

Electronic Health system

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E commerce, e shopping, e-education, e-health are now popular terms & getting well acceptance all over the world.

eHealth (also written e-health) is a relatively recent term for healthcare practice supported by electronic processes and communication. E health practice started in 1999.¹ Some people says, it is interchangeable with health informatics with a broad definition covering electronic/digital processes in health² while others use it in the narrower sense of healthcare practice using the Internet.^{3,4}

Definition to e- health given by WHO as below-

eHealth is the use of information and communication technologies (ICT) for health. Examples include treating patients, conducting research, educating the health workforce, tracking diseases and monitoring public health. The e health unit works with partners at the Global, regional & country level to promote & strengthen the use of information & communication technologies in health development, from applications in the field to Global governance.

World Health Assembly resolutions on e Health

The World Health Assembly resolution recognized the potential of e Health to strengthen health systems and to improve quality, safety and access to care, and encouraged Member States to take action to incorporate e Health in health systems and services.⁵

World Health Organization in 1998 recognized the increasing importance of the Internet and its potential to impact health through advertising and promotion of medical products, in its resolution on "Cross-border advertising, promotion, and sale of medical products through the Internet"⁶

Technology is a part of daily life for most people now a days. Whether we are at the checkout buying groceries using a card instead of cash, sending an email instead of posting a letter, or paying our bills online instead of by cheque, the best uses of

technology improve the quality and safety of the service, and might save time and money & make the life comfortable & easier.

In the Australian healthcare system, people of all ages interact with technology when they visit their doctor, to get a blood test or a scan, go to their chemist to fill a prescription. They do not like to spend enough time in hospital.⁷

In eHealth system personal doctor or the respective hospital will have access to the patients health file & will able to advise the patient, though the patient is not in front of him.

In case of illness the local doctor after examining the patient put data in e-health file of that particular person that will dictate the specialist doctor to diagnose & treat the respective patient. Even with the help of web cam many information may be collected when the patient is not in a position to pay visit to the doctor. X ray, USG report & lab reports may be transferred to the respective doctor just by a click. Thus saving time, saving journey hassle & money. Sometimes mobile phone may be used for any clarification. Basic treatment given over mobile phone is termed as telemedicine, which is also a part of ehealth system. It is practiced in our country by Grameen phone, Bangla link & by Govt of Bangladesh.

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eHealth aims to introduce electronic services to improve upon some paper-based systems.

"It's been estimated that for every dollar invested in eHealth in Australia, we'll see more than two dollars back." Said by Australian Health minister in a conference, 2008.^{7,8}

Bangladesh also is in process of developing ehealth system in our country. Policies & rules & regulations are already been formed by the DGHS & is available in DGHS web page.

Ehealth system encompasses a range of services or systems including:-

1. Electronic health records: enabling the communication of patient data between different healthcare professionals (GPs, specialists etc.);
2. Telemedicine: physical and psychological treatments at a distance;
3. Consumer health informatics: use of electronic resources on medical topics by healthy individuals or patients;
4. Health knowledge management: e.g. in an overview of latest medical journals, best practice guidelines or epidemiological tracking (examples include physician resources such as Medscape and MDLinx);
5. Virtual healthcare teams: consisting of healthcare professionals who collaborate and share information on patients through digital equipment (for transmural care);
6. mHealth or m-Health: includes the use of mobile devices in collecting aggregate and patient health data, providing healthcare information to practitioners, researchers, and patients, real-time monitoring of patient's vital signs, and direct provision of care (via mobile-telemedicine);
7. Medical research using Grids: powerful computing and data management capabilities to handle large amounts of heterogeneous data.
8. Healthcare Information Systems: also often refer to software solutions for appointment scheduling, patient data management, work schedule management and other administrative tasks surrounding health.

We all can enjoy these above facilities if we can organize a good e-health system as in Europe, America, England, Australia.

Electronic patient record in e-health system may bring some dispute regarding the easy access to some confidential part of the patient. So there is a chance of hampering some privacy but this can also be resolved by applying some code or password system.

Chronic patients over time often acquire a high level of knowledge about the processes involved in their own care, and often develop a routine in coping with their condition. For these types of routine patients, e-Health solutions tend to be relatively easy to implement.

e-health is not a total solution of health problems but definitely it is a remarkable break through. We need to bring attitudinal change in care provider & care seeker to enjoy e-health system.

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