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EDITORIAL

Cyber technologies, electronic health records, physicians and patients

A few weeks ago, a patient was referred to me by a respected colleague. After the consultation and without using an electronic health record (EHR) for the moment, I went over the diagnostic possibilities and recommended studies to the patient. I also told the nurse that the patient should return and continue her studies and treatment with her original physician, since, I – being a hematologist – could not find her problem to be blood-related. To my surprise, the patient refused to go back to the physician who had originally referred her to me. She claimed she felt that her original physician paid more attention to the computer and filling out the requested information rather than the patient and her needs.

Obtaining relevant information is definitely important; however, when this results in dedicating more time to the computer and completing the patient's EHR, then, we as a medical community, have a problem which is both ethical and practical. Obviously, these electronic systems and health records are, in fact, designed by experts who may not necessarily have experience in clinical medicine. They are usually influenced by the hospital's administrative sector, which demands more information than the medically indispensable. In other words, the physician ends up doing administrative work with an ''enter'' or a ''click'', which is fantastic for administrators who are able to quickly obtain expenses, consumptions, prescriptions and requested lab work, etc. However, this has caused fatigue, annoyance, and disappointment amongst many physicians, especially those who are not so skilled in these chores. The feeling that we as physicians dedicate more time obtaining electronic data, rather than the correct elaboration of a clinical history or conducting a proper medical consultation is the consequence. This brings frustration to everyday activities in clinical practice; even nursing staff has been caught in this situation when they have to request medications, lab work or any medical instrument for their patients using electronic media.

It is worth noting that the search for making electronic systems more efficient and reducing system shortcuts so the physician performs his work quicker is considered an ''accomplishment'' for the administrator. Nevertheless, these medical records depend on the physician and/or nursing staff inputting the data correctly in its proper place. Additionally, being a system which tries to be a standard for all specialties, it has to be able to obtain diagnoses for different illnesses from a single database, using CIE-10 for this purpose, and despite this, the latter is often insufficient.

In a systematic review, results showed the use of electronic health records to be inefficient, since it increased work time from 98.1% to 328.6% (median 238.4%), mainly for physicians and nurses.[1] This is truly unacceptable and it makes us search for further mechanisms to make this more efficient and less problematic for the medical team who are in contact with patients every day. Not everything is negative; for example, electronic medical systems provide greater safety in the collection of data and support research studies gathering different information, information which otherwise would most likely be unavailable.[2] Many systems include technical data, such as medication interactions and ''notifications'' when there is a risk, in this sense, for the patient. However, they can also provide risk data or ''electronic'' scales which, in fact, can underestimate the real condition of the patient compared to the information obtained from an experienced physician. Many electronic health record's systems are easy to learn and easy to use, in addition to presenting a wide range of options and shortcuts. This lets us gather the patient information more efficiently, like their previous appointments, evolution, lab and image work, with their respective interpretations, as well as the courses of treatment used. Many of the electronic health records systems are even enabled with remote access from mobile platforms such as cell phones and tablets, allowing for greater portability of information.

In a different study about internal medicine activity in Switzerland, in a single institution, for all those with more than 1 year's experience, the amount of time taken to attend a patient was analyzed and compared to the amount of time the resident dedicated to the computer through observers. Meanwhile, not only was the bureaucratic aspect being studied, but the use of the internet to obtain information or for personal use was also studied as well. Researchers concluded that residents dedicated an average of 1.7 h to patients,

5.2 h on the computer and 13 min on activities involving the patient and the computer, all this in the period of a 12-h shift.[3] In other words, around 50% of the resident's time is dedicated to ''cyber technologies'', and it is hard to accept that all these hours are spent ''studying'' or for academic purposes.

Some of the situations which may come up with an electronic health record system or the need to conduct maintenance for the server and/or ''software'' updates in order to keep it efficient. Thus, it is not available to use during certain times; at the same time, there could be a connection failure inherent to the software or the hospital network, situations which are less and less frequent, yet still may occur, prolonging the amount of time used on these files to update the patient information. Lastly, there is an uncomfortable reality – the patient's privacy may be at risk, as well as the hospital's information. This may occur when said systems come under attack by information experts or ''hackers''.

Electronic health records are here to stay and are not going away anytime soon. Healthcare services administrators would die before that happened. Its effects, cost–benefit and impact on physicians and patients ought to be studied beyond a practical or superficial point of view.

References

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