Introduction

* 1. INTRODUCTION

Aim of this project is to create doctor patient handling management system that will help doctors in their work and will also help patients to book doctor appointments and view medical progress. The system allows doctors to manage their booking slots online. Patients are allowed to book empty slots online and those slots are reserved in their name. The system manages the appointment data for multiple doctors of various date and times. Each time a user visits a doctor his/her medical entry is stored in the database by doctor. Next time a user logs in he may view his/her entire medical history as and when needed. At the same time a doctor may view patient’s previews medical history while the patient visits him.

* + 1. OBJECTIVES
* This Website is very user friendly.
* It helps each and every patient to have their appointments booked or removed just with a single ONECLICK.
* One can easily view the doctor list just with ONECLICK
* Easily accessing doctors database and choosing doctor by ONECLICK
  + 1. JUSTIFICATION OF STUDY

We implement this system for better user experience. This system is very easy to access. Also for establish real time communication, using modern and updated technology. So, user can see the update without reload or refresh. This system will compatible with user device such as pc, laptop, tab & smart phone. So user can easily access the system anytime anywhere. This system is very simple & user friendly so, any user can use this system easily.

* + 1. SCOPE OF STUDY

Scope of the project is very broad in terms of other online doctor appointment portal. Few of them are:

* This Website would help every patient to easily access to the website.

* With this website it helps any patient to appoint their desired doctor just with ONECLICK
* One can see the availability of each and every doctor of their choice with a ONECLICK
* One can easily view the doctor list just with ONECLICK

Literature Survey

2.1 Waiting Time

Waiting time simply means a period of time which one must wait in order for a specific action to occur, after that action is requested or mandated (Fernandes et al., 1994). Patients’ waiting time has been defined as “the length of time from when the patient entered the outpatient clinic to the time the patient actually received his or her prescription” (Jamaiah, 2003). It is defined as the total time from registration until consultation with a doctor. There were two waiting times, the first is time taken to see a physician and the second is time to obtain medicine (Suriani, 2003). This paper deals with the waiting time to see physicians. Long waiting times are a serious problem for patients using urban health centres in developing countries (Bachmann, 1998). A block appointment system was introduced and evaluated in a large South African health centre. Waiting times of all patients were measured over one-week period before and after the implementation of appointments. Focus groups and individual interviews were conducted with staff and patients. After introducing appointments, patients with acute and chronic illnesses and having appointments had significantly shorter waits time than similar patients without appointments .Appointments had no benefits for patients not seeing doctors or collecting repeat medication. There was, however, an overall increase in patients' waiting times after introducing the system, mainly due to one typical day in the follow-up study. Focus groups and interviews revealed that staff were skeptical at baseline but at follow-up were positive about the system. Patients were enthusiastic about the appointment system at all stages. The study shows that block appointments can reduce patients’ waiting times for acute patients, but may not be suitable for all patients. Staff and patients had different views, which converged with experience of the new system.

2.2 Patients’ Appointment System

A patient appointment system or appointment schedule for health care center started long time ago . Management of patients’ appointments has earlier works and has developed simplified queuing models and fairly static scheduling conditions. Another attempt was made to calculate the waiting time between patient and doctor using the mathematical queuing models to minimize waiting time . However; traditionally the appointment system has considered that the doctor time is more important than patient time . So an appointment system was designed to minimize the doctor idle time but current designing of an appointment system is based on decisive factors with respect to both the patient and doctor . The patient appointment system has complex structures because it represents the patient appointment time in the healthcare center and controls the patient waiting time based on the type and the period of patient appointment .

2.2.1 Appointment Delay

Past research shows that the longer the appointment delay which is defined as the time between the day a patient requests an appointment and her actual appointment date, the higher the chances that he/she will cancel or not show up. This suggests an obvious way of minimizing no-shows and cancellations: this is done by asking the patients to come right away or make appointment requests on the day they want to be seen . This is called an open access (OA) or advanced access policy , and of late it has become a popular paradigm in practice and the subject of active research. Several authors report on their experiences in implementing OA, both positive and negative Some strongly advocate OA strongly against it .

2.2.2 Managing Patients’ Appointment system

According to Dexter (1999), managing patient appointment system is a computer application used to manage and reduce the patient waiting time in the health care center. Some health care centers do not use any appointment system. So it has a longer average patients’ waiting time than the health care center that adopts the patients’ appointment system. While patients can wait for more than one hour to be attended to by a physician in a health care center, they also can feel that they are being disregarded and treated unfairly. So when patients are given the time of appointment in a health care centre, they can evaluate the quality of service in the centre .Hence, developing patients’ appointment process for health care centres necessitates the use of a sophisticated queuing model that captures much of the real system’s features (saving time, reducing idle time, etc). Therefore the appointment schedule represents the real situation in the health care centre faced by patient appointment schedulers .On the other hand, the standard practice for scheduling and processing patient appointments are based on the nature of treatments of the patients and that better approaches more sensitive to patient needs are desirable .

2.3 Online Booking System

An online system is also known as a web based system. A web is made up of page that is commonly known as web page or web site, and a web site is a computer program that runs a web server that provides access to a group of related web pages (Alex, 2000). A system is a set of independent components working together to achieve a common objective. Therefore a web based system is a system that is accessible over the internet by a user in order to achieve a particular task for a given purpose. The Internet is a system that is use to connect computers and computer networks. It helps to link millions of computer networks all over the world and it allows the users to get information stored on other computers from a long distance (James, 1999). According to Chua (2010) the public demand for better healthcare system and the alarming number of missed appointments have forced the healthcare sector to recognize how they deliver care services. With the advance of IT technology today and seen healthcare system as a critical system, appointment booking system lies at the intersection of delivering efficient, dependable and timely access to health services. The conventional way of appointment booking is via fax, phone or email. But with the growing internet penetration, healthcare industry is moving towards the use of an online clinic system.

The Internet provides a wide range of technologies that enable hospitals to communicate with their patients. Recently, as the prevalence of Internet increasing, many hospitals initiated the website appointment system. Electronic patient-provider communication promises to improve efficiency and effectiveness of clinical care.

Software Requirement Specification