The challenge of the digital era: privacy and confidentiality of patient information

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Currently, we live in a digital era in which as human beings, we play a more dynamic role using all modern technologies that help us solve everyday problems in a useful way. The exponential growth in the use of electronic devices emerges as a psychosocial phenomenon based on technology. Therefore, technological innovation implies a way to do things, characterized by changes that fulfill the needs of this new digital society, particularly in the field of Health.

In recent years there has been an important increase associated to the safety of electronic medical information (or patient information) that is stored, transmitted and managed digitally by physicians and other professionals in the field of health. In fact, nowadays medicine uses high-resolution images systems, precise laboratory tests, diagnoses of diseases, among other types of digital information. This information is perhaps more valuable than any other type of personal digital information. Thus, there is a growing interest in ensuring its adequate protection.

It is not a secret that recently have taken place multiple information leakage events, such as personal data from Facebook, financial data from Equifax, confidential information from different governments, among others. This situation leads us to think about the great responsibility that the health professional has to face regarding the challenge of protecting the information of their patients, ensuring the privacy and confidentiality of the data. It is not a simple challenge, this implies a set of steps and measures that the health professional must follow to ensure that the protected health information (known as e-PHI, from its acronym in English Electronic Protected Health Information) is accessed only by authorized personnel, avoiding any security breach and also ensuring that this valuable information is available at all times to those who need it.

Based on the foregoing, multiple organizations all around the world have emphasized the importance of preserving the confidentiality and privacy of patient data. For example, the World Health Organization has debated in multiple scenarios as an international consensus that all patients have the fundamental right to privacy, as well as to the confidentiality of their medical information[1].

Additionally, in 1996, the federal government of the United States through the Department of Health and Human Services formalized the legislation that promotes the privacy of data to safeguard the medical information known as the Transfer Law and security of medical insurance, also known by its acronym in English as HIPAA (Health Insurance Portability and Accountability Act)[2].

There are numerous technological mechanisms and procedures nowadays to increase the confidentiality, integrity and availability of electronic medical records and digital information of patients, safely managing information to avoid an impact on the quality of the patient's treatment and their rights. Health professionals should make the best decisions regarding the care of their patients.

As a person who knows the field of Health importance and being a specialist in the field of information security, I would like to take this opportunity to highlight the significance of the aforementioned challenge that involves all health professionals to provide a safe and sound environment in the management of digital patients' information.

Referencias

1. World Health Organization. [Internet]. Patients' rights. [Consultado 25 Mazo 2018]. Disponible en: http://www.who.int/genomics/public /patientrights/en/
2. U.S. Department of Health & Human Services. Health Information Privacy. [Internet]. Summary of the HIPAA Security Rule. [Consultado 25 Mazo 2018]. Disponible en: https://www.hhs.gov/hipaa/for-professionals/security/laws-regulations/index.html