### LITERATURE SURVEY

## Case study |:

Determinants of plasma donation: A review of the literature

Author: Antoine Beurel

### **Abstract**

The major contribution of Human Sciences in the understanding of the whole blood donation behavior has been through the study of individuals' motivations and deterrents to donate. However, if whole blood donation has been very widely studied in the last sixty years, we still know very little about plasma donation in voluntary non-remunerated environments. Yet, the need for plasma-derived products has been strongly increasing for some years, and blood collection agencies have to adapt if they want to meet this demand. This article aims to review the main motivations and deterrents to whole blood donation, and to compare them with those that we already know concerning plasma donation. Current evidence shows similarities between both behaviors, but also differences that indicate a need for further research regarding plasma donation.

# Case Study ||:

# IMPLEMENTATION OF BLOOD DONATION APPLICATION USING ANDROID SMARTPHONE

Author: Ms. Pradnya Jagtap

#### Abstract:

Blood is an important constituent of human body. Timely availability of quality blood is a crucial requirement for sustaining the healthcare services. In the hospital, in most of the cases, when blood is required, could not be provided on time causing unpleasant things. Though donor is available in the hospital, patient is unaware of it, and so is donor. To resolve this, a communication between hospital, blood bank, donor, and receptor is important. The system listed with following forecasting on price variations and stock handling, increase in number of blood type, increase in human accident Infrastructure, blood on various category to be managed. So we solve the problem using the android application. The system will make sure that in case of need, the blood will be made available to the patient. There will be android app to make this communication faster. It aims to create an information about the donor and organization that are related to donating the blood. The methodology used to build this system uses GPS. The Proposed system will be used in Blood banks, Hospitals, for Donors and Requester whoever registers to the system.

KEYWORDS: Cloud Computing, GPS, Google Cloud Messaging, Clustering

## Case Study |||:

Management of Blood Donation System: Literature Review and Research Perspectives

Author: Seda Bas, Giuliana Carello

### **Abstract:**

Applying optimization methods to healthcare management and logistics is a developing research area with numerous studies. Specifically, facility location, staff rostering, patient allocation, and medical supply transportation are the main themes analysed. Optimization approaches have been developed for several healthcare related problems, ranging from the resource management in hospitals to the delivery of care services in a territory. However, optimization approaches can also improve other services in the health system that have been only marginally addressed, yet. One of them is the Blood Donation (BD) system, aiming at providing an adequate supply of blood to Transfusion Centres (TCs) and hospitals. Blood is necessary for several treatments and surgeries, and still a limited resource. The need for blood is about ten million units per year in the USA, 2.1 in Italy and 2 in Turkey; moreover, people still die in some countries because of inadequate supply of blood products (World Health Organization 2014). Hence, BD plays a fundamental role in healthcare systems, aiming at guaranteeing an adequate blood availability to meet the demand and save lives.

