Technology: A help or a hindrance to healthcare?

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INTRODUCTION

Technology is “the application of scientific knowledge for particular purposes, especially in industry” (OxfordLanguages, 2021).

Healthcare Information Technology (HIT) is “the application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision making” (Alotaibi et al., 2017). Technology overall has had a positive influence in the health care setting.

SIGNIFICANCE

- Hospitals with automated dispensing technologies, smart pumps, and bar code medication administration technologies had a reduction in error by 54% (Alotaibi et al., 2017)
- 98% of physicians reported using the internet while at work and 92% reported using internet to communicate (Morilla, 2017)
- A study conducted on medications that were frequently mis-administered, showed a reduction of 43.5% after implementing barcode administration (Thompson, et al., 2018).

POSITION STATEMENT

Technology in health care has improved patient outcomes, decreased human error along with with ensuring patient safety, and allowing for a continuum of care through multiple facilities.

SUPPORT FOR POSITION

Technology was introduced into health care in the 1960s. Automated dispensing technologies and smart pumps have reduced error by 54% (Alotaibi et al., 2017). Technology in the healthcare field includes diagnostic tools such as CT and MRI.

Within HIT systems, Clinical Decision Support (CDS) is integrated providing support of clinician diagnosis including links to textbooks, protocol for diagnostic studies, treatments, etc.

Use of CDS has proven to ensure proper diagnosis and improve patient outcomes (National Academic of Sciences, Engineering, and Medicine, 2015). Proper, and quick, diagnosis also decreases hospital expenses and results in quick turn over.

e-Hospital is a software application allowing access to patient information across hospitals (Morilla, 2017). With a continuum of care patient satisfaction rates are proven to increase drastically (Xesfingi, S., et al., 2016).

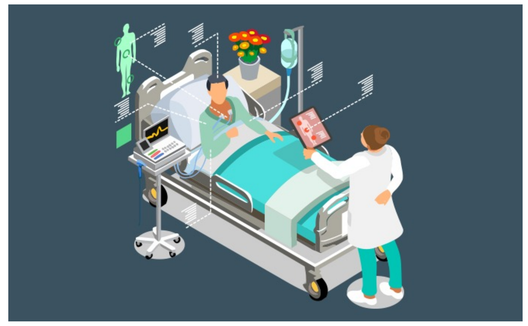
IMPLICATIONS FOR PRACTICE

- Automated dispensing technology, smart pumps, and bar code administration have resulted in a reduction of error. Nurses need to continue to implement these protocols in order to continue and decrease error and improve safety.
- Programs such as “e-Hospital” have allowed for a continuum of care in healthcare. These systems allow patient information to be accessed in a single database, available to those involved in the patient’s care. By continuing to use programs such as “e-Hospital” patient satisfaction will continue to increase, and outcomes will continue to improve.
- Technology allows for more accurate and quicker diagnosis through CDS software which creates a cascade of protocols specific to a disease (National Academic of Sciences, Engineering, and Medicine, 2015)

(Marbury, 2019)

CONCLUSION

Technology in health care has proven to be a great asset. HIT has allowed for decreased medication error and improved safety. It has also promoted a continuum of care never feasible before online databases containing patient information. With electronic records of patient information, the care given to patients is better and quicker. Diagnosis has been more accurate, and patient outcomes have been better. Technology has overall improved patient care in a positive way.



(Donovan, 2019)

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