

## **Electronic Visits in Primary Care: Modeling, Analysis and Scheduling Policies**

### **ABSTRACT**

Primary care, the backbone of the nation's healthcare system, is at the risk of collapse. Patients are dissatisfied due to poor access to care, and physicians are unhappy and burning out with an enormous amount of tasks. To improve the primary care access, many healthcare organizations have introduced electronic visits (or e-visits) to provide patient-physician communications through securing messages. In this paper, we introduce an analytical model to study e-visits in primary care clinics. Analytical formulas to evaluate the mean and variance of the patient length of visit in primary care clinics with e-visits are derived. System properties are investigated. In addition, comparisons of different scheduling policies between the office and the e-visits are carried out. The first come first serve, preemptive-resume, and non-preemptive policies are studied and the results show that the first come first serve policy typically leads to the best performance.

### **EXISTING SYSTEM**

Now a days due to population growth and aging, and the expanded healthcare insurance coverage, the demand for primary care services has increased substantially in the past years. Patients have difficulty of getting timely access to care, while primary care physicians are facing insurmountable tasks. More patients need access to primary care but less medical students are choosing to enter the field.

### **DRAWBACKS**

- Patients are not satisfied because of poor access.
- Physicians also get tired of doing enormous works.

## PROPOSED SYSTEM

In this paper, we introduce an analytical model to study e-visits in primary care clinics. Analytical formulas to evaluate the mean and variance of the patient length of visit in primary care clinics with e-visits are derived. System properties are investigated. In addition, comparisons of different scheduling policies between the office and the e-visits are carried out. The first come first serve, preemptive-resume, and non-preemptive policies are studied and the results show that the first come first serve policy typically leads to the best performance.

## ADVANTAGES

- It provides patient- physician communication.
- Patient can get the treatment quickly without delay.

## SYSTEM REQUIREMENTS

### H/W System Configuration:-

- Processor - Pentium –IV
- RAM - 4 GB (min)
- Hard Disk - 20 GB
- Key Board - Standard Windows Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - SVGA

### S/W System Configuration:-

- Operating System : Windows 7 or 8 32 bit
- Application Server : Tomcat5.0/6.X
- Programming Language : Java
- Java Version : JDK 1.6 and above