The Electronic Health Record: A Blessing for Patient Safety but a Curse for Medical Education?

The electronic health record (EHR) can improve the quality, safety, and efficiency of patient care.[1] It can improve communication and teamwork among health care providers. Its use can also increase patient safety, and have an effect on quality of care by incorporating evidence-based medicine into day-to-day practice.[2]

But is the EHR changing medical education? I can clearly remember the first time I logged into the EHR, and I was astonished! Not only was I overwhelmed by the huge task of learning its functions, but also I was dazzled by how much information I could gather by just clicking a few buttons. I could go back 10 years into a patient's medical record and review an office encounter, and not struggle with illegible and at times disorganized handwritten entries. It was amazing, and my immediate thought was "wow!"

Before moving to the United States, I spent 8 years with the National Health Service (NHS) in the United Kingdom. I still remember, from my time at the NHS, going into the medical record office time and again (which by the way was not available outside of working hours) to get patient records, which were often so dense that I sometimes needed a cart to carry them. I would scratch my head when I had a large paper file, which could be only part 1 of 8 or 10. I then had to quickly go through it as other patients were waiting to be seen and cared for; my senior colleagues would not be happy if I was "too slow" or spending "too much time" with just 1 patient.

I thought the EHR would be the cure and even the panacea for all the pain I had to suffer when I was going through piles of often illegible documents and loose papers. I was right to a great extent, and while the intention was cure, like everything else in medicine there were potential side effects.

One potential side effect is on medical education. Now we have "order sets" for almost every medical condition where one just needs to know the key word to search for it. We may not even know what the components of these order sets are when we are tapping buttons and clicking boxes. We could become operators and office workers in our little cubicles, where working with our computers becomes the most important component of our work, rather than spending time at the patient's bedside. One can almost finish reading the "history and physical" *and* the "assessment and plan" even before the patient reaches the hospital floor.

We have become resistant, and in many cases have developed an "antibody" to the pop-up windows warning us about a drug interaction or a major side effect when ordering different medications.

What if, as a function of the EHR, "good physicians" are considered to be the ones who can type faster, or input the orders quicker, or do a speedier "chart review"? We are so in love with EHRs that it seems almost impossible to work without them. Undoubtedly, the EHR is an integral part of any modern health care system, and while it can greatly improve patient care, what is paramount is to ensure that medical education can still thrive. We need to ensure that we can train skillful, caring, and thoughtful physicians, *not* efficient office workers.

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