

# Globalized Medicare and Organ Transplantation System

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**Abstract** - Globalized Medicare and Organ Transplantation System is a new system for managing the patients globally. It is a portal and through this multi special hospitals can enter their patient details and also if any availability of organs to transplant, they can instantly inform all the hospitals which are registered in this portal. The project makes sure the preservation of the act by dealing it with registered hospitals only. Patient details contain a Global Identification Number. If a patient is admitted in a hospital by seriously injured, using his GIN doctors can find his previous case history like any allergy, heart patient or not, previous surgery details if any etc.. So treatment will be easy and faster.

**Key Words:** Organ transplantation, Global identification number, Global medicare, Medical history.

## 1. INTRODUCTION

Aiming at promoting and streamlining the process of organ donation, the government amended the Transplantation of Human Organs Act, in order to simplify rules and extend the ambit of donors to grandparents and grandchildren. The Bill, which may be called Transplantation of Human Organs and Tissues Act (THOTA), proposes to allow swap donation, tissue donation and expands the definition of near relatives.

Globalized Medicare and Organ Transplantation System is a new system for managing the patients globally. It is a portal and through this multi special hospitals can enter their patient details and also if any availability of organs to transplant, they can instantly inform all the hospitals which are registered in this portal. The project makes sure the preservation of the act by dealing it with registered hospitals only. Patient details contain a Global Identification Number (GIN). If a patient is admitted in a hospital by seriously injured, using his GIN doctors can find his previous case history like any allergy, heart patient or not, previous surgery details if any etc.. So treatment will be easy and faster.

## 2. SYSTEM DESIGN

### 2.1 Use Case Diagram

Use case diagram is used to identify the primary elements and processes that form the system. The primary elements are called as "actors" and the processes are called as "use cases". Use case diagram is a graph of actors, a set of use cases enclosed by a system boundary, communication association between the actors and the use cases. The use case diagrams describes how a system interacts with outside actors, each use case represents a piece of functionality that a system provides to its users. A use case is shown as an ellipse containing the name of a use case and an actor is shown as stick figure with the name of the actor below it.

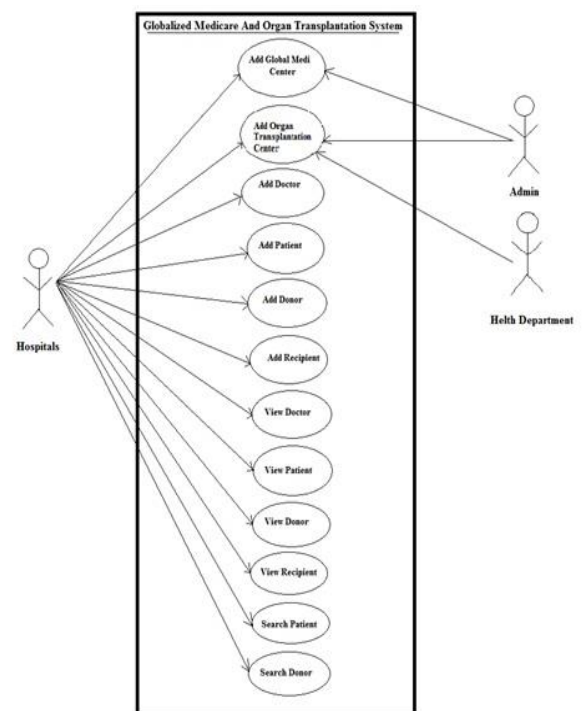
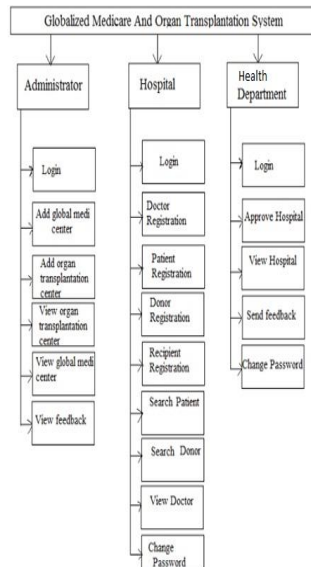


Fig 1: Use case diagram

## 2.2 Modular Design Diagram

Modular design diagram subdivides the system into modules which can be independently created and used to derive functionalities. Some complex systems can be broken down into simpler subsystems which work when combined. Components of modular design can be created separately and then added together to increase functionality.



**Fig 2:** Modular design diagram

## 3. IMPLEMENTATION

### 3.1 Hardware Specification

Processor : Intel(R) Core 2 Duo

Processor speed : E4600 @ 2.40GHz

Hard disk : 500GB

RAM : 2 GB

### 3.2 Software Specification

Operating system : Microsoft Windows XP Professional

Front end : Microsoft visual studio 2012

Back end : Microsoft SQL server 2010

Web Server : IIS 6.0

Scripting language : Java Script

Back end : MS SQL server 2010

Web browser : Internet explorer, Mozilla firefox

## 3. CONCLUSIONS

The project titled Globalized Medicare and Organ Transplantation System is well designed method for managing the patients globally and also if any availability of organs to transplant, they can instantly inform all the hospitals which are registered in this portal. It helps in speeding up processes and very effective method for details transactions such as applying, short listing and searching details etc. This project covers almost all topics in ASP.Net.

The problems were thoroughly analyzed and studied to uncover all the possible troubles that can be occurred in the system. The system is feasible enough for amendments and modifications that may arrive in future. I believe that the system will remain good for a reasonable period of time. Once again I am expressing my thanks to those who helped me to make this a successful one.

## REFERENCES

- [1] AMA (American Medical Association, Council on Scientific Affairs).1981.Organ donor recruitment. JAMA 246:2157-2158.
- [2] ASTS (American Society of Transplant Surgeons). 1990. Survey on Present Status of Reimbursement for Immunosuppressive Drugs.
- [3] Bart KJ, Macon EJ, Whittier FC, Baldwin RJ, Blount JH. 1981. a. Cadaveric kidneys for transplantation. Transplantation 31:379-382.
- [4] Callender CO. 1989. The results of transplantation in blacks: Just the tip of the iceberg. Transplantation proc 21:3407-3410.
- [5] Darby JM, Stein K, Grenvik A, Stuart SA. 1989. Approach to management of the heartbreaking "brain dead" organ donor. JAMA 261:2222-2228.
- [6] DOT (U.S Department of Transplantation). 1989. The Effects of the 65 mph Speed Limit Through 1988. Washington, D.C.