

Benefits of Management Information System in Blood Bank

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Abstract: This paper discuss about the benefits of management information system in blood bank. Management information system plays an important role in the development of the projects. In today's world of information most of the systems are transforming into the management information system. The paper is basically focussed on the blood bank management information system. It discuss about the beneficiaries of the blood bank management information system. It plays a vital role in the blood bank as blood is the necessity of everyone.

Keywords: Management Information System, Blood Bank

1. Introduction

When the manager manages the information i.e. the processed data then the system develop which is known as 'Management Information System' ^[1]. In this context system consist input, output, processing of data into information and feedback or control. Manager is required to manage five types of resources effectively. Out of five resources four resources comes under 'physical' category and one resource comes under 'conceptual' category. The names of the resources are as follows:

1. Personnel
2. Material
3. Machine
4. Money
5. Information (processed data)

There are various reasons behind which can justify the need of the management information system viz. International economy, worldwide competition, increasing business complexity, social constraints. Information comes from the data. Management information system assist managers as computer understands the problem of the managers and they are capable of solving the problem of the managers. This results the breakthrough in the management information system. By using the concept of management information system leads to develop many application specific software which provide the solutions to the managers. It also helps the end users as the common men who are using the solution provided by the management information system helpful in the retrieval of the information as well as the speed of the information retrieval are also increased. Because of this end user gets the desired results or output with the specific time interval. Managers use computer based information system ^{[2][3][4]} to make decisions to solve problems, and information is used in making these decisions. Information is presented in both oral and written forms by an information processor. The computer portion of the information processor contains each of the computer-based application areas- AIS, MIS, DSS, the virtual office and knowledge based systems.



Figure 1: Computer Based Information System

2. Management Information System In Blood Bank

Researcher has developed the management information system for blood bank at Jhalawar district Rajasthan. Unfortunately blood bank staff still using the old traditional method i.e. they are maintaining the data manually. This practise effect the retrieval of the information and staff is unable to maintain the inventory properly. During the development of the management information system for the blood bank researcher focused on two concepts which are inventory control and the information retrieval. By developing the information system inventory should be properly managed and the information retrieval can be precise.

Beneficiaries of blood bank management information system

There are three beneficiaries which can get benefits from the management information system of blood bank which are

1. Donors: person who wants to donate the blood voluntarily at the blood donation camp. Information system also keeps the record of the donors who wants to register online.
2. Seekers: person who wants the blood from the blood bank due to various reasons like accidents, surgeries, delivery and many more.
3. Blood bank: staff people which are working in the blood bank which includes staff member, operator, blood bank in charge, head of pathological department.

Benefits of blood bank management information system to donors

1. It provides the unique identification number at the time of blood donation camp which helps him for the future correspondence. MIS gives the unique user id and password for those donors who are applying online. They can edit their information time to time. This feature helps administrator to collect the information of all the donors area wise and blood group wise.
2. Donors can view the blood donation camp organising at the different places.
3. As it is a web based application, its index page encourages the donor to donate the blood.
4. Donor can also check his blood group medical status whether it is healthy or unhealthy.
5. Donor can check the status of the particular blood group just on one click sitting at home.

Benefits of blood bank management information system to seekers

1. Seeker can get the information of the desired blood group from the central inventory
2. Seeker can get the list of donors' area wise, blood group wise if the desired blood group is not available in the central inventory.
3. Seeker can get the information of the particular blood group available in the blood bank.
4. Seeker can get the information of that blood group which is not fit for blood transfusion.
5. Seeker can get the blood units according to his requirement from the blood bank.

Benefits of blood bank management information system to blood bank

1. Blood bank in charge is getting rid from manual procedure. Now they to do the entries in the information system.
2. The probability of error should be minimal.
3. Information retrieval should be precise and effective.
4. Inventory control can be properly controlled and managed as researcher is using the FIFO (First In First Out) concept.
5. Report can be generated of donors, seekers, total consumption of the blood units and overall report monthly, bi-monthly, quarterly, half yearly, annually.
6. Blood bank in charge can get the information which blood is in demand but rarely available and which blood group is rarely in demand but plenty in stock.
7. Blood bank in charge can get the information which is maximum cause for which the blood units are required like accidental cases, heart surgery, delivery cases.
8. Blood bank in charge can get the information which doctor has recommended the blood units.
9. Blood bank in charge can view the list of discarded blood units, they can also view the reason for which the blood units are discarded.
10. Blood bank in charge can view the central inventory as it shows the total account of number of units of the particular blood group.
11. Blood bank in charge can manually discard those units which become unhealthy due to some technical fault.
12. Blood bank in charge can check by viewing the report whether the replacement donor has actually donated the blood or not.

13. Blood bank in charge can generate the unique identification number to the donor.
14. Blood bank in charge can generate the source id of the blood unit bags
15. Blood bank can upload the information of the blood donation camp organising in the city so that end user can view the details of the blood donation camp.

3. Conclusion

In the world of information technology where whole world is becomes global village, where end user can get the information just sitting at home on one click. In fact government has taken a step in order to transform the system. Management information system helps to make the system paper less. Now the end user has to enrol himself and his job is done. All the money transaction is made possible because of the management information system. Researcher believes that by developing the management information system for the blood bank make the revolutionary changes in the system. It is small contribution of the researcher in order to serve the mankind.

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