Commentary: Electronic medical record system – should complement but not replace traditional health care

The electronic medical record (EMR) system is an emerging tool, which helps the physician in multiple ways namely better and faster documentation of medical records, quicker integration of various details including investigations done in different locations, avoiding diagnostic errors by increasing the availability of instant literature, improving research activities, and in formulating large-scale health care plans.[1]

A survey in the United States (US) suggested that only 12% of the ophthalmologists had implemented EMR in their practice. Lack of infrastructure and finance, the requirement of physician's time and commitment for the process, doubts regarding the choice of vendor, and doubtful cost-effectiveness of EMR platforms were some of the reasons attributed to poor implementation rate. The physicians required more incentives to properly establish a still naïve EMR in their practice.[1]

Chiang and colleagues recommended certain additions to EMR to increase its adoption rate in ophthalmology. According to them, the EMR vendors should facilitate transferring information between the office and the operating theatre, bring in new software to help the ophthalmologists in visual depictions, should provide special columns to annotate the ophthalmic vital signs like visual acuity and intraocular pressure, and should develop better picture archiving systems to support image transfers.[2]

The US government had earlier primed itself toward a digitized medical recording system but is still in the process of dealing with poor adoption rates. The American Academy of Ophthalmology had initiated universal platforms namely the Systematized Nomenclature of Medicine (SNOMED) and the Digital Imaging and Communication in Medicine (DICOM) for documentation of concepts and images, respectively, encouraging EMR adoption.[1,2] Lim *et al*. reported a genuine usage of EMR in ophthalmology in the United Kingdom, with 45.3% of the ophthalmic care units already using it and 26.4% of the units planning to implement it in the future.[3] Literature validates the indirect cost-effectiveness of EMR over 5 to 10 years for the physician. Chiang *et al*., further revealed that 76% of those who had started EMR in their practice were satisfied with the platform.[1] Sanders *et al*. reported that EMR enabled better and complete organized documentation of patient details than the conventional paper recording.[4]

Although there are many positives, it is not always feasible for an average physician to start EMR in his or her clinical practice. There is a disturbance in the patient-doctor interface, and there are difficulties in entering details, especially in ophthalmology in a pre-designed fashion rather than physician preferred freehand drawings.[5] To spend so much to technologies and to strain the physician-patient relationship is meaningless.

In India, there are few published literature[6,7] of large data retrieved from the EMR system that predominantly deal with the demographic distribution of ocular diseases in the country. Similarly, in this paper, the authors propose the advantage of EMR in the field of ophthalmology in a highly populated country like India, and thereby support its use and stimulate minds in employing EMR to enhance eye care across the country with a database-guided stratified approach and to ultimately move a step closer toward eradicating blindness.[8]

The eyeSmart EMR system introduced by the L. V. Prasad Eye Institute (LVPEI) sets an example and seems to deliver multiple utilities. The system can be resourceful at various levels starting from basic primary health center to the apical tertiary institute and help in integrating each level. This aspect is especially useful in India as is extremely patient-friendly. Moreover, the system also favors the eye care specialists, as it helps them in reviewing patient records in their own electronic devices.[6,7]

In conclusion, EMR seems to be a worthy portal for better, easier, and efficient patient care. However, the traditional physician-patient relationship must remain unaffected by such technological additions. A rightful balance between the two will help in progressing toward an ideal health care system.

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