pros and cons of electronic health record systems (ehrs) essay sample

When it comes to using electronic health record systems (EHR), health facilities have made pretty significant advances in record keeping. For better or for worse, many of us have already experienced these dramatic and important transitions in the medical field.

So, what are electronic health record systems and why are people excited about this technology?

Well, many people consider electronic health record systems to be just record keeping systems – that they are simply a type of word processing system. However, these EHR's do a lot more than store information. Integrated into these advanced systems are clinical alerts and warnings that remind doctors of patient allergies and drug interactions or reminders about annual diagnostic tests such as mammograms and colonoscopies. These " pop ups" aid doctors in making informative decisions about their patients. They can reduce errors, improve patient safety, and have already been particularly effective in preventive care.

EHR systems can also link doctors to relevant reference literature concerning a patient's condition. Furthermore, these systems allow computerized physician order entry, letting doctors send orders directly to the pharmacy or laboratory. This immensely eliminates the hustle and bustle that comes with delivering paper prescriptions and test results. Personal electronic health records are also becoming a common resource to patients because they can access their test results, billing information, appointment scheduling, etc. in the leisure of their own home.

Another feature of EHR systems is secure messaging, which not only allows doctors and patients to communicate electronically with each other, but also other doctors who are part of the same medical team. Better communication often leads to better medical outcomes. With that said, the interoperability of an electronic health record is an extremely appealing feature to both doctors and patients. Although we are not quite in the direction of achieving it, the goal of these systems is to allow an EHR system in a region, or even an entire country, to communicate with each other. If you are unconscious in an emergency room and are unable to communicate your medical history to the doctors, the interoperability feature would allow doctors to log into your personal health record, find your medical history, and ensure the best possible treatment. Without an electronic record and medical history, doctors would essentially go about treating you blindly.

Taking it even a step further, EHR systems can greatly promote research. If everything is computerized and the systems have good search capacities, rather than going through patient files on paper, research can be done much more easily electronically. With this type of integrated data, physicians can look at their own patient records and assess the quality of the care they are providing. Once records are computerized they can be gathered into databases and searched to promote advances in scientific discovery. This is cheaper than physically testing on patients and can give a lot more data.

Enthusiasts claim that there will be major cost savings for medical facilities. Optimists say around $78 billion might be saved annually because patient safety will improve. Costly mistakes and duplication of tests will be

diminished while administrative efficiencies will increase. Medical facilities will not have to hire personnel to make hard copies and manually file medical records.

So, what's the catch?

The idea that a person will have one electronic health record that covers everything about him/her from birth to present is pretty daunting. As decades go by, records get bigger and bigger. If the doctor is looking for a particular detail, they have to go through huge volumes of information. It would be a different story if these systems had excellent programmed search engines but unfortunately, most do not. Doctors complain that they are not able to find the information they need because the systems are too hard to navigate through. Physicians have on average ten minutes to see a patient, and now they have to factor in time with computer systems that demand a lot of attention. With paper records, they had tabs, summary data sheets and etc. to organize patients' records however they liked. Now doctors are at the mercy of the computer. All the information appears in the same font, and there are so many hyperlinks that have to be clicked in order to successfully display what the doctors want.

Usability data display issues are the least of people's concerns, however. Input errors are the most worrisome. With the limited time doctors have with each patient, they type important information very quickly sometimes inverting numbers or typing values in the wrong place. As a result, doctors resort to shortcuts. For example, copy-paste functions are designed to save

time, and in a medical setting, copying information such as medical history from a prior date and time is normal. But if this information is not edited properly, it can be life threatening. Dr. Hoffman from Case Western University recalls working on project where an ill patient was prescribed antibiotics for seven days. A physician did a checkup everyday, and since her medical history was the same, the physician copied and pasted her medical information from day to day – without editing. Thus, her medical record stated that she had been on her second day of antibiotics for about six days before someone realized that this information had simply been copied and pasted without annotation. Although unintentional, mistakes like these lead doctors to make the wrong medical decisions that put their patients' lives in danger.

Software defects and computer shutdowns in a clinical setting can be catastrophic. Another scenario Dr. Hoffman recalls involved a woman getting a Pap smear test that somehow got lost in the transmission from the laboratory to the physician. Her results from the year before were normal, but because her record did not display the current lab report, her cervical cancer, which would have been caught in the lab test that got lost, proliferated and she died.

If health records are computerized, problems such as hacking, stolen or misplaced laptops, misuse of memory sticks, accidental and/or intentional disclosures regarding health information are just the beginning. All of the aforementioned problems can culminate to malpractice claims and concerns, which brews up extremely controversial legal issues.

Although the situations mentioned above are pretty rare, there is no doubt about the clinical benefits and secondary uses of electronic health records. They may harbor significant drawbacks but they also have immense potential.