E-Health Information and Its Assesment

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Abstract – E-Health provides to improve Health by using different assessment tools. This paper presents e-health readiness assessment tools like PCEHR System (Personally Controlled Electronic Health Record). The purpose of PCEHR is to provide a secure electronic summary of people's medical history which will eventually include information such as current medication, adverse drug reactions, allergies and immunization history in an easily assessable format. We study that only 12% of the adults in India have Proficient health literacy. E-Health Readiness refers to the preparedness of Health care institutions or communities for the anticipation change brought by programs related to Information and Communications Technology (ICT).

Index Terms – E-HEALTH , E-Readiness, PCEHR, ICT.

1. INTRODUCTION

Electronic health helps the user to take health or medical services at their doorstop. The internet has provided a powerful platform for changing the way people deal with health issues. More then three quarters of Indian now have access to the internet with up to 80% of them having used the flat form to acquire health information. The Indian healthcare industry is all set to grow to over USD 280 billion by 2020, which is a growth of over ten times from 2005. This growth has been driven by several factors, including increase in medical care in India.

E Health is an application of information and communication technologies across the whole range of function that affects health. Health Care providers are the key driving force in pushing E-Health initiatives. without their acceptance and actual use.

Those E-health benefits would be unlikely to be reaped .poor health care outcomes tead to increased levels of morbidity and mortality, and abstruct countries prosperity and business profitability. The benefits of E-health, such as improved operational efficiency, higher quality of care, and positives return on investments have been well documented in the literature.

E-Health is an emerging field at the intersection of medical informatics, public health, and business, and refer to health services and information delivered or enhanced through the internet and other related technologies. Different E health application have been used across countries , corresponding to their health need and priorities .The world health organization (WHO) E Health for health care Delivery(eHCD) program ,For example , targeted primary health care in a number of countries in the asia pacific region.

E-Health implementation represents a disruptive change in the health care workplace.

The change does not occur simply from the introduction of ICT infrastructure but may also require remodeling of the job design of interconnected health professionals to effectively and efficiently incorporate technology. without the presence of motivational forces (e.g. health care providers dissatisfaction with the status quo) , it is unlikely that the innovation process would be initiated. If health care providers resist change or do not process attributes necessary for change (e.g. adaptability and growth-orientation), the change process is less likely to proceed.

E-Health, deliver the health information and services via the Internet and related technologies provide a uirtealy unlimited set of tools and opportunities for improving user's health.

2. METHOD AND TOOLS

2.1 Information and Communication Technologies

In an increasingly digital world, there is growing recognition that the health sector must integrate Information and Communication Technologies (ICTs) at all levels especially at a time when health systems face stringent economic challenges and growing demands to provide more and better health care services, especially to those most in need. ICTs might help improve health conditions in Low and Middle-Income Countries (LMICs) by strengthening disease prevention and management efforts.

Use of ICT in health care is widely use as an important source of reducing discrimination based on lack of access to information and as a means of timely response to matters transmitting one's personal or community health.

2.2. *E-Readiness*

The idea of E-Readiness in health care is relatively new and has been defined as "the degree to which users, health care system itself are prepared to participate and succeed with E-health implementation".

E-Health readiness assessment could also provide other advantages such as:

(1) Avoiding huge losses in time , money and effort.(2)Avoiding delays and disappointments among planners, staff and users of services.

An ICT policy was defined as "a general plan on how to bring a society and its economy forward through the use of ICT that focused on specific sectors such as health, education or administration.

2.3. *Personally Controlled Electronic Health Record*

The PCEHR is an online summery allowing health care providers and hospitals to view and share an individual's health information, including diagnoses, allergies and medications. The PCEHR was commissioned in July 2012 and had over 1 million consumers register to use it . July 2012 to 30 June 2013 was the first year of operations for the PCEHR (Personally Controlled Electronic Health Record) system.

The E-health record system is a national system that enables people to control who can access their health care record. The objectives are to provide access to people's health information of health information, improve the availability and quality of health information and improve the coordination and quality of health care provided to patients by different health care providers.

An E-health record is an electronic summary of a person's key health information. A person and their authorized health care provider organizations can access it online whenever and wherever it is needed for providing health care to the person.

2.4.1. *Governance*

The E-health record system operator is the Secretary of the Department of health and Ageing (DoHA). The system operator works with arrange of agencies and organizations to deliver the e-health record system. Many of the system operator's functions are delivered by Accenture, controlled by system operator as the e-health record system's National Infrastructure Operator (NIO) and the chief Executive Medicare, Depart of Human Service (DHS).

2.4.2. *Legislation and Delegations:*

The Personally Controlled Electronic Health Records Act 2012 (PCEHR Act) commenced on 29 June 2012 and establishes the legal framework for the E-Health record system. The PCEHR Act prescribes the circumstances in which an entity can use information in the E Health record system. The operational detail of the system is contained in the PCEHR Rules and regulations.

2.4.3 *Registration:*

Registration in the E Health record system is entirely voluntary. Part 3 of the PCEHR Act provides for consumers, healthcare provider organizations, repository operators, portal operators and contracted service providers to register to participate in the E- Health record system. If a person chooses to register as any of these entities, they must meet eligibility criteria and make an application to the System Operator.

The System Operator is not required to register a person or entity if registration would compromise the security or integrity of the E Health record system. The System Operator may subsequently decide to cancel, suspend or vary the registration of a person or entity at their request or for a range of other reasons, including in relation to the security and integrity of the system.

2.4.4 *Security, privacy and confidentiality:*

Many of the protections imposed by the PCEHR Act and the technical infrastructure are about ensuring that people have strong protection of their digital records.

In order to ensure that the privacy of health information is not compromised the PCEHR Act established a specific privacy regime for the e-Health record system, drawing heavily on the National Privacy Principles of the Privacy Act 1988.

The key privacy protections provided by the PCEHR Act include:

- The ability for a person to control which health care provider organization can access information in their E-Health record.
- Closely defined limits on the circumstances in which information can be accessed outside of those controls.
- The ability to view an audit trail of all access to a person's E-Health record
- Civil penalties for unauthorized access to E-Health records

Requirements to report data breaches.

3. CONCLUSION

The value of having a personal health summary to share with selected health professionals will be that relevant information is available at the right time for the right people. Improved access , speed and accuracy of health information will benefit health providers , consumers and government to deliver greater efficiency , less duplication and waste , safe faster consultation ,greater options for location of health provision and mobility of patients , greater consumer choice, and ultimately better health service delivery overall. The PCEHR is in its early stages of implementation (when compare to other global electronic health record implementation) and therefore this review is timely. Significant investments of time and capital have been made to establish the PCEHR and the feedback has come when collectively we have an opportunity to access, learn and adjust to what the user of this infrastructure need to get the most from this investment.

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