World Journal of Rheumatology

Online Submissions: http://www.wjgnet.com/esps/
wjrheumato@wjgnet.com
doi:10.5499/wjr.v3.i1.1

World J Rheumatol 2013 March 12; 3(1): 1-2
ISSN 2220-3214 (online)

EDITORIAL

Cautionary note: Electronic medical records, a potential disaster in the making?

Bruce Rothschild

Bruce Rothschild, Biodiversity Institute, University of Kansas, Lawrence, KS 66066, United States
Author contributions: Rothschild B solely contributed to this article.
Correspondence to: Bruce Rothschild, MD, Biodiversity Institute, University of Kansas, Lawrence, KS 66066, United States. bmr@ku.edu
Telephone: +1-785-6151523 Fax: +1-785-5942691
Received: September 13, 2012 Revised: December 25, 2012
Accepted: January 29, 2013
Published online: March 12, 2013

Abstract

Concern is expressed that electronic medical records may actually compromise care. Reports are electronically collated with patient charts, but when are they examined? Current electronic transmission of results to patients' electronic medical records do not seem to notify of new information. The unknown time from prescription to patient action and the variable time required for individual test performance seem to mandate that a physician attempting to be conscientious would have to examine all sections of every patient medical record in their practice, every day. That is quite inefficient and error-prone. Electronic medical record still contains what appear to be dangerous "bugs" which compromise our ability to provide the care we believe our patients deserve? I remain unsure that outpatient electronic medical records are "ready for prime time."

Key words: Electronic medical records; Impediments to care; Laboratory results; Efficiency; Reports

Rothschild B. Cautionary note: Electronic medical records, a potential disaster in the making? *World J Rheumatol* 2013; 3(1): 1-2 Available from: URL: http://www.wjgnet.com/2220-3214/full/v3/i1/1.htm DOI: http://dx.doi.org/10.5499/wjr.v3.i1.1

ELECTRONIC MEDICAL RECORDS

Independent of the issue of assuring confidentiality, [*e.g.*, exemplified by local on line (web) release of confidential hospital records on 10 000 patients], concern must be expressed that electronic medical records may actually compromise care in the outpatient setting. Especially pertinent to rheumatologists is concern as to how medical records are appended. Reports (laboratory, radiology, procedure, consultation) currently arrive at physician offices by multiple media. They are collated with patient charts, but when are they examined? As most laboratory providers (at least in this area) refuse to provide cumulative reports, the conscientious physician reviewing reports prior to collation is at disadvantage and can easily overlook significant changes of values that are still within "normal limits". Once the reports are collated (placed in patient chart), the physician has the opportunity to examine the report in real time, and compare it with previous results in the patient chart. The alternative is that the provider first sees the results at the patient's next visit. Such an approach risks timely information being buried in the chart, to the detriment of all involved.

LABORATORY RESULTS

Arrival of mailed or faxed reports clearly alerts physicians to new information. Current electronic records and electronic transmission of results to patients' medical records paradoxically do not seem to provide that alert. Results are automatically inserted in separate sections (*e.g.*, laboratory, radiology) of a given patient's record. A major challenge in actually reviewing results is the unknown time from the physician provision of the prescription to when the patient actually "activates" the prescription (*e.g.*, has blood drawn or X-rays taken) and the variable time required for individual test performance. One local hospital offered to delay transmission of results, so they can send all results from a given order in one transmission - unless of course there was an "urgent" value. That is less likely to occur

with automatic electronic transmission of test results, but also would delay the opportunity for timely physician action on values missed or not recognized as significant by the hospital or laboratory. To learn of new information, the provider would have to examine all sections of every patient medical record in their practice, every day. That is quite inefficient and error-prone. The more time spent reviewing records with no new information reduces attentiveness and opportunity to recognize those that do contain new information.

It was said that Winston Churchill had 100 new ideas a day; three of them were good. He had great advisors. If electronic medical records are to be one of medicine's good ideas, they should not aggravate an ongoing problem: Physician distraction by systematic inefficiencies.

Whether they relate to thwarting systematic insurance company-promoted compromise of patient care or to checking every patient's chart every day for any new results, such distractions compromise the ability of the conscientious physician to provide quality care. While we seem to have limited ability to address insurance company "excesses", we still have a modicum of opportunity to control our own house. Therefore, it seems appropriate to comment that the electronic medical record still contains what appear to be dangerous "bugs" which compromise our ability to provide the care we believe our patients deserve? I remain unsure that outpatient electronic medical records are "ready for prime time".

P- Reviewers Daoussis D, Zhai GJ
S- Editor Huang XZ **L- Editor** A **E- Editor** Li JY