



REVA HACK</>2020

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Data processing for hospitals

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Overview

Medical professionals don't have access to the patient data they need at the time of treatment because it's too difficult to access. Patient data lies within paper charts, electronic records, and other sources.

Goals

- 1. We can use a method of storing and retrieving pathological data in a hospital by use of a data processing machine, comprising the steps of storing information.*
- 2. It includes storage of an identification number for each pathological tests.*

Working Methodology

We can make use of Four expandable files, three of which provide for permanent storage, and one of which is a daily transaction file such as Patient Description file(PDF), Test Library File(TLF) etc. While reference has been made to four basic data files for use in the present system, number of other files may be provided for facilitating handling of the data into basic data files.

Specifications

*We can make use of Big data analysis, Semantic Web technologies, hospital information system.
[Windows 7 premium or Windows 8,10,Pro,Enterprise and Education edition,32 or 64 bit]*

Data processing in hospital

Medical Data

- Data provides the basis for categorising the symptoms that a patient presents or for identifying subgroups within a population of patients.
- Data is anything which can be observed from a patient or generated based on previously collected or derived data.
- Medical data are crucial to information processing and decision making.

Medical Data uses

- Identify future health risks.
- Identify deviations from expected trends.
- Provide a legal record.
- Support training and development.
- Build up an historical record.

Data recording techniques

- It should be clear from these examples that the idea of data is inextricably bound to the idea of data recording.
- *Data recording technique ranges from:*
 - Hand written text.
 - Hand drawn sketches.
 - Photographic images.
 - Machine generated tracings of analog signals.

Who collects medical data?

- Clinician staff – doctors and nurses
- Office / admin staff
- Lab personnel
- Radiologists
- Pharmacists
- ICT devices – ICU monitors

Information processing

- We can only talk about information processing if a human is involved.
- Computers cannot process information
- Computer can only process DATA.
- Only a human being is able to interpret the data so that they become information.

C code

```
▪ include <stdio.h>
▪ void main()
▪ {
▪   FILE *fptr;
▪   char name[20];
▪   int age;
▪   char disease;
▪   /* open for writing */
▪   fptr = fopen("emp.rec", "w");
▪   if (fptr == NULL)
▪   {
▪     printf("File does not exists \n");
▪     return;
▪   }
```

- `Printf("scanf("%s", name);`
- `fprintf(fptr, "Name = %s\n", name);`
- `printf("Enter the age\n");`
- `scanf("%d", &age);`
- `fprintf(fptr, "Age = %d\n", age);`
- `printf("Enter the disease\n");`
- `scanf("%f", &disease);`
- `fprintf(fptr, "Salary = %.2f\n", disease);`
- `fclose(fptr);`
- `}`

- Many countries have been complaining for incompleteness, inappropriateness and illegibility of record.
- Therefore creating awareness on the magnitude of the problem has paramount importance. Hence available correct patient information has lots of potential in reducing errors and support roles.

THANK YOU