologi Mara:	Rusnah Johare
University of Botswana:	Nathan Mnjama
University of Ghana:	Harry Akussah, Pino Akotia
University of New South Wales:	Ann Pederson
University of West Indies:	Victoria Lemieux

## **Project Managers**

Lynn Coleman (1994-6)  
Laura Millar (1996-7)  
Elizabeth Box (1997-8)  
Dawn Routledge (1999)

## **Production Team**

Additional members of the production team include

Jane Cowan  
Nicki Hall  
Greg Holoboff  
Barbara Lange  
Jennifer Leijten  
Leanne Nash

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# **Managing Hospital Records**

## **Principal Author**

### ***GEOFFREY YEO***

Geoffrey Yeo has worked in the field of archives and records management since 1976, and has a wide range of practical experience in the local government, health care and academic sectors. Until 1999, he was Information and Archives Manager at the Royal College of Physicians of London. While there, he planned and implemented a process of major change, setting up a records management programme, establishing a current information service, designing a corporate intranet and introducing an integrated system for automated management of archive and library materials. From 1995 to 1997 he was a part-time Lecturer at the School of Library, Archive and Information Studies, University College, London. Since 1994 he has also acted as a consultant to the International Records Management Trust, undertaking hospital records projects in The Gambia and Ghana. He has published widely both in the field of archives and records management and on historical matters. He is now a freelance Archivist/Records Manager.

## **Contributors**

Richard Browne

Andrew Griffin

## **Reviewers**

Barbara Craig, University of Toronto, Canada

Judith Etherton, St Bartholomews Hospital Archives

Victoria Lemieux, University of West Indies, Jamaica

Ann Mitchell, Monash University, Australia

Rod Stone, St George's Hospital, London, UK

John Walford, (formerly) Public Record Office, UK

## **Testers**

Moi University, Kenya

University of Botswana

University of Legon, Ghana



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# **INTRODUCTION TO MANAGING HOSPITAL RECORDS**

Hospitals deal with the life and health of their patients. Good medical care relies on well-trained doctors and nurses and on high-quality facilities and equipment. Good medical care also relies on good record keeping. Without accurate, comprehensive up-to-date and accessible patient casenotes, medical personnel may not offer the best treatment or may in fact misdiagnose a condition, which can have serious consequences. Associated records, such as X-rays, specimens, drug records and patient registers, must also be well cared for if the patient is to be protected. Good records care also ensures the hospital's administration runs smoothly: unneeded records are transferred or destroyed regularly, keeping storage areas clear and accessible; and key records can be found quickly, saving time and resources. Records also provide evidence of the hospital's accountability for its actions and they form a key source of data for medical research, statistical reports and health information systems.

It is still common in many hospitals to give each department total autonomy in the management of its records. Unfortunately, this decentralisation of records care often leads to poorly designed filing systems, loss of information, premature destruction or unnecessary retention of records and ultimately to inefficiency and wasted resources. Above all, patient care will be adversely affected if correct records are not maintained or if records are inadequately managed or if there is no means of co-ordinating the care the same patient receives in different departments. A structured and effective records management programme, covering all departments and all records irrespective of media, should be the aim of every hospital.

A comprehensive records programme will help to ensure that staff have access both to clinical information and to administrative records on a wide range of issues, including policy, precedents, legal rights and obligations, personnel, finance, buildings, equipment and resources. Besides controlling records needed for current business, the programme will ensure that the hospital can meet its legal and financial obligations and can defend its actions when necessary.

*Managing Hospital Records* addresses the specific issues involved in managing clinical and non-clinical hospital records, indicating where particular approaches are needed to meet the specific requirements of a records service within a hospital environment. While *Managing Hospital Records* is primarily concerned with the records of general (or 'acute') hospitals, much of its content is also applicable to the management of records in other health care facilities, such as long-stay hospitals, mission hospitals, sanatoria, community clinics and local health centres.

This module is written particularly for those already working in, or recently appointed to, hospital posts carrying managerial responsibility for records and also for managers in other sectors interested in hospital records issues. Activities are designed on the assumption that students are working in a hospital record-keeping environment or have access to hospital records. Those students who do not have access to hospital-related records may choose to adapt the activities to suit hypothetical situations.

*Managing Hospital Records* builds on the general principles outlined in the core modules of the Management of Public Sector Records Study Programme. Students of *Managing Hospital Records* are strongly urged not to begin the module until they have first completed work on all core modules in the Management of Public Sector Records Study Programme or are otherwise comfortable with the concepts and practices outlined in those modules.

*Managing Hospital Records* consists of five lessons:

- Lesson 1: The Context of Hospital Records Management
- Lesson 2: Management of Patient Casenotes
- Lesson 3: Management of Other Hospital Records
- Lesson 4: Appraisal, Storage and Access Issues
- Lesson 5: What to Do Next?.

## AIMS AND OUTCOMES

### **Aims**

This module has four primary aims. These are

1. to introduce the concept of hospital records management and the context within which hospital records management programmes operate
2. to explain the management of patient casenotes, including discussion of filing and numbering systems, arrangement of records and management of indexes
3. to outline the management of a variety of other hospital records, including X-rays, specimens, patient registers, administrative and policy files, financial and personnel records, nursing records, pharmacy records and educational records
4. to explain the processes involved with appraisal and storage of and access to hospital records.

## Outcomes

When you have completed this module, you will be able to

1. explain the nature of hospital records management and the context within which hospital records management programmes work
2. understand the steps involved in the management of patient casenotes
3. understand the principles behind the management of other hospital records, such as X-rays, specimens, patient registers, administrative and policy files, financial and personnel records, nursing records, pharmacy records and educational records
4. explain the processes involved with appraising hospital records, ensuring adequate storage and providing access.

## METHOD OF STUDY AND ASSESSMENT

This module of five lessons should occupy about 60 hours of your time. You should plan to spend about

- 12 hours on Lesson 1
- 12 hours on Lesson 2
- 15 hours on Lesson 3
- 12 hours on Lesson 4
- 9 hours on Lesson 5.

This includes time spent doing the reading and considering the study questions.

At the end of each lesson there is a summary of the major points. Sources for additional information are provided in Lesson 5.

Throughout each lesson, activities have been included to help you think about the information provided. Each activity is a 'self-assessed' project; there is no 'right' or 'wrong' answer. Rather, the activity is designed to encourage you to explore the ideas presented and relate them to the environment in which you are studying or working. If you are studying these modules independently and are not part of a records or archives management organisation, you should try to complete the activities with a hypothetical situation if possible. If the activity suggests writing something, you should keep this brief and to the point; this is not a marked or graded exercise and you should only spend as much time on the activity as you feel necessary to understand the information being taught. At the end of each lesson are comments on the activities that will help you assess your work.

Following the summary at the end of each lesson are a number of self-study questions. Note that these self-study questions are designed to help you review the material in this module. They are not intended to be graded or marked exercises. You should complete as many of the questions as you feel will help you to understand the concepts presented. External assessments, such as assignments or exams, will be included separately when this module becomes part of a graded educational programme.

## WHAT RESOURCES WILL YOU NEED?

Students working through this module should have access to hospital records if possible. If you are not employed in a hospital, does your archival institution care for hospital records? Does your records office or records centre have close links with the national, regional, or local hospital, so you can study the care of those records within the hospital environment? Whenever possible, it is ideal to draw on real examples, particularly in a module such as this one, which focuses specifically on the care of records in hospitals.

If you do not have direct access to hospital records or are not working within a hospital records environment, you should make arrangements with a hospital in your area to visit them periodically and examine their record-keeping systems. Ideally, you should develop a working relationship with a representative of the hospital, who can answer questions and provide information about record-keeping practices within the institution. Alternately, you may be able to seek out a colleague with experience in hospital records care who can offer support and advice as you study the module. This person may also help to provide information about hospital administration so that you can work through the lessons and activities in a more meaningful way.

### Case Studies

The following case studies may be useful additions to this module.

Case Study:

- 19: Henry Kemoni, Kenya, 'Managing Medical Records in Kenya: A Case Study of the Moi National Referral and Teaching Hospital, Eldoret'
- 20: Barbara Craig, Canada, 'Central Childrens' Hospital Merger and the Archives'

# **THE CONTEXT OF HOSPITAL RECORDS MANAGEMENT**

Lesson 1 examines the context within which hospital records management operates. While many government agencies and private-sector institutions encounter similar records management concerns, hospitals also have to deal with the particular needs of the medical community: that is, with the needs of physicians, surgeons, nurses, medical social workers, physiotherapists and others involved in the care of patients in a hospital environment.

This lesson discusses the following issues:

- the relationship between hospitals and government
- the internal organisation of hospitals
- the types of records found in hospitals, including patient casenotes, X-rays, pathological specimens and preparations, patient indexes and registers, pharmacy and drug records, administrative records, nursing records and educational records
- the principles of hospital records management
- the nature of health-related information
- the role of the records manager
- the legal status of hospital records
- the relationship of hospital records to the national or other records and archives institution.

## **HOSPITALS AND GOVERNMENT**

The core modules of this programme are written primarily for records managers and archivists working in or for government ministries or departments (although the principles outlined are generally equally applicable in the private sector). It is essential for records managers to understand the context within which the records under their care have been created. Records managers working in a hospital environment also need to be aware of the different administrative systems found in

hospitals and the particular relationship between hospital administrations and the central government.

*Records managers need to be aware of the different administrative systems found in hospitals.*

State-run hospital services follow a wide variety of models, arising partly from the specialist nature of their work and partly from the numbers of separate hospitals and other health care facilities that may exist within a country and their geographical distance both from each other and from the seat of government.

Each hospital may form an agency within a Ministry of Health, with the chief administrator of the hospital reporting directly to the permanent secretary, or his or her equivalent, or to a deputy. Alternatively there may be an intermediate agency operating between the individual hospitals and the ministry, with the hospital administrator reporting to it; or each hospital or group of hospitals may have its own governing body or management board with substantially devolved powers. Hospital staff may have the status of civil servants employed by the ministry or they may be employees of the intermediate agency or of the hospital's governing body, in which case they may or may not have the status of civil servants.

While all hospitals are subject to the health legislation in force in the country concerned, it is normal to find some devolution of management responsibility. The model followed in a particular country or region will determine the precise legislative framework within which each hospital operates, the degree to which it conforms to civil service practice and the freedom enjoyed by hospital administrators to determine their own policies and procedures.

In many countries there are also hospitals run by charitable or commercial organisations. Such hospitals are not subject to managerial control by a central government, although they are of course subject to any overarching health legislation within the country. Some charitable hospitals may receive state funding in one form or another and may accept some form of accountability to the central government in return. The guidance provided in this module is primarily intended for state-run hospitals, but much of the information included here will also be appropriate in other sectors.

*While all hospitals are subject to the health legislation in force in the country concerned, it is normal to find some devolution of management responsibility.*



### Activity 1

Write a brief description of the relationship between your hospital and the governing agency responsible for it, whether this be the local or central government or a private agency or board. Include information on reporting relationships between the hospital's administration and the governing agency, as appropriate.

If you do not work within a hospital environment, you should visit a local hospital and discuss its organisation with a representative and then write a brief description of the information gleaned.

## INTERNAL ORGANISATION OF HOSPITALS

The internal administrative structure of hospitals in most Commonwealth countries is broadly derived from practice in the United Kingdom. The exact arrangements will differ from one country to another, and varying organisational practices will sometimes be found in different hospitals within the same country. However, certain areas of uniformity can be identified.

Hospitals normally have one or more central administrative departments, dealing with policy, personnel, finance and estate matters, if responsibility for these issues has been assigned to the individual hospital. Hospitals will also deal with institutional services such as cleaning, catering, portering and laundry. Overall management responsibility for these services within the hospital, or within a group of hospitals, will normally rest with the hospital administrator, who may have a title such as 'hospital secretary', 'general manager' or 'chief executive'.

*Overall management responsibility for hospital services will normally rest with the hospital administrator.*

Where the hospital or group has its own governing body, effective control over the majority of institutional matters may rest with that body. The administrator may act as an agent for the governing body, or the administrator may have substantial executive powers of his or her own.

Where there is no governing body and the administrator has a direct link to a ministry or agency of central government, he or she is likely to have considerable powers and responsibilities.

There are also likely to be various standing committees in the hospital. For example, there may be a principal medical committee to advise the hospital's management on clinical matters. Many hospitals will have financial, establishment and general purposes committees.

Besides these, ad-hoc committees may be established from time to time to look into particular issues of current interest. In addition, there are likely to be senior staff — for example, finance or works officers — with certain executive powers.

In addition to its administrative departments, the hospital will have a number of clinical departments, in which the majority of staff will be employed. The clinical departments may be under the control of the hospital administrator, or there may be a separate post, with a title such as ‘Medical Superintendent’, ‘Medical Director’, to whom the heads of the clinical departments report. However senior medical staff (often known as ‘consultants’) in many hospitals have considerable independence from the administrative hierarchy. The relationship of the medical director to the hospital administrator and to any governing body will also vary according to local conditions.

The nursing service will be under the control of a chief nurse (or equivalent title such as ‘principal nursing officer’ or ‘matron’). In-patients will be accommodated in wards, often divided by specialty and by sex. Each ward is likely to be managed by a sister or charge nurse, responsible either to the chief nurse or to a subordinate. The working relationships between the chief nurse and the hospital administrator or medical director and between the ward sisters and the medical staff and heads of other departments will vary widely between hospitals. The only common factor is that in almost every case they will prove to be complex.

The arrangements for out-patients may vary widely from one hospital to another. Many hospitals have specialist out-patient clinics, where the same patient may reattend for continuing treatment over an extended period. These clinics are usually headed by consultants who are specialists in one or more fields. Other hospitals may simply have a general clinic, headed by a generalist, where patients without appointments are treated for relatively minor ailments. There may also be an accident and emergency department or casualty department. The functions and relationships of the various out-patient departments within a hospital are generally matters of local tradition and convenience.

In many countries, individual hospital departments enjoy a substantial degree of independence, with only nominal supervision by the administrator or medical director. Some hospitals have recently adopted the American system of clinical directorates, in which several wards and departments are grouped within a directorate with a clinical director exercising considerable authority over each of them.

Hospitals that provide medical or nursing education or research facilities will have a further set of administrative structures for the management of these activities. Once again, wide variations in practice will be found. In some instances the medical or nursing school will be an integral part of the hospital, while in other cases it will be an administratively separate body or a faculty within a university, subject to the university’s governance. Where the school is not constitutionally a part of the hospital, formal or informal working arrangements will be in place to allow educational activity to be coordinated with the care of patients.

*In many countries, individual hospital departments enjoy a substantial degree of independence.*

### **Activity 2**

Write a brief description of the organisational structure of your hospital or draw an organisational chart outlining the main units in the hospital and their place in the hierarchy.

If you do not work within a hospital environment or have access to information about a hospital's organisation, you should visit your hospital representative or colleague and learn information from him or her about the organisational structure of their institution so that you can write a description or prepare a chart.

## **TYPES OF RECORDS REQUIRED IN HOSPITALS**

Below is a brief overview of the types of records found in a typical general hospital.

Note that in practice not all of these records are necessarily the direct responsibility of a single hospital records manager or medical records administrator. While the ideal is that the hospital records manager should be responsible for all records in the hospital, in practice technicians at the local level may maintain records such as X-rays and pathological preparations. Approaches to the management of the various record types are discussed in more detail in later lessons.

*Ideally, the hospital records manager will be responsible for all records in the hospital, but in reality such records as X-rays and pathological preparations may be maintained by technicians at the local level.*

It should be noted that many types of records created to support diagnosis and treatment are not necessarily the direct responsibility of a single hospital records manager or medical records administrator, but are maintained at the departmental level. While the ideal is that the hospital records manager should be responsible for all records in the hospital, in practice such records as X-rays and pathological preparations may be maintained by technicians at the local level.

*Developments in information technology are discussed further in the Managing Electronic Records and Automating Records Services and in Lesson 4 of this module.*

## Patient Casenotes

*Patient casenotes form the largest and most complex series of records required in a hospital.*

Casenotes are created or written when a patient comes into contact with any member of the medical staff. Notes may also be created to record contact with nurses, physiotherapists and others involved in patient care. Casenotes include patient histories, diagnostic test results and temperature, blood pressure and other charts, as well as records of operations and other forms of treatment.

*For detailed information about the management of patient casenotes, see Lesson 2.*

In most hospitals, the notes about each patient are kept together in one file bearing the patient's name and other personal details. The file may also contain referral letters from health centres or family doctors and other documents relating to the patient's condition. Over a period of time, the documentation will build up to form a complete medical history of the patient. The principle of maintaining a single file for each individual patient is crucial to the continuity of patient care.

Besides notes created when individuals are admitted to hospital wards as in-patients, notes should also be generated when they attend as out-patients. Specialist out-patient clinics may create extensive notes about each individual. All these records need to be kept on the same individual patient's file. Accident and emergency departments and general clinics are likely to produce fewer notes, and in some hospitals they may create no notes at all. The records created in out-patient departments will vary according to local circumstances; in general, clinic attendances produce a smaller quantity of notes per patient than ward admissions.

### Activity 3

Examine a sample of patient casenotes files and write a list of the typical contents of each. Identify general types of information kept, such as referral letters, clinical notes, pharmacy or drug information and so on.

How are the records filed? In chronological order from back to front, or front to back? Or are they filed by type of record or by another method? Are the records held together within the file with a clip, tag or tie, or are they loose? Write down two steps you would take to improve the organisation of the casenotes file.

## **X-rays**

X-ray films are large-size photographic records produced for diagnostic purposes in response to a request from a clinician. They form part of a patient's case history, but because of their size they cannot be kept in the files containing the casenotes. X-rays are usually filed separately, according to a unique identifying number that is linked with the patient's name. Requests for X-rays can be made on a printed form and it is usual for the same form to be used subsequently for a written report based on examination of the X-ray. This form or a copy of it is placed in the casenote file.

*For detailed information about the management of X-rays, see Lessons 3 and 4.*

### **Activity 4**

Write a brief description of how X-rays and request documents are filed in your hospital or the hospital you are examining for this module.

Write down two ways in which you might change the management of X-rays to improve their care.

## **Pathological Specimens and Preparations**

Specimens taken from patients (such as plasma, serum, bodily fluids, swabs, wet tissue or whole blood samples) and the preparations made from them for pathological examination and diagnosis are also part of a patient's case history. However, as with X-rays, the format of specimens and preparations makes it impossible for them to be housed with the casenotes. Specimens and preparations are usually kept in labelled boxes or on shelves. Again, it is usual for a combined request and report form to be used and for this form, or a copy of it, to be placed in the patient's file.

*For detailed information about the management of pathological specimens and preparations, see Lessons 3 and 4.*

### **Activity 5**

Write a brief description of how pathological specimens and preparations are maintained in your hospital or the hospital you are examining for this module.

Write down two ways in which you might change the management of pathological specimens and preparations to improve their care.

## Patient Indexes and Registers

One or more indexes should be maintained, either in traditional card index form or electronically, containing the names and other appropriate details about the hospital's patients. A single central index containing data about all its patients may be known as the 'master patient index'. This index serves as a finding aid for the patient casenotes and may also provide location information for X-rays and other diagnostic documentation. In addition to providing access to the casenotes and related documents, the index forms an important record in its own right. In some hospitals local indexes may also be maintained in individual departments.

*Indexes serve as finding aids for the patient casenotes.*

Besides the indexes, various chronological registers of patients may be maintained, either centrally or in individual departments. Any specialist department is likely to maintain a day book or register in which is recorded information about each patient seen or request received. Chronological registers may also be used by the hospital to record admissions, discharges, births and deaths of patients.

*The management of patient indexes is discussed in more detail later in this lesson.*

### Activity 6

Write a brief description of how patient indexes are maintained in your hospital or the hospital you are examining for this module.

Write down two ways in which you might change the management of patient indexes to improve their care.

## Pharmacy and Drug Records

The prescription and supply of drugs generates a variety of records, including pharmacy stock, ordering and dispensing records, requests for drugs from wards and departments, drug administration records and prescriptions for individual patients. The receipt and issue of all drugs should be recorded. Records about drugs are often held by both the pharmacy and the ward, and so cross-referencing and uniform management is important to ensure that documentation can be retrieved easily.

Information about dangerous or 'controlled' drugs is often recorded in particular detail in both the hospital pharmacy and in individual wards and departments, in order to ensure proper and appropriate use of these drugs. In many countries there will be statutory requirements for the creation and retention of appropriate pharmacy records.

*For detailed information about the management of pharmacy and drug records, see Lesson 3.*

### **Activity 7**

Write a brief description of how pharmacy and drug records are maintained in your hospital or the hospital you are examining for this module.

Write down two ways in which you might change the management of pharmacy and drug records to improve their care.

## **Central Administrative Records**

Minutes and papers of major committees and of the governing body, if there is one, serve as the central record of the hospital's affairs. The hospital administrator's files and correspondence will reflect the implementation of policy and also the hospital's day-to-day activities in so far as they need his or her direction.

*A hospital's administrative records will be little different from those found in non-medical organisations of equivalent size.*

Hospitals also require records relating to finance, personnel, buildings, accommodation, stores and other such services, although they will be little different from those used in non-medical organisations of equivalent size. Besides these records, annual and statistical reports will probably be prepared, providing summaries of hospital activity. Legal case files and duty officers' logs are other key hospital records. Duty officers' logs may be used to record unexpected incidents which occur when day-time hospital staff are not on duty. The care of administration records is discussed in more detail in other modules in this study programme.

*See the core modules for care of administrative and other records not specifically discussed within this specialist module.*

## **Administrative Records in Clinical Departments**

The range of records kept by clinical and paraclinical departments will depend on the organisation of the hospital and the extent to which individual departments (or groupings of departments under a single director) are independent of the hospital's central authority.

*The greater the independence of the clinical department, the more extensive and significant its records.*

If clinical policy is set at the department level, the records of the departmental head will take on greater importance. If the head is entirely subordinate to a medical director or hospital administrator, the definitive policy records will be held at the centre. Regardless of the arrangement, however, all heads of departments and senior medical staff will probably keep their own papers on administrative and professional matters.

### **Activity 8**

Write a brief description of how central and departmental administrative records are maintained in your hospital or the hospital you are examining for this module.

Write down two ways in which you might change the management of administrative records to improve their care.

## **Nursing and Ward Records**

The office of the chief nurse will generate records of the type found in any office with an executive or administrative function: correspondence, reports, minutes of meetings, staff records and so on. The chief nurse may be expected to keep copies of any rules and procedures issued for nursing staff or for patients: these are important records, though unlikely to be bulky.

In the wards, records may be produced in larger quantity. Wards may maintain their own admission registers, in addition to the hospital's central record of admissions and discharges. Property and clothing books may be used to provide a record of any possessions received into custody when patients are admitted and to document their return to the patient or his or her representative on discharge or death. Nurses may be required to write activity reports, typically in a book kept on the ward for inspection by their managers, and they may also keep records of nursing care for their own and their colleagues' use. As noted above, drug records should also be maintained in each ward.

### **Activity 9**

Does your hospital maintain nursing records or ward records? If so, write a brief description of how these records are maintained. If not, explain how and where these records are created and kept.



## Educational Records

The officers, boards and committees of medical and nursing schools will produce their own records: minutes, correspondence, reports and so on. Autonomous schools will also produce the usual range of finance, personnel, estates and accommodation records.

*Educational records may also be found if there is a teaching component within the hospital.*

The school may issue an annual report and a calendar or handbook setting out details of courses. Records relating to the students themselves — for example, applications, study records, examination results, payment of fees, records of attendance, prizes and scholarships — will also be generated.

### Activity 10

Does your hospital operate a medical or nursing school? Is it organisationally part of the hospital or is it administered by another agency, such as a university?

If your hospital does operate such an educational facility, write a brief description of how educational records are maintained and whether they are cared for by the hospital or by another agency.

## PRINCIPLES AND PRACTICE OF HOSPITAL RECORDS MANAGEMENT

*The principles of records management set out in earlier modules in this programme can and should underpin every stage of a hospital records programme.*

However, at a practical level the civil service model has to be adapted to work within a hospital context, while records are in current use and while they are being kept for administrative or legal purposes.

*The care of hospital archives is covered in Lesson 4.*

## Organisational Structures

In many countries it is typical for hospitals to employ one or more ‘medical records officers’ to manage a centralised registry system for patient casenotes. However the decentralised nature of much other hospital record keeping has often led hospital administrators to assume that no formal records management structures are needed other than to care for casenotes; this assumption is often found even in hospitals where filing clerks are employed to deal with the records of administrative departments.

*If records are to be managed efficiently throughout their life, a structured record-keeping system must be in place in all parts of the hospital.*

The principles of records management set out above, and in the earlier modules in this programme, can and should underlie every stage of a hospital records programme. However, at a practical level the civil service model has to be adapted to work within a hospital context, while records are in current use and while they are being kept for administrative, legal or clinical purposes.

The centralised management of patient casenotes closely parallels the practical models recommended for civil service records, and in this module this practice is encouraged. However the records centre model suggested for the civil service may need some modification in a hospital context. It is unlikely that records centres operated by a national or other public records and archives institution could also serve a nation’s hospitals. Many of a country’s hospitals will be nowhere near a records centre, and all will frequently require access to older records at very short notice. Where possible, hospitals should make local arrangements for storage of their semi-current records.

Although other models are possible, this module advocates the establishment of a records service with hospital-wide responsibilities for both current and semi-current records. Where hospitals are administered as a group, these responsibilities can usefully be extended across the group as a whole. The records department should have its own staff and accommodation. Its responsibilities for records care should be endorsed by senior management and documented in standing orders or similar hospital regulations.

The major part of the work of the records service will be in dealing with patient casenotes and with related series such as admission and discharge records. As explained in Lesson 2, casenote files are created when new patients are registered, and thus it is appropriate for the records service to have responsibility for the registration of patients or, at the very least, a close working relationship with reception and registration staff. Within the records storage areas, by far the largest part of the available space is likely to be occupied by patient casenotes.

Many hospitals have a medical records committee, which, if properly constituted, can provide strong support to the records manager. Typically, the medical records committee will be responsible for approving the design and format of health records

and forms, reviewing the quality of information in the records, dealing with matters relating to the storage and retention of records and monitoring their retrieval rate. The suggested membership of the medical records committee is a senior hospital manager, representatives from the various clinical services, a representative from the nursing staff and the records manager.

*Ideally, the records service should have direct control of the storage and management of all hospital records from the time of their creation.*

The records service control the storage and management of all hospital records. However, the kind of administrative structures described above do not support the use of a central registry to control current records other than casenotes. Indeed in the past the tradition of relative independence of departments from the central administration has led to great diversity of practice, much of it unsystematic.

Although most hospital departments are fairly small (by civil service standards) and produce relatively few records, each has distinct functions and there is in fact little need for cross-departmental access to active records other than casenotes. With each department often being physically separate from other parts of the hospital, it is generally necessary to maintain a decentralised current filing system in each section of the hospital.

For these reasons, the hospital records service often does not have line management responsibility for current records in departmental filing systems, but the records management office can still be expected to exercise a role in maintaining professional standards for all current records. Where possible, hospital managements should be encouraged to give the records service a formal professional responsibility for departmental systems. If this structure can be established, filing staff in departments will be managerially accountable to their departmental supervisor but will be professionally guided by the head of the hospital records service to ensure the maintenance of best practice.

Some hospital departments generate relatively small quantities of records and will be unable to justify the employment of dedicated filing staff. In this situation the role of the records department may be purely advisory. Nevertheless all departments should be strongly encouraged to assign responsibility for their records to nominated members of staff, even if this assignment forms only a part of their overall duties. The nominated individuals should be made responsible both for current filing and for transferring material to the hospital records department at the semi-current phase.

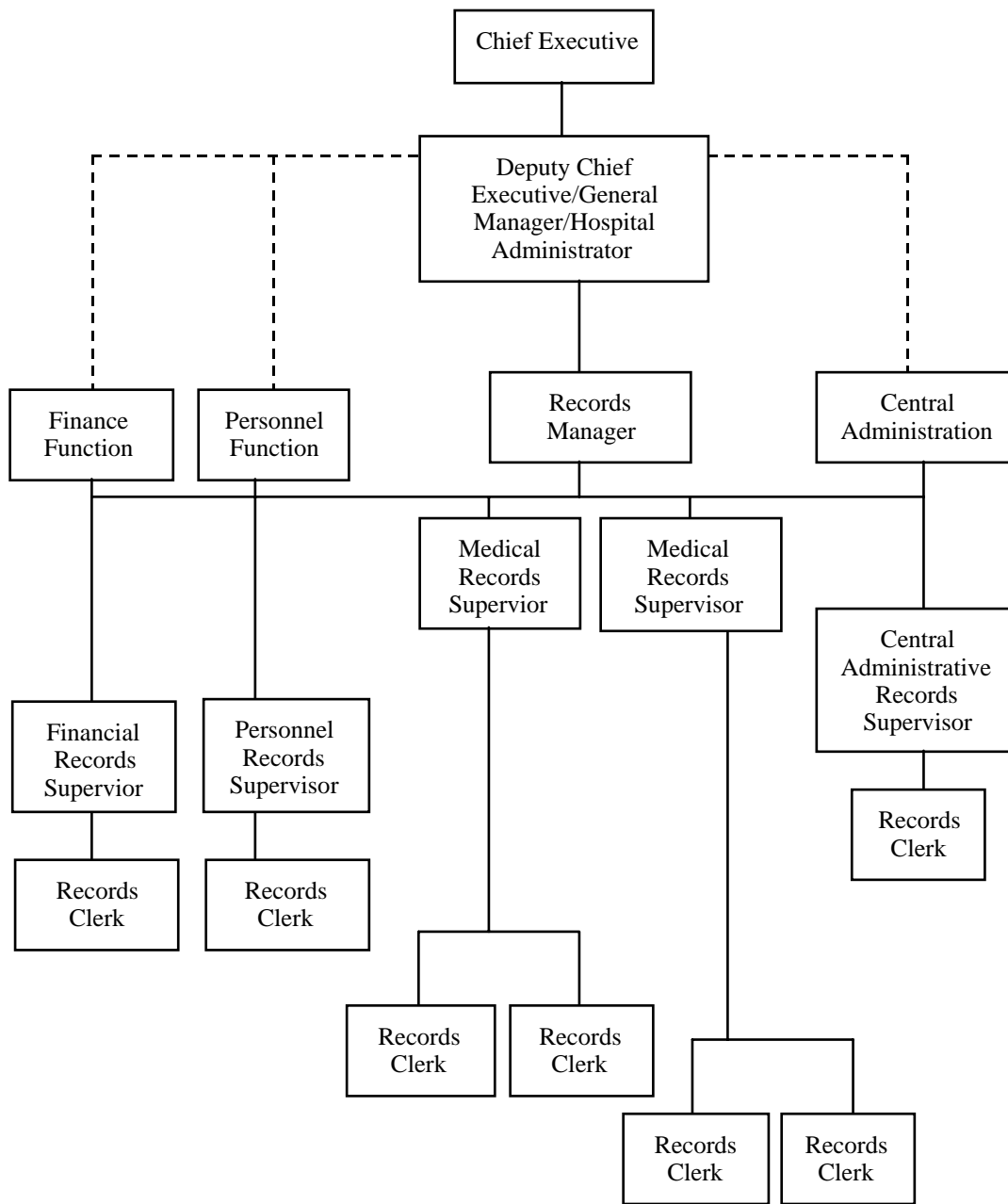
The diagram below in Figure 1 illustrates the management structure of a well-organised, centralised hospital records service.

The model proposed here differs in a number of important respects from the typical 'medical records department' found in many hospitals. This model will not always be practicable, but where it can be introduced it will broadly parallel, on a smaller scale, the system for central government agencies discussed in other modules in the study programme.

*Even if the hospital records service often does not have line management responsibility for current records in departmental filing systems, the records management office should still exercise a role in maintaining professional standards for all current records.*

### **Activity 11**

Write a brief description of the records management systems as they presently exist in your hospital. Indicate which parts of the function are centralised or decentralised, approximately how many people are involved, whether records management tasks are defined in policies or procedures documents and if records are regularly transferred to a centralised storage area or records centre.



*Figure 1: Management Structure of a Hospital Records Service*

# RECORDS MANAGEMENT AND THE MANAGEMENT OF HEALTH INFORMATION

Like any organisation, a health care service has a wide range of information requirements. Records management meets a substantial part of these, but others are met by the collection and analysis of data and the production of statistics or by access to externally generated information sources whether in printed or electronic form. Facilities for the provision of published information are normally provided in libraries, but in many health care institutions the management of data and statistics is considered part of the 'medical records' function. These tasks are ideally the responsibility of the statistician and the data manager: records management and statistical analysis are different skills. Nevertheless there is a strong case for locating the records department within a wider information division responsible for all aspects of information management, including library and data management services.

*The need for data analysis, statistical information and library services will to some extent depend on the size and function of the hospital.*

Large teaching hospitals are likely to need specialised data analysis providing detailed information for health care planning, administrative purposes and research, as well as a substantial library to support staff research interests, teaching and study programmes.

In recent years information management has acquired an increasingly high profile in the world of health care. This module is not the place for a full discussion of health information issues, but it is worth noting here that the need for information based on statistical data has grown in response to the requirements of aid donors and in recognition of the value of accurate and timely information for health service planning and budgeting. In this area, records departments have an important role to play.

## **Data Collection and Diagnostic Coding**

A large proportion of the data required for information management purposes is derived from activities taking place within the hospital, and not least from the various interactions between hospital staff and patients. There is often a requirement for summary information about the numbers of patients attending the hospital in a given year, or the numbers who fall within particular age groups or live in particular districts of the country. The raw data aggregated to provide this information can most easily be collected when patients are registered. Automated systems for the collection, aggregation and analysis of data are increasingly available, but in many countries these are still in their infancy and manual tally sheets are often maintained

by reception or registration staff. In some instances the data are obtained by counting and totalling up relevant entries in patient registers.

There will almost certainly be a further requirement for data about the number of patients who have been diagnosed with or died as a result of particular diseases. This data may be aggregated to provide monthly or yearly totals for a hospital or group of hospitals, or may be combined with other data, such as information relating to the ages or districts of residence of patients, to allow more sophisticated analysis of morbidity and mortality trends. Clinical data may also be combined with financial data to provide information about the costs of treatment.

Data on patients' diagnoses can be collected using tally sheets, and in many hospitals out-patient morbidity statistics are derived from data collected this way in the various clinics. Particularly in the case of in-patients, however, data can be obtained more reliably from the patients' casenotes, where the clinicians' final diagnoses should be recorded. Each diagnosis can be classified in accordance with a recognised disease classification scheme.

By far the most widespread classification scheme is the *International Classification of Diseases*, or *ICD*, which is regularly revised and updated. The *ICD* is designed for statistical analysis of data to support study of the incidence of disease and treatment, as well as for strategic planning; the *ICD* is used by countries that are members of the World Health Organisation to compile morbidity and mortality statistics for international comparison. Another classification scheme, produced by the Office of Population Censuses and Surveys in the United Kingdom and known as *OPCS*, is commonly used to classify surgical operations.

*The ICDS is used by may hospitals around the world.*

The process of classification is usually known as 'clinical coding' or 'diagnostic coding' because the *ICD* assigns an alphanumeric code to each specific diagnosis. Coding is a skilled activity requiring training in the use of the relevant classification schemes. Classification is undertaken after the patient has been discharged or died, when the casenotes are no longer required on the ward but before they are returned to storage.

There will almost certainly be a further requirement for data about the number of patients who have been diagnosed with or died as a result of particular diseases. This data may be aggregated to provide monthly or yearly totals for a hospital or group of hospitals. The data may also be combined with other data, such as information relating to the ages or districts of residence of patients, to allow more sophisticated analysis of morbidity and mortality trends. Clinical information may also be combined with financial data to provide information about the costs of treatment.

### Activity 12

Write a brief description of how health information is managed in your hospital. Who is responsible for statistical analysis? Who requests this information? Has the interest in health information increased, decreased or stayed the same over the last five or so years? Write down three reasons you think that health information has become more or less needed by the hospital, the central authorities, medical researchers or the public.

## THE HOSPITAL RECORDS MANAGER

Whether or not the records manager's post forms part of a larger information division, the records manager should have sufficient status within the hospital to be able to negotiate effectively with the heads of other departments. Either the records manager or the information manager to whom he or she reports should have direct access to the most senior management levels. These issues, together with the role of the records manager in setting standards, monitoring performance and promoting the service to users, are discussed more fully in earlier modules in the study programme; the principles that apply to the care of civil service records are equally applicable in hospitals.

*For more information on the role of the records manager, see particularly Developing Infrastructures for Records and Archives Services and Managing Resources for Records and Archives Services.*

Those responsible for staffing a hospital's information division should recognise the various specialist skills necessary for effective functioning. Data analysts, statisticians and librarians have different skills from records managers, and in many hospitals all will be needed. There is also a need for adequate support staff, and in the records service these are likely to include registration or reception clerks as well as records clerks and supervisors.

*The records manager should have sufficient status within the hospital to be able to negotiate effectively with the heads of other departments.*

As noted above, much of the data collection work in hospitals is undertaken at patient reception areas. For this reason the task often falls to registration clerks and others on the staff of the records service. If diagnostic coders are employed they may also



report to the records manager, but even if they do not their work will still impinge on the activities of the records service.

For these reasons hospital records managers will almost certainly need to have some knowledge of data collection and coding techniques, but there is no necessity for them to be statisticians. If appropriately trained, the records manager may wish to undertake some data analysis, but if he or she is to devote adequate attention to managing the records service the bulk of the statistical work should be left to others.

*Records managers may participate in data analysis, but this is not their first responsibility or priority.*

## LEGAL STATUS OF HOSPITAL RECORDS

The legal status of hospital records will vary from one country to another. Where hospitals are directly controlled by a central government ministry, the legal position regarding hospital records is likely to be the same as for other records of the government. In this situation, if a national records act or equivalent legislation is in force, it will almost certainly apply to hospital records unless they are specifically exempted from its provisions.

Where hospitals are subject to a more indirect form of government control, a national records act may still state that it covers hospital records or, more generally, records of any publicly funded body. Alternatively it may be found that the act specifically excludes hospital records, or more generally that its provisions do not extend to records not directly controlled by government ministries. In some countries legislation may have been drafted without considering the existence of records of this kind, or the wording may be imprecise. In these circumstances it can be difficult to ascertain the exact legal position of hospital records and it may be necessary to consult a lawyer in order to clarify the hospital's obligations.

Hospitals run by charitable or commercial organisations will not generally be subject to a national records act, but the wording of any such legislation should nevertheless be examined to ascertain the position in the country concerned.

Whether or not hospitals are subject to a national records act or equivalent legislation, there may also be separate enactments relating to record keeping in the health sector. These enactments could take the form of regulations specifically concerning hospital or health care records, or of legislation on a particular subject containing one or more clauses about record keeping in the field in question. A common example of the latter is legislation on dangerous drugs: many Commonwealth countries have laws, modelled on those of the United Kingdom, that regulate the use of drugs for medical purposes and include specific requirements for the retention and disposition of drug

records. Enactments of this kind can be expected to apply to charitable and commercial hospitals as well as government hospitals.

Hospital records are also subject to obligations regarding the confidentiality of information relating to individual patients. Even in countries where the right to confidentiality is not enshrined in law, it may be said that patients have the moral right to expect that their medical details will not be disclosed inappropriately. These issues are discussed more fully in Lesson 4 below.

*It may be necessary to consult a lawyer in order to clarify the hospital's legal obligations.*

In some countries, hospitals may be subject to little or no records-related legislation of any kind. If no legislation exists, or if the existing laws are perceived to be defective, hospitals should be encouraged to organise their record services in the light of recognised best practice, as set out in this module and in the earlier modules of this programme.

However, as discussed in the module on *Developing Infrastructures for Records and Archives Services*, a records service is most effective when clear legislative guidelines are in place. If new records legislation or new health legislation is promulgated, action should be taken to encourage the legislators to include provision for hospital records services. Such legislation might be framed to oblige hospitals to establish and maintain a comprehensive records service to appropriate minimum standards, including provision for non-clinical and semi-current records; and, if local conditions allow, to give an appropriately qualified records manager professional oversight of departmental record systems as proposed above.

If no appropriate legislation is in place, it is valuable to review the government's regulations and general orders to ensure hospital records management issues are outlined adequately. Further, it is important to review regulations, general orders and internal policies when legislative changes occur, in order to ensure that consistency is maintained.

### **Activity 13**

Write a brief description of any legislation in place in your country that governs or affects record keeping in hospitals. Indicate whether you feel this legislation is effective or how it could be improved.

# HOSPITAL RECORDS SERVICES AND THE RECORDS AND ARCHIVES INSTITUTION

Hospital records services in Commonwealth countries are less likely to have a formal relationship with a records and archives institution than are the registries in central government ministries. The situation in any particular country will depend on the administrative relationship between hospitals and the central government, and on the phrasing of any records legislation.

If the legislation is well designed, it will give the head of the records and archives institution overall responsibility for hospital records and will make the heads of hospital records services professionally accountable to him or her. Wherever possible, any new legislation should include these provisions. Even where there is no legal linkage, however, it is recommended that a close working relationship should be established.

*The records manager in charge of a hospital records service should be able to look to the records and archives institution for guidance and support, even if formal professional reporting structures are not in place.*

Some countries may recently have introduced a national strategy for health information; others may be considering doing so. Typically such strategies focus largely or wholly on management of information derived from statistical data. Where possible, however, steps should be taken to ensure that the management of recorded information in the health care sector also forms part of a strategic plan coordinated at the national level. In such a strategy both clinical and non-clinical records need to be considered, and the head of the records and archives institution should be closely involved in its preparation and implementation.

*For more information on strategic planning, see Strategic Planning for Records and Archives Services.*

Of course, there will be practical differences between the role of the records and archives institution in regard to hospital records and its role in the registries of central government ministries. With hospitals located at intervals throughout a country, geographical distance alone dictates that hospitals should normally manage their own semi-current records. In most cases it will be only at the archival phase that a hospital record may come into the physical custody of the records and archives institution.

#### **Activity 14**

Write a brief description of the organisational relationship between your hospital and your government's records and archives institution or other record-keeping agency within the central government. Identify three steps that could be taken to improve the relationship in order to manage hospital records better.

# SUMMARY

Lesson 1 has examined the context within which hospital records management operates. While many government agencies and private sector institutions have similar records needs, hospitals have to deal also with the particular needs of the medical community. This lesson has reviewed specific issues such as

- the relationship between hospitals and government
- the internal organisation of hospitals
- the types of records found in hospitals, including patient casenotes, X-rays, pathological specimens and preparations, patient indexes and registers, pharmacy and drug records, administrative records, nursing records and educational records
- the principles of hospital records management
- the nature of health-related information
- the role of the records manager
- the legal status of hospital records
- the relationship of hospital records to the national government.

# STUDY QUESTIONS

1. Explain the different issues arising in the care of hospital records, when compared with central government records.
2. Outline a typical organisational structure for the average hospital in your country.
3. What types of organisational structure might be set up for a hospital records management programme?
4. Why is a hospital records management programme important?
5. What types of records are found in hospitals?
6. Explain the purpose and nature of patient casenotes.
7. Explain the purpose and nature of patient registers and indexes.
8. What is data collection?
9. What is diagnostic coding?
10. What should be the role of the records manager in a hospital records management programme?
11. What types of legislation might affect hospital records?
12. Explain the relationship that a hospital records management programme might have with the records and archives institution.

# ACTIVITIES: COMMENTS

## Activity 1

While all hospitals will have their own particular relationship with their governing agency, some commonalities will exist. For example, there is usually an established hierarchy; hospitals cannot run efficiently without a clear chain of command. Similarly, there are usually a number of checks on authority and responsibility.

## Activity 2

One typical organisational structure might be as shown below.

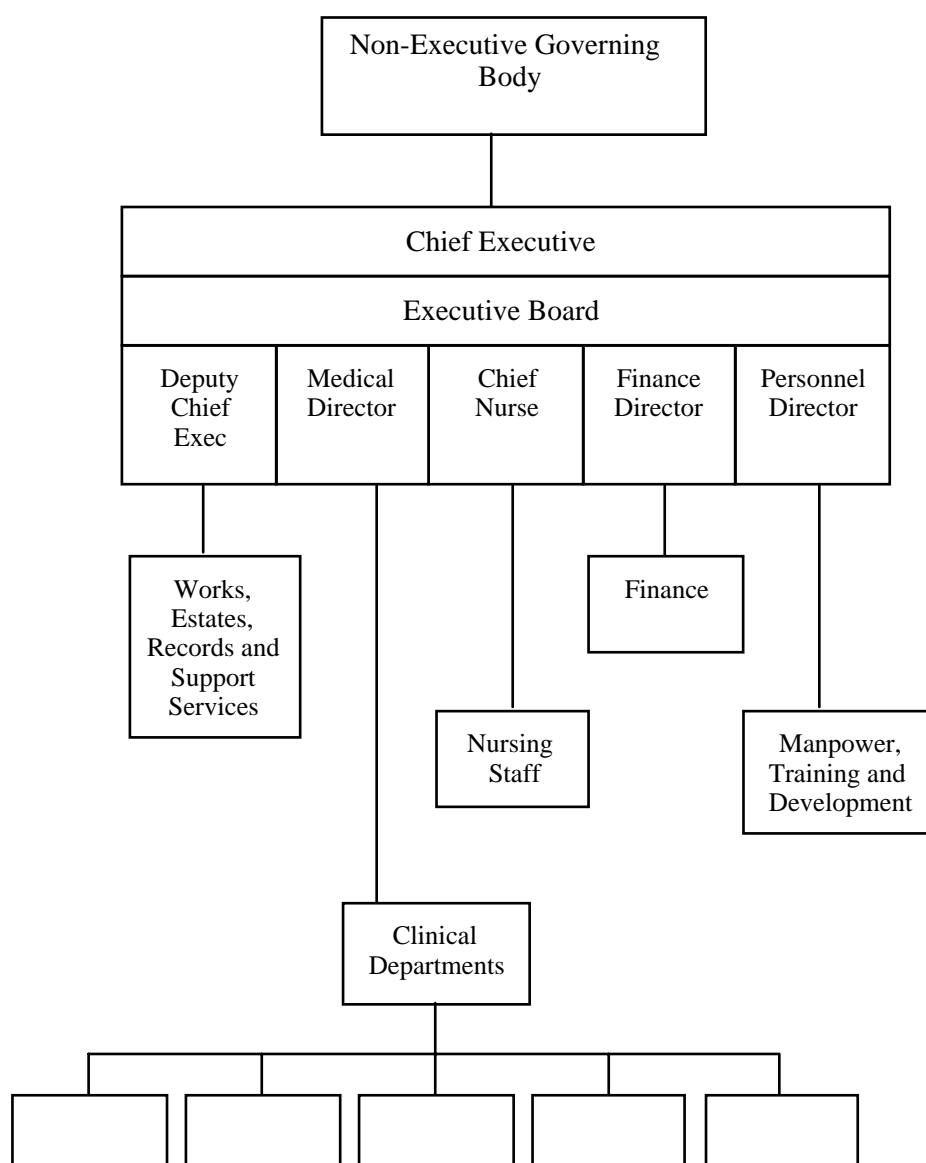


Figure 2: Typical Organisational Structure

### **Activities 3-10**

These activities are designed to help you understand how different types of records are managed in your hospital. The following lessons in this module discuss various options for records care, including best practice examples.

#### **Activity 11**

Just as organisational structures will differ, records management systems will differ from institution to institution. The following lessons in this module offer some ideas about how systems might be developed to care for various hospital records.

#### **Activity 12**

Not all hospitals actively produce health statistics. However, one of the values of good records management is that it allows such information to be compiled. It might be worthwhile to investigate whether your hospital should expand its health information management responsibilities, particularly if the hospital is part of the government structure. Improvements in the quality of statistical information might be useful as government sets health care policies or priorities.

#### **Activity 13**

A range of legislation can affect record keeping in hospitals. A few examples include:

- a national records act
- hospitals or medical legislation
- statute of limitation
- legislation and guidelines concerning confidentiality, data protection and access to patient information
- controlled drugs legislation.

#### **Activity 14**

Hospitals should have a close relationship with the government's records and archives institution or similar record-keeping agency. Legislation could be amended to strengthen this relationship, or hospital policies could be updated to take into account records and archives institution requirements. Records management personnel within the hospital could be categorised according to record-keeping job classification schemes, and hospitals could send personnel for training or upgrading with the records and archives institution.



## **MANAGEMENT OF PATIENT CASENOTES**

This lesson examines the creation and management of patient casenotes. The first topic discussed is whether to retain casenotes at the hospital or give custody of them to the patient; this module recommends retaining casenotes at the hospital and bases further instruction on this principle. Subsequent issues covered include:

- unitary file systems for hospital-based records
- numbering schemes
- casenote file design and content
- the creation and management of forms
- internal arrangement of files
- closure of files and creation of continuation files
- creation and management of the master patient index
- identification and registration of patients.

## **RETAINING CASENOTES AT THE HOSPITAL OR WITH THE PATIENT**

By the time that patients leave hospital, their attendance will have been recorded in one or more registers and, with the possible exception of the most trivial cases, notes will have been compiled to record the diagnosis and treatment offered. Casenotes are vital to the care of patients. Casenotes document each episode for future reference as well as providing the foundation for statistical information, research and clinical audit. If casenotes are not maintained, or if they are incomplete, lost or difficult to retrieve, patient care may be compromised, tests may need to be repeated and the hospital may have inadequate protection against negligence claims.

*Casenotes are vital to the care of patients.*

The question then arises as to where the casenotes should be housed. Many hospitals retain all notes on their own premises, while others tell patients to take their notes home with them. Hospitals that send notes home with patients are said to have 'patient-based' records. In some hospitals out-patient casenotes are patient-based while in-patient notes are retained in the hospital.

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***Patient-based casenotes:*** Casenotes given to the patients for safe keeping, not retained in the hospital.

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***Hospital-based casenotes:*** Casenotes retained by the hospital in its own records registry or storage areas.

There are a number of advantages to patient-based records, including

- a saving in space for record storage within the hospital
- lower costs through employment of fewer records staff
- ease of identification of patients who bring their notes with them when they return to the hospital
- possibility of using the same records if the patient attends another hospital or clinic.

The advantages of hospital-based records include

- no requirement for patients to remember to bring their records with them
- reduced likelihood of records being lost, damaged or tampered with
- maintenance of confidentiality
- access to records for audit or research after final discharge of the patient
- availability of records if the hospital is required to defend a legal action.

Experience of a patient-based system in one Commonwealth country has shown that as many as 30 percent of patients fail to bring their records when re-attending the hospital. Patients may lose them, forget them or simply not recognise their importance. The absence of records can easily result in misdiagnosis or inappropriate treatment. For this reason alone the patient-base system is generally to be discouraged. Where a lack of resources in a hospital means that patient-based records cannot be avoided, then records of minor out-patient treatment should be selected for patient-based retention. It is recommended that records of in-patient admissions and other major treatment be hospital-based.

*Methods for keeping track of the movement of records retained at the hospital are dealt with in Lesson 4.*

### Activity 15

Does your hospital manage patient casenotes as hospital based or patient based? Why do you suppose your institution chose the method it chose? Describe three benefits and three drawbacks to each method.

## UNITARY FILE SYSTEMS FOR HOSPITAL-BASED CASENOTES

*The best practice for managing casenotes is to create a file for each patient, in which all relevant documents are kept.*

When hospitals first began to keep patient casenotes, the records were often maintained in bound volumes, with details about many individuals included in the same volume. Some hospitals, and some departments within hospitals, may still use bound volumes, but this system is not recommended. Keeping notes in this form will cause difficulties when patients are readmitted to different wards or reattend at different clinics, for a volume containing records relating to more than one patient cannot be consulted in more than one location at a time. Moreover, the use of volumes imposes a chronological arrangement that makes it difficult to form a coherent view of the total information recorded about any particular patient.

In some hospitals there may be a card or piece of paper for each patient on which notes are written. The use of cards enables the record for each individual to be kept separately, thus avoiding most of the difficulties associated with bound volumes. However, if patients receive regular treatment their cards will soon fill up and continuation cards will be needed. Difficulties then arise in keeping all the cards together for any one patient. Further problems may occur when laboratory forms or correspondence need to be attached to the cards to keep them together. Staples, paper clips and rubber bands cannot be relied onto keep items together when subject to repeated handling; in addition, they are all physically damaging to records and, from a preservation perspective, are not acceptable fasteners. If paper stationery is in short supply the use of cards may be the only option, but cards are really more suitable for health centres, local clinics and small hospitals, where notes can be relatively brief, rather than for larger institutions where notes may be extensive.

*For more information on preservation issues, see Preserving Records.*

The best practice for managing casenotes is to create a file for each patient, in which all relevant documents are kept. The physical construction and design of such a file is described below. The file is opened when the patient first attends the hospital and is

then used whenever he or she visits an out-patient clinic or is admitted as an in-patient. As the patient's treatment progresses, more sheets are added to the file. Over time a patient may attend several different departments of the hospital, but the same file can continue to be used to house all the documentation relating to that individual. If the patient reattends after an interval, whether of months or years, the file can be retrieved and further notes added to it.

Some hospitals find it necessary to keep separate files in each department, which means that a patient who attends three departments will have three files. Hospitals that occupy several sites may also feel that their geography requires the maintenance of separate files. Particularly in environments without good records management practices, there may be a lack of confidence in the effectiveness of a centralised system.

However the practice of keeping multiple files for each patient cannot be recommended, as it makes it difficult for doctors and nurses to gain access to the patient's complete medical history. Diagnosis and treatment may then be based on incomplete information, and vital facts about drugs and allergies may not be available when needed. The hospital should have a single file for each patient in which his or her complete history is recorded, enabling treatment to be co-ordinated and ensuring that vital information is always accessible. This type of filing system is referred to as a 'unitary file' or 'unit file' system.

*The practice of keeping multiple files for each patient is not recommended.*

### **Activity 16**

Does your hospital manage patient casenotes as unitary files, or are multiple files kept for each patient? Why do you suppose your institution chose the method it chose? Describe three benefits and three drawbacks to each method.

## **NUMBERING SCHEMES**

One of the most efficient methods of record keeping is to assign each patient a unique number when he or she first attends the hospital. This number will be used not only to identify the patient's unitary file but also as an identification code whenever information about the patient is recorded. Thus if a patient is sent to the X-ray department for radiography and his or her name is entered in a register in that department, the patient's number will be entered in the register beside his or her name.

*To facilitate efficient record keeping, each patient should be assigned only one number.*

To facilitate efficient record keeping, each patient should be assigned only one number. The same number should be used in all departments throughout the hospital. If a patient has inadvertently been assigned two or more numbers, all but one should be cancelled. (The procedure for cancelling numbers is described later in this lesson.)

Ideally, the same number should be used when the patient attends any hospital or healthcare facility within a region, or indeed nationally. In practice, however, this may only be achievable with the introduction of sophisticated information technology, on a scale likely to be beyond the resources of many countries for the foreseeable future.

*See Lesson 4 for a discussion of the use of information technology in hospital record keeping.*

It is equally important that within a hospital each number should be used only once, to identify a single patient. When a number has been assigned to a patient it should not be changed, and the same number should never be assigned to another patient. Even if a patient dies it would be unwise for his or her number to be re-used for at least fifty years after death.

A master list should be maintained of numbers used, to avoid any possibility of a number being used twice. Hospitals that have used the same number for more than one patient have found that their record-keeping systems soon begin to break down.

*The running number system is most suitable for patient casenote files.*

Of the numbering systems described in the module *Organising and Controlling Current Records*, only the running number system is suitable for patient casenote files. However, there are a number of possible variants of the system, any of which may be appropriate depending on local circumstances. Some hospitals choose to assign the first patient number 1 and to continue assigning numbers in sequence. As more patients attend, the file numbers grow larger and within a few years six-digit numbers may be in use.

Other hospitals prefer to assign six-digit numbers from the start, with the first patient assigned number 000001. A system that uses six-digit reference numbers will require an appropriate level of numeracy on the part of the records clerks. Especially when numbers exceed 99999, misfiling is a real possibility.

Another method that makes filing easier is to break the reference number into easily recognisable components. Thus the first element in the number could be a year: the first file opened in 1998 would be numbered 1998/1, the second would be 1998/2 and so on. In January 1999 the numbers would begin again at 1999/1. An alternative

would be to use numbers in the form 1998/0001, 1998/0002 etc. Using either approach, the introduction of the slash (‘/’) reduces the chance of misfiling.

Under this system, the year will represent the year when the patient first attended the hospital. Even if the patient reattends in a subsequent year, the original reference number is used and must not be altered. (Remember also that it is wise to use the full date, such as ‘1998’, not just the last two digits, such as ‘98’, so that files from the 1900s and from the 2000s can be interfiled without confusion. Using the last two digits only could lead to confusion if people are not sure whether the record refers to 1902 or 2002.)

Letters can also be used instead of, or in conjunction with, digits. File references such as A2000 or AB2000 are less likely to be misfiled than 002000 (which a busy clerk could easily file as 000200). Thus a system could be used whereby files are opened in the sequence: A0001 to A9999, B0001 to B9999, etc. The letters I, O, S and Z should not be used as they are easily confused with the digits 1, 0, 5 and 2.

In deciding on a numbering scheme, thought must be given to the quantity of numbers likely to be required. The use of letters as well as digits will vastly increase the total quantity available. The chart following illustrates the different quantity of numbers available depending on the numbering scheme used. If a system is adopted that provides over 12 million different reference numbers, even the largest hospital will be able to continue assigning numbers to new patients for several centuries without running out of unique numbers.

### **Activity 17**

Describe the numbering system used by your hospital to manage patient casenotes. Why do you suppose your institution chose the method it chose? Describe three benefits and three drawbacks to this method.

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### Numbering Schemes

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Type of Code	will allow up to __ numbers
4-character code all digits Example: 1234	9,999
4-character code 1 letter + 3 digits Example: A123	21,978*
5-character code all digits Example: 12345	99,999
5-character code 1 letter + 4 digits Example: A1234	219,978*
5-character code 2 letters + 3 digits Example: AB123	483,516*
6-character code all digits Example: 123456	999,999
6-character code 1 letter + 5 digits Example: A12345	2,199,978*
6-character code 2 letters + 4 digits Example: AB1234	4,839,516*
6-character code 3 letters + 3 digits Example: ABC123	10,637,352*

- Excludes use of I, O, S and Z

*Figure 3: Numbering Schemes*

# CASENOTE FILE DESIGN AND CONTENT

The construction of the casenote file should resemble that described in the module *Organising and Controlling Current Records*. Because hospital files are often handled by many people in a day, in busy wards and clinics, it is important that papers do not become detached or disorganised. Therefore, secure fasteners are essential to hold hospital patient notes in their original order. Inert plastic fasteners are recommended, since metal clips or staples can be physically damaging.

## The File Cover

The design of the file cover for patient casenotes will differ in some respects from designs used in civil service agencies. The hospital name should be printed, or stamped, on the cover; some hospitals also print the word 'Confidential'. It is also necessary to include on the front of the cover

- the patient's name
- the patient's number
- the year of last attendance.

It may also be desirable to allocate space for

- the patient's sex
- any other critical information about the patient.

If at all possible, the cover should be pre-printed with clearly marked spaces where these details can be entered. If pre-printing is not possible, staff must be given clear instructions as to where on the file cover each piece of information should be written. It is important to ensure that the layout of each file cover is consistent, so that staff know where to look for any given piece of information. Much staff time will be wasted if this is not done.

*The appropriate methods of recording patients' names are discussed later in this lesson.*

The patient's number should be highly visible on the front of the file cover. A carefully positioned number, well away from any other writing or printing, will greatly facilitate filing and retrieval. If the information is hand-written, large and bold characters should be used; small or badly written characters cannot be easily read and may result in misfiling. A better practice is to use pre-numbered file covers: the numbers can be printed when the covers are ordered from the stationery supplier or can be put on the covers by a member of staff using an 'enumerator', a hand-held number-stamping machine that automatically prints the next available number each time it is used. Printed or stamped numbers are less likely to be misread than hand-written ones.



*If possible, the cover should be pre-printed with clearly marked spaces where information can be entered.*

The year of last attendance should be recorded on the cover so that files which have been inactive for a number of years can easily be identified for disposal. This is often done by using pre-printed coloured stickers: when a patient attends in 1998 a sticker marked '1998' is attached to the file cover; if he or she reattends in 1999 a differently coloured sticker is placed below or beside it.

In humid climates stickers can easily become detached from the files. A grid in which years of attendance can be written by hand will serve the same purpose. Colour-coded stripes or crosses added in crayon or indelible ink may also be used.

A designated space for critical information allows doctors or nurses to write easily visible memoranda of any long-term aspect of the patient's condition that should be drawn to the immediate attention of other staff. Examples would be special drug needs; allergies; HIV or sickle-cell status. If information of this sort is 'buried' inside the file a busy member of staff might fail to see it. The result could be the administration of an inappropriate drug with possibly fatal results.

In some hospitals there may be pressure to include other information on the front of the file cover in order to reduce stationery costs. This practice should be resisted if at all possible, as the inclusion of extra detail on the cover will make it harder for staff to locate essential information. Efficiency will suffer as a result. However, if the economical use of stationery is a priority, it is possible to record information on the inside and the back of the cover without detracting from the clarity of the front. Medical and nursing staff should be warned not to write non-essential information on the file cover and not to attach or staple items to the outside of the file.

In countries where A4 paper is normally used, the file cover should be slightly larger than A4 size, so that A4 documents can be protected by the cover and there is no need to fold them. The hospital number, patient's name and critical information can be written either parallel to the long side of the cover or parallel to the short side. If information is placed parallel to the short side, medical and nursing staff do not have to turn the file sideways to read these details on the cover when they are using the file.

However, the patient's number and the yearly attendance grid should be written parallel to the long side so that they can easily be read when the file is stored on its long side on a shelf. For this reason it may be preferable for all printing and writing on the cover to be parallel to the long side. For ease of visibility, the number is best placed at a top corner of the file cover. See the sample file cover below for an example.

When rules have been established for the internal arrangement of papers within the file, it is good practice to include pre-printed filing instructions on the file cover. The inside of the back cover is usually a suitable place for this.

### **Activity 18**

Describe the file covers in use in your hospital. Why do you suppose your institution chose this design? Describe three benefits and three drawbacks of the file covers which are in use.

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Hospital no.
Surname

**CONFIDENTIAL**  
**PROPERTY OF KENTALI HOSPITAL, ASABWE**

Allergies and other sensitivities	Years of attendance at Hospital
Blood group	

*Figure 4: Sample File Cover*

# FORMS AND FORMS DESIGN

*Good form design is essential for the efficient gathering and dissemination of information.*

Although some hospitals permit notes to be written on sheets of plain paper, it is better practice for the records department to provide pre-printed forms on which information can be recorded about the patient and about his or her diagnosis and treatment. The use of well-designed forms saves staff time and helps to ensure that the necessary information is recorded consistently and accurately. Forms also make it easier for users of the file to locate the kind of information they are seeking.

The forms in use will vary from one hospital to another, according to local needs and priorities. However it is recommended that all hospitals should employ a 'summary sheet', sometimes called a 'front sheet', on which personal details of the patient and a summary of his or her medical history can be recorded. This sheet should be printed with spaces in which to enter the patient's name and number, together with other personal details such as address, nationality and religion. Another part of the form should allow the recording of dates of admission and discharge and the final diagnosis on each discharge. An example of a summary sheet is reproduced below. Continuation sheets will be needed for patients who are repeatedly admitted and discharged.

Other useful forms include history sheets; temperature, pulse, respiratory, blood and fluid balance charts; and drug prescription and administration records. For surgical purposes there will be operating and anaesthetic record sheets. Consent forms, which are signed or marked by patients before an operation or procedure, are also recommended for the legal protection of the hospital and its staff. Maternity, paediatric and psychiatric departments will have forms specific to their own requirements, while other specialist departments may wish to have forms pre-printed with diagrams of particular parts of the human anatomy, to facilitate quick and accurate note-taking.

The range of forms appropriate to the needs of each hospital should be discussed by the records manager with the hospital's medical records or medical advisory committee and senior management. Decisions about forms should take into account any legal requirements in force in the country concerned.

Much of the time of the records staff will be occupied in filing completed forms such as laboratory reports. Each form must include a clearly designated space for the patient's name and number, both to facilitate the filing process and to allow identification if the form should subsequently become detached from the file. Incoming loose forms should always have identification numbers on them; if they do not, additional staff time will be required to identify the patient concerned and then locate the correct file. Good form design is an important tool in ensuring that records are legible, complete and duly authenticated. For this reason forms should also have designated spaces where the clinician can sign each entry and note the date and time.

Name		Hospital number
Address		Change of address
Telephone		Telephone
Change of address		Change of address
Telephone		Telephone
Date of birth <i>Please write APPROX if this is an estimate</i>		Nationality ASABWEAN / OTHER <i>if OTHER please state</i>
Sex M / F	Status M / S / W / D	Religion
Occupation		
<b>Next of Kin</b>	Name	
Relationship to patient	Address	
	Telephone	
<b>Change of Next of Kin</b>	Name	
Relationship to patient	Address	
	Telephone	

*Figure 5: Sample Summary Sheet, part 1*

<b>FIRST ADMISSION</b>			
Date admitted	Provisional diagnosis	Physician	
Principal final diagnosis		Secondary final diagnoses	
Discharged (date)	Died (date)	Length of stay	Coded by
<b>NEXT ADMISSION</b>			
Date admitted	Provisional diagnosis	Physician	
Principal final diagnosis		Secondary final diagnoses	
Discharged (date)	Died (date)	Length of stay	Coded by
<b>NEXT ADMISSION</b>			
Date admitted	Provisional diagnosis	Physician	
Principal final diagnosis		Secondary final diagnoses	
Discharged (date)	Died (date)	Length of stay)	Coded by

*Figure 5: Sample Summary Sheet, part 2*

### Activity 19

Write a list of all the major forms used by your hospital (or as many as you can reasonably identify without taking too much time). Are the forms printed in large quantities, or are they created in small quantities and changed from time to time? Is there any system in place for the creation and management of hospital forms?

Take two forms and analyse their design and layout. For each form, suggest at least three changes you would make to improve the design or usefulness of the form.

## INTERNAL ARRANGEMENT OF THE FILE

Methods of arranging papers within the file cover are discussed in the module *Organising and Controlling Current Records*. Some further points need to be borne in mind in connection with patient casenote files.

The summary sheet needs to be placed where it is immediately accessible and must not become 'buried' in the middle of the file. Thus if the 'back-to-front' filing method is adopted, with most recent documents placed on the top of the file, it will be necessary to consider ways in which the summary sheet can be kept separate from the other papers on the file. If it is placed at the front of the file, it must be lifted out when new papers are added and must then be replaced on top of them. This is not recommended, as the summary sheet would soon get damaged through repeated handling. However, if the file can be fastened on both sides, for example using a 'treasury' tag, the summary sheet can be placed on one side of the file and the remaining papers on the other. Another alternative is to print the summary sheet form on the inside or back of the file cover. This will automatically keep the summary details in a prominent position but does not allow for continuation sheets to be used.

*The summary sheet needs to be placed where it is immediately accessible.*

In hospitals that create a large quantity of notes for each patient, the best practice may be to insert divider cards in each file, breaking the file into sub-parts for different types of documents. These dividers will not only provide a clearly defined location for the summary sheet but will also allow other types of document to be filed separately from one another. If affordable, an inert plastic sleeve could be used to protect the vital summary sheet within the file. A basic division may be to separate records relating to in-patient and out-patient episodes.

Many hospitals find it helpful if diagnostic test results can be placed in a separate part of the file from history sheets. If each file is provided with four divider cards, five sections will be created.

*The summary sheet is filed at the front, with the first divider card behind it.*

The remaining sections, each with its heading printed on a divider card, could be as follows:

- history sheets and operation records
- investigations and diagnostic test results
- drug record
- temperature, blood pressure and other charts.

This approach to filing makes it necessary to lift papers out of the file whenever new ones are to be filed. Special types of file fasteners now exist to facilitate this but it is recognised that many hospitals will be unable to afford the stationery required to implement a system of this kind. However, the system has the merit of providing users of the file with a quick and easy means of locating the papers they want to see.

### **Activity 20**

Refer back to the work you did for Activity 3 in Lesson 1. Consider the information provided in this lesson and expand your two suggestions for improving filing systems. Add at least another two suggestions about how to improve the filing of patient information.

## **CLOSURE OF FILES**

As indicated in *Organising and Controlling Current Records*, it is good practice to close any file which is more than 3 cm (1 in) thick and to open a continuation file to which new documentation can be added.

The procedure for closing casenote files is as follows. The closed file should be marked with an agreed wording, such as 'PART 1, CLOSED ON [DATE]'. All current data should be copied from the old file cover to the new, and the latter must also be distinguished by an agreed form of words such as 'CONTINUATION FILE, PART 2'. Both parts will have the same file reference and the two will be stored together. If a further continuation file is opened at a later date it will of course become 'PART 3'.

Removal of the closed parts of the file to semi-current storage is possible, but it means that a patient's complete medical history can only be obtained by retrieving files from two different locations.



For this reason it is not recommended in cases where the patient may be expected to re-attend the hospital. It is only recommended in situations where the patient is known to have moved away or died, or has not come to the hospital for five years or more.

*Removal of the closed parts of the file to semi-current storage is only recommended when the patient is known to have moved away or died, or has not come to the hospital for five years or more.*

## THE MASTER PATIENT INDEX

In contrast to civil service files, which are normally opened when a letter arrives or a document is created on a new subject within the administrative process, the opening of a casenote file is triggered by the arrival in hospital of a patient who has not been registered before.

The retrieval of existing files may be triggered in a variety of ways, such as by a request for a file needed for clinical or financial audit, or for teaching or research purposes. However, the most usual circumstance for retrieval of an existing file is the reattendance of a patient who has visited the hospital before.

There need to be clear procedures for establishing whether or not a file exists for each patient who may arrive at the hospital, and to retrieve the file where it exists. The key tool in these procedures is the hospital's master index of casenote files. This tool is called a 'master index' to distinguish it from any smaller local indexes of patients maintained in individual departments. The master index should contain identification details about every patient for whom a file is maintained in the hospital.

The master index is the vital finding aid for casenote files. Unless it is up-to-date, accurate and maintained according to precise rules, it will not serve its purpose of enabling patients to be identified, and files retrieved. It can take the form of a card index, as described below, or a computerised database. Index books, which list names under the first letter of the surname, are not recommended. As they fill up with names they become increasingly difficult to use because they cannot be organised into strict alphabetical order.

If index cards are used, they should have printed headings, with sufficient space for each piece of information to be recorded. The arrangement of information on the index card is important, as a well-designed card will enhance both the accuracy and the speed with which files can be retrieved. The two most important items of information—the patient's surname and hospital number—should be positioned at the top of the card. A good layout will allow a searcher to read the most useful pieces of

information first and so reduce retrieval time. An example of an index card is given below.

If the recommended method of keeping all treatment notes in a file cover is used, the index card is required only to hold brief identification details. The dimensions of the card can be small. It should not be necessary to use cards larger than 15 x 10 cm (6 x 4 in). This will help to limit the space occupied by the index.

The completed index cards should be filed in suitable drawers, in alphabetical order by patient surname. A marker card should be used to pinpoint every change of letter. If desired, males and females can be filed in separate sequences: if the index is divided into these two categories, the number of cards to be looked through for any one patient is conveniently halved. If a disease classification scheme such as *ICD* is used (see Lesson 1), an index of diagnoses can be maintained in addition to the index of patients' names.

*The use of computer technology as an alternative to a card index is considered in Lesson 4.*

*The master index of casenote files is a key tool to help clarify whether or not a file exists for each patient.*

### **Activity 21**

Describe the methods in place in your hospital for indexing patient information. Suggest at least two steps you might take to improve the indexing system.

Surname		Hospital number	
First name/s			
Other name/s			
Mother's name			
Address		Date of birth	
		M/F	S/M/W/D
National identity number		Date first registered	

*Figure 6: Sample Index Card*

# IDENTIFICATION OF PATIENTS

Information allowing staff to identify the patient uniquely and unambiguously is seen as crucial to the patient's medical record. When patients attend hospital for the first time, their personal details need to be obtained for the file cover, summary sheet and master patient index. If the patient has been referred from a health centre or family doctor, or from another hospital, some or all of these details may be supplied by the person making the referral. This information should be confirmed by the patient (or a relative) on arrival at the hospital. In other cases patients or their relatives must be asked to supply the details themselves.

## Names

The patient's name should be recorded carefully and in full. In countries where patients have one or more first (or 'given') names followed by a family name or surname, it is good practice to record the family name first. The first name(s) must be clearly distinguished from it, preferably in a separate space marked for the purpose. In countries where the family name normally precedes the given name, the names will naturally be recorded in the same order.

The following chart gives examples of the order of names in different cultures:

Christian and Jewish	One or more personal names followed by the family name (which may be hyphenated). A rule will be needed for dealing with hyphenated names: for example, you may decide that they should always be indexed under the name preceding the hyphen.
Muslim	Normally a personal name which may be followed or preceded by a religious name (check). Muslims may or may not have a family name. If there is no family name, index under the second or last name (check).
Hindu	A personal name, a complementary name and a family name.
Sikh	A personal name, a title (Singh for men and Kaur for women) and a family name.
Chinese	Normally a family name (common anglicised examples are Chang, Wong, Lee, Ho, Cheung) followed by personal names. Some Chinese (e.g. in Hong Kong) place the family name last. Care will be needed to establish which of an individual's names is the family name.

*Figure 7: Order of Names*

In some countries, people may call themselves by a variety of names. They should be asked to provide all the names by which they are known and all these names should be recorded both on the file and in the master index. Cross-references will need to be inserted in the index for patients who change their name, such as upon marriage, as well as those who are known by more than one name. In such instances a full index card should be filed under the married or more usual name while a brief cross-reference card is filed under the alternative name(s).

*Patient names should be recorded in full.*

A decision will need to be made about the spelling of patients' names. Where the same name can be spelt in several ways, consistent handling of the names is important. If patients are literate they can be asked to spell their name. In the case of illiterate patients, clerks will have to spell names as they think fit, though it may be helpful for them to be issued with guidance on names that can be spelt in more than one way. If a list of standard spellings is compiled, it may be best if it is used only when a patient is illiterate. Literate patients may be proud of the spelling of their names and the imposition of a standard form that differs from their own spelling can cause anxiety, as well as lost time looking for a patient's file when the name is spelled differently. It is preferable to use a patient's own spelling whenever possible.

The handling of variant spellings of names in the master patient index is important: the simplest method, where there are possibilities of confusion, is to file variant spellings of a particular name as if they were identical and to insert cross-reference cards at each alternative place directing the clerk to the chosen spelling.

Similar issues arise where transliteration is needed from one alphabet into another. In countries where this occurs frequently, guidance rules on standard practice should be issued. The records and archives institution or library may be able to provide advice on transliteration rules.

## **Other Biographical Details**

Unless it is a rare or unusual name, a patient's name will not be unique. In order to distinguish between patients, it is important to obtain and record a number of other personal details. In addition to the details needed to distinguish the patient from other people of the same name, further details will also be required to assist the medical staff with diagnosis and treatment, or to allow appropriate action to be taken if the patient dies or if complications arise with the patient's condition. Some of the information may be needed for all these purposes.

*Some hospitals may find that they have hundreds of different patients with the same name.*

Information needed to distinguish one patient from another will be entered on the master index of patients, while information needed purely for clinical purposes will be entered on the summary sheet or elsewhere in the casenote file. Some details will need to be recorded both on the index card and on the file, but it is not necessary to enter the whole set of information in both places: to do so merely creates unnecessary clerical work.

Following are the usual biographical details required and the appropriate place(s) to record them.

<b><u>File and index</u></b>	<b><u>File</u></b>	<b><u>Index</u></b>
surname	occupation	former names
first names	religion	name of father
alternative names (if any)	name of next of kin	maiden name of mother
address/telephone number	address/telephone of next of kin	
date of birth		
sex		
nationality, tribe or race		
marital status		

*Figure 8: Biographical Details*

In some countries some of these details will be inappropriate: few patients may have telephones, for example, or the political situation may make it inadvisable to ask patients about their ethnic background.

Particularly in countries where transport facilities are limited, patients from rural areas may find it necessary to stay with friends or relatives during episodes of continuing out-patient treatment. In hospitals where this situation is common it is obviously wise to record both permanent and temporary addresses.

*It may be wise to record both permanent and temporary addresses.*

Some details may be impossible to obtain. In less developed societies patients may not know their date of birth. In this situation, registration clerks should be instructed to ask the patient questions such as what the patient remembers about events in the country's history, in order to form a reliable estimate of age. If it is not possible to ask such questions, the clerk may have to estimate the year or decade of birth based on the patient's appearance or on a statement obtained from the patient about his or her approximate age.

In all cases, the estimated or actual date of birth rather than the estimated or actual age at registration should be recorded, since the file may remain in use for many years. If the age has been estimated, the entry should be clearly marked with an agreed wording such as 'ESTIMATED' or 'APPROX'.

While asking for the date of birth is often a useful way of checking the identity of a patient, in many less developed societies the name of the patient's father or the maiden name of the patient's mother are likely to be more useful for distinguishing one person from another with the same name. For this reason it is suggested that, when two or more cards in the master index bear identical names, they should be filed following the alphabetical sequence of mother's maiden names.

### Activity 22

Write down three factors relating to how people are named in your country that could affect how their names are indexed. (For example, are family names given first or last, are names written in a particular script?) Suggest three steps you would take to ensure names were recorded accurately in hospital indexes, given these factors.

## Identity Cards

To assist in identifying patients who reattend, it is also suggested that all patients should be issued with a hospital identity card, recording their name and reference number. Patients should be instructed to bring this card with them whenever they attend the hospital. Some hospitals may wish to introduce a scheme whereby patients are charged a reduced fee if they bring their identity or appointment card with them.

<p style="text-align: center;"><b>KENTALI HOSPITAL PATIENT'S CARD</b></p> <p style="text-align: center;"><i>Please bring this card with you on every visit</i></p> <p>Surname .....</p> <p>First name/s .....</p> <p>Hospital number: _____</p>
---

*Figure 9: Patient Card*

# PATIENT REGISTRATION

‘Registration’ is here defined as the sequence of administrative processes needed to respond to the arrival of patients at the hospital. The key elements of registration are the identification of the patient; the retrieval of a file or the opening of a new file for patients who have not attended before; and the delivery of the file to medical staff, before the patient’s diagnosis or treatment begins.

The way in which these processes are managed will depend on a number of factors, but chiefly they will depend on the extent to which the arrival of particular patients at the hospital can be known in advance. The availability of this information will be influenced by the state of development of the country, especially by patient literacy levels and the presence or absence of a reliable infrastructure of postal, telephone and transport services.

In a literate society with a developed infrastructure, the hospital can arrange most non-emergency attendances to be by prior appointment. The hospital can also arrange for a waiting list to be maintained for non-emergency admissions to the wards. Patients are referred to the hospital from a local health facility or family doctor and can be advised of their initial appointment by post or telephone.

This process allows most elements of the registration process, including checking the master patient index, to be undertaken before the patient arrives at the hospital. Out-patient clinics can send their appointments lists to the records department a day or two in advance, and files that already exist can be retrieved and taken to the clinic before it opens.

An appointments system helps the records department to organise its work and also allows the hospital, if it so wishes, to have a number of locations at which patients present themselves. Even where postal and telephone services are limited (making it more difficult to arrange appointments for initial attendances) or where local health facilities are few (making the hospital a first port of call rather than a referral centre), it may still be possible for follow-up visits to the hospital to be arranged by appointment, provided patients are sufficiently literate to understand and apply the system that is in use.

In semi-literate societies, appointments systems can be more difficult to enforce. Many patients may arrive on a day other than that of their appointment, and others may arrive with no appointment at all. Furthermore, in areas where transport facilities are limited, it may be impossible even for literate patients to organise their journey so as to arrive at the hospital on a stated date.

In these situations, which are found to a greater or lesser extent throughout most of the developing world, hospitals generally accept that even non-emergency patients must be seen whenever they arrive. A hospital may have a hybrid system, where some patients have appointments and others do not, or it may not operate an appointments system of any kind.

It then becomes necessary for most or all patients to be identified and their files retrieved when they arrive in the hospital. This identification process requires that a



single registration point be established, within or adjoining the records department. The master patient index is housed in this location, and clerks are on duty there whenever the gates of the hospital are open. It is this system that is described below.

## Hospital Registration Procedures

When a patient reports to the registration point, the clerks on duty must establish whether the patient has a number and whether a file exists as a result of a previous attendance. In many instances it will be possible to establish that a file exists by obtaining the number from the patient's hospital identity card. However, when a patient does not have an identity card or has forgotten to bring it, the master patient index will be needed to trace the number so that the patient's file can be retrieved. When the patient's name is a common one, the records clerk will need to interview the patient or a relative to obtain sufficient information to identify the patient from others of the same name who appear in the index. Details such as date of birth or address may be useful but, as indicated above, the most reliable means of identifying one patient from another of the same name is usually to ask for his or her mother's maiden name.

*Registration procedures help the staff identify the patient and file the file quickly and efficiently.*

If the patient's name does not appear in the index, a new file must be opened. It is helpful if a stock of empty files with pre-numbered covers is maintained. An appropriate quantity of the blank forms described above should be pre-inserted within each cover so that the files are ready for use. As each new patient arrives, the next pre-numbered file is brought into use. This method will ensure that numbers are assigned in the correct sequence. Should there be more than one clerk registering patients simultaneously, a batch of numbered files can be assigned to each clerk.

A master list should be maintained, to record the name of the patient to whom each number has been issued. This list is kept in numerical order and its use should ensure that no number is inadvertently issued twice. Each page of the list should have at least two columns, in one of which the numbers are pre-printed or inserted using a numbering machine. The other column is used by the clerks to record the patients' names. Further columns may be used if desired, to record the date of registration or other information required, such as for statistical purposes. If a single clerk is employed, the list can be kept in a bound book. Loose pages can be used if more than one clerk is registering patients simultaneously. These pages are then inserted into a loose leaf binder at the end of each day or week.

Before opening a new file, clerks must be instructed to make careful checks that no file already exists. The supervisor should regularly monitor that these checks are being done. Occasionally, patients may claim that they have never attended the hospital before, yet a check of the master index reveals that a file already exists. Particularly where the clinical departments are spread over a wide area, patients may

not be fully aware that departments which they have visited on previous occasions are in fact part of the same hospital. Even when patients say that they are attending for the first time the index should always be checked before a new file is opened.

In many hospitals the patient will be required to make a payment before or after receiving treatment. The hospital may wish to integrate the payment of the fee with the registration process, to ensure that no patient is registered without paying. The registration clerks may be asked to collect payment as part of their duties.

Alternatively, separate cashiers can be employed, with a payment counter in or near the registration point. It is also possible to collect payment at the end of treatment, in which case payment is managed as an entirely separate exercise.

After registration is complete, the patient is sent to the ward or clinic. It is best practice for the patient's file to be taken to the ward or clinic by a member of staff but is it possible, if the hospital's policy on confidentiality allows this, for the patient to bring the file personally. The latter option is not wholly satisfactory, even for newly opened files, but may be the only practicable course where staffing levels are low.

If the patient carries his or her own file and, if applicable, a receipt for payment made, the ward or clinic staff will know that the registration process is complete. If the file is transported by some other means, it is best for the registration clerks to give patients some form of proof that they have been registered, so that the ward or clinic staff will know that the necessary procedures have been completed. This can be done by making a suitable annotation on the patient's identity card. It may also be useful to issue a receipt for the file to confirm that it has been transferred.

### Activity 23

Briefly describe the registration procedures used in your hospital. Identify three records management problems or issues that you identify as a result of the methods used in your institution to register patients. Suggest three steps you would take to improve the registration system from a records management perspective.

## Common Registration Problems

*Patients may claim to have been at the hospital before but their names may not be in the indexes.*

If a patient claims to have attended previously but his or her name is not in the index and there is no other way of discovering the reference number, the patient should be handled as a new registration. However, the file should be marked on the cover to indicate that the patient has attended previously, with the date and outcome of that attendance if known.

If a reference number is known but the file cannot be found, a temporary file should be opened, bearing the same number as the missing file but marked on the cover with an agreed form of words such as 'TEMPORARY FILE'. Clerks should not be permitted to open files of this kind without authorisation by the supervisor, who should check that all avenues have been explored to locate the original file.

*Files may not be easily found, in which case a temporary file should be opened.*

A good working practice is to record on the temporary file details of the searches undertaken to trace the missing file. If the original is subsequently found, the contents of the two files should be merged, with the papers being interfiled in the correct sequence. The cover of the temporary file may be destroyed unless it has been used to record unique information, in which case it should be inserted within the cover of the permanent file.

If a reference number is known but the file has been destroyed, a new file should be opened, bearing the same number as the destroyed file but marked on the cover with an agreed form of words such as 'PREVIOUS FILE DESTROYED'.

If a patient is found to have two different reference numbers (and therefore two separate files), the two files should be merged in the way described above. One or other of the numbers should be deleted by removing the surplus card from the master index and by renumbering all relevant papers within the file. The card that remains in the master index should be annotated with an agreed form of words such as 'FILE NO. XXX FOR THIS PATIENT DELETED'. In the master list of file numbers, the deleted number should be annotated with an agreed form of words such as 'MERGED WITH FILE NO. YYY'.

*Two files for the same patient may have to be merged.*

If a patient is found to have been registered under two different names, the files should be merged and one of the two reference numbers deleted, as described above. Both names should appear on the merged file, with an indication that the patient is (or has been) known by more than one name. In addition, one name should be cross-referenced to the other in the master index.

#### **Activity 24**

Identify three common registration problems experienced in your hospital. For each problem, suggest at least two actions that could be taken to reduce the likelihood of the problem occurring.

## Registration of In-patient Admissions

If out-patient records do not form part of a unitary file system and the registration point deals only with admissions to the wards, registration procedures can be relatively simple. Where non-emergency ward admissions are planned in advance, by means of a waiting list and appointments system, the patients can be asked to register either when they are put on the waiting list or when they report for admission. If they register in advance, the files can be made ready before the admission date.

In a hospital that does not have an appointments system or a formal waiting list, non-emergency admissions are likely to be determined on a day-to-day basis by the doctor controlling the beds in each ward. The doctor can provide each patient with a signed form confirming that he or she is to be admitted to the ward on the date stated. If the hospital wishes to avoid any possibility of patients being registered without due authorisation, anyone arriving at the registration point without a signed form can be sent back to the doctor to obtain the necessary consent.

If the registration point deals with out-patients as well as in-patients, a far larger number of patients will be seen each day. After registration, patients will go to the appropriate clinic, where the medical staff will decide whether they require treatment and will identify those who need to be admitted to the wards. Depending on circumstances, patients in the latter category may be placed on a waiting list, given a specific future date to report for admission or admitted immediately.

*The records control systems needed to manage different registration systems are described in Lesson 4.*

*Even in hospitals where most admissions are planned in advance, arrangements must be made for emergency admissions and other cases where patients are too ill to go to the registration point.*

It will sometimes be possible for an accompanying relative to go to registration on the patient's behalf, but there must also be a system whereby, at the discretion of the medical staff, a records clerk can be summoned to the ward to register patients there. Medical and nursing staff should not be permitted to open files themselves but should be instructed to summon a records clerk when necessary.

If patients must be registered as part of an emergency admission or at times when the records department is unstaffed, doctors and nurses can be provided with temporary files or wallets designed to hold loose papers securely. Records staff can then be advised as soon as possible after the patient is admitted so that full registration procedures can be undertaken.

Some hospitals allow nurses or other staff to undertake the retrieval of existing files at times when no records staff are on duty, but this practice is not recommended.

If non-records staff must retrieve records, clear instructions for the logging out of files must be issued and respected. If resources allow, it is preferable for the records department to be manned on a twenty-four-hour basis.

*Records procedures on the discharge or death of a patient are described in Lesson 4.*

### **Activity 25**

Identify the process used for registering in-patients in your hospital.

Can you suggest two or three ways you could improve the process from a records management perspective?

## **Clinic Procedures and Registration of Out-patient Attendances**

As indicated in Lesson 1, the management of out-patient treatment varies from one hospital to another. Some hospitals have separate specialist clinics in addition to a general clinic or an accident and emergency department. Other hospitals simply have one or more all-purpose clinics. The records department may be able to influence the hospital's practices in these areas, but ultimately the clinic structures will be determined by the hospital managers. The records department will have to devise appropriate records systems to meet their requirements.

Many hospitals that operate a unitary casenote file system make an exception for attendances in an accident and emergency department or in a general out-patients clinic dealing only with minor injuries. Certain other departments such as immunisation clinics or dental clinics, which deal only with routine treatment, can also be exempted from the unitary file system. The staff in these departments do not generally need access to a patient's complete history, and it is quite acceptable and usually simpler for separate records to be maintained in these departments.

*If staff in some departments do not need access to a patient's complete history, it is usually simpler for separate records to be maintained in these departments.*

These records are often kept on cards filed in alphabetical order by patient's name. Reference numbers are usually not required; indeed in some hospitals it is not considered necessary to keep any notes at all for the most minor out-patient attendances. However if a patient is referred from one of these departments to another part of the hospital, their unitary file will then be retrieved or, if no file exists, a new one will be opened.

Wherever possible, patients attending specialist clinics should be included within a unitary file system, so that treatment provided in the clinics can be co-ordinated with ward episodes. However the question of which groups of patients should be included in the unitary files is not one that the records department alone can decide. Hospital managers and medical staff will also have an opinion on this matter, although the records staff will be able to advise on the practical feasibility of their preferred option.

Where a unitary file system is in place but no appointments procedures exist, all patients must report to the registration point when they arrive at the hospital, so that their file can be identified or a new file opened. However it will usually be found that records systems are easier to operate in clinics where most or all of the patients are seen by prior appointment.

The recommended system is as follows. Patients are registered either when their first appointment is made or on the first day that they receive treatment in the clinic. The identity card given to patients when they are first registered includes a printed grid where appointments can be recorded, as indicated on the example below. Whenever they are given an appointment, the date and possibly the time are noted on the card, together with the name of the clinic and, if appropriate, the name of the doctor responsible for the case. All appointments are also entered in a clinic diary, where the patient's names and file numbers are both recorded. One or two days before the clinic is held, the diary or a copy of it is used to provide a list of the files to be retrieved.

If follow-up clinic attendances are always by appointment, the diary system means that patients will not need to register on these occasions. If, however, it is the hospital's policy not to turn away those who arrive without an appointment or who come on the wrong day, such patients will have to visit the registration point so that files can be retrieved or opened for them on the day they arrive.

*Records procedures at the end of a clinic are described in Lesson 4.*

### **Activity 26**

Identify the process used for registering out-patients in your hospital. How are the systems different from the processes used to register in-patients?

Can you suggest two or three ways you could improve the process from a records management perspective?

# APPOINTMENTS

Patient's name: \_\_\_\_\_

Hospital identification number: \_\_\_\_\_

Date	Clinic

Folded

Date	Clinic

*Figure 10: Sample Appointments Grid*

# SUMMARY

This lesson has outlined the management of patient casenotes, beginning with the question of whether to retain casenotes at the hospital or give custody of them to the patient. It has recommended retaining casenotes at the hospital and subsequent recommendations for action are based on this principle. This lesson has also discussed the concept of unitary file systems for hospital-based records and the choice of numbering systems for filing. It has examined aspects of designing casenote files and ensuring the efficient management of their contents. It has considered the creation and management of forms and the internal organisation of files. Practices required for the closure of files and for the creation and management of a master patient index have been discussed. Finally, it has included extensive discussion of processes for identifying and registering patients.



# STUDY QUESTIONS

1. What are the benefits and drawbacks of retaining casenotes at the hospital?
2. What are the benefits and drawbacks of allowing patients to take casenotes away with them?
3. What is a unitary file system?
4. Explain the purpose of assigning patients registration numbers.
5. Why should patients be assigned only one unique number?
6. What types of numbering systems can be used to register patients?
7. Explain the information that should be included on a file cover for patient casenotes.
8. What types of forms can be used in a hospital?
9. What is the purpose of a summary sheet?
10. How should the contents of a casenotes file be organized?
11. Explain the procedures for closing files.
12. What is a master patient index?
13. Explain how a master patient index should be organised.
14. What difficulties occur when identifying patients in a hospital registration process?
15. What issues can arise in documenting patients' names?
16. In your country, how would patients' names best be recorded?
17. What other personal information should be recorded about a patient to identify him or her?
18. What difficulties can emerge when identifying a patients' age?
19. In your particular country, what concerns arise when trying to determine patients' ages?
20. Why can using a mother's maiden name be useful for identification of patients with identical names?

21. In your particular country, would the use of a mother's maiden name be a useful way of identifying patients with identical names?
22. What is the benefit of an identity card for patients?
23. Explain the procedures involved with registering in-patients in a hospital.
24. Explain the procedures involved with registering out-patient attendances in a hospital.
25. Explain some common registration problems found in hospitals and the 'best practice' solutions.
26. Explain the procedure for establishing and maintaining an appointments system.

# ACTIVITIES: COMMENTS

## **Activities 15-26**

Each of the activities in this lesson is designed to make you examine existing practices in your hospital or the hospital you are studying and consider ways you might adjust those practices to improve record keeping in the institution. It is particularly important for anyone working with hospital records to understand the realities of practice within that institution; not all systems will be ideal but change can only be effective if it takes place in a planned and organised fashion.

There are no 'right' answers to the questions posed, and the benefits or drawbacks you identified or the suggestions you made for improvement will vary depending on the needs of your organisation. However, you should review your answers against this lesson and again once you have finished the entire module to see if your suggestions conform to good record-keeping principles and practices.

## **MANAGEMENT OF OTHER HOSPITAL RECORDS**

This lesson examines the management of specific types of hospital records, including

- X-rays, pathological specimens and preparations, and related records
- patient registers
- pharmacy and drug records
- administrative and policy records
- financial and personnel records
- records of nursing activity
- educational records.

### **X-RAYS, PATHOLOGICAL SPECIMENS AND PREPARATIONS, AND RELATED RECORDS**

Certain types of records relating to individual patients must be stored separately from his or her casenote file, either because of their format or because they require storage in special conditions. Examples are X-ray films and pathological specimens and preparations. It is important not only that these special format materials can be linked with the rest of the documentation for the same patient, but also that each item, whether an X-ray, other diagnostic test or laboratory preparation, can be individually identified.

Whether the patient has been referred to the hospital by an external medical practitioner, or whether the X-ray or test has been requested from within the hospital, the patient should always be registered.

*Certain types of records relating to individual patients must be stored separately from his or her casenote file.*

## **X-ray Films**

Because of their large size and weight, X-ray films are best kept in stiff, standard-format envelopes or packets. Specifications for these envelopes and for the shelving on which they are stored will be considered in Lesson 4.

There are several different ways of identifying individual X-rays, but the simplest is to rely on the date of the X-ray and the patient's name and number. This may be sufficient, particularly in smaller hospitals.

Alternatively, each patient's X-ray may be given its own unique identification number. This can be made up of the patient's number prefixed or suffixed with a letter or a separate number, beginning at A or 1: for example, A/291764 or 1/291764. Double letters can be used when the letter Z has been reached. The advantage of using unique X-ray numbers is that it provides a more precise form of identification. The disadvantage is that it requires a small amount of additional work in generating and keeping track of assigned numbers.

Depending on climatic conditions, these systems may allow several X-rays to be stored in the same envelope. However, there should be a separate X-ray envelope for each patient, and there may be occasions when an individual patient requires more than one envelope. Within the envelopes, the films should be arranged in chronological or numerical order with the latest at the front.

In humid climates each X-ray should be stored in a separate envelope, to prevent the films from sticking together. If envelopes are in short supply, each X-ray can be interfiled with a sheet of paper.

A significant benefit of these filing systems is that all the X-rays for any one patient can be kept together, either in the same envelope or in adjoining envelopes. However physical problems may arise when new X-rays need to be added to an existing envelope which is full, or when a long-established patient is X-rayed for the first time and a new envelope needs to be interfiled. It will be found that the creation of extra space on a full shelf of X-rays is extremely difficult.

For this reason it may be preferable to use a separate single sequence of X-ray numbers, each new request and its corresponding film being assigned the next available number. These numbers may be allocated using a single sequence beginning at 1, or any of the alternative numbering schemes discussed in lesson 2 may be employed; care must be taken to ensure that X-ray numbers and patient (unitary file) numbers are distinctive, so that there is no risk of confusion between the two sequences of numbers.

The latter system makes it easy to discover how many patients have had an X-ray in any given period of time, to deal with accruals (which are simply filed at the end of the existing sequence) and to remove the oldest X-rays for disposal. The disadvantage is that, in order to provide the necessary link between an X-ray and the other documentation for the same patient, an additional card index or register has to be maintained, with cross-references between X-ray numbers and patient unitary file numbers. It also means that the X-rays for any one patient have to be retrieved from different storage locations.

Whichever system is used, the patient's name and unitary file number, the separate X-ray number (if applicable) and the date should all be photographed onto each film to provide identification. These are usually positioned on an identification strip at the top of the film. X-rays can easily get out of order; if they are not properly identified, restoring the correct arrangement can be very time consuming.

The same details should be recorded on the outside of the X-ray envelope, together with the part of the body X-rayed. If local practice requires this, the ward or department from which the request originated and the name of the clinician who made the request may also be noted on the envelope. Where several X-rays are stored in the same envelope, the patient's name and number need only be recorded once but the other details will need to be recorded separately for each X-ray. If at all possible, the envelopes should be specially printed with designated spaces for each piece of information required.

If X-rays are not stored on the shelves in chronological order, a coloured sticker (or one of the alternatives suggested in Lesson 2 above) may be used to show at a glance the last year in which a patient had an X-ray. Thus when the envelope has been inactive for a number of years it can be identified for disposal.

*Because of their large size and weight, X-ray films are best kept in stiff, standard-format envelopes or packets.*

## **X-ray Requests and Reports**

Whether the patient has been referred to the hospital by an external medical practitioner, or whether the X-ray or test has been requested from within the hospital, the patient should be registered before the X-ray is made.

Requests for X-rays should be made on a standard form. The design of the form should include designated spaces for the patient's name and unitary file number, as well as the date of the request and the name, signature and department of the requesting clinician.

A day book or register should be maintained to record the receipt of X-ray requests and, if applicable, the assignment of the next available X-ray number which should then be written on the request form. Following the production and examination of the X-ray film, the radiologist's comments are usually written on the request form so that the form also serves as the report.

Two signed copies of the report are needed, one to be kept for reference in the X-ray department, the other to be forwarded to the clinician who made the request. This second copy will in due course be placed on the patient's file. For this reason self-duplicating request forms are preferred. In areas where self-duplicating forms are unobtainable, carbon paper or photocopies may be used or the report may have to be written twice. If the latter practice is followed, the radiologist should sign both copies after checking that they are accurate and identical.

If the radiologist's copies of the reports are kept with the X-ray films themselves, there is a tendency for the reports, which may be flimsy and small, to become out of order or crumpled and damaged, unless they are placed in a separate folder within the X-ray envelope. A preferred arrangement is to file the reports separately, arranging them numerically by X-ray number or patient number, or alphabetically by patient name.

*Requests for X-rays should be made on a standard form.*

### **Activity 27**

Refer back to the work you did for Activity 4 in Lesson 1. Consider the information provided in this lesson and expand your two suggestions for how you could improve the care of X-rays, adding at least another two suggestions based on information you have gleaned as you work through this module.

## **PATHOLOGICAL SPECIMENS, PREPARATIONS AND RELATED RECORDS**

Diagnostic reports made as a result of laboratory tests or other technical examinations are an essential part of a patient's record. As with X-rays, requests for a particular investigation may be entered on a form by the clinician and sent to the pathology department or laboratory. The pathology department will need a numbering scheme to enable it to track these requests. If appropriate, separate numbering sequences may be used for each kind of test that can be requested (such as haematological, histological or bacteriological tests). Coloured forms, though not essential, may also be used to help distinguish the different kinds of tests.

Some pathology departments may serve not only the hospital where they are based but also other hospitals or healthcare facilities. Where this is the case, patient numbers used in different hospitals may overlap and therefore should not be used as the basis for a numbering scheme within the department.

It is therefore recommended that each request be given a unique identification number. A day book or register is needed to record details of each request when it is received and the assignment of the number, which is then written on the request form. All specimens and preparations will also need to be clearly labelled. They should be identified by the unique identification number, the patient's name and number and, if necessary, the name of the hospital or medical practitioner requesting the test.

Specimens are generally kept for a short time and are discarded after the authorised examination report has been issued and accepted by the clinician requesting it. Paraffin blocks, prepared by infiltrating the specimen with paraffin wax, may be kept for much longer periods. Sections from the block are mounted on glass slides and stained for examination. If there are large quantities, paraffin blocks and stained glass slides need to be indexed and given a location so that they are readily accessible.

*Appropriate storage conditions for specimens are discussed in Lesson 4.*

Just as with X-rays, reports of pathological investigations are frequently entered on the request form or attached to it. Two copies of a report are prepared; one copy is sent to the clinician who initiated the request while the other is retained in the pathology department.

It is essential that the reports are adequately identified with the patient's name and number, the pathology department's unique identification number and the date. These details are required both to allow the reports to be found when required and to link them to the specimens or preparations on which they are based. For the clinician's copy, which is eventually added to the patient's casenote file, the patient's number ensures that it is placed in the correct file, while the date is used to ensure that within the file all reports are arranged in the correct order. There needs to be a reliable and systematic procedure for ensuring that the clinician's copy of the report is placed on the patient's file, otherwise there may be a need to repeat the test. The accurate filing of these copies in chronological order is important as they may record a series of examinations during the same episode of illness. The pathologist's copies may be filed numerically by pathology number or alphabetically by patient name.

*Specimens are generally kept for a short time and are discarded after the authorised examination report has been issued and accepted by the clinician requesting it.*

### **Activity 28**

Refer back to the work you did for Activity 5 in Lesson 1. Consider the information provided in this lesson and expand your two suggestions for how you could improve the care of specimens and preparations, adding at least another two suggestions based on information you have gleaned as you work through this module.



# PATIENT REGISTERS

The day books or registers described above, which are kept in support of the work of X-ray and pathology departments, are typical of patient registers kept in departments throughout the hospital. Characteristically, such registers are kept in bound or loose-leaf volumes, with horizontal lines to mark off the data about each patient, and columns to record appropriate details about the patient and his or her diagnosis, treatment or progress through the hospital or the department concerned.

Operating theatre registers, for example, contain patient details and the date and sometimes time of the operation, the nature of the operation, names of the surgeon and anaesthetist and the type of anaesthetic employed. Mortuary registers include information about the patient as well as the date of receipt of the body in the mortuary and particulars of any valuables.

There must be a system for storing and retrieving registers once they have been closed. For example, ward registries when full will need to be transferred to the records department where they may be arranged by ward and, within ward, chronologically.

Practices relating to registration of admissions and discharges or births and deaths vary widely between one hospital and another. Some maintain these records centrally; some have no central system but keep separate registers in individual wards or clinics; others may have a duplicate system where registers are maintained both centrally and locally. Admissions, discharges, births and deaths may all be recorded in the same register, or separate books may be used for one or more of these categories.

Registers are usually arranged chronologically, with entries made in date order as patients arrive or their details are notified. However, an alphabetical arrangement by patients' surnames is also possible. Registers of the latter kind are not usually arranged in strict alphabetical order; instead, the volume is divided into sections corresponding to the letters of the alphabet, and within each initial letter of surname a chronological arrangement is maintained. This system allows new entries to be made as patients arrive but also allows staff to search more easily for the record when a patient's name is known. An alternative method is to maintain an alphabetical index to the chronological register.

Some hospitals may choose not to keep registers for some of the categories mentioned. However, the failure to maintain full records, particularly in the case of admissions, discharges, births and deaths, may have serious consequences not only for patients and their families, but for the hospital itself in cases where information about past patient episodes is sought. There needs to be a reliable system for storing and retrieving registers once they have been completed; ward registers, for example, can be transferred to the records department as soon as they are full.

On the other hand, if registers of this type are allowed to proliferate without adequate control, redundant records are likely to be created and much staff time will be spent entering the same information into more than one register. However there is often a genuine operational need for separate registers to be maintained at different locations

within a department (normally at points through which patients must pass as they progress through the department). In these circumstances, when using paper-based systems, some repetition of details between registers is probably inevitable. The key to effective linkages between different registers is of course the use of the patient's number as a unique identifier. In recent years many hospitals have introduced computer systems that have replaced some or all of their manual registers.

*Registers are usually arranged chronologically, with entries made in date order as patients arrive or details are recorded.*

*Computerised methods for registration are discussed in Lesson 4.*

### **Activity 29**

Refer back to the work you did for Activity 6 in Lesson 1. Consider the information provided in this lesson and expand your two suggestions for how you could improve the care of patient registers and related indexes, adding at least another two suggestions based on information you have gleaned as you work through this module.

## **PHARMACY AND DRUG RECORDS**

Drugs are a valuable commodity in any hospital. Comprehensive record keeping is necessary to provide an audit trail in the event of error in the prescription, dispensing or administration of drugs, or in case of misuse or theft of drug supplies. In addition, full records of drug trials must be kept.

*Comprehensive record keeping is necessary to in the management of drugs.*

Copies of order forms for stock, and all delivery notes, should be kept for an agreed number of years. Original orders are usually passed to the finance department for payment. From the moment that drug supplies are received in the hospital, a full record should be kept of each quantity that passes from one custodian to another (for example, from bulk stores to the hospital pharmacy, and from there to wards or departments or to individual patients). These records should be cross-checked regularly as part of the stock control and audit process.

The pharmacy will normally have a dispensary counter where out-patients can present prescriptions given to them in the clinics and collect or purchase the drugs prescribed.

In addition, ward staff will send requests to the pharmacy to replenish drug stocks and to provide non-stock items prescribed for individual in-patients. Requests or requisitions from wards and other departments should be checked in the pharmacy to ensure that they are duly authorised. The requisitions should then be retained for an agreed length of time.

In all cases, full records need to be maintained of items received, issued or dispensed, as well as details of the staff involved in preparing, checking and dispensing drugs, so that each stage of the process is documented and can be traced if necessary. The pharmacy must also maintain records documenting specially prepared 'one-off' prescriptions: these records must include patient details, individual ingredient details and the batch numbers of the ingredients so that all items can be traced.

There may be legislation or other regulations about the form pharmacy records should take, particularly for dangerous or 'controlled' drugs. For example, the government may require that a register be kept with pages laid out in a specified format. On the wards, a controlled drug register may be used to note details of the type and quantity of drugs administered to in-patients, and by whom.

In order to prevent abuse of drugs and to ensure that relevant information is available where it is needed, it is usual to keep duplicate copies of records concerning the movement of drugs within the hospital. One copy remains with the issuer, the other with the recipient. The disposition of the stock of drugs is thus fully documented at every stage. At the final stage, when the recipient is an individual patient, relevant documentation should be included in his or her casenotes.

Thus, for example, requests to the pharmacy from wards requiring non-stock items may be dealt with as follows: a book is kept in each ward in which each page comprises a blank pre-printed form. The request is written on two copies of the form, one of which remains in the book while the other is detached and sent to the pharmacy, accompanied by two copies of the original signed prescription.

To produce such copies, self-duplicating paper is best; however the use of carbon paper may be a cheaper option. One copy of the request form and prescription then remain in the pharmacy, while the second copy of the prescription and the drugs are sent to the ward. Alternatively, the hospital may decide that a single copy of the prescription is sufficient; the pharmacist would then check the request form against the prescription and would retain only a copy of the request form, suitably annotated.

To facilitate both the retrieval and eventual disposal of records of this kind, the pharmacy may arrange such records alphabetically by ward, then by date. Records of items dispensed at the counter may also be kept in chronological order, to document the transactions conducted each day.

All drug records, both those maintained in the pharmacy and those kept in the wards or other departments, should be preserved for an agreed length of time in case they are needed. In practice the frequency of reference is likely to be low. These records can therefore be transferred to semi-current storage after a fairly short period.

*All drug records should be preserved for an agreed length of time in case they are needed.*

*More information on the appraisal and disposal of records is provided in Lesson 4 and in Building Records Appraisal Systems.*

### **Activity 30**

Refer back to the work you did for Activity 7 in Lesson 1. Consider the information provided in this lesson and expand your two suggestions for how you could improve the care of pharmacy and drug records, adding at least another two suggestions based on information you have gleaned as you work through this module.

## **ADMINISTRATIVE AND POLICY RECORDS**

The management of minutes, reports and files of correspondence and working papers is discussed in other modules in the study programme, and the principles and practices set out there will be broadly applicable to administrative records in hospitals. However administrative filing systems in hospitals will usually be on a much smaller scale than those in central government ministries.

*For information on the management of current administrative and policy records, see Organising and Controlling Current Records.*

Registration of individual documents is not usual practice in hospital administration, while file titles and classification and coding schemes can often be much simpler than in the civil service context.

*The management of administrative records should follow procedures outlined in other modules in the study programme.*

### Activity 31

Refer back to the work you did for Activity 8 in Lesson 1. Now expand your two suggestions for how you could improve the care of your hospital's administrative records, adding at least another two suggestions based on information you have gleaned as you work through this module.

## Financial and Personnel Records

Like other institutions, hospitals produce financial records, which in a paper-based system generally comprise series of accounts such as ledgers and cash books together with supporting documents (invoices, delivery notes, purchase orders, receipts) and payroll records. Hospitals are likely to be required to produce estimates of income and expenditure, to provide annual account statements and to record all financial transactions for the purposes of accountability and for internal and external audit.

*Guidance on the management of financial records is found in Managing Financial Records.*

In hospitals responsible for their own personnel functions, files for current and former staff are kept. There may be separate series for administrative, medical and nursing staff. It may also be necessary to keep separate records relating to recruitment, staffing structures, remuneration schemes and so on. Some hospitals also keep details of individual staff on index cards, in registers, on microfilm or fiche, or in electronic databases.

*Guidance on the management of personnel records is found in Managing Personnel Records.*

*Financial and personnel records should be managed according to principles and practices outlined in other modules in this study programme.*

### Activity 32

If you did not examine financial or personnel records as part of your work for Activity 8 in Lesson 1, you should now spend a little time investigating how these records are cared for by your institution. Develop two suggestions for how you could improve the care of your hospital's personnel and financial records.

# RECORDS OF NURSING ACTIVITY

In countries where a traditional British model is followed, the main record of nursing activity on each ward is likely to be a chronologically arranged 'day/night nursing report book'. Such books are used by nurses to make notes on new admissions and transfers and on the progress of, and any problems relating to, patients in the ward. The use of such report books has now largely been abandoned in the United Kingdom because of the inflexibility of the format, but such books are still found in many countries. In hospitals where senior nursing staff need to inspect a single record of ward activity in volume form, these books are likely to remain in use, but elsewhere alternative forms of record are likely to be preferable.

Just as medical staff ceased to use bound volumes for their patient casenotes and turned to the use of files, so nurses have increasingly come to prefer systems that generate separate physical records for each patient. In many hospitals, such a system takes the form of a nursing card index (often known as a 'Kardex', from the name of a manufacturer of such card indexes). In the card index, one card is maintained for each patient on the ward. The cards are used to note patients' allergies, dietary requirements and drug regimes, as well as progress reports. In countries where nursing care plans are used, these too may be noted on the card index. For nursing purposes, patients are identified on the cards by their name and by the number or position of the bed they occupy. To ensure a clear link to other records, each patient should also be identified by his or her unitary casenote number.

In some countries it is now usual for nursing reports and progress notes to be placed on patients' casenote files. This practice is particularly common in hospitals where patients are assessed by a nurse on admission, in order for the nurse to establish a nursing diagnosis and care plan. Notes of this kind may be in narrative format or may follow a structured flow sheet. In either case a pre-printed form should be used. It is not normal practice for 'Kardex' records to be placed on the casenote file when the patient is discharged, although consideration might be given to doing so in order to ensure the completeness of the documentation on the file.

With all these systems, a major difficulty arises from the need for nurses to keep their records up to date when the ward is busy. A 'Kardex', in particular, is not easily portable and has to be kept at a central workstation, while the nurses are constantly moving around the ward. Many nurses use rough worksheets to make a quick but temporary record as they perform their duties, but there is still a risk that documentation of some activities will be overlooked.

Typically, the formal nursing records are compiled after the event, either from memory or by copying the contents of worksheets.

The records manager should promote good practice among the nursing staff, encouraging them to compile records promptly and thoroughly and to check carefully any copies made from rough notes in order to ensure the accuracy of the formal record. The practice of destroying the rough notes at the end of a shift, and of relying on memory in writing up records after the event, should be discouraged.

*In some countries it is now common for nursing reports and progress notes to be placed on patients' casenote files.*

### **Activity 33**

Refer back to the work you did for Activity 9 in Lesson 1. Now expand your two suggestions for how you could improve the care of nursing-related records, adding at least another two suggestions based on information you have gleaned as you work through this module.

## **EDUCATIONAL RECORDS**

This module does not attempt to offer full guidance on the management of records in medical and nursing schools. It is suggested that the administrative records of such schools can be managed using the same principles as apply to records of the hospital's central administration, while the records which relate to individual students share characteristics with personnel records discussed in another module of this programme.

### **Activity 34**

Refer back to the work you did for Activity 10 in Lesson 1. Consider the information provided in this lesson and expand your two suggestions for how you could improve the care of education-related records, adding at least another two suggestions based on information you have gleaned as you work through this module.

# SUMMARY

This lesson has examined the management of specific types of hospital records, including X-rays, pathological specimens and preparations, patient registers, records of nursing activity and pharmacy and drug records. It has also introduced the idea of caring for administrative and policy records, financial and personnel records and educational records, directing the reader to other modules for more information on these specific topics.



# STUDY QUESTIONS

1. Why do X-rays, pathological specimens and preparations need to be stored separately from the patient's casenotes file?
2. How are X-rays best stored?
3. How are X-rays best identified?
4. What information should be recorded on an X-ray envelope?
5. Under what conditions should a large number of X-rays not be stored together in one envelope?
6. Explain the procedure involved in preparing an X-ray report.
7. How should X-ray reports be filed?
8. How long are specimens usually kept?
9. Explain the different types of registers that might be kept in a hospital.
10. What types of financial records might be found in a hospital?
11. What types of personnel records might be found in a hospital?
12. What is the purpose of a nursing report book?
13. What are the benefits and drawbacks of using a bound volume as a nursing report book?
14. What are the benefits and drawbacks of using a 'Kardex' system for nursing notes?
15. Why are comprehensive record-keeping processes important for the management of pharmacy and drug records?
16. What pharmacy processes should be documented through records?

# ACTIVITIES: COMMENTS

## **Activities 27-34**

These activities are designed to help you consider methods for improving records care in your own institution. There are no 'right' answers to the questions, but the suggestions you develop for improved records care should conform to the principles and practices outlined in this and the other modules in the study programme. To help you assess the worth of your ideas, review them again as you complete this module and examine them in relation to the other modules in this programme.

## APPRAISAL, STORAGE, AND ACCESS ISSUES

This lesson discusses the appraisal of hospital records and their management as current and semi-current records, including a discussion of the physical storage of records and the control of their issue, use and return. The lesson then considers the destruction of obsolete records and transfer of records to archives. It also considers access issues related to hospital records, and it concludes with a discussion of the use of computers in hospital record keeping and the management of electronic hospital records.

### APPRAISAL OF HOSPITAL RECORDS

The concept that records follow a life cycle and that their management is part of a continuum of care is equally applicable in hospitals as in central government agencies. In order to manage hospital records efficiently, they should be appraised and rules for retention and disposal applied. The information in this lesson is drawn from the principles set out in the module *Building Records Appraisal Systems*, placing those concepts in the hospital context.

*Like other organisational records, hospital records follow a life cycle and their management should be part of a continuum of care.*

Most clinical records may be appropriately dealt with by means of a disposal schedule. In most cases the schedule can authorise the routine destruction of records or stipulate the transfer of all or a sample of the records to an archive repository, when an agreed period has passed since the records ceased to be in regular use.

In some countries there may be nationally agreed disposal schedules for hospital records, either laid down by statute or imposed by the records and archives institution. In other countries no national schedules may exist. The paragraphs below are intended to offer guidance to hospital records managers who have to draw up local schedules for their own use. These notes may also assist the records and archives institution in drawing up national schedules for hospital records.

## Determining Retention Periods

*Retention periods for patient casenotes and other clinical records will be determined by a combination of legal, clinical, administrative, audit and research requirements.*

A useful guide to retention periods for all hospital records, based on United Kingdom practice and legislation, is provided in Health Service Circular HSC 1999/053 issued by the UK National Health Service Executive. Further details of this and other publications are given in Lesson 5, Additional Resources.

Legal requirements will be relevant to records retention, even in countries where there are no statutory retention periods for hospital records. In particular, casenotes and other clinical records should be retained until the expiry of the time limit for medical negligence claims under the limitation statutes in force in the country concerned. Such claims are still rare in many developing countries but it would be rash to assume that they will not become more frequent in future. The law of limitation does not of itself require that records be kept for any stated period of time, but the hospital would be wise to adopt the time limit for negligence claims as a minimum retention period for its clinical records, to ensure that it can defend itself at law if necessary.

In many Commonwealth countries, local laws will be based on United Kingdom legislation, which generally allows a period of six years from the date of knowledge of an injury for legal action to be brought, although a longer period is allowed for children and the mentally ill. In countries where a six-year limit applies, it may be possible to consider destruction of patient records that have been inactive for six years. However, in the UK all patient records are kept for at least eight years. The use of a grid on file covers, as recommended in Lesson 2, provides a simple means of identifying casenote files where patients have not attended for a stated number of years.

Clinicians may recommend that some or all patient casenotes be kept for longer than the minimum periods mentioned above, for clinical reference in the event the patient reattends. Some clinicians may want every record to be kept until the patient is known to have died. Considerations of storage space mean that few hospital records services have the resources to keep all such records, and it would not be wise for hospitals to attempt to keep all records in paper form for such a time.

In countries where appropriate technology is available, the conversion of patient casenotes from paper to microfilm, microfiche or optical disk can be useful when storage space is limited and files are relatively inactive but need to be kept for clinical reasons. When converting records from one format to another, quality control is essential to ensure that the records in the new format remain accessible, complete and admissible as evidence at law. It is also possible to link microfilm and optical disk systems to a master index held on computer.

This approach may be considered when the files to be converted are expected to remain moderately active or when faster retrieval is required. Solutions of this kind

should only be considered when arrangements can be put in hand to ensure that the system can be properly maintained using resources available locally. Unless it can be guaranteed that records on optical disks can be stored and accessed over appropriately long periods, storage in this medium should not be attempted.

*For more information on media conversion, see Organising and Controlling Current Records and Preserving Records.*

Where media conversion is not an acceptable or affordable option, it is unlikely that the potential level of demand for original paper records that have been inactive for decades could justify the cost of preserving them. Particularly in countries where resources are limited, it is important that a structured disposal policy should be agreed and enforced.

A more satisfactory approach may be to identify particular diagnoses for which longer or shorter retention periods are appropriate. As yet there is no consensus on this issue in the medical profession, and few countries have comprehensive national guidelines. In the absence of external guidance, the hospital's medical committee or its records committee could be asked to advise on this question with a view to identifying retention periods for particular diagnoses.

Where diagnostic coding is in use, staff employed on coding could then be instructed to mark file covers with an appropriate form of words (such as 'DO NOT DESTROY UNTIL 30 YEARS FROM LAST ATTENDANCE') when relevant diagnoses are coded. Any rules of this kind should of course be noted on the appropriate records disposal schedule.

X-rays and laboratory preparations could also be retained until the expiry of the legal limitation period, but often the reality is that they are too space consuming, and there is little likelihood of their being required in a legal defence. Thus they are often kept for shorter periods. In these circumstances the retention periods for laboratory preparations will depend on clinical need.

Microbiological stained slides may not be kept for more than a few months beyond the issue of the authorised report, though there may be exceptions, for example in cases of leukaemia. Cytology, histopathology, bone marrow smears and other slide preparations may need to be kept longer for further diagnosis or continuing clinical management. With cancer patients, for example, it may be good practice for preparations to be kept for a number of years in case the cancer recurs.

## **Approving the Records Schedule**

Once a draft schedule has been prepared, the records manager should obtain the authorisation of key personnel within the hospital. Each part of the schedule should be approved by the relevant head of department. The complete schedule should be submitted to the hospital administrator and if possible to a competent lawyer. It should also be approved by the hospital's governing body or other responsible government agency and by the records and archives institution, if applicable.

*The records schedule must be approved by key personnel within the hospital.*

### **Activity 35**

Look back at your review of legislation that could affect record keeping in hospitals. Also investigate legal or administrative requirements for records retention in your hospital. Based on the information gathered, write a brief description of at least four or five specific issues that must be considered by your hospital when determining retention periods for different categories of hospital records.

## **STORAGE OF HOSPITAL RECORDS**

### **Paper Records**

The optimum conditions for storage of paper records are described in the module *Preserving Records*. In hospitals in developing countries, it will often be impossible to provide ideal conditions, but the aim of the records manager should be to match them as closely as local circumstances allow.

Current files housed in the central administrative offices of the hospital, or in departmental filing systems, can be stored in a range of filing equipment as described in *Organising and Controlling Current Records*. Schemes of arrangement of the individual files within the filing unit are also described there.

At the semi-current stage, departmental files and other records can be moved on to high-density shelving, following the principles outlined in *Managing Records in Records Centres*. While most records should normally be boxed for storage at this stage in their life, many items including operating theatre registers, admission and discharge books and birth and death registers are likely to be oversized and will probably remain unboxed unless specially constructed boxes are available. For any oversized items, shelving of appropriate dimensions must be provided.

### **Casenote Storage**

Most of the current filing equipment described in *Organising and Controlling Current Records* is not usually appropriate for patient casenote files. Casenotes are generally stored, unboxed, on high-density shelving throughout their life, rather than being transferred to such shelving when deemed to be semi-current.

The arrangement of casenote files on the shelves can be in simple numerical sequence. Alternatively a system of terminal digit filing can be employed.

*Casenotes are generally stored, unboxed, on high-density shelving throughout their life, rather than being transferred to such shelving when deemed to be semi-current.*

Terminal digit filing involves allotting records to sections, according to the last two digits of their file reference. Thus in a six-digit system all files ending \*\*\*\*00 are stored in one section, all files ending \*\*\*\*01 in the next, and so on up to \*\*\*\*99. Marker cards are employed to divide up the shelf bays and to assist the clerks in locating files. Within sections, files are arranged in sub-sections according to the middle pair of numbers, beginning with 00, up to 99. Within sub-sections, files are arranged numerically according to the first pair of digits.

*Terminal digit filing involves allotting records to sections, according to the last two digits of their file reference.*

The terminal digit filing system has several advantages. For example, file references are assigned in numerical order but newly opened files are not grouped together on the shelves, thus avoiding a concentration of filing activity in one part of the storage area. Further, when clerks are familiar with the system the number of misfiles can be reduced.

Newly opened files are generally slim, but with the passage of time some older files will become quite bulky. As stated in Lesson 2, a file more than 3 cm (1 in) thick should be closed and a continuation file placed next to it, but such pairs of files will still occupy an above-average amount of shelf space. Terminal digit filing has the effect of distributing bulkier files, and pairs of files, around the storage area, rather than concentrating them on particular shelves where file references were assigned long ago, thus helping to avoid congestion on the shelves.

Terminal digit filing is not suitable for all situations: it will not be effective unless all existing file references have been assigned in logical sequence and all contain an equal number of digits or alphabetical characters. It also requires a fair degree of numeracy on the part of the filing clerks; in hospitals where numerate staff are hard to recruit, terminal digit filing is probably best avoided.

In most hospitals patient casenote files are placed directly on the shelving, with their spines resting on the shelf and the sides bearing the file numbers positioned next to the gangway used by the records clerks. This arrangement ensures that any detached documents do not fall out of the file. It also maximises the speed of retrieval and replacing.

In some countries, climatic conditions may make it necessary for all paper records to be placed in boxes on the shelves, or to be stored in closed cabinets, to protect them from impurities in the air. The use of boxes or cabinets will reduce the speed of

retrieval; further, cabinets may occupy too much space and may be prohibitively expensive.

Boxing casenote files is a possibility but, since because the retrieval rate of such files is often high for several months after registration, hospital records services with limited staff may prefer not to box such records until one year or more has passed from the date the patient was first registered. An interval of this kind can only be applied if the files are physically arranged in the order in which the patients were registered, and therefore this approach is impossible if terminal digit filing is employed.

Patient casenote files may also need to be boxed if it is not possible to obtain shelf dividers or file covers of sufficient quality for them to stand upright on the shelves. In general, however, boxing of casenote files is less satisfactory than open shelf storage.

### **Activity 36**

Describe how casenotes are stored in your hospital. Identify two steps you could take to improve both preservation and access.

## **Storage of X-ray Films and Pathological Laboratory Preparations**

X-ray film envelopes must be large enough to contain the films unfolded and strong enough to contain the weight of the films without damage or tearing. A size frequently used is 35 x 43 cm (14 x 17 in). Because of the weight of X-rays, X-ray film envelopes should be stored on steel shelving with supports at intervals of approximately 30 cm (12 in).

While some smaller hospitals may shelve X-rays alphabetically by patient name, in most hospitals it will be necessary to arrange the X-rays in numerical order. Number order is preferred if there are likely to be many patients with the same name and particularly if a separate sequence of X-ray numbers is used, as suggested in Lesson 3.

The envelopes should be shelved so that identification details are on the outer edge, preferably at one corner, and are thus visible without the need to remove the whole envelope. Within the envelopes, the films should be placed with the identification strip at the open edge (normally the top of the envelope).

Like other photographic materials, X-ray films should be stored in cool, dry and well-ventilated conditions, ideally in a temperature range of 15-27°C, and with a relative humidity of 40-50%. In such conditions, films should last for at least 15 to 20 years. High humidity is particularly damaging and will soon cause the films to stick together and become unusable. Certain gases, such as formaldehyde, sulphur dioxide and other industrial pollutants, are also potentially harmful. It is important to ensure that during the processing of X-rays, adequate washing is carried out to remove any harmful processing chemicals.



*X-rays are best stored in number order if there are likely to be many patients with the same name.*

Paraffin blocks are ideally stored in boxes at a temperature below 20° C. However temperatures a little higher than this may be acceptable. The melting point of paraffin wax is between 50-60°C.

Stained glass slides should also be boxed and where possible should be stored in a cool, ventilated, non-humid atmosphere in conditions similar to those provided for X-rays.

The staff of pathology and X-ray departments may wish to keep preparations and X-rays locally for their own convenience. However, keeping them in the records department can be a means of maintaining them under control and in good order. It may also be possible to provide the required atmospheric conditions within the records department, in a way that cannot necessarily be replicated across the hospital site. If such items are stored as near as possible to the patient casenote files, time and labour can be saved when related records need to be retrieved or put away. If necessary, recent preparations and X-rays may be kept in the department concerned while those that are semi-current can be housed in the records department.

*Specimens and slides need to be stored in a stable environment and kept only as long as needed.*

### **Activity 37**

Describe how X-rays are stored in your hospital. How long are they kept before they are destroyed? How are they destroyed, if they are? Identify two steps you could take to improve both preservation and access to X-rays.

## **OPERATION OF A SINGLE-SITE RECORDS SERVICE**

Operating a hospital records service from a single site has many advantages. If this option is available (for example, when setting up a new service or restructuring an existing one) it will often be the best choice. However, a number of factors must be considered when assessing the suitability of a proposed site. Adequate space and suitable shelving will be needed for records in a wide variety of formats. If a master

patient index is maintained in manual form, space for an appropriate number of card index drawers will be required. Besides records storage, facilities must also be provided for staff and for the registration of patients. Although the physical arrangements for registration will vary according to local circumstances, ease of access for patients is likely to be of critical importance.

*A single-site records service allows for better access to patient files.*

Where patients are seen without an appointment, it is essential that the registration and records storage areas are in close proximity, so that files can be retrieved as patients are identified. If both functions share the same room or building, the available space should be divided between a reception area for patients and secure areas for staff and records. The former will have seating for patients waiting to be registered and one or more counters where they can be interviewed.

The counter(s) will form a barrier between the two parts of the accommodation. The registration clerks will be seated behind the counter and behind them will be located the master patient index and the casenote file shelving. The index should be placed where it is as accessible as possible to the registration clerks. The gangways in the record storage area should lead directly to and from the registration area and not be placed crosswise to it.

Records other than patient casenotes should generally be placed at the furthest point from the registration counter. Offices for staff not involved in the registration process can also be located away from the counter.

Patients should not have access to the records storage and staff areas, and the accommodation should have a staff entrance separate from that used by patients. Hospital employees from other departments may need to have access to the staff areas but should not normally have access to records storage areas. However, facilities should be provided for them to request specific records as required, perhaps by means of a staff enquiry point separate from the patient registration counter. An area for employees to consult records may be provided within the accommodation occupied by the records service, although in the majority of cases hospital staff will want to borrow the records for use in their own departments.

Many variations on this model are possible. The patient waiting area, for example, can be a covered shelter outside the main building. This may be cheaper to construct and may be more congenial for patients, especially in hot climates where air conditioning is not available.

The waiting area must be large enough to accommodate all patients awaiting registration, and if necessary there must be sufficient counter space for several patients to be interviewed simultaneously, in order to avoid delays. When planning accommodation, it is necessary to assess not only the number of staff and quantity of records to be housed, but also the numbers of patients to be registered each day.

In other respects, however, the planning of the accommodation can follow the advice given in earlier modules of this programme. Apart from the patient seating and registration counter, the fittings will not differ greatly from those in other records centres.

*For information on laying out reference areas, see Managing Archives and Organising and Controlling Current Records.*

## **Moving Current Records within the Hospital**

As explained in the module *Organising and Controlling Current Records*, controls are necessary to ensure that the whereabouts of records borrowed from the records department are known at all times and that all items borrowed are duly returned. Unless the need for tracing procedures is appreciated by all staff, there is a danger that the system will be no more than a record of the first borrower. The same procedures should be applied to all records withdrawn from storage, whether these are patient casenotes, X-rays, administrative files or other departmental records.

### **Issuing Records**

*When issuing records, the use of a charge-out document is essential.*

The use of file request forms, circulation ladders on file covers and transit books is not usual in hospitals, though such methods should certainly be considered where staff resources allow. The use of a charge-out document, however, is essential. When deciding on a suitable system a number of factors must be considered, including the withdrawal rate of items and the time they are required. Some clinical records may be required at all hours of the day or night, and unless the records department is staffed for 24 hours a day a variety of different staff will need to be able to use the system.

Some hospitals prepare individual tracer cards for each casenote file. The cards are pre-printed with the file number and are kept within the file when inactive on the shelf. When the file is issued the tracer is taken out of the file, annotated with the date and the name of the user and left on the shelf as a substitute. A variation on this is the use of a miniature folder that acts as a tracer and can also be used to store loose documents received in the records department while the file is on loan. However for many hospitals these options will be too expensive.

A multi-use tracer card is a more economical alternative. Such cards are not specific to any one file and are used over and over again for any number of withdrawals. If the card is appropriately designed, the same cards can be used both for casenote files and for other categories of records. A sample tracer card is shown below.

A loans/withdrawals book can be useful as an additional control to supplement a tracer card system. The withdrawal of any item from its usual location is logged in a book with appropriately headed columns.

As indicated in *Organising and Controlling Current Records*, when an item is passed from one borrower to another the transfer should be recorded on a file movement sheet that is sent to the records department to enable the tracer card or loans book to be updated.

If a unitary casenote file system is in place covering out-patients as well as in-patients, most unitary files will be retrieved for patients attending clinics. If any of these patients are admitted to the wards on the same day, their file will be taken to the ward in question after the clinic has closed. However it will not be apparent to the registration clerks which of the presenting out-patients are likely to be admitted to the wards. A list of planned admissions must therefore be supplied to the records staff so that the tracer cards can be amended for files that have been transferred to the wards.

*It is good practice for other departments to maintain their own charge-out system, recording the movement of files in and out of the department.*

### **Activity 38**

Describe how records are presently issued in your hospital. Identify two steps you could take to improve the process of making records available while documenting their location and use.

### **Return of Records**

*Records should be returned to the records department as soon as possible after their use.*

After a clinic has closed, the files for patients who have been admitted to the wards should be taken to the ward in question; all other files should be returned to storage. This includes files for patients who have been given follow-up appointments in the clinic or have been told to report for admission on a future date. It is not good practice to 'leave to one side' files for patients who are expected to return. Hospital staff should also be discouraged from retaining files which are no longer required. The return of files to storage will reduce the risk of loss or misplacement.

When in-patients are discharged or die, their files must also be returned to the records department. Details of the discharge or death are then entered in the appropriate register.

When records are returned a check should be made to see that they are complete and intact before they are filed away. Patient casenotes should be checked to ensure that final diagnoses have been recorded. If this has not been done, or if there are other obvious gaps in the record, the relevant file should be referred back to the clinician responsible. If diagnostic coding is used in the hospital, no casenotes should be refiled without ensuring that the coding has been completed.

In some hospitals, when an in-patient is discharged or dies, casenotes are stripped (or 'weeded') of ephemeral papers such as temperature and fluid balance charts before being returned to the shelf. If local agreement can be reached on the categories of papers to be removed at this stage, this can be a useful technique for reducing the bulk of the files in store.

At the same time it is good practice to check that the remaining papers are in good order, filed chronologically or in some other agreed arrangement within the file cover. A casenote file with disorganised contents will be of limited value if the patient re-attends.

For records that may be used again, damaged file covers should be replaced before filing. If the damaged file cover has been used to record unique information it must be copied or placed inside the new cover. No file should be replaced unless the correct tracer card is in its position on the shelf; following this rule should ensure that misfiling is avoided. The supervisor should maintain careful checks that all these procedures are reliably carried out.



It may not always be possible for casenotes to be returned directly to storage. Casenotes for patients who have died may need to go first to the post-mortem room or the death registry. If the hospital uses its clinical records for statistical purposes, files will need to go to the officer responsible for coding before the records are stored. There should be an agreed procedure for movement of casenotes after the patient has left and regular checks to ensure that files are not misplaced. In no circumstances should files simply be left in the ward or clinic.

### Activity 39

Describe how records are presently returned to storage in your hospital. Identify two steps you could take to improve the process of returning records.

## OPERATION OF A MULTIPLE-SITE RECORDS SERVICE

*It may not always be possible for a hospital records service to operate from a single location.*

Storage of records in adjoining rooms is unlikely to cause problems, but some records services may have storage areas spread across more than one site within a single hospital. In other cases, economic restraints or shortage of space within the hospital may make it necessary to use off-site as well as on-site storage.

If two sites within the hospital are used for records storage, it may be preferable for one (probably the larger) to be used for registration and storage of patient casenote files and the other for X-rays and semi-current departmental records. Semi-current departmental records are also an obvious candidate for off-site storage, and there is usually little difficulty in dividing them between as many sites as necessary.

The division of casenote files between different storage areas may not be as simple. In hospitals where patients are regularly seen without appointments, speed of retrieval is essential and patients may have to be directed to register in the place where their records are held. If files are divided between more than one storage area, the index cards as well as the files must be split up, with related cards and files housed in the same area.

The most effective way to achieve this is to divide the records between two areas according to the sex of the patient. Male patients can then be directed to a registration point on one site and female on the other. If patients are literate, an alphabetical division by the initial letter of surnames is also possible.

In some hospitals it may be possible to keep the master patient index cards in a single location where all patients are registered and to divide the records according to their file references. Thus in a terminal digit system the shelves allocated as \*\*\*\*00 to \*\*\*\*49 might be in one area and \*\*\*\*50 to \*\*\*\*99 in another. However, if files need to be retrieved quickly for patients who arrive without appointments, it will be important for all the storage areas to be in close proximity to the registration point.

Where patients are seen by appointment, speed of retrieval may be relatively unimportant and the prior notice provided by the appointments system may allow time for files to be retrieved, irrespective of the distance between the sites where they are housed. Alternatively, telephone or e-mail communication between the index location point and the storage areas may be used. However, if files are likely to be wanted urgently, division of the storage on this basis should not be attempted in countries where the necessary communications technology is unreliable.

If the hospital is itself divided over a number of separate sites, or if the records service covers a group of hospitals, it will almost certainly be impossible to register all patients at a single location, even if all records are housed in one central store. Multiple registration points will be needed, each with a waiting area and registration counter.

Once again, effective telephone or electronic communication will be necessary, although in this context its purpose will be to enable staff registering patients to check the master patient index held at a central point. If communication of this kind is impossible, a unitary file system cannot operate: without access to a master index a single hospital-wide numbering system will not be possible, only local files can be used and complete patient medical histories will not be maintained.

If the sites are widely separated, adequate means of transporting files must also be available. Even where reliable communication links and transport facilities exist, the time needed to retrieve unitary casenote files and deliver them to a distant site will probably mean that local files have to be used if patients are seen without prior notice. Sufficient time for the transport of unitary files from a central point may be available only where patients are seen by prior appointment.

The use of off-site or secondary storage for unitary casenote files introduces a further level of complexity, and the principles of semi-currency may be more difficult to apply to casenote files than to administrative records. The removal of closed or less active files to secondary storage can be difficult, not least because the retrieval system normally depends on their being stored in some form of numerical sequence.

It is possible to separate out files that have been inactive for a number of years, but doing so will break up the sequence and will probably make it necessary to compile a finding list giving file references and their locations. In a large hospital with 100,000 or more casenote files this can be a laborious task for a small records staff, yet without such a list the existence of two or more incomplete part-sequences is likely to cause retrieval problems.

An alternative is to remove whole sequences of files from one or more parts of the primary storage area. Where possible, the sequences chosen should be those where the patients were registered at the earliest dates (for example, more than ten years



ago); this is usually easy where files have been arranged on the shelves in strict numerical order but is less straightforward where terminal digit filing is employed. The approach diverges from the principle usually applied in identifying records for secondary storage, as it is possible that some of the files will still be in regular use. However, by using this approach the compilation of a detailed finding aid can be avoided.

Regardless of which method is used, the relegation of casenote files to secondary storage will cause problems in hospitals where patients are seen without appointments, for in this situation virtually any file may have to be retrieved speedily and at short notice. The most practicable method of relegating files to secondary storage is to remove those where the patient is known to be dead.

In a paper-based unitary file system, the most complex arrangement of all is one where patients can be registered at a multiplicity of geographically separate points, each in telephone communication with a central point where the master index is held. This central point in turn communicates with one or more primary record stores and one or more secondary storage areas holding records extracted from the primary sequence. In theory there is no reason why this arrangement cannot be achieved using a wholly paper-based system, which in many countries will be the only available option. In practice it will often prove difficult, especially where telecommunications or transport facilities are poor or financial resources limited.

#### Activity 40

Does your hospital maintain a single-site or multiple-site records service? List five advantages and five disadvantages to a single-site records service for your institution. Then list five advantages and five disadvantages to a multiple-site records service.

Based on these lists of advantages and disadvantages, which method would you recommend for your hospital? Why?

## DESTRUCTION OF OBSOLETE RECORDS

The destruction of time-expired records is covered in the module *Building Records Appraisal Systems*, which sets out the various options available for destroying paper. In some countries, hospitals are unlikely to have access to bulk shredding facilities and incineration may be the only option. In remote areas where mechanised facilities are not available, burning of the records on a supervised bonfire may be the only possible method of destruction.

*Because personal health records contain confidential information, any means of destruction must have safeguards in place against unauthorised access or accidental disclosure.*

Personal information may also be found in non-clinical records, including administrative files. It is wise to ensure the secure destruction of all obsolete records that may contain any kind of confidential or sensitive information.

Unwanted X-ray films can be reprocessed to extract the silver content. X-ray envelopes may be recycled and used for new patients.

#### **Activity 41**

How are obsolete records destroyed in your hospital at present? Identify three steps you would take to improve the security or efficiency of records destruction.

## **TRANSFER TO ARCHIVES**

A proportion of the records generated by the hospital will be scheduled for archival preservation. The following list suggests some of the hospital records that may be found worthy of permanent retention when an appraisal exercise is undertaken.

- One set (signed originals where available) of the minutes, agenda and presented papers of the governing body of the hospital and of all committees reporting to it, any medical and nursing advisory committees, any ethics committee and other major committees.
- A complete set of standing orders and instructions, regulations, policies and procedures of the hospital together with those modified or repealed.
- Files on the development of standing orders, instructions, regulations, policies and procedures.
- One set of each annual report and accounts and one set of major management reports.
- Any records that provide evidence of title: title deeds and related documents and files on the purchase, transfer, disposal, lease or mortgage of property.
- Plans, drawings, specifications, contract documents and other key records of the design and construction of new departments and building extensions, their refurbishment or reconstruction, including records relating to major projects which have been deferred or abandoned.

- Files on the opening, relocation or closure of wards and departments together with any commemorative brochure or programme.
- Files on any enquiry or review following a major emergency, disaster (such as a fire or flood) or similar incident.
- Plans, drawings, specifications, laboratory notebooks and other key records on the design and development of any medical instrument, equipment, process or significant research for which staff at the hospital were wholly or partially responsible.

Admission, discharge, birth and death registers (and their electronic equivalents) are also likely candidates for transfer to archives. Other patient registers, and statistical summaries derived from them, may also be considered for permanent retention.

The archival preservation of patient casenote files is more problematical. Besides their value for medical and social history, such records can provide useful data for research purposes in disease prevention and in ways of providing more efficient and effective health services. However, until electronic casenote records become the norm the bulk of casenotes will be a deterrent to longterm preservation.

As suggested in the module *Building Records Appraisal Systems*, sampling may be an appropriate course of action for casenotes whose clinical value has expired. Where terminal digit filing has been used for the shelving of casenotes, numerical or serial sampling is easy to apply. Taking all files with any one pair of terminal digits represents a one percent sample, while the selection of all files with a further pair of digits is equivalent to drawing a two percent sample. Samples chosen in this way for permanent preservation can provide a useful research tool and obviate the need to preserve entire record series.

Although some medical staff may wish to retain documents on site for the purposes of their own research, in general it is not wise for any but the largest and most well-funded hospitals to attempt to maintain their own archives. In the majority of hospitals, the resources to operate a professionally run archive service are unlikely to be available. Instead, suitable archives should be transferred to the archival institution or another authorised repository.

*Some of the records created by hospitals will be worthy of permanent preservation as archives.*

#### **Activity 42**

Are any of your hospital's records transferred to an archival institution? If so, describe the policies and procedures followed. If not, explain why not. What steps would you take to initiate or expand an archival programme for your hospital?

# ACCESS ISSUES AND HOSPITAL RECORDS

Health records are the property of the hospital where they were created, and therefore in state-run hospitals they ultimately form part of the records of the national government. However, the information in a patient's record is the intellectual property of the patient and the health professionals treating him or her.

It follows that without the patient's consent, this information should not be made available to anyone except those involved in the care of the patient. The confidentiality of patient records has obvious implications for the security and accessibility of record-keeping systems in hospitals.

*A primary objective to be followed by all records staff is to maintain the confidential relationship between doctor and patient.*

Patients have a right to expect that the information they provide to health professionals is always treated in confidence. Non-clinical records may also contain sensitive information about the financial or business affairs of the hospital or about its personnel. Confidential records must be protected against loss, damage, unauthorised access, modification or disclosure, and all staff should be required to sign a written undertaking to observe strict confidentiality.

Clear guidelines should be in place as to which members of hospital staff are entitled to have access to patient casenotes and other potentially sensitive records. In addition, senior staff should be identified who have the power to authorise the release of clinical information to persons outside the hospital. Such information should always be conveyed in writing.

In cases of doubt, such as when information is sought by third parties such as employers and insurance companies, the patient's consent should be obtained before confidential details are released. Only in exceptional cases, such as records required in investigations into serious criminal offences, may casenotes be released without the patient's consent.

The supply of information from clinical records to patients themselves, or to their relatives, may be regulated by law or by central government directive. In countries where this is not the case, hospitals should formulate their own guidelines. As noted in Lesson 2, in some hospitals no objection is raised to the practice of allowing patients to take their records home. Elsewhere it may be the practice to insist that information from clinical records can only be released to a patient after consultation with the doctor in charge of the individual's treatment.

A policy should also be in force regarding the transfer of records outside the hospital, particularly with regard to casenotes requested by other hospitals or healthcare facilities. Authorisation procedures must be in place to ensure that records are transferred only in appropriate circumstances. If original records are sent to other hospitals, the charge-out system must be used. However, some hospitals have a policy of sending only photocopies of their records. If adequate photocopying

facilities are available this option should be seriously considered as it largely eliminates the risk of loss of original material.

Patient confidentiality should be respected and maintained when clinical records are transferred from the hospital to an archive repository. In some countries there are legislative provisions for the number of years which must pass before patient records can be made accessible to the public.

In countries where no such legislation exists, a policy should be agreed by the Archives in consultation with the Ministry of Health or other appropriate government agency. A closure period of one hundred years may be considered appropriate, with provision for access to be granted at an earlier date to medical and other scholarly researchers who are able to give a written undertaking that they will not identify named patients in any published work.

*Only in exceptional case may casenotes be released without the patient's consent.*

### **Activity 43**

Describe the systems presently in place in your hospital to protect patient confidentiality with regard to the use of records. Are these systems based on government legislation, records and archives institution requirements or other formal guidelines? If not, what is the authority for systems of confidentiality?

What steps would you take to ensure access to records while protecting confidentiality of patient information?

## **Providing Electronic Access**

In a growing number of countries, automated systems are being introduced to assist in managing the creation and use of hospital records. Most hospital record services have their first contact with computers when word processing is introduced, although packages designed to help with diagnostic coding may form another useful starting point. (It is important to note that simple statistical software can be used to help with data analysis, and some hospital managers may believe that the records service is fully automated when software of this kind has been acquired. However, as noted in Lesson 1, the production of statistics is really a separate issue.)

*One of the best uses of automation at this time is to computerise the master patient card index.*

In records management terms the real benefits of computers begin to emerge when the master patient card index can be replaced by an automated system. Not only can the space occupied by the cards be saved but, with the use of a suitable database application, searching the index also becomes easier and more flexible. For example, when seeking to identify a patient whose name is X and whose mother's maiden name is Y, even with relatively simple database software it should be possible to request the computer to find the patient in question in a single search.

More sophisticated text-retrieval software will be needed to allow automated cross-referencing between alternative names for the same patient and between variant spellings of a single name, as discussed in Lesson 2.

*For a discussion of automation, see Automating Records Services.*

If a local area network or intranet exists within the hospital, a further significant benefit of automation is that access to the index need no longer be confined to a single physical location. When an electronic patient index can be accessed remotely at multiple points around the hospital, many of the operational problems discussed earlier in this lesson can be greatly reduced. In particular, it becomes feasible to consider using a unitary file system but registering patients at various points in the hospital, so long as staff at each point can have online access to the patient index. If appropriate, access to the index can also be provided outside the hospital, for example to other hospitals or healthcare facilities in the locality.

A valuable additional feature of an automated index is that it can include a system for logging the issue and return of casenotes, replacing or supplementing the use of charge-out documents in paper form.

A more advanced version of the automated index is the 'patient administration system', often referred to as a 'PAS'. In the PAS system, information about each patient's appointments, attendances, admissions and discharges is entered in addition to the name and biographical details. These systems can be used to manage many or all of the administrative processes concerned with the arrival of patients at the hospital, such as the generation of appointments lists for each clinic. Similar systems may be used on a smaller scale in individual departments.

Software packages for use in hospitals have been available for a number of years, although they may not always be easily obtainable locally or appropriate for all countries. Patient administration systems are widespread in developed countries but much less so in the developing world; they are generally designed for countries with an infrastructure to support hospital appointments and waiting lists. Computer applications for controlling the storage and retention of records, as described in the module *Automating Records Services*, are less commonly found in hospitals even in developed countries, but their appropriateness for the hospital environment should certainly be considered.

Even with the simplest of computer systems, it will be essential to establish the existence of adequate support and maintenance arrangements before a commitment to automation is made. With coding and statistical applications, it may not matter so much if a delay is incurred because of a failure of the power supply or because

defective hardware or software cannot be repaired promptly; but the consequences for patient registration can be dire if an electronic system breaks down and there is no alternative means of access to the records.

Where electronic systems are in place, there must be adequate controls to ensure that access to them is limited to authorised persons, both within the hospital and elsewhere.

#### Activity 44

Does your hospital have any automated systems for the management of its records? If so, describe the systems used. If not, list four issues you would wish to consider when determining whether to implement an automated records system and which records it might be used for.

## ELECTRONIC HOSPITAL RECORDS

In hospitals where the introduction of a patient administration system is feasible, it may be possible to dispense with certain types of records needed in a paper-based environment. In particular, the patient registers described in Lesson 3 are likely to be deemed irrelevant or less necessary. Certainly where such registers in effect constitute duplicate records of the same information in different formats, their use can be discontinued where appropriate computer systems are in place, because of the wide variety of report presentations offered by computer packages. However, where the content of paper registers may be needed for legal or archival purposes, appropriate measures must be taken before any decision is made to rely solely on the electronic system and to abandon paper altogether.

*These issues are considered in more detail in the module Managing Electronic Records.*

In recent years, much research effort has been directed at developing an electronic version of the patient casenote file. At the time of writing electronic patient records are used in only a small number of hospitals worldwide, but the number can be expected to increase substantially in the future. The use of electronic records will allow virtually instant access to casenotes by any clinician or other authorised user and will also allow access by multiple users at the same time.

The risk of lost or misplaced casenotes will largely be eliminated, and bulk storage areas will no longer be required. It will also be possible for X-rays and other images to be incorporated into the electronic record. Where electronic patient records make use of database techniques, validation of input entries can be used to ensure that vital elements are not omitted from the record; a database structure also allows the retrieval of information from the record in a variety of ways.

In the longer term, technology offers the prospect of national rather than hospital-specific clinical records systems. Work has recently been undertaken in the UK to develop an automated thesaurus of clinical terms, known as the 'Read codes', to allow doctors and other health workers to use a controlled vocabulary when composing electronic patient records. A similar system of standard clinical terms, called 'SNOMED-RT', has been developed in the United States of America.

These systems will help to ensure consistency of terminology between one clinical record and another and will improve the quality of data derived from records for treatment, research and management planning purposes. Research is also now in progress into the development of 'integrated clinical workstations,' where it is hoped that clinicians will be able to consult electronic patient records and other sources such as national and international medical databases and the results of clinical trials and evaluations.

Clinicians will also be able to issue electronic prescriptions and enter new data into the patient's record, all in a seamless procedure conducted at the patient's bedside. Work in these and other related areas is continuing, mainly in Europe and the United States, although it is likely to be some time before these new techniques can be put to use in all parts of the world.

In the future, electronic patient records will be created by data entry at the keyboard or using voice recognition techniques, as well as by making scanned images of paper documents. Current records will probably be maintained in a document management system or database which can be accessed by authorised clinicians, paramedical staff and administrators; it will be possible for a number of individuals or workgroups to have simultaneous access to the same record. Electronic information will also be available remotely, allowing advice on diagnosis and treatment to be sought from specialists who are not present in the hospital, and giving local health centres and family doctors the facility to consult relevant hospital records on-line. However, as in other sectors, issues about preserving the functionality and context of electronic records over time have not been prominent in much of the development work undertaken to date. The challenges raised in *Managing Electronic Records* are as pertinent to clinical records as to any other type.

*See Managing Electronic Records for more information on this issue.*

*Automation will change the way hospital records are created, allowing for the development of electronic informations sources.*



### **Activity 45**

Does your hospital create any electronic records? If so, describe the records created. If not, list four issues you would wish to consider when determining whether to start creating or keeping hospital records in electronic form.

# SUMMARY

This lesson has examined issues involved with the appraisal of hospital records; it has also looked at their management as current and semi-current records. Included was a discussion of the physical storage of records and the steps involved in issuing records to users and then returning them to central storage. The lesson then considered the destruction of obsolete records and the transfer of records to archives. It also examined access and confidentiality issues related to hospital records, and it concluded with a discussion of the use of computers in hospital record keeping and introduced the concept of managing hospital records in electronic form.

# STUDY QUESTIONS

1. What factors must be considered when determining retention periods for hospital records?
2. Name two reasons to keep patient casenotes for more than the legally required time.
3. Name the drawbacks to keeping patient casenotes beyond the legal time period.
4. Who should approve the hospital's records disposal schedule?
5. What are the options for storing casenotes?
6. How should X-ray films be stored? How should laboratory preparations be stored?
7. What are the advantages and disadvantages of a single-site records service?
8. How should record storage and patient registration areas be laid out in a single-site records service?
9. What systems should be in place to track the issue of records in the hospital?
10. What is a tracer card?
11. What systems should be in place to ensure records are returned to the right filing location?
12. What are the advantages and disadvantages of a multiple-site records service?
13. How should record storage and patient registration areas be laid out in a multiple-site records environment?
14. What considerations should be taken into account when dividing records among different storage areas?
15. What is the primary consideration hospitals must take into account when destroying obsolete records?
16. Name five types of hospital records often worthy of permanent retention.
17. Explain the major access concerns surrounding hospital records.
18. What are the benefits and drawbacks to providing electronic access to records?
19. What types of hospital records are suitable for conversion to an electronic format?

# ACTIVITIES: COMMENTS

## **Activity 35**

A range of legal and administrative requirements could affect records retention decisions for hospital records. Records may be needed to protect patient rights or to defend the hospital and its staff, in cases of alleged malpractice or medical error. Patients may also need proof of medical condition for insurance or pension purposes; proof of birth or death; or evidence of their compliance with medical procedures. Many other issues, including clinical audit and research needs, could influence the retention of medical records. It is wise to obtain legal counsel and government advice before making any decisions about retention of hospital records.

## **Activity 36**

While approaches to the management of casenotes will differ from institution to institution, the underlying concepts remain the same: any actions taken to improve both preservation and access will need to follow the principles and practices of good records management, as outlined in this study programme.

## **Activity 37**

The care of X-rays will also differ from institution to institution. Any actions taken to destroy X-rays must conform to records schedules and should be documented fully, in order to provide evidence that the X-rays are no longer available. Storage of X-rays should conform to requirements for good records preservation, and access should be controlled to avoid the risk of loss, damage or misplacement.

## **Activity 38**

Any systems for issuing records must take into account the following: protection of the record against loss or damage; appropriate access to authorised individuals; control of access to anyone outside those properly authorised to see records; and documentation of the issue so that the borrower can be traced and the record ultimately re-filed in good order.

## **Activity 39**

The procedures for returning records also need to take into account the points raised in the comments for the previous activity. Timeliness of the return of records is also important, to ensure that records are not left unaccounted for over long periods.

## **Activity 40**

Both single-site and multiple-site records services have a range of advantages and disadvantages. The decision about which type of service to provide will depend largely on the scope and nature of the hospital and its needs for record keeping and for service to its patients. Patients who are seriously ill must not be expected to attend at inconveniently-sited registration points in order for their files to be retrieved. The principles and practices outlined in these modules must also be acknowledged when determining how to manage records services.

**Activity 41**

The systems used to destroy obsolete records must protect confidentiality, ensure complete destruction of the records and allow for full documentation of all records destroyed, so that the record-keeping agency can remain accountable for its actions and provide evidence of its work.

**Activity 42**

Systems for transferring records to archives should follow the policies and procedures outlined in the study programme, particularly in the module *Managing Archives*.

**Activity 43**

Patient confidentiality must be protected, and it is wise to base systems on existing legislation, requirements or other formal guidelines. It is also wise to seek legal counsel or discuss the issue with the records and archives institution before establishing any systems.

**Activity 44**

It is critical to consider safety, security and confidentiality when considering the implementation of automated systems for the care of records. Account should also be taken of any data protection legislation in force in the country concerned. An automated system should offer real improvements in the management of records or in enhancing access to the information they contain; there is little point in introducing automation just to duplicate a manual system. For more information on automating, see *Automating Records Services*.

**Activity 45**

Electronic systems have much to offer, particularly in terms of accessibility to current information, but the management of electronic records is a very complex and constantly changing issue. Before considering creating or keeping hospital records in electronic form, it is wise to examine all issues very carefully. In particular, consider whether a technical infrastructure exists in the country concerned, to support the upkeep of the necessary hardware and software and the maintenance of electronic records over time. For more on the management of electronic records, see *Managing Electronic Records*.

## WHAT TO DO NEXT?

*Managing Hospital Records* builds on the general principles outlined in the core modules of the Management of Public Sector Records Programme; *Managing Hospital Records* has considered the specific issues involved in managing clinical and non-clinical hospital records, particularly in general (or ‘acute’) hospitals.

This module has emphasised the importance of good records management for hospitals, which deal with the life and health of their patients. The module has noted that good medical care relies on good record keeping as well as on medical expertise or quality facilities and resources. Without accurate, up-to-date and accessible patient casenotes, medical personnel may not offer the best treatment or may in fact misdiagnose a condition, which can have serious consequences. Associated records, such as X-rays, specimens, drug records and patient registers, must also be well cared for if the patient is to be protected. Good records care also ensures the hospital’s administration runs smoothly: unneeded records are transferred or destroyed regularly, keeping storage areas clear and accessible; and key records can be found quickly, saving time and resources. Records also provide evidence of the hospital’s accountability for its actions and they form a key source of data for medical research, statistical reports and health information systems.

This module has focused on four particular areas:

- the concept of hospital records management and the context within which hospital records management programmes operate
- the management of patient casenotes, including discussion of filing and numbering systems, arrangement of records and management of indexes
- the management of a variety of other hospital records, including X-rays, specimens, patient registers, administrative and policy files, financial and personnel records, nursing records, pharmacy records and educational records
- the processes involved with appraisal and storage of and access to hospital records.

Once you understand these principles, concepts and practices, the next step is for you to consider what to do next. It is necessary to establish priorities for hospital records management and to know where to go to find out more about hospital records issues.

# ESTABLISHING PRIORITIES FOR ACTION

This module has introduced key activities in hospital records management. But which tasks should you undertake first? Which are high priority and which are low? Each institution will make different decisions based on its current status, needs and short- and long-term plans. However, it is possible to offer some recommendations for action, to help the hospital manage its records in a planned fashion.

The key issue to resolve is whether records systems as a whole, for both patient and administrative records, are ineffective and are failing to meet clinical, operational and legal requirements, or whether problems are mainly confined to a small number of departments.

There are three situations in which new record-keeping systems will need to be introduced:

- effective record-keeping systems have not been established or have collapsed within the organisation as a whole
- elements of the record-keeping systems are not meeting the requirements of best practice: for example, out-patient and in-patient records are maintained separately
- a new hospital, department or unit is established.

For collapsed and non-existent systems and for new organisations, a records management strategy will need to be designed, agreed and implemented. For hospitals in which shortcomings are limited and not widespread, an approach which focuses on the problem areas will be required. Even where problems are limited, the opportunity should be taken to review and, where necessary, amend the wider records management systems to ensure that they are still serving the hospital's needs.

## Activity 46

Based on the work you have done in this module, identify the priorities you would establish for your own hospital's records management programme.

Consider the following as suggestions only.

### **Priority 1: Draw up a Records Management Strategy**

The hospital authority must have an agreed strategy for managing all hospital records (clinical, administrative and educational). The strategy will need to include:

- A records management policy, stating the role of records management within the hospital or group of hospitals and the objectives of the records management

programme. The policy should also state the hospital's broad requirements to create, maintain, access and dispose of its records.

- A clear statement of the responsibilities of staff at all levels for achieving the objectives of the records management programme and the organisational structure and personnel required to meet the hospital's records needs. The records organisation, or the information division of which it forms part, will need to be headed by a manager who will be a senior member of staff with a direct reporting line to the hospital's administrator, general manager or chief executive.
- A commitment of financial support from the hospital's senior management to support the records management programme and assign it adequate funds and accommodation to establish and maintain the programme.
- The identification of appropriate records management systems and practices. The exact systems to be put in place may need to be decided after a needs analysis and records survey have been conducted (see below).
- A statement of service targets and performance measurements. Setting and monitoring service targets are useful ways of measuring the impact of a records management programme, persuading senior management and clinicians of the benefits and securing ongoing financial support.

*More information about the objectives and framework of a records management programme is provided in Managing and Controlling Current Records.*

## **Priority 2: Undertake a Functional Analysis**

Conduct an analysis of the hospital's or department's functions and activities (known as a business systems or functional analysis). Look at the way information flows within the organisation. This will identify problem areas, such as diagnostic tests which have to be repeated because test reports cannot be found.

When functions, activities and information flows are understood, decisions can be made about what records need to be created and held, how they are to be arranged and accessed, by whom they need to be accessed and used, for how long they need to be retained and their ultimate disposition. Record-keeping systems will never satisfy requirements unless they have been matched to the functional and operational needs of the hospital.

*For more information, see the Analysing Business Systems module.*



### **Priority 3: Conduct a Records Survey**

The records survey may be regarded as complementary to the functional analysis. The purpose of the survey is to locate and identify the hospital's existing records, and to relate them to its present functions and information needs. The records survey will also identify semi-current and non-current records within the existing system as a preparatory step in their appraisal and disposal.

The survey may reveal duplication, gaps or record-keeping activities that are no longer meaningful. For example, do patient files lack certain information? Are records relating to the same patient held in different locations, so that there is no single complete record? Conversely, is too much information about the same patient being gathered and held in separate locations, when a complete central record exists?

If the survey shows that the system is mainly working well and is only failing in certain areas (for example, patient casenotes are reliable and comprehensive but cannot be found when required), changes in the control mechanisms will be required, but only in those areas shown to be defective. If the survey shows that full records are not being captured by the record-keeping system (for example, the papers relating to an individual patient are divided between in-patient and out-patient files), then the system will need to be restructured. If the survey shows that there is a risk to patient care because necessary records are not being created, then new systems will need to be designed. The records survey will make it possible to decide where best to direct the records management improvement programme.

When the analysis and survey are complete, existing systems should be decongested if there has been a build up of redundant files. Once the current records have been separated from any which are no longer required for current activities, decisions can be made about the changes required to establish effective record-keeping systems for the future.

Whether an existing system needs complete overhaul or whether it is ineffective only in parts, there is still a need to go through the same process. However, collapsed systems, or systems which fail to meet a hospital's information needs, are often the reason for embarking on a records management improvement programme.

*Guidance on building new record-keeping systems is given in Organising and Controlling Current Records. The conduct of a records survey is described in more detail in Building Records Appraisal Systems.*

### **Priority 4: Identify the Stakeholders and Their Needs**

This can also be regarded as complementary to the functional analysis and records survey. Stakeholders in hospital record keeping may include patients, staff of the hospital and of other health facilities and central government agencies. In practice most benefit will probably be gained from identifying and interviewing members of

staff within the hospital who have record-keeping concerns. Staff will be able to provide information on a range of issues, for example:

- the problems they are experiencing (and possible solutions)
- the areas in which lack of adequate records or information impedes their work
- existing methods of records creation
- which records they use regularly and which they do not
- any plans for the future which will have an impact on records management (including automation projects).

It is important to remember that individual stakeholders will have different and sometimes conflicting objectives and priorities. Some staff will see the introduction of computers as the answer to all records management problems. If there are automated systems or plans to introduce them, the information technology department (if there is one) will be a stakeholder with its own agenda.

## **Priority 5 : Design and Introduce New or Improved Record Keeping Systems**

The design of record-keeping systems will depend upon the nature and characteristics of the records themselves, the functions or activities which gave rise to them, the context in which they are created or accumulated and the information requirements of the staff who will use them. The aim must be to identify and organise records, intellectually and physically, so that they can be easily accessed, used and maintained for as long as they are needed and then disposed of at the appropriate time.

The introduction of computerised systems must be based on a very thorough and detailed analysis of information flows (see Priority 2). This would normally be carried out by a specialist systems analyst. As a general rule, wholly manual systems require less intensive analysis because they are more tolerant of imprecision and 'unwritten rules' than automated systems.

Within the hospital context, the priority must be to ensure first that systems are in place to manage patient records effectively. Without soundly based record keeping systems, which are able to provide comprehensive, complete and reliable information about individual patients attending for treatment, health care will be compromised and, in extreme cases, patients' lives will be put at risk.

*The design of record-keeping systems is dealt with in Organising and Controlling Current Records and in Lessons 2 to 4 of this module.*

## **Priority 6: Plan Training**

All staff who use records or are involved in records work should be trained. For records staff, training must cover the skills required to manage, operate and maintain

records systems, both clinical and administrative. The users of records -- nurses, clinicians, administrators and other hospital staff -- should receive basic awareness training so that they have a clear idea of the value of good records management and know what is expected of them to make the systems work effectively.

Training will need to be planned and co-ordinated carefully to ensure that the required information and skills are passed on to all appropriate staff, and that all new staff receive necessary training.

In the absence of a training capacity in the country, the use of distance learning materials may need to be considered. Suggestions for organisations to contact are included at the end of this lesson. It is worth considering short term attachments of selected records staff to hospitals with trained records managers, or to other organisations where effective records management programmes are in place, the aim being to build a basic awareness of principles and best practice.

An option may be to focus training in one member of staff at supervisory or managerial level, who can then pass on knowledge and skills to other records staff in the hospital. The trained officer will also need expertise in training and skills transfer.

Professional training in records management is expensive and may not be affordable within hospital budgets. In any case, 'pure' records management courses are unlikely to include detailed instruction in 'medical records' or other hospital records issues.

## GETTING HELP

Many institutions, particularly in countries with limited resources, have little access to resources for hospital records work. However, there are places you can go to get more information or to obtain assistance. Following are names and addresses of agencies that could be contacted for assistance.

*See the Additional Resources document for information on other organisations and associations involved with records and archives management generally.*

## International Organisations

### **International Federation of Health Record Organisations**

The International Federation of Health Record Organisations (IFHRO) and the World Health Organisation (WHO) have collaborated to develop a set of learning packages for medical record practice. The packages are focused on the management of current clinical records. They are intended to meet the needs of those who teach medical record practice, allowing for the possibility that the teacher may not be a trained educator.

## **National or Regional Organisations**

### **Computer Patient Record Institute**

4915 St Elmo Avenue, Suite 401  
Bethesda, MD  
20814, US  
Website: [www.cpri.org](http://www.cpri.org)

The Computer Patient Record Institute promotes the use of electronic systems for managing clinical information in the United States of America. It publishes a number of guidelines and related documents, mainly focused on the North American context.

### **Medical Records Institute**

PO Box 600770, 567 Walnut Street  
Massachusetts, 02460, US  
Email: [postmaster@medrecinst.com](mailto:postmaster@medrecinst.com)  
Website: [www.medrecinst.com](http://www.medrecinst.com)

The Medical Records Institute promotes the development and acceptance of electronic health records systems on a national and international basis.

### **UK National Health Service Executive**

London, UK  
Website: [www.imt4nhs.exec.nhs.uk](http://www.imt4nhs.exec.nhs.uk)

The NHS Executive has issued a circular (HSC 1999/053), which sets out the legal obligations for all NHS bodies to keep records; explains the actions needed to fulfil these obligations; provides guidance on good practice; explains the requirements to select records for permanent preservation; and lists suggested minimum periods for the retention of records. Guidance on the retention of records in general practice (i.e. local health centres and family doctors) is provided in circular HSC 1998/217. The detailed guidelines are based on United Kingdom law and practice, but there is also much general advice of value in a wider context.

The Executive's website provides information about recent developments in health information management and technology in the UK National Health Service, including details of pilot projects for the introduction of electronic patient records. At this time, the circulars mentioned above are not available on the website.

### **The Institute of Health Record Information and Management (IHRIM UK)**

115 Willoughby Road  
Boston, Lincolnshire  
PE21 9HR, UK

This is the professional association in the United Kingdom for medical records managers and clinical coding managers. IHRIM provides certified training courses and guidance materials and also issues a quarterly journal.

### Activity 47

Find out if your institution has any information about any of the agencies listed above. Does your organisation receive publications, participate in conferences or meetings or otherwise work with any of these groups?

In your opinion, which groups should your institution consider communicating with first, if any, and what would you expect to achieve by doing so? How would you go about building a productive relationship?

## OTHER RESOURCES

There are some valuable publications available about hospital records management, but the area is not as well developed as others in the records field. While there are several books and articles about the management of clinical records, particularly about proposals to develop electronic patient records, little has been written about the management of administrative and other records in hospitals. Core publications are identified with an asterisk (\*).

*Core publications are also identified in the Additional Resources document; refer to that document for information on more general publications on records and archives management.*

### General Works

United Kingdom, Audit Commission. *Setting the Records Straight: A Study of Hospital Medical Records*. London, UK: HMSO, 1995.

Benjamin, B., ed. *Medical Records*. London, UK: Heinemann, 1977.

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### **Activity 48**

Check your institution's library or resource centre. What books or other resources do you have about health records issues? Are any of the publications listed above available in your institution? If so, examine two or three of them and assess their currency and value to your institution. If not, identify two or three publications you think would be most useful to help develop or expand your library. Devise a plan outlining how you could realistically obtain copies of these.



# SUMMARY

This lesson has provided an overview of *Managing Hospital Records*. This lesson has then discussed how to establish priorities for action and suggested that the main priorities for action are often as follows:

- Priority 1: Draw up a records management strategy
- Priority 2: Undertake a functional analysis
- Priority 3: Conduct a records survey
- Priority 4: Identify the stakeholders and their needs
- Priority 5: Design and introduce new or improved record-keeping systems
- Priority 6: Plan training.

The lesson then outlined ways to find out more information or get help with hospital records issues. The lesson concluded with a discussion of valuable information resources relevant to hospital records care.

# STUDY QUESTIONS

1. In your own words, explain the reason why the priorities proposed in this lesson are offered in the order they are in.
2. Indicate two of the organisations listed in this lesson that you would choose to contact first and explain why.
3. Indicate two of the publications listed in this lesson that you would choose to purchase first and explain why.

# ACTIVITIES: COMMENTS

## **Activity 46**

Every hospital will find itself at a different stage of development in terms of records management. The priorities established will have to take into account the particular needs of that institution, the region and the country. As noted earlier, the main priorities that might be established include

- Drawing up a records management strategy
- Undertaking a functional analysis
- Conducting a records survey
- Identifying the stakeholders and their needs
- Designing and introducing new or improved record-keeping systems
- Planning training.

## **Activity 47**

If resources are limited, it is wise to communicate with international organisations first, as they often obtain and filter information from national or regional associations. Thus valuable information is passed on to your organisation through the international group, which can save resources for all. It is also advisable to focus on general information before obtaining specialised publications or information.

## **Activity 48**

As mentioned in relation to the previous activity, it is important to begin with general information and ensure you have a good resource library of introductory and overview publications before developing a more specialised library.