Individual Article Discussion

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Abstract

The article chosen for this assignment is titled *Meaningful Use and Certification of Health Information Technology: What about Safety?* This article argues that the regulations set forth by the Department of Health and Human Services in regards to the American Recovery and Reinvestment Act of 2009 do not take appropriate measures to ensure patient safety. The article also suggests methods for protecting patient safety. This article is relevant to several areas that we have studied in this couse, including HITECH, the electronic health record, and patient safety to name a few. This article is important to the future of informatics because it shows the importance of the role of informatics nurse as a bridge between information technology and patient care. The article also demonstrates that there is sure to be an increased demand for the informationist in the future along with the importance for informatics professionals to focus on patient safety.

Individual Article Discussion

 The article that I have chosen for this assignment is titled *Meaningful Use and Certification of Health Information Technology: What about Safety?* The article was written by Sharona Hoffman and Andy Podgurski.

**Summary of the Reviewed Paper**

 The American Recovery and Reinvestment Act (ARRA) of 2009 “dedicated $27 billion to the promotion of health information technology” (Hoffman & Podgurski, 2011). The Department of Health and Human Services (HHS) then created regulations to implement ARRA. The article *Meaningful Use and Certification of Health Information Technology: What about Safety?* argues that the regulations created by the HHS have not given appropriate consideration to patient safety. The article also discusses methods for protecting patients amidst evolving technology.

**Electronic Health Record**

The article first discusses the electronic health record (EHR). Benefits of the EHR from the article include easy access to clinical notes, transmission of diagnostic test images and laboratory results, computerized provider order entry (CPOE), decision support tools, secure messaging, and also allows remote access to records (Hoffman & Podgurski, 2011, p. 1). Some problems with the EHR that the article points to are “software bugs, computer shut-downs, and user errors. EHR software is extremely complex, and it can have defects that endager patients” (Hoffman & Podgurski, 2011).

**Meaningful Use**

 The article then goes on to discuss meaningful use. Meaningful use regulations spell out what healthcare facilities and providers must do in order to receive incentive funds. The article also discusses the certification criteria that was established by the HHS to “help providers purchase high-quality systems that they can use meaningfully” (Hoffman & Podgurski, 2011).

**Patient Safety Risks**

Next, the article provides a critique of the regulations that have been set forth. “Clearly if the government wishes to begin disbursing incentive payments in 2011, it had to limit the number of requirements it imposed and simplify the certification process” (Hoffman & Podgurski, 2011). The authors of the article point to this being the cause of some serious potential patient safety risks imposed by certain EHR systems.

 Several different aspects of the computerization of EHR systems can pose risks to patient safety according to the authors of the article. Some patient safety risks identified include errors in computerized provider order entry (CPOE), EHR systems that haven’t been tested properly or had their safety verified, and a lack of monitoring of EHRs after approval for any problems or adverse events (Hoffman & Podgurski, 2011).

 The authors of the article point to their solution to mitigating the aforementioned patient safety risks. They suggest expanding meaningful use criteria to “require providers to establish (1) a process for ensuring the safety of their EHR system’s implementation and (2) a body, such as a system oversight committee, responsible for overseeing the process” (Hoffman & Podgurski, 2011). The final suggestion for improving patient safety in the article was to use clinical trial and testing similar to what is done in drug trials to prove efficacy and safety.

**Relevance to the Course**

**Office of the National Coordinator of Health Information Technology**

This article has extreme relevance to this course and healthcare in general. One of the first topics that we covered in this course is the Office of the National Coordinator of Health Information Technology (ONCHIT). The Bush administration was responsible for establishing ONCHIT. The mission of the group is to “provide leadership for the development and nationwide implementation of an interoperable health information technology infrastructure to improve the quality and efficiency of health care” (Burke & Weill, 2013, p. 19). OHCHIT later became funded by the Health Information Technology for Economic and Clinical Health Act (HITECH) which was signed into law by President Obama (Burke & Weill, 2013, p. 19). The article that I reviewed for this paper discussed the authors’ proposed expansion of meaningful use regulations. OHCHIT is where meaningful use is defined. In order to show meaningful use providers and healthcare orginizations must meet a required 15 criteria and then an additional 5 out of 10 other criteria.

**HITECH**

One topic that we discussed in this course is the American Recovery and Reinvestment Act (ARRA). ARRA was signed into law by President Obama in 2009 and calls for the computerization of healthcare records. Earlier in the semester we were also assigned to read the article *7 Strategies for Improving HITECH Readiness* by Pam Arlotto. The article spoke of “seven strategies healthcare organizations should adopt to prepare for the implementation of the Health Information Technology for Economic and Clinical Health Act (Arlotto, 2010, p. 90). The Health Information Technology for Economic and Clinical Health Act (HITECH) came to be because of ARRA. The goal of HITECH is to “promote the adoption and meaningful use of health information technology” (Department of Health and Human Services, 2009).

 It was interesting to compare the two articles because the authors discussed different aspects of the same topic. The HITECH article discussed strategies that healthcare organizations and providers could use to successfully meet the guidelines that were set by the government. The Meaningful Use article explored areas of the guidelines that have the potential to adversely affect patient safety.

**Electronic Health Record**

 We have discussed various aspects of the EHR to great lengths in this course. We learned about many EHR considerations such as testing, certification, cost, security, confidentiality, caregiver resistance, data integrity, and master file maintenance (Hebda & Czar, 2013, p. 285-289). The article also discussed many of these considerations, especially in regards to their potential risk to patient safety. In this course we also learned about the many predicted benefits to the EHR. Some of the benefits discussed include allowing patient records to be accessed remotely, the EHR can also be accessed by different healthcare providers and organizations when interoperable, and the EHR does not lead to transcription errors.

**Information Technology**

 The article can also be related to the coursework that we have completed on the subject of information technology. “The term information technology (IT) includes not only the use of computers but also communications networks and computer literacy- knowledge of how to use computer technology” (Burke & Weill, 2013, p. 2). The article discussed how a combination of hardware, software, and human error can pose risks to patient safety. The article discussed in great length the importance of testing and monitoring EHR systems which are essentially programs.

**Patient Safety**

Regardless of specialty area, patient safety is of utmost importance to nursing. In this course we learned about how informatics can improve patient safety. Computerized Provider Order Entry (CPOE) has the potential to eliminate transcription errors and decrease medication errors. Barcoded medication administration improves patient safety by ensuring the right patient is administered the correct medication. Decision-support software (DSS) is able to alert practitioners to potential risks. It is also able to provide tools and clinical pathways. These are just a few of the ways that informatics has the potential to improve patient safety; however, as the article discussed technology also poses potential risks to patient safety.

**Significance to the Future of Informatics**

**Nurse Informationist**

I would like to start this section with discussing exactly what an informationist is. Since my field of practice is nursing, I will specifically discuss the role of nurse informationist. An informatics nurse is “a nurse with knowledge and experience using technology and applying this knowledge to all facets of nursing practice to improve nursing and patient care” (Kirchner, 2014). Informatics seeks out and applies data to improve patient care. The article “*Meaningful Use and Certification of Health Information Technology: What about Safety?* centered its focus on the importance of using data to improve patient safety. Nurse informationists are relied on for effectively using data to improve patient care and safety. Informatics nurses “use their depth of knowledge and understanding of the patient-care process, combined with the power of technology, to contribute to the care of the individual and the transformation of healthcare (Sensmeier, 2011).

**Increased Demand for informationists**

 The appropriate implementation of meaningful use is certain to increase the demand for informationists. The complexity of developing, testing, and evaluating EHR systems requires specially trained personnel. “The U. S. Department of Health and Human Services (HHS) reported that 80% of hospitals and more than 50% of physicians and other providers were adopting the use of EHRs” (Schneider, 2014). The expanded use of the EHR is sure to continue to grow especially when considering its financial implications.

 The article suggests that EHR systems should be monitored more thoroughly in clinical trials prior to being approved. It also points to the lack of monitoring that EHR systems comply with after they have been approved. These are important areas that will require the attention of informationists to assure patient safety. These areas will need careful monitoring to catch, report, and resolve any adverse events.

**Continued Focus on Patient Safety**

 Throughout our studies this semester we spent a lot of time focusing on patient safety. Technology has provided healthcare workers with many tools that can contribute to keeping patients safe. Our textbook discussed several information technology safeguards including computerized provider order entry (CPOE), e-prescribing, barcoded medication administration, and decision-support software (Hebda & Czar, 2013, p. 17-19).

The main implication for informatics that the article pointed to is the need to remain vigilant in the protection of patient safety. The article stressed the importance of continued monitoring, which is especially important because of the time frame that was imposed to receive stimulus funding for the EHR implementation. It is important to understand that the technical side of healthcare can pose major risks to patients.

**Conclusion**

 The article *Meaningful Use and Certification of Health Information technology: What about Safety?* was a thoughtful discussion on the topic of meaningful use and patient safety. The authors showed evidence that additional testing and monitoring of EHR systems is necessary to ensure patient safety. The article reinforced many concepts that we have been learning throughout the semester. Most importantly though; the article pointed to the importance of informatics in the future.

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