Research Article

EHEALTH SERVICES: A NEW PLATFORM FOR HEALTHCARE FOR ALL

Gagandeep Kaur and Monika Pathak

Multani Mal Modi College, Patiala, India

ARTICLE INFO	ABSTRACT

eHealth services enable patients to get easy access to medical information and to facilities them for various facilities with aims to provide quick and easy access to the patient's records. With exponential growth in population, health care services precariously falling out of reach of common masses. The major objective of eHelath services is to reach to large masses. In this paper, review of numerous ehealth care facilities is taken to explore the usefulness of the e-health care services for the large masses. The research is exploratory in nature and addresses various challenges being faced by the eHelath survives in India. The study concluded that the despite of the challenges, various initiatives have been taken by the government and has received satisfactory response from the patients. The study also concluded that mobile based health application may dominate web based application in future.

INTRODUCTION

eHealth attainment is outlined as the ability to hunt, find, perceive and appraise health data from electronic sources and apply information gained to addressing or finding an ill health. As in ehealth all the records and data will be maintained in the form of digital records or in electronic form. Electronic Health Records (EHR) consists of a repository of knowledge regarding the health standing of people. In an EHR, health records square measure created and managed in digital formats. The history of clinical documentation primarily based on paper based records, and that they square measure cumbersome and ineffective. The higher health care is provided by EHR by up all aspects of health care. In this paper the various online facilities provided by the government related to the health in the form of various web portals and mobile applications to alert the citizens regarding their health in timely manner. It's a great initiative as all the information which we get is the authenticated information provided by the government regarding health [1, 2].

The structure of the paper is classified as follows: section II a brief about the numerous services provided by the government in the form of various web portals and mobile android based applications are discussed. Section III deals with the various challenges which are encountered in e-health care are discussed.

Corresponding author: **Gagandeep Kaur**
Multani Mal Modi College, Patiala, India

E-Health Initiatives Thorough Web Services

The ehealth is an integral part of telemedicine system, which enables the doctors to view patient's records such as X-ray, MRI, pathology reports etc. in the digital form. The patient gets treatment without appearing physically at the doctor's place. On the other hand, virtual visit of patient helps the doctor to examine physical condition of the patient [3, 4]. The ehealth is a electronic system made available to patients and doctors through web based interface. The government has taken various initiatives; some of them are discussed below:

Online Registration System (ORS)

The online registration has emerged as good initiatives by the government of India, where patient can create his account by just using their aadhar card.

The system was started in July 2015 and on the starting day 100 hospitals were linked under this system.

The various facilities such as online appointment, OPD schedule and access other facilities [6, 7].

The application for online registration has been developed on cloud platform and aadhar card database has been linked with it. The patient need to provide Aadhar card into registration form, rest of the information is automatically made available through aadhar database.

The total numbers of hospitals linked in this service are 144. The number of appointments done through this system is around 13 lakhs so far.

Table 1 State wise list of online registration Hospitals

State	Hospital	State	Hospital
Andhra Pradesh	1	Maharashtra	5
Assam	2	Manipur	1
Bihar	1	Meghalaya	2
Chandigarh	4	Odisha	4
Dadra & Nagar Haveli	1	Puducherry	3
Delhi	23	Rajasthan	2
Himachal Pradesh	9	Telangana	6
J &K	3	Tripura	2
Jharkhand	5	Uttarakhand	46
Karnataka	12	UP	2
Kerala	2	West Bengal	3
Madhya Pradesh	5	Total	144

National Health Portal

The Ministry of Health and Family Welfare, Government of India has taken initiative to set up the National Health Portal on Apr 30, 2015 to provide healthcare related information at single point. A lot of health related tips are available on the portal to the people. A toll free number is also provided to the citizen so that they can get health related tips any time anywhere in the country. This is currently working in six languages. Some of the major initiatives addressed on portal listed below:

'Mera Aspataal' (Patient feedback Application)

The "My Hospital" is Ministry of Health, Government of Republic of India initiative to capture patient feedback for the services received at the hospital through easy multiple channels like Short Message Service (SMS), outward-bound Dialing (OBD) mobile application and internet portal [8]. The patient will submit the feedback in seven completely different languages on mobile app and internet portal; for the hospitals visited in last seven days.

The patient also can check the already submitted feedback. The collected feedback are going to be compiled, analyzed and envisioned within the kind of a dashboard accessible to the various stakeholders at facility, district, state and national level.

My Hospital can facilitate the government to require applicable selections for enhancing the standard of care delivery across public facilities which can improve the patient's expertise [8]. The patient is going to be able to receive a good and applicable care. My Hospital can ultimately facilitate establish patient driven, responsive and responsible attention system.

Table 2 Satisfaction level of Mera Aspataal'

Hospitals Covered	1063
Total Feed Back	1371430
Satisfied	1051303
Dis-Satisfied	320127
Per of satisfied	76.66 %
Per of Dissatisfied	23.34%

The numbers of hospitals registered with online Mera Aspatal are 1063. The total number of feedbacks received till now is around 13.5 lakhs out of which 10.5 lakh customers are satisfied by the service provided to them in the hospital and around 3 lakhs people are unsatisfied by the services provided to them by the hospital.

NOTTO (National Organ and tissue transplant Organization)

It is a web portal by the government of India to make a record of the tissue transplation system [9]. The system is built mainly to remove the gap between the demand of the organ and supply of that organ and also it takes care of the quality assurance of the organs.

NHP Indradhanush

It is a mobile application designed to reduce the impermanence and illness in the country. A user has to register the date of birth of the baby in this application and the application alerts about the vaccination for that particular child to the applicant or parents or guardian whoever fills the details of that child in the application up to the age of 16 years. A user can register details of more than one child also to get vaccination alerts [6]. An applicant can put a reminder on any other inoculation in this application which is recommended by the doctor. This application is launched in April 2016.

NHP Directory Services

This application has information of hospitals and blood banks across Asian nation. The user friendly application accesses the user location and allows someone to seek out close hospitals and blood banks [6].

In order to use this application, your movable should be connected to the web because the application uses GPS to get the user location. GPS has to be enabled for the app to perform. The android users will download this app from Google play store. This application was launched in June 2015 and build using the android based platform and runs on any android based device whose android version is above 2.3 and currently this application does not work on any other platform.

No More tension

Stress is associate degree indivisible a part of human existence. It affects all people rich and poor, literate and illiterate, each men and girls and young and also the previous alike across the developed and developing nations. Stress is perceived these days collectively of the vital issue touching physical and psychological state. Individuals owing to their feverish way don't notice being established by Stress and regarded it as a district of their daily way.

The stress management application not solely provides you data regarding stress however additionally helps you to understand your stress levels and the way to cut back them.

Challenges in Implementation of Ehealth Services

EHealth services enable the patients to access various facilities such as online registration, fixing appointment with doctor, accessing records and preserving various data for future references. Despite of various traits of eHealth services, it encompasses few challenges. The various challenges associated in e-health cares that are as follows:

High level of digital illiteracy: The digital illiteracy is very high in rural area as compare to urban area in India. Unfortunately major share of population lacking behind to avail health care is residing in the rural, in such scenario, it will be more difficult to serve people in rural by eHealth services [1]. The people need to be literate and need to be well aware about the procedure to take benefits from these services.

Data Exchange: The main challenge in this is to maintain the privacy and confidentiality of the patient's data or records which are provided by the people at the time of online registration for appointments or pay fees. To standardize the exchange of knowledge, varied writing schemes are also utilized in combination with international medical standards. Systems that alter these transfers are usually cited as Health info Exchange (HIE). Of the sorts of e-Health already mentioned, there are roughly 2 types; front-end information exchange and back-end exchange.

CONCLUSION

Ehealth services have emerged as new platform to service patients in more convenient and cost economical way. The government of India has taken various initiatives to serve the patients through various online portals and provide platform to exchange data. Day by day more and more hospitals are adopting online registration and appointment services and in the coming year majority of the healthcare services will be available online. The eHealth care is one of the pillars in digital India. As mobile technology is dominating web based desktop application, it may in future eHealth service completely of partly available on mobile. The adoptability of mobile application, enforce eHeath services to transpose into mHealth services.

References

1. Bensink, M., Hailey, D. and Wootton, R. (2006), "A systematic review of successes and failures in home telehealth: preliminary results", *Journal of Telemedicine and Telecare,* Vol. 12 No. S3,pp. 8-16.
2. Bhaskaranarayana, L. S. Satyamurthy, and M. L. N. Remilla, "Indian space research organization and telemedicine in India," *Telemedicine and E-Health,* vol. 15, no. 6, pp. 586–591, 2009.
3. Mishra SK, Ayyagari A, Bhandari M, Bedi BS, Shah R. "Telemedicine Application in Maha Kumbhmela (Indian Festival) with Large Congregation" Telemed J E Health, 2004;10: S107-08. Available at:www.atmeda.org/ehealth/ehealth.htm.
4. Saroj Kanta Mishra, Lily Kapoor, Indra Pratap Singh,.Telemedicine in India:Current Scenario And The Future Special Section: Telemedicine In Indiatelemedicine and E-Health Saroj Mishra, "The current status of eHealth initiatives in India", pp.1-11, 2008.
5. www.mohfw.gov.in/aboutus/departments/departments-health-and-family-welfare/e-healthtelemedicine/e-governance accessed on 9-1-2018 at 8:00 am.
6. www.nhp.gov.in/ accessed on 6-1-2018 at 8:00 am.
7. www.ors.gov.in/index.html accessed on 9-1-2018 at 11:00 am.
8. www.meraaspataal.nhp.gov.in/ accessed on 10-1-2018 at 11:00 am.
9. www.notto.nic.in/ accessed on 11-1-2018 at 11:00 am.
10. www.nhp.gov.in/nhp-indradhanush_pg accessed on 11-1-2018 at 1:00 pm.
11. www.nhp.gov.in/nhp-swasth-bharat_pg accessed on 12-1-2018 at 1:00 pm.
12. www.nhp.gov.in/nhp-health-directory-services-mobile-application_pg accessed on 12-1-2018 at 5:00 pm.
13. www.nhp.gov.in/mobile-no-more-tension accessed on 12-1-2018 at 5:00 pm.

****