Health Information Systems

Name

Institution

Course

Instructor

Date

**Introduction**

The process of merging organizations is highly challenging especially due to the differences in organizational culture that may exist between the joining organizations. As such, it is important to ensure that proper measures and strategies are put in place to facilitate operational efficiency. In the healthcare setting, communication forms the backbone of all operations among health care professionals. As such, Healthcare Information Systems are important in coordinating the efforts of all the health care professionals and ensuring that they are always on the same page when dealing with patients and in view of reducing medical errors. To improve the efficiency of merged healthcare organizations, this paper demonstrates the effectiveness of employing Electronic Health Records.

**Analysis of the Technology**

Initially, healthcare organizations used paper to record, store, and share information about the patients and their care. This proved to be a highly tasking and ineffective method, especially in terms of time management and timely coordination of the professional efforts among the healthcare delivery teams. Electronic Health Records (EHRs) are Information Technology systems that have been designed to electronic management of patient data, providing a network-based platform from which the healthcare professionals can share information (Boonstra, Versluis, & Vos, 2014). Through EHRs, health care professionals are able to achieve evidence-based-care as they are able to access vast information through the utilized devices, which can be employed to the specific patient cases to facilitate more positive outcomes. In addition, EHRs promote patient-oriented care as healthcare professionals are able to virtually communicate in a timely manner and hence develop a better understanding of the patient, hence establishing a collaborative approach towards ensuring all-round health of the patient (Boonstra, Versluis, & Vos, 2014).

**Interdisciplinary Team**

The process of implementation of the EHRs is of major concern as, like any other form of change, is bound to meet resistant among the healthcare professionals who are used to the traditional paper system. As such, it is important for an interdisciplinary team to be established to ensure that enough buy-in is obtained from all the disciplines across the health care organization to facilitate implementation of the value adding technology. It is important for such a team to involve a representative from all the professions within the health care setting in order to create an inclusive approach towards embracement of the new technology. Four among these members of the interdisciplinary team may include the EHRs Administrator, the Physician champion, the Information Technology (IT) manager, and the Nurse leader. The physician champion is responsible for ensuring that the physicians have a better understanding of the new technology and obtaining buy-in from the physicians. In addition, he or she is responsible of presenting the concerns of the physicians to the implementation team and ensuring that their interests are catered for. The same applies for the Nurse leader who represents the interests of the nurses in relation to the EHRs and convinces the nurses to embrace the new technology. The IT manager is in charge of ensuring that all the technical aspects of the implementation process are well covered, including the software and hardware required to implement the EHRs technology within the health care setting. Lastly, the EHRs Administrator manages the implementation process, coordinating the efforts of the interdisciplinary team members towards achievement of the pre-established EHRs objectives.

**Importance of Standardized Nursing Terminologies and Interoperability**

Interoperability involves the healthcare technology’s ability to facilitate healthcare coordination via clinical archiving. The healthcare environment presents different settings that are defined by distinctive systemic structures. As such, the introduction of any technology that has succeeded elsewhere into a certain healthcare environment does not necessarily guarantee its success. As such, interoperability allows for overcoming of such a hurdle by facilitating an IT environment that ensures efficient sharing of information while reducing any ambiguities in the process of patient care.

Standardized Nursing Terminologies (SNTs)are terms that are specific to the nursing profession in terms of application and allow for distinguishing between nursing communication and communication from any other health care professionals (Schwiran & Thede, 2011). Initially, nurses were viewed as secondary in terms of their importance to the care of patients and the nursing profession was undervalued. SNTs have contributed immensely towards the acknowledgement of the nurses’ contribution to the patient care process by distinguishing their efforts from those of the rest of the healthcare professionals (Schwiran & Thede, 2011).

**Federal Regulations**

The federal government has established various regulations that govern the application of health information systems in the healthcare setting. Two of these legislations include the Affordable Care Act (ACA) of 2010, and the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009, which are applicable when referring to the implementation of EHRs technology (Grama, 2015). The ACA of 2010 requires implementation of healthcare insurance to allow for accessibility of health care, reduced costs, and improved quality. The EHRs reduces the costs of health care by reducing patient stay at the hospital by ensuring coordinated health delivery efforts. By improving health care eligibility in terms of health care provision in health care organizations that are recipients of Medicare and Medicaid incentives, EHRs also promotes health care accessibility (Grama, 2015).

**Security Threats**

In as much as EHRs promote improved care among health care professionals, it presents various issues of concern with regards to security. One such issue is the issue of accessibility of patient information by third parties, or unauthorized persons. Considering the system’s use of the local network to facilitate cloud sharing of information among members of the health delivery team, it exposes such information to breach by unauthorized parties (Ozair, Jamshed, Sharma, & Aggarwal, 2015). If stolen, patient information may be negatively applied in different areas that may greatly impact the life of the patient. However, the EHRs use of Firewall to detect and block malware has proven effective in preventing attacks directed at the system. In addition, being computer-based, EHRs devices may be installed with antimalware software that prevents attacks and retrieval of information by unauthorized persons. Another issue of concern involves the threat of losing data. Electronic devises may break down for one reason or another, an aspect that may lead to the loss of important data that has been saved on such devices (Ozair, Jamshed, Sharma, & Aggarwal, 2015). However, the problem of possible losing of data has been settled through establishing online networks through which information collected and stored through the EHRs is backed up and hence recovered in case of any loss.

**Emerging Technologies**

One of the emerging technologies in health care is Telehealth, which involves the use of telecommunication devices to carry out remote healthcare services. The application of the technology in a non-clinical setting includes the use of internet connected devices in continuing medical education, administrative meetings, and provider training. On the other hand, telehealth can also be applied in the clinical setting. For instance, a remote physician may use video conferencing to speak directly to their patient, diagnose them, and suggest treatment. Another technology that has emerged over the recent past within the healthcare system is Mobile Health (mHealth). This technology facilitates various new approaches towards interaction among health care professionals and patients, and delivery of health care. One of the applications of this technology in the non-clinical setting includes the use of smartphones to send educative messages to patients. In the clinical application, patients inform health care professionals of their symptoms through the phone and the health care provider offers the closest diagnosis and advise.

**Conclusion**

EHRs have been noted to be effective in managing health care practices within organizational settings, allowing for proper sharing of information and thus coordinated care. With improvements in the quality of care, patients are bound to experience reduced hospital stay and hence reduced cost of healthcare. To implement this technology in the healthcare environment, it is important to ensure that an interdisciplinary team is established. Implementation of this technology in the merged organization would lead to improved efficiency and coordination among all the members of the newly formed organization.

References

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