

Paper on Clinical Decision Support Technology

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Oct 15th, 2018

Introduction

Nurses are at the front and center of a healthcare delivery system deeply interlaced with technology. From robot assisted surgeries and vaccines, to pharmacogenomics and electronic health records, strides are made everyday to achieve safer delivery of high quality patient care. Clinical decision support systems (CDS), as described by The Office of the National Coordinator for Health Information Technology, enhance health and health care by providing timely patient specific information, computerized alerts, order sets specific to individual conditions and clinical guidelines amongst other tools. Considering the aid that these systems are claimed to provide during the decision making process, clinical decision support systems can play an important role in enhancing patient care. A closer look at the literature suggests that improvements need to be made for these systems to work effectively.

Discussion

The Office of the National Coordinator for Health Information Technology (2018) and the Agency for Healthcare Research and Quality (2013), both support the use of clinical decision support systems stating that CDS can lead to improved efficiency, lower costs and improves the patients experience. These advantages sound promising but research has shown some limitations. A systematic review of randomized controlled trials that assessed the effectiveness of CDS systems integrated with electronic health records concluded that although DCS systems improve morbidity moderately, it does not affect mortality rates. “This effect, when it occurs, is largely dependent on the disease and setting characteristics.” (Moja et al., 2014) Another systematic review that looked at randomized trials that assessed the effects of computerized clinical decision

support systems compared with a non-computerized clinical decision support system control, specifically in ambulatory diabetes management, concluded that clinical outcomes may experience limited improvement. (Jeffery, Iserman, & Haynes, 2013)

Conclusion

It is difficult to identify an area of nursing that is not affected by technology and the potential advantages of CDS offer a reason why. Prior to doing research I held the opinion that this technological advance will improve the clinical setting tremendously and will facilitate patient care and streamline problem resolutions. Following my research, I still hold this opinion but I also believe that as a nurse one should not depend on these systems to care for our patients. Although a great tool that can help minimize human error and provide key patient information when needed, CDS can also take away from the nurses autonomy and ability to use their own critical thinking skills. It is evident that more studies have to be completed in order to find the best way to incorporate CDS into the clinical setting, nurse should take an active role in this process to insure that at the center of this discussion are the human needs of the patient and not the suggestions of an incredibly advanced computer system.

References

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