

Doctor's Hub – a Way to Effective Health Management

Divya Bhavani Mohan

PG Student, Dept. of CSE, SRM University, Kattankulathur, Kancheepuram, Tamil Nadu, India

ABSTRACT: The field of medicine is growing rapidly in this fast paced world. There are vast developments and advancements rendering services to the users online. Services such as online appointment scheduling based on improved search criteria according to the doctor's specialization field, event management of health related camps, effective communication between doctors, patients, medical representatives, organizations etc can be of great use to the current generation users. But there is no centralized website covering online medical functionalities. In this paper, Doctor's Hub is a website that provides centralized platform connecting doctors, patients and medical representatives. Centralization of various functionalities in medical field is done. This involves online appointment fixing, event organization and management activities for health related camps like eye camps, blood banks, seminars etc., online hiring through various organizations thereby resolving the above mentioned issue.

KEYWORDS: doctor, patient, communication, online appointment, health camp, event, recruitment

I. INTRODUCTION

Healthcare industry in recent years has been showing increasing number of advancements. With increase in the number of internet users and requirement for efficient and updated medical support, there is a need for an online system for covering up the functionalities. Patients and healthcare providers of the healthcare industry suffer from poor record keeping and medication tracking. Pharmaceutical providers also suffer from this inaccurate record keeping of the administration of their medication. People were having difficulty in making appointment with doctor like telephone line is busy, office closed, put on hold, etc. Therefore there is a need of some system which will take care of these issues and must be cost effective.

This paper states the need for an automated online system that maintains and tracks the information related to registered doctors and patients that can be updated by them when required for efficient and accurate display of data when searched. This provides medical representatives and healthcare providers the ability to manage and track the medication and products better. It also paves way for accurate communication between patients and his/her medical doctor.

Doctor's Hub is a website that provides centralized platform connecting doctors, patients and medical representatives. Our project involves following aspect: It provides centralized hub for doctors, patients and also medical representatives. Medical tourism enhances foreign communication and is a boon for economic growth due to inflow of foreign currency. Economic development of our country due to enhancement in medical tourism. Updation of latest development/technology in medical field. It is real time and efficient time management is possible.

II. RELATED WORK

This involves the experimental studies of 2 filed publications[1], basic details of patented invention[2] are mentioned below:

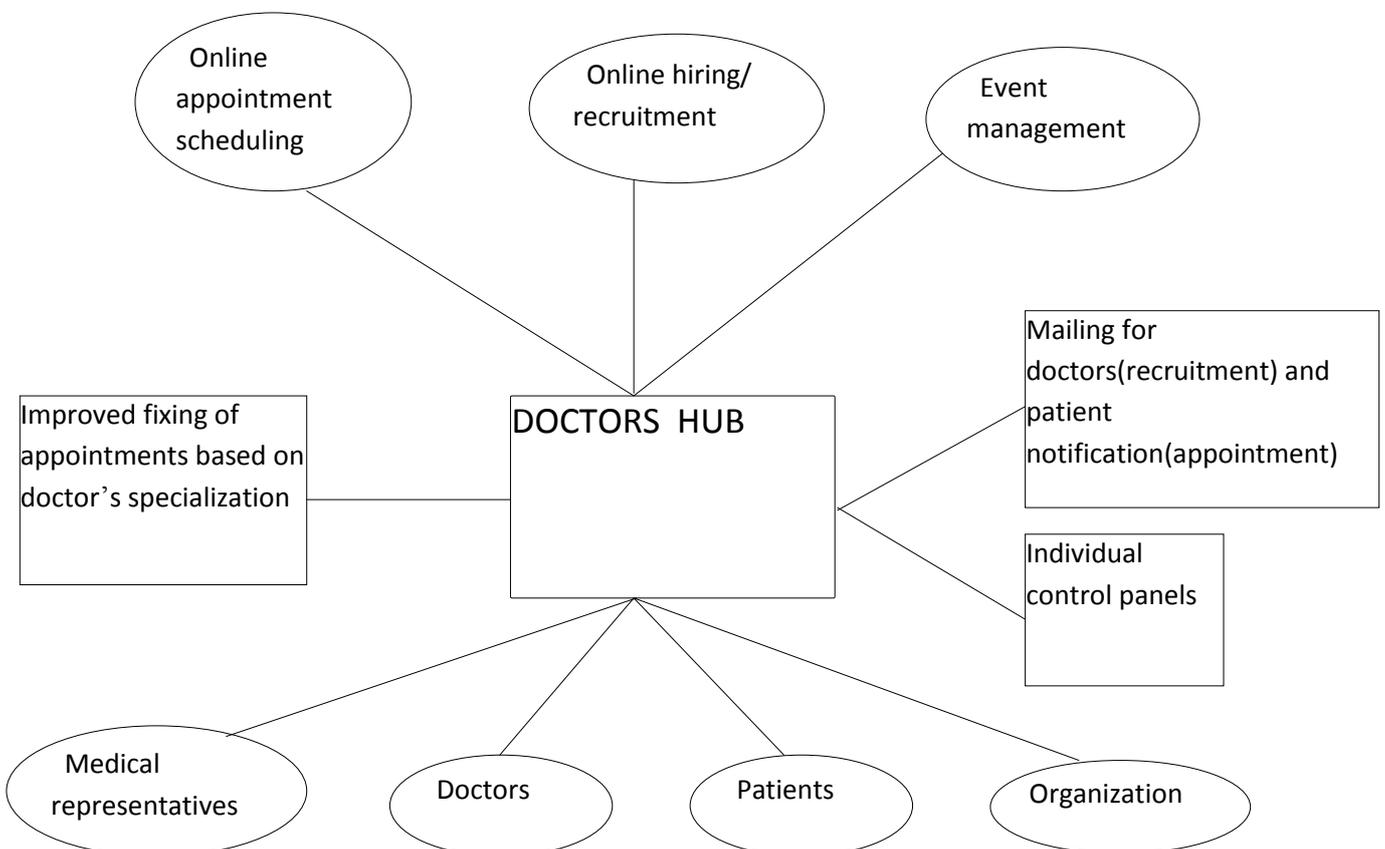
The title of invention is Healthcare management and patient education systems and methods[3]. The invention is related to healthcare systems and patient education programs. The application number is 12/469,159 and date of filing i.e application date and publication date are 20/5/2009 and 25/11/2010 respectively. The objective of invention was to satisfy the need for a web based tool with which medical providers could store patient information, organize

educational seminars, invite attendees, report patient comprehension and thereby provide educational services to patients to improve patient outcomes.

Another one is Online Doctor’s appointment[4]. The invention is related to online appointment scheduling. The application number is 10/460,107 and date of filing i.e application date and publication date are 12/6/2003 and 30/12/2004 respectively. The objective of invention was to avoid the difficulty that patients had while fixing appointments with doctors. It is a real time web based application where people can make doctors appointment 24 hours a day and 7 days a week. They can pick the desired day and time from doctor appointment calendar.

III. PROPOSED SYSTEM

Doctor’s Hub is a website that provides centralized platform connecting doctors, patients and medical representatives. The project involves following aspect: It provides centralized hub for doctors, patients and also medical representatives. Medical tourism enhances foreign communication and is a boon for economic growth due to inflow of foreign currency. Economic development of our country due to enhancement in medical tourism. Updation of latest development/technology in medical field. It is real time and efficient time management is possible. Various modules in this project includes Registration, User Management, Doctor Management, Patient management, Vendor Management, Event management, Recruitment, Feedback. User management is about providing authentication by generation of username and passwords. Doctor management caters to every doctor an individual control panel. Registered doctors can interact with patients and medical representatives & fix appointments. Patients can search doctors only and those with fixed appointments can further contact doctors. Interaction of medical representatives with doctors concerning their products is also possible. Online event management is all about organization & schedule of health related camps, seminars, blood donation, charitable trusts. For those interested in jobs, the facility of online hiring and recruitment of doctors for designated posts in hospitals is provided. Then for effective and efficient communication , feedback can be given by users about doctors and organizations.



Architecture diagram

IV. INFERENCE

Doctor's Hub provides a centralized platform for covering up the functionalities of medical field. Here doctor, patient, medical representative(vendor) and organization; all are given individual control panel which they can authenticate using respective login Id's through online registration. All these are maintained and controlled by admin who also has his/he own control panel.

The website also provides online appointment scheduling which is time saving and cost effective. Patients can search for doctors according to their requirements based on the specialization or field of doctors. Communication for appointment fixing with patients can be done through email after doctors get notification for appointment from them. The patents Healthcare management and patient education systems and methods[3] is related to healthcare and patient education programs. And online doctor's appointment[4] which is related to online appointment scheduling. In this paper, Doctor's Hub, when compared to above patents additional features are included making it further effective. Users like patients, medical representatives and doctors of an organization can be part of the educational and health related seminars like eye camps, blood donation camps, etc. through online registration. The participants of events can give feedback and participation certificates will also be issued for the same. Apart from that the website also offers functionalities like online hiring of doctors by an organization after they have applied for desired jobs. In this recruitment process the selected doctors for interview are intimated through email. Thus it covers various aspects of medical domain under one roof making it a centralized website to access all features it provides.

The project involves centralization of various functionalities in medical field. It is real time and effective. There will be frequent updation of latest development/technology in medical field. It reduces communication gap between doctors and patients & also medical representatives resulting in effective time management. In addition to that online appointment scheduling is time saving. Facility of email to registered users for information regarding events and recruitment makes interaction efficient. Medical tourism enhances foreign communication and is a boon for economic growth due to inflow of foreign currency. This boosts economic development of our country due to enhancement in medical tourism. Thus it resolves the issues when compared to the above related patents resulting in better performance.

REFERENCES

- [1] Patent search technique used is Espacenet which is an EPO Patent Database.
- [2] Google patent search, <https://www.patentsgoogle.com>
- [3] Douglas J Jorgensen, "Healthcare management and patient education systems and methods", U.S. Patent 12/469,159, May, 5, 2009
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- [5] The IEEE website. <http://www.ieee.org/>