

Assessment 4: Patient Care Technology

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Patient care technology has been identified as having a significant impact on both patient care and the nursing practice as it helps in improving the efficacy of vital sign monitoring, medication administration, and documentation. This consistent and timely intervention, better management of chronic conditions, and overall improvement in patient outcomes allow nursing practices to become better. In terms of nursing practice, patient care technology can assist nurses in performing their duties more effectively and efficiently. For example, by using electronic medical records, nurses can access patient information quickly and easily, which can reduce errors and improve communication among the healthcare team. Additionally, patient care technology can help nurses to manage their workload and prioritize tasks, which can help to reduce stress and improve job satisfaction. This assignment aims at providing an analytical understanding of patient care technology and it can benefit a nursing environment.

Electronic Health Record (EHR) system is one of the commonly used practices in the health care system. An EHR system is a digital version of a patient's paper chart, and it allows healthcare providers to store and access patient information electronically. This includes demographic information, medical history, lab results, medication lists, and progress notes. The benefits of using an EHR system include improved patient safety, more efficient care coordination, and increased productivity. With an EHR system, healthcare providers can access a patient's complete medical history at the point of care, which can help to reduce errors and improve the quality of care. Additionally, EHR systems can be integrated with other technologies, such as telemedicine and remote monitoring, to facilitate care coordination and improve access to care for patients (O'Brien et al., 2015). Similarly, others have highlighted the assumption regarding the adoption of EHR to help and improve the

safety of patients, increase the health care quality, and reduce the health care cost (Kowitlawakul, et al., 2015).

The use of electronic health care can have a significant impact on patient care delivery in multiple ways as it provides improved patient safety by providing healthcare providers with access to a patient's complete medical record history. EHR systems can be integrated with other technologies, such as telemedicine and remote monitoring, to facilitate care coordination and improve access to care for patients. Similarly, it can improve the efficiency of vital sign monitoring, medication administration, and documentation, which can lead to more timely interventions, better management of chronic conditions, and overall improved patient outcomes. While enhancing better communication among the healthcare team such as nurses and doctors and can help in improving the quality of care (Forde-Johnston, et al., 2023)

However, HER has its limitation such as the initial cost of implementing the EHR can be costly, especially when implemented for small and rural healthcare providers. Similarly, EHR heavily relies on technology that can malfunction leading to system downtime while disrupting the ability of the nurses to gather data on time. Similarly, studies have highlighted that it can be limiting in the application of the technology while making the nurses too much dependent on the technology rather than interacting with the patients and providing care with empathy (Jimma, &Enyew, 2022)

With an EHR system, healthcare providers can access a patient's complete medication list at the point of care, which can help to reduce errors and improve medication safety. Additionally, an EHR system can alert healthcare providers to potential drug interactions or allergies, which can prevent adverse reactions. Another example is in the case of care coordination, where an EHR system can be integrated with telemedicine technology, allowing for remote monitoring of a patient's condition and communication with healthcare

providers. This can facilitate care coordination, improve access to care for patients, and reduce the need for hospital visits

The data EHR can generate is based on a wide range of healthcare options such as demographic information, medical history, allergies, medications, immunization records, laboratory results, medication and reaction list including the information regarding the medication patient is currently taking, its schedule and dosage, progress notes, appointment, and visitation information, etc. This can help in improving the accuracy and efficiency of vital sign monitoring, medication administration, and documentation, which can lead to more timely interventions, better management of chronic conditions, and overall improved patient outcomes.

The data gathered through EHR can be easily communicated through multiple mediums as within the EHR system, the data gathered through this can be stored and accessible, allowing the healthcare providers to view, update and share the patient information. It can integrate with Health Information Exchange (HIE) platforms, which allows for the sharing of patient information between different healthcare organizations. This can improve care coordination and access to care for patients. Similarly, it can be integrated with Health Information Exchange (HIE) platforms, which allows for the sharing of patient information between different healthcare organizations. This can improve care coordination and access to care for patients. EHR systems can integrate with telemedicine technology, which allows for remote monitoring of patients' conditions and communication with healthcare providers. This can facilitate care coordination, improve access to care for patients, and reduce the need for hospital visits. Also, it can generate quick reports and analytics, and machine learning. These communication channels help healthcare providers to access patient information quickly and easily, improve care coordination, and make informed

clinical decisions. Additionally, this communication can be used to improve the quality of care for patients and make the work of healthcare providers more efficient and effective.

With such an open platform for providing information and easy access to the patient record, it is important to maintain patient safety and confidentiality when using technology like EHR systems requires the implementation of appropriate controls and safeguards. This can help to prevent unauthorized access to patient information and ensure that only authorized personnel have access to sensitive patient data, authentication, and encryption, auditing, and monitoring, data backup and recovery, and compliance with legal and regulatory requirements. This includes compliance with laws and regulations, data privacy and security, data sharing and interoperability, informed consent, ethical considerations, and transparency. By considering these implications, healthcare providers and organizations can ensure that EHR systems are used in a way that respects patient rights and promotes the best interests of patients.

Evidence-based strategies can help in improving the application of patient care technology by providing guidance on how to effectively implement and use the technology, evaluating the impact of the technology, continuously improving the technology, and using machine learning and predictive analytics to optimize the use of the technology. By using these strategies, healthcare organizations can ensure that the technology is being used in the most effective way possible to improve patient outcomes (Malhan et al., 2022).

In conclusion, EHR can be used to provide data that allow the healthcare providers and the patient complete transparency of records and medical history while helping them to make better-informed decisions regarding healthcare. For nurses, it helps in maintaining and gathering information easier and to help in crises.

Reference

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