**WEEK – 7 FRIDAY READING REFLECTION**

A.

Health care has seen drastic changes in technologies over the recent years. One such revolutionary change is the implementation of Electronic Health Records. There is an array of advantages when these EHRs are incorporated into the existing system. Improvements in the clinical workflows, alerts on medication errors led to improved patient safety and advanced features like CDSS coupled with EHRs outstand them in improving the clinical efficiency (King et al., 2014). CDSS functions as an adjunct to CPOE- computer-based physician order-entry to alert physician on drug dosing, detect allergies and prompts during prescriptions (Vogel & Reed, 2021, p. 567). Also, EHRs play a vital role in the exchange of information facilitating interoperability. However, successful execution depends on various factors like user acceptance, installation costs, patient benefits, political and ethical concerns. The initial set up of equipment is quite expensive, which hampers its usage across multiple locations. Adapting to a new technology by the medical staff is quite difficult and this impedes usage of EHRs which can sometimes be responsible for medical errors compromising patient safety (Fragidis & Chatzoglou, 2018). To overcome such drawbacks, we need to consider certain factors for successful optimization of health information technology in healthcare. EHR implementation approach draws back to two main strategies namely, top-down, and middle-out (Fragidis & Chatzoglou, 2018). These methods outline importance of involvement of governments and local healthcare organizations in making changes to existing information systems (Fragidis & Chatzoglou, 2018). Added to this, continuous evaluation of these health information technologies is indicated. One is proposed method is TPOM- Technology, People, Organizations and Macroenvironmental factors (Cresswell et al., 2020). All these factors are interdependent on each other and accompanied by transformations in social groups (Cresswell et al., 2020). Further advancements or changes to existing technologies rely primarily upon active stakeholder engagement and commitment as the solution provided must benefit them (Fragidis & Chatzoglou, 2018). Other critical factors include clear long-term perspectives and endurance (Fragidis & Chatzoglou, 2018). In a nutshell, any clinical technology should align with the requirements of physician, benefit the patient accounting for safety and fulfil the needs of stakeholder. To achieve this, various factors should be considered such as creating learning health systems, developing agile support structures with organizational leadership, maintaining user motivation, developing relationships among organizations, measuring progress and continuous monitoring of HITs to ensure patient safety (Cresswell et al., 2016).

B

I am dental graduate and I have three years of clinical experience as a dentist. In the dental office I worked, every new patient encounter required registration in hospital outpatient system. This included the demographics of the patient. Later, changes were made to the initial system to include diagnosis and option to schedule future appointments. These changes required comprehensive planning, execution, and closure. During the initiation phase, we identified the need to include diagnosis in the patient system. Also, the scope of this inclusion was determined (Knowledgehut, 2019). Later in the planning stage, we identified the realistic timeframe to set this change into implementation. We had also listed the possible risk factors while incorporating changes to the existing system and developed workflow documentation (Siddiqui, 2015). We also identified the needed resources to complete the task (Knowledgehut, 2019). While executing the changes in the system, teams were created to manage and evaluate the workflows developed (Siddiqui, 2015). After incorporating the proposed changes to the existing system and objectives achieved, reports were generated to determine the success of the project. Later, evaluations were done on timely basis to check for effective functionality of the incorporated changes.

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