**Project Proposal**

**Idea:**

Blood bank management system.

**Components:**

The project will have 3 main components: donation of blood, report, storage, request for blood, transportation of blood from the clinic to the hospital.

**Details:**

Donors can be of any gender but must be above 18 and should have a specific Hemoglobin level. Their bloods will be first screened and then stored.

Blood will have a blood group and blood components (RBCs, WBCs and plasma etc). The database will record the amount of every component of all blood samples.

After a donation anticoagulant/preservative solution is added to the blood bag contains nutrients for the blood during storage and stops the blood from clotting and a check is kept in the dbms. The blood is always to be stored at a temperature between +2 °C and +6 °C.[[1]](#footnote-2)

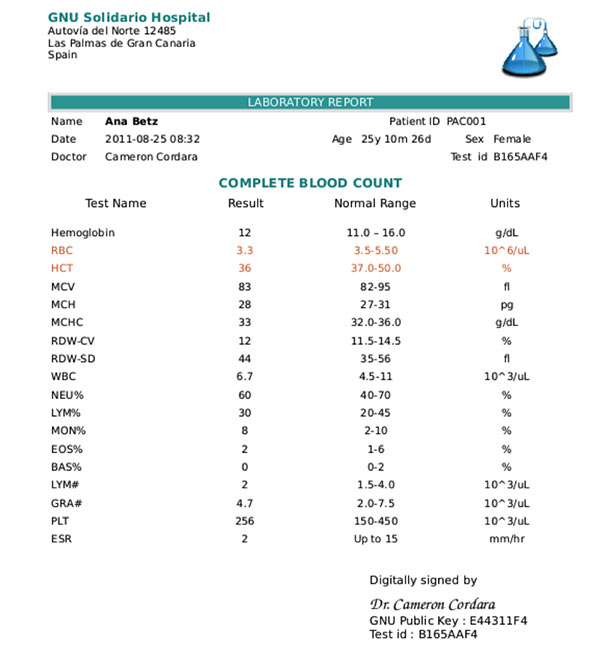
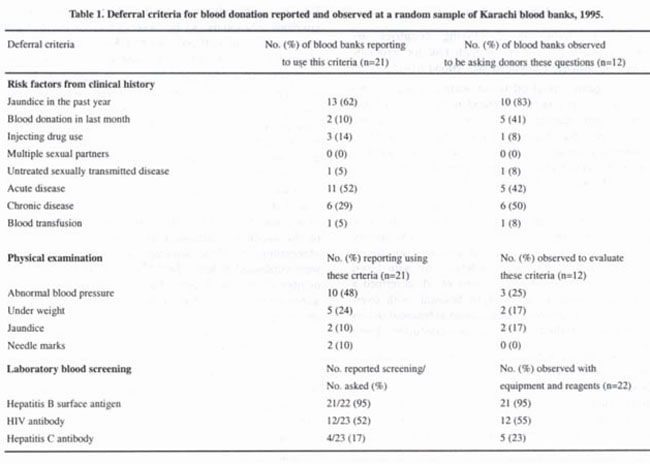
Donations can only be made during the working days i.e. Monday to Friday however the requests for blood can be made any day and any time of the week. Donors are given a blood report once their donation is processed. This might take 2-4 weeks.

Requests for blood can only be made by hospitals.

Once a request is made the blood is transported to the hospital by the blood bank’s own transportation in specialized vans. The driver should have basic medical know how for this job.

Request for blood can be specific to a component and a certain blood group.

Transportation can be urgent or delayed depending on the request.

Following are the details which will be present in the dbms regarding the different components. (As of now they are just samples)

1. <https://www.quora.com/How-is-donated-blood-stored-and-how-long-can-it-be-kept>

   <https://transfusion.com.au/blood_products/storage/storage_temperature_range> [↑](#footnote-ref-2)