Electronic Health Records

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Introduction

The healthcare industry is an ever-changing world. New medical information is being discovered, new technology is being introduced, less invasive surgical methods are being developed, etc. Right now the big item on the market is electronic health records. After healthcare reform was passed, one of the items on the agenda was electronic health records for all by 2014. The world is getting more technical and it’s now the healthcare industry’s turn.

Electronic health records have the potential to change the healthcare system for the better but there are many barriers that have stopped a fast adoption of the system. This paper will cover a brief history on how computers and technology made its way into healthcare. Then go into the benefits that electronic health records bring. Afterwards some issues regarding legal, ethical, security and social problems. Finally some future research and learning that is still in need to make the transition to electronic health records a successful one.

Background

Electronic health records are a recent development in the healthcare industry. Originally technology was only used as a financial management tool in the healthcare system (Buchbinder & Shanks, 2007, p 138). Healthcare is extremely diverse and the information that is used on a day to day basis is just as diverse. Other areas of the healthcare system started to gravitate towards technology before the advancements of electronic health records. The transfer to technology is a slow process that is still in the works. United States hospitals have yet to fully adopt an electronic health records system (Jha, et. al., 2009). Dr. Bumenthal reported that even
though the transition to electronic health records is inevitable it will not be an easy transition (2010).

The world is moving forward with technology, the healthcare system now has to focus on also making that move. Many larger institutions have already made the switch, and it will not be long before the rest of the system does the same (Blumenthal & Tavenner, 2010). The new healthcare reform legislation is requiring all healthcare entities to shift to an electronic health records system by 2014 (Soderlund, 2011).

**Potential Benefits**

Electronic health records have many benefits. Many physicians have also stated their fondness in the system. The New England Journal of Medicine reported that: “Health information technology, especially electronic health records, has the potential to improve the efficiency and effectiveness of health care providers” (Jha, et. al., 2009). Physicians think that a more technical approach to health care is beneficial, specifically younger physicians. They grew up around computers and see the benefit of them. The resistance is seen mostly from older physicians (Luchestla, 2010).

The resistance aside, electronic health records are inevitable. As scary as that may sound to some physicians and hospitals, the bright side of them are all the benefits they will bring to patient care and diagnostics. Electronic health records will ease doctors’ decisions and patients’ outcomes (Blumenthal & Tavenner, 2010). Patients have taken a vast liking to electronic health records. They not only give ideas of possible diagnoses but they also alert physicians and practitioners of potential red flags with regards to prescription dosage or tests that have not yet been run. They will serve as a reminder to physicians, so they may practice medicine better and
improve patient care. Patients will want nothing less than the best care and electronic health records will assist in this (Blumenthal & Tavenner, 2010).

Paper records have been around since the start and are a comfort zone for most physicians, but there are many problems that arise from paper records. Some include: illegible writing, incomplete notes, the record can only be at one place at one time, storage space, etc. (Buchbinder & Shanks, 2007, p 142). Electronic health records have the ability to change this. Doctors’ handwriting will no longer be a problem, the system is interactive and will leave complete notes, storage space will no longer be an issue and the records can be seen in multiple places by the physicians that need it. They will also allow the patients to be able to access their records when they are in need of them, and specialists can easily receive a patient record when needed. “A fully implemented EMR provides improved efficiency, productivity, quality of care, health outcomes, patient satisfaction and cost reduction” (Buchbinder & Shanks, 2007, p 143).

Legal and Ethical Issues

As with every other type of technology, health information technology has many legal and ethical issues that need to be addressed. Most of the concerns regard privacy and confidentiality of patient information.

Since electronic health records are computerized, employees and anyone who has access to patient records needs to be trained in high ethical standards. Not only will they need to be trained to use the system, “they must be indoctrinated into the ethics and practices of privacy and confidentiality and data security” (Buchbinder & Shanks, 2007, p 148). Ethically speaking, everyone in contact with the records would need high morals to not place the information into the wrong hands. Legally, the Health Information Portability and Accountability Act, HIPAA,
protects patient privacy and confidentiality. All forms of health IT would need to abide by these standards to insure the patients’ rights are respected (Buchbinder & Shanks, 2007, p 148).

**Security Concerns**

The main security concern with patient records going electronic is the loss of privacy and how private the systems would be. HIPAA states: “Each person who maintains or transmits health information shall maintain reasonable and appropriate administrative, technical and physical safeguards to ensure the integrity and confidentiality of the information to protect against reasonable anticipated threats or hazards to the security or integrity of the information; and unauthorized uses or disclosures of the information” (Buchbinder & Shanks, 2007, p 148). HIPAA standardized doctor-patient confidentiality to insure all patient interactions were kept private.

To ensure that the systems will be kept secure the systems are required to have “access controls, user identification codes and passwords, authentication/password controls, appropriate authorization for access to patient data, security administration, network controls, audit controls, security policies and HIPAA training for all healthcare personnel” (Buchbinder & Shanks, 2007, p 149). Electronic health records have been tested to guarantee that the system is safe and the patient information will remain confidential. They are tested for security purposes to make sure outside forces cannot access any patient information that is meant to be confidential.

**Social Problems**

Healthcare IT has been a slow transition. The public thinks of hospitals as a financially secure entity, when in reality many of them are struggling with little or no profit margin (Buchbinder & Shanks, 2007, p 151). Due to this, most people consider the change to be wastage.
of money. A lot of people do not think the change would be successful and many have resisted the change.

Finances is not the only barrier, with security concerns, the public is hesitant of their information becoming electronic. Most people think that when health records go electronic it will be easier for hackers to access this information. Privacy is a huge concern along with confidentiality. Patients need to be able to trust that even with their records going electronic their physicians will keep the information confidential (Chen, et. al., 2005, p 145).

Another problem is interoperability. The benefits from this would mean easier flow of information from the primary physician to the specialist, easier access when a doctor is away from work, etc. but the misuse of the easy flow of information is a concern amongst providers. Patients need peace of mind that their information is not being misused (Buchbinder & Shanks, 2007, p 151).

**Further Required Research**

Electronic health records are potentially the best breakthrough for medicine, but they need to be further researched to evaluate their full potential. If the system were down, would the records be accessible? If the computers crash, are the records lost forever? How safe are they from hackers? Do they really help better patient care or are they possibly detrimental in severe cases? All these questions and more need to be answered to ensure that the electronic route is the way to go.

Physicians and patients need to be at ease to know that their records are safe and in times of technical crisis these records will not be lost forever and accessible if need be. Also, physicians need to know that they can work with the system and not against it. If they have a
patient in need of a medication fast, they need to know the system will allow it and not make
them to do other tests before being able to access the medication.

There are many concerns and questions that still float around regarding electronic health
records, and this is slowing the adoption of a fully implemented system. With the new healthcare
law pushing for them and offering incentives to healthcare entities that adopt an electronic health
record system, these questions need to be answered fast. Research needs to be done to certify that
little or no harm can come from electronic health records.

Conclusion

Technology in healthcare can produce a positive outcome. But, the transition to
technology has been a slow process. Many people are hesitant regarding privacy and
confidentiality. Technology can be the breakthrough medicine needs but the healthcare system
needs to adopt a fully function system in order to get the most use out of it. Healthcare reform is
pushing for a full transition by 2014, but before any complete transition can happen some
questions need to be answered and the systems need to be properly tested. If all goes well,
electronic health records can be the form of health records for everyone and can help better
patient care.
References


This is a perspective in *The New England Journal of Medicine*. It is a recent perspective, dated in 2010, and explains why electronic health records are not only important to implement but also need to be meaningfully used.


This textbook talks about to effectively run a healthcare entity and what is required of a manager. It is relatively recent and also discusses the changes in healthcare with regards to electronic health records. This book teaches students that are interested in becoming health care managers what they would need to do to effectively run a healthcare entity, be it a hospital, doctors’ office, etc.


This book is the oldest source I used, dated in 2005. It helped to formulate that electronic health records have been around for some time and concerns about them are still looming.

This journal article in *The New England Journal of Medicine* discussed the implementation of electronic health records in hospitals and how fast they are being adopted. It is a recent article dated for 2009. It is also an article that has been updated with new information regarding adoption in US hospitals.


This is a dissertation from a masters of public health student that was published in 2010. It discusses the history and implementation of electronic health records and can be found on the UNT Health Science Center website.


This is a news article that is archived in the American Dental Association website. It was published this year in March and talks about how the government is pushing for a 2014 transition to electronic health records. This article helps to show that not only hospitals and doctors’ offices need to make the change but all areas of the healthcare industry include dentists’ offices.