

# MEDICAL RECORDS IN FAMILY PRACTICE

*S. S. Withana*



**S**ubjective Information  
**O**bjective Information  
**A**ssessment  
**P**lanning

# Learning goals..

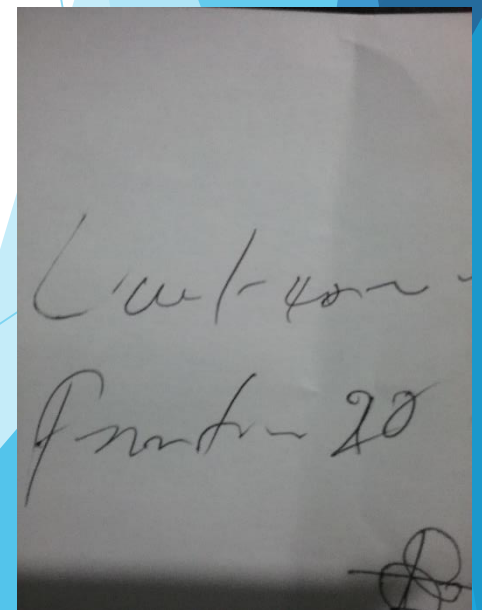
- ▶ What are medical records
- ▶ Why we need them
- ▶ Features of an ideal medical record
- ▶ What are the types
- ▶ Difference between paper based records and electronic records
- ▶ Importance of computers

# What are medical records?

- ▶ An account of patient's history, physician's findings, results of the investigations and management plan.

# History..

- ▶ Mesopotamians used 5000 years ago..
  - ▶ Clay tablets - cuneiforms.
- ▶ Egyptians used papyrus..
- ▶ Dr. Lawrence Weed, 1969 - POMR
- ▶ Currently, computer based - electronic medical records (EMR)



# Why we need medical records..

- ▶ Continuity of care
- ▶ Co-ordination of care
- ▶ Legal documentation - insurance
- ▶ ↑ Medical care - ↑ life span - ↑ Information
- ▶ Comprehensive care
- ▶ Education..

# Why we need medical records..

- ▶ Support patient management - decision making
- ▶ Health care management - billing, reimbursement
- ▶ Research - epidemiology, audit
- ▶ EXAM

# FEATURES OF AN 'IDEAL' MEDICAL RECORD..

- ▶ Setting up cost - LOW
- ▶ Storage space - MINIMAL
- ▶ Retrieval - QUICK
- ▶ Complete & accurate
- ▶ Legible



# FEATURES OF AN 'IDEAL' MEDICAL RECORD..

- ▶ Easily updated
- ▶ Confidentiality
- ▶ Reliable Back up
- ▶ Active reminders / alerts
- ▶ Connected to medical knowledge



# TYPES OF MEDICAL RECORDS..

## ▶ Patient held

- ▶ Exercise book
- ▶ Medical smart card

## ▶ Doctor held

- ▶ Paper based
- ▶ Computer based

## ▶ Web based

# PAPER BASED MEDICAL RECORDS..

- ▶ Problem Oriented Medical Record (POMR)
- ▶ Contains a list of all currently active problems, updated at each visit
  - | Data-sheet
  - | Problem list
  - | Clinical notes
  - | Flow sheet
  - | Lab reports

PROBLEM ORIENTED MEDICAL RECORD

Clinic Number: .....

Name: .....

Address: .....

Family Medicine Clinic,  
Faculty of Medicine, University of Kelaniya.

Weight: ...

PROBLEM ORIENTED MEDICAL RECORD

No :

Name :

Address :

Family Practice Teaching Unit,  
Faculty of Medicine,  
University of Kelaniya,  
P. O. Box 6, Talagolla Road,  
Ragama.

### DATA SHEET

Number : \_\_\_\_\_ Date : \_\_\_\_\_

Surname :

Other names :

Date of Birth :

Sex :

Address :

Telephone No:

Marital status :

Occupation :

Ethnic group :

Religion :

Members in the household :

Husband :

Wife :

Children : 1. 5.  
2. 6.  
3. 7.  
4. 8.

Father :

Mother :

Brothers :

Sisters :

Grandchildren :

Others : 1.  
2.  
3.

Name of the chief occupant / Guardian :

Previous illnesses/operations of note :

Family illnesses of note :

Blood group & Rh factor :

Record of immunizations :

Adverse drug reactions :

## PROBLEM LIST

Date	Problem	Date	Problem
4. 3. 79	Breast lump (benign) removed 12.4.79		
2. 4. 80	Diabetes		
4. 3. 79	Marriage problem resolved 1984		



# Recording clinical notes in a POMR

- ▶ Subjective
  - ▶ Patient's view
- ▶ Objective
  - ▶ Doctor's findings
- ▶ Assessment
  - ▶ Diagnosis/problem definition
- ▶ Plan
  - ▶ Management plan

PROBLEM ORIENTED MEDICAL RECORD – University Family Medicine Centre

Clinical Note

Date ..... / ..... / ..... No: .....

SUBJECTIVE

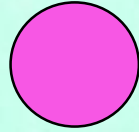
OBJECTIVE

ASSESSMENT

PLAN OF MANAGEMENT

Review after ..... SOS/Days/Weeks/Month/s

**PROBLEM ORIENTED MEDICAL RECORD**



*No :*

*Name :*

*Address :*

Family Practice Teaching Unit,  
Faculty of Medicine,  
University of Kelaniya,  
P. O. Box 6, Talagolla Road,  
Ragama.



Drug allergy

Hypertension  
research study

# Registers used with paper based records..

- ▶ Practice register
- ▶ Age - sex register
- ▶ Disease register
- ▶ Immunization register

The image shows a photograph of a practice register form. The form is a table with five columns: No., Name, Forenames, Sex, and D.O.B. The table is labeled A, B, and C in the top right corner. The form is a light brown color and has a slightly aged appearance. The table is empty, with no data entered.

No.	Name	Forenames	Sex	D.O.B.
-----	------	-----------	-----	--------



# Limitations of paper records..

- ▶ Large space needed
- ▶ Separate staff to maintain
- ▶ Hand written text may be
  - ▶ Illegible
  - ▶ Different in order and structure
  - ▶ Incomplete
- ▶ Limited warnings and alerts
- ▶ Analysis has to be done manually
- ▶ Back up - difficult

# EMR??

- ▶ An electronic record of health related information on an individual that can be created, gathered, managed and consulted by authorized clinicians and staff within one health care organization.
- ▶ Have the potential to provide substantial benefit to the patients, physicians, clinic practice and health care organizations
- ▶ Can improve quality of patient care and patient safety.

NEW PATIENT

CLEAR ACTIVE PATIENT

Patient: **Malaria Test Govigama (03)**

DOB: 01/01/1965 Age: 51

Encounter History

Home | Manual

Logout

Administrator Administrator

Hide Menu

Patients

New/Search

Summary

Visits

Create Visit

Current

Visit History

Records

Visit Forms

Import

 Modules Procedures Administration Reports Miscellaneous

Popups

Find:   
by: **Name** **ID**  
**SSN** **DOB**  
**Any** **Filter**

Online Support

**Billing** (expand)[Edit](#) **Demographics** (expand)[Edit](#) **Notes** (expand)[Edit](#) **Patient Reminders** (expand)[Edit](#) **Disclosures** (expand)[Edit](#) **Amendments** (expand)**Labs** (expand)[Trend](#) **Vitals** (collapse)

Most recent vitals from: 2015-08-15 09:39:00

**Blood Pressure:** 150/90    **Weight:** 220.46 lb (100.00 kg)**Height:** 66.93 in (170.00 cm)    **BMI:** 35 kg/m^2**BMI Status:** Obesity II[Click here to view and graph all vitals.](#)[Edit](#) **Clinical Reminders** (expand)[Add](#) **Appointments** (expand)[Edit](#) **Medical Problems** (collapse)Malaria  
Snake bite  
Hypertension[Edit](#) **Allergies** (collapse)**Aspirin**[Edit](#) **Medications** (collapse)Metformin Hydrochloride -  
GLUCOPHAGE  
Paracetamol  
Glimepiride [GLYMED][Edit](#) **Immunizations** (expand)[Edit](#) **Prescription** (expand)**Tracks** (expand)**Past Encounters and Documents** [\(To Billing View\)](#)

Results per page: 20

1-5 of 5

Date	Issue	Reason/Form	Provider	Coding	Insurance
15/08/2015		Second Vitals	Administrator, Administrator		15/08/2015
15/04/2015		Document: Hilla_sFPC_20150323.docx (Patient Information)			
03/04/2015		Wheezing	Administrator, Administrator		03/04/2015
09/04/2015		Abdominal pain	Administrator, Administrator		09/04/2015

# Medical smart card

- ▶ Similar to ATM card but with memory
- ▶ Stores a summary of patient details
- ▶ Patient held, portable
- ▶ Need a smart card reader
- ▶ Similar to electronic exercise book
- ▶ Doctor shopping possible



# EMR vs PAPER BASED RECORDS

## EMR

- ▶ Space less
- ▶ Retrieval instant
- ▶ Legibility high
- ▶ High accuracy when entered in the structure
- ▶ Codes are generated automatically
- ▶ Confidentiality with passwords at many levels

## Paper

- ▶ Need more space when records increase
- ▶ Depends on number of patients and organization
- ▶ Hand writing??
- ▶ Difficult to maintain structure in blank paper
- ▶ Have to remember
- ▶ If lockers opened, difficult to maintain confidentiality

## EMR

- ▶ Chance of subtle or catastrophic failures
- ▶ Alerts, prompts and reminders assist diagnosis and therapeutic decisions
- ▶ Initial cost high
- ▶ Users need initial training

## Paper

- ▶ Floods, fire
- ▶ No active support
- ▶ Low cost
- ▶ Minimal training needed



# Why turn to computers now

- ▶ Technology becoming more accessible
- ▶ Impossible to remember all drugs, side-effects and patient details. Computers are best at data storage and retrieval
- ▶ Patients and practitioners are becoming more computer literate in everyday life
- ▶ Leapfrogging..

# Summary

- ▶ What are medical records
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# ACTIVITY

**Medical Records**

# ANSWER

- ▶ S - cold and fever for 2 days
  - ▶ Cough+, Contact history<sup>0</sup>
- ▶ O - Vitals - normal, temperature - Nl, Lungs - clear
- ▶ A - Acute upper respiratory tract infection
- ▶ P - Loratidine 10 mg daily, Increase fluid intake, if not settling R/V in 2 days to investigate

The day will come when patients has to choose between a human doctor and a machine.

We need to train the our graduates up to a level, so the patients will choose a human doctor assisted by a computer instead of a machine.

Because we cannot loose the human touch in the practice of medicine..

Prof. K. Mendis

THANK YOU