Education Module for Health Record Practice

Module 2 - Patient Identification, Registration and the Master Patient Index

This unit is designed to enable the participant to discuss methods of patient identification and registration and identify processes required to develop, use and maintain an effective patient identification system in a hospital, clinic or primary health care centre.

OBJECTIVES:

At the conclusion of this unit the participant should be able to:

1. Discuss the importance of complete and accurate patient identification
2. State the purpose of a master patient index (MPI)
3. List the items, which should be included in a master patient index
4. Develop and implement a master patient index (MPI)
5. Trace the flow of a patient's index card from admission to discharge
6. Use alphabetical or phonetic filing rules to correctly file cards in a manual master patient index
7. Discuss the need for cross-referencing names in a master patient index
8. State the types of supplies and equipment commonly used for maintenance of a manual master patient index (MPI).

A.   PATIENT IDENTIFICATION

The identifying information is an important part of a patient's health record. It should include enough information to uniquely identify an individual patient. Most facilities will ask to view and/or copy the patient's driver's license or identification card in order to verify this data.

The patient identification data that is collected during the patient registration process is used to populate the Master Patient Index (MPI), which will be discussed later in this unit. The patient identification data may be entered into a computerized database, or manually typed onto a registration form.

This section of the medical record should contain at least the following information:

1. The full legal name of the patient, including the surname (or family name), first name, middle name or initial, suffixes (e.g., Jr.) and prefixes (e.g., Doctor). It is also important to collect the patient's alias, previous name, or maiden name, as the patient may have been seen at the facility under another name.

2. Internal identification number or hospital registration number. This is the number used to identify and file a health record, also called the patient's health record number. (This number is may be assigned at the patient's first inpatient admission or outpatient encounter at this facility, or a new number is also assigned for each subsequent visit.)

3. Place and date of birth (MM/DD/YYYY or DD/MM/YYYY), gender, race, ethnicity, marital status, address, phone numbers, and any unique identifying number, such as a national identification number or social security number.

4. Name, address and telephone number of nearest relative (next of kin) or friend.

5. Name and address of attending doctor, and name and address of referring doctor, if applicable.

6. Occupation, name and address of patient's employer.

7. Date and time of admission or encounter, and name of unit or clinic.

8. Details of health insurance and medico-legal information if appropriate.

The above information should be obtained from the patient, if possible, or otherwise from the person accompanying the patient to the hospital or clinic.

Care must be taken to ensure the correct spelling of names and that all names are recorded accurately and in full. Patients should be asked how they spell their names (both surname and given names) as names that sound alike may be spelled quite differently. Names should be recorded in the manner used for all official documents of the state or country.

B. PATIENT REGISTRATION

The complete and accurate collection of patient identification information is an important part of the patient registration process. For statistical purposes, a method for counting all outpatient encounters and hospital admissions each day is essential. There are a variety of methods in use, which are separate from the allocation of new health record numbers and will be discussed in Unit

7.

Important aspects of patient registration are:

1. When a patient presents at a hospital or clinic for the first time, they should be registered as a new patient. However, to make sure that the patient is, in fact, a new patient they should be asked if they have been to the hospital or clinic previously. Even if they say no, the admission or clinic staff should still check in the facility's computerized patient database, the manual master patient index or with the health record department, depending upon the level of computerization at the facility. This step is necessary to make sure that the patient does not already have a health record number at that hospital or clinic; and to ensure that duplicate records are not created.

2. If the patient does not have an entry in the MPI or a health record number, the identifying information is collected and either entered into the computerized database, or recorded on the front sheet of a new record. The patient is registered and a patient identification number is assigned. In most hospitals and health care centres, this registration number is used as the patient's health record number. In a manual system, an Admission, or Patient Register is maintained at the point where the number is issued, and should contain the following information:

Health Record Number	Patient's Name	Date of Issue	Doctor/ Clinic
10 26 42	John Doe	01/01/2004	Dr. Lee

This register is maintained as a control to avoid duplication of numbers and the issuing of the same number to two people.

3. If the patient has an existing file in the MPI and a health record number, the current identifying information should be checked with previous data and changes noted.

C.   MASTER PATIENT INDEX (MPI)

Indexes are a must for any hospital, health clinic, or primary health care facility. They serve as a guide to the location of an item. An index can be a table, file, or catalogue, listing an item and furnishing information for easy access to that item.

The Master Patient Index (MPI) is a permanent listing, containing the names of all patients who have ever been admitted to or treated in a hospital or clinic (also called Patients' Index, Master Person Index, Patient's Master Index, or Master File). Because the Master Patient Index is the key to locating a patient's health record, it is considered to be one of the most important tools maintained

in the health record department, clinic or primary health care centre. Since health records are filed numerically in most healthcare facilities, the MPI is used to identify a patient's health record number and locate the record.

Typically, a manual MPI is maintained using individual index cards for each patient that are filed alphabetically. In a manual MPI, each patient who is registered in the facility has an index card in the MPI that is maintained in the health record department. However, an increasing number of health facilities are maintaining computerized Master Patient Indexes and this is described in more detail in Unit 6, Hospital Medical Record Computer Applications. A computerized MPI is maintained using specialized database software. Reference to the computerized MPI will be made in this Unit, when applicable. The basic principles are the same, whether the data collection is done manually or by computer.

1. Content of the master patient index

The information contained in this index varies with the needs of the hospital or clinic. Whether the MPI is computerized or manual will determine the amount of data that will be maintained, based on space limitations. In a manual system, only information of an identifying nature necessary for prompt location of a particular health record should be recorded on the patient's MPI card. A computerized MPI will allow the facility to maintain additional information. Typically, the MPI contains two basic types of data: demographic level and visit level. The privacy necessary for maintaining confidential information should be considered when thinking of recording diagnoses and procedures on a MPI card, and should be avoided. The information recorded should include:

Demographic Level
- Internal identification number – number assigned at the time of hospital registration, also called the health record number.   It is the number used to file the health records.
- Patient's full name - family name, given name, middle name or initial, and pertinent suffixes and prefixes
- Date of birth (MM/DD/YYYY or DD/MM/YYYY) - in cases where patients have the same name, the age and date of birth provides additional information for identifying and obtaining the correct health record
- Complete address – street, city, state, zip code/post code, country
- Gender
- Race/Ethnicity
- Other unique identifying information, which will assist the identification of the patient, such as the mother's maiden name, national identification number or social security number. (This information is limited by the amount of space available, i.e., computerized database or index card.)

Visit Level
The following additional information may also be listed on the patient's

master index card if there is a need and adequate storage available:

- Account number – the billing number used to identify admission or encounter charges
- Admission and discharge dates - for inpatient hospitalizations
- Type of service – inpatient, emergency, outpatient surgery, etc.
- Encounter date or date of service – for outpatient visits
- Disposition – discharged, transferred, or died
- Admitting and/or attending physician's name

The following is an illustration of a MPI card used in a manual master patient index. The information at the top is collected at the time of the first encounter of the patient with the hospital or clinic. If the entries on the card must be handwritten, a pre-printed card will help ensure that the required data elements are recorded and made in a uniform place on the card.

<div align="center">Master Patient Index Card</div>

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| DOE, John William                    MR#  17-28-42        |
|                                                           |
| 17 Western Avenue                    DOB 02/17/1949       |
| Anytown, Indiana  46321              Sex:  M              |
| 219-555-3083                                              |
|                                                           |
| Adm Date      Dis Date      Service    Physician    Account #        |
|                                                           |
| 02/14/2004    02/17/2004    IP         Smith        04-3332112 |
| 05/16/2004                  OPS        Jones        04-3332866 |
|                                                           |
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2. Manual Master Patient Index

a. For inpatients, the procedure for a manual master patient index could be as follows:

    1)   Each day the admission registration staff notifies the health record department of all patients registered in the facility. This may be done by sending copies of the admission slips for all patients admitted to hospital, which are usually the carbon copies or computer printouts of the registration forms or face sheets.

    2)   The MPI is checked to see if any of the patients whose names

appear on the admission slips have been previously admitted and if they have an index card. If yes, these cards are pulled out and the current admission information is recorded. The demographic information on the index card must also be checked for any changes in name, address, etc.

3)   If the patient has had no previous admission, and therefore no card in the MPI, a new index card is prepared.

4)   In some hospitals the completed cards of inpatients are filed in a separate file, called the "in-hospital" or "in-house" file, and remain there until the patient is discharged.

5)   At discharge, the MPI card is removed from the "in-hospital box" and the discharge date is recorded. If a death occurred the date may be recorded in red. The patients' index cards are then filed into the MPI. Given the importance of the integrity and accuracy of this index, many hospitals have a second person check the filed card for accuracy.

b. Organization of the MPI

In the absence of a computerized MPI, special index cards or books or may be used for the listing of patients' names, with index cards being the most preferred.

The most popular and efficient method of maintaining the MPI is on index cards arranged alphabetically in a vertical file with a separate card for each patient. Using this method a single index card can be located readily in one search.

If using a book, it is divided into alphabetical sections. Names are listed under the first letter of the surname in chronological order by date of admission. This method is only feasible for a small facility, but retrieval becomes cumbersome and increasingly difficult for large hospitals, or where the volume of patient admissions or encounters is great, because a strict alphabetical order is maintained. This method is NOT generally recommended for a MPI.

It is not recommended to maintain the master patient index by year of admission or encounter. This is not a good method as patients often forget the date of their last visit, or if they were ever admitted to a particular hospital at all. Much time is lost searching through several sections of the index for the appropriate index card. Nor is it recommended to separate the MPI by sex, that is, to file the cards of male patients in one file and the cards of female patients in another.

c. Methods used for filing

1) <u>Alphabetical</u> - The MPI cards are arranged in the file like the words in a dictionary, following letter by letter of the family name first, then by the given name, and last by the middle name or initial.

- If there are two or more patients with the same family name, cards should be filed alphabetically by the given name. If given names are the same, the middle name or initial should be used to arrange the cards. If the entire name is identical the cards are filed by date of birth, filing the earliest birth date first (the card of the patient who was born first is filed first).

- If an initial is given for a patient's first or middle name, the rule is to "file nothing before something" (Huffman, 1994). Thus, SMITH, P. would come before SMITH, PETER.

- Last names beginning with a prefix or containing an apostrophe are filed in strict alphabetical order, ignoring any spaces or apostrophes. For example, the name O'Leary would be filed as Oleary, and the name Mac Dougal would be filed as Macdougal.

- Compound or hyphenated names are filed letter by letter, as one word; thus Ai-Min would be filed A-I-M-I-N.

2) <u>Phonetic</u> - in phonetic filing systems the patients' master index cards are arranged in the file by the first letter of the surname, and then according to sound rather than spelling. Thus all surnames that sound alike, but are spelled differently, are filed together. For example:

SMITH P.	LEA S.	GREENE, JAMES EDGAR
SMYTH P.	LEE S.	GREEN, JAMES EDWARD
SMYTHE P.	LEIGH S.	GREENE, JAMES EDWIN

- While an alphabetical filing system uses 26 letters the "Soundex" system uses only six code numbers.

- Names, which sound alike, but are spelled differently are grouped together in a phonetic patient index, rather than filed letter by letter as in an alphabetical patient index.

- Grouping similar sounding names together lessens the chance of lost index cards due to misspellings and index cards having misspelled names can be more easily located.

d. General filing rules for a Master Patient Index

1) Rules for filing MPI cards must be very detailed. It is not easy to locate medical records if you cannot locate the correct MPI card. Filing rules should be posted near the patients' master index for easy reference.

2) Use of the MPI and filing of the cards should be by authorized personnel only. Careful orientation of new employees to the proper filing procedures is necessary, as is periodic follow-up on the accuracy of these procedures.

3) The MPI should be a continuous file, that is, not divided into years.

4) A MPI card should be removed from the file only for updating or placing in the in-hospital box.

5) Occasional auditing of the MPI is recommended to monitor filing accuracy. This can be done by having the file clerk place a slightly higher card of a different colour behind each individual card at the time it is filed. A second person, known as the auditor or checker, removes the audit card after checking that each card has been correctly filed. It is useful to audit the filing done by new personnel to ensure that they are applying the rules correctly.

6) A patient whose name has changed since a previous admission will need a new index card. The new index card should be cross-referenced to the original index card. All information recorded on the original card should be entered on the new card. The original card should be cross-referenced to the new card.

3. **Supplies and equipment for a manual Master Patient Index**

Index cards, index guides and filing equipment are needed for maintaining a manual MPI.

a) Index cards - 3 x 5 inch cards (7.5 x 12.5 cms) are generally used, but the size may vary depending on the amount of information to be recorded.

Since the MPI is a permanent file, the card must be durable to withstand much handling. Remember, however, that the heavier the card, the more space required in the file.

b) Index guides - Index guides for an alphabetical or phonetic MPI file facilitate the location of an individual patient's card. Being slightly larger than the patient's card, the top of the guide with an initial letter of a

common surname is extended above the other cards, thus serving as a guide. Phonetic index guides will require, in addition to guides with initial letters or surnames, subguides indicating basic code numbers. The size and activity of the index will determine the number of guides needed. Sturdy construction of guides is also essential.

c) Filing equipment - Patients' index cards may be filed in cabinets suitable to the card's size. If 3 x 5 inch (7.5 x 12.5 cms) cards are used, they are usually filed in vertical, eight-drawer, triple compartment file cabinets. A power file is considered feasible when the MPI has more than 500,000 actively used cards. At the touch of a button, a power file delivers the required section of the index to the front of the file for easy access.

4. Computerized Master Patient Index

As mentioned earlier, It is also possible to maintain the MPI in a computer. At the time of admission to a facility, the registration staff searches the computer database for a particular patient. If the patient has been in hospital or attended a clinic previously, the patient's information is displayed on the computer screen. The registrar then updates any demographic information that has changed since the previous admission or visit. If the patient has not been to the hospital previously, the registrar collects the patient demographic information and the system automatically assigns a new registration, or medical record number, and stores this information in its memory. At the time of the patient's discharge, the date of discharge is entered into the system, thereby completing the current MPI entry.   A computerized MPI is discussed in more detail in Unit 6.

SUMMARY

The master patient index (MPI) is a permanent listing of all patients who have ever been admitted to, or treated by, the clinic, doctor or hospital. MPI cards should be prepared as soon as possible following the registration of a new patient and not later than 24 hours after the patient's presentation to the clinic or admission office. As the MPI is the key to finding a patient's health record, in a manual system they must be filed promptly in alphabetical or phonetic order.

The type of equipment required will depend upon the type and size of the cards used. The size generally used is a 3 x 5 inch card (7.5 x 12.5 cms). Regardless of the size of the card, however, only basic identification information needed to promptly locate a medical record should be recorded. MPI cards must be filed promptly and removed only for updating information. To help find a card guides should be used at regular intervals.

If computerization of hospital information is considered, the registration process and the MPI should be computerized first, if computer storage is available. The patient demographic and visit information contained on the cards can be stored in a computer database, and at the time of a patient's admission to, or outpatient encounter at a

hospital, the staff can check the name and file number via a computer terminal in the office.

REVIEW QUESTIONS:

1.   What is the purpose of a Master Patient Index?

2.   What are the contents of a Master Patient Index?

3.   How is a master patient index card prepared? How are data collected?

4.   What equipment would be needed for a Master Patient Index?

5.   How does the "Soundex" phonetic system work?
        When would it be most useful?

6.   Why is the Master Patient Index important?

7.   How long should a Master Patient Index be kept?

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