**Discussion 6**

**Challenge Areas in Nursing Informatics**

**Post a response that describes the topic you were assigned. Next, explain how the challenges you identified in your research might affect nursing informatics in one of the following: healthcare outcomes, healthcare organizations, or healthcare policy. Be specific and provide examples. Finally, recommend at least two strategies to help overcome the challenges you identified. Be specific.**

Security is protecting the system items from accidental or malicious access, use, modification, destruction, or disclosure. It is also defined as ensuring confidentiality and privacy through controlling access to intended information health information. Security and privacy are a key component that needs to be taken into consideration while exchanging electronic health information. Therefore, I would like to discuss security and explain how it affects nursing informatics in healthcare organizations along with the strategy to overcome the challenge.

Electronic documentation is more relevant because this is where we acquire most of the necessary patient information. Security is a critical factor for the realization and implementation of electronic health records. Security of personal data is constantly increasing, especially in health, and can be seriously threatened by hackers, viruses, and worms. In today's digital world, there is a high number of cyberattacks, and as nurses along with nurses informatics spend a lot of time in EHR I totally agree with the statement that Nurses “In their busy world, in the blink of an eye, they could click on a link that could affect their whole healthcare system.” (Eddy , 2023) This will lead to the leakage of patient information, and identification theft for insurance purposes leading to financial loss and a bad reputation for the healthcare organization.

**Nurse Informatics and Healthcare Organizations**

This challenge affects nursing informatics and healthcare organizations because the damage caused by hospital data breaches can negatively affect patients and their healthcare organizations. Medical records alterations can jeopardize a patient’s health and without health history data nurses will have difficulty providing care and nursing informatics are unable to transform data into needed information and leverage technologies to improve health and healthcare equity, safety, quality, and outcomes. For instance, we had nurse informaticist rounding on our unit one day and that was during downtime when we were not able to access patient information, The informaticist was on our unit to educate about a new change in EPIC that just happened a few days ago but because it was downtime, she was not able to show us the change and educate about it as we have no patient information available. This example can be completely out of our topic security, and this downtime didn't  last long may be an hour or two that we can manage but if we are unable to access patient information due to data breaches for a longer time this will affect nurses as well as nursing informatics. When EHRs and other hospital systems are hacked, a healthcare organization may face substantial penalties for violations of the Health Insurance Portability and Accountability Act (HIPAA). On top of this healthcare organizations may lose patients to other facilities, and the damage to their reputation can be difficult to undo. (Bvorel, 2021)

**Strategies to overcome the challenge.**

Strategies such as Involving nurses, Nursing leadership, and Nurse Informaticists in crafting policy and receiving training that fosters connections between nursing staff and IT leaders.

As a nurse I have seen a lot of nurses and physicians leave their patient window open in the workstation and go to attend to their patient that is a huge privacy issue, patient information is seen by everyone including family and other patients walking in the hallway questioning the security that can lead to information being stolen for many different purpose therefore Before leaving the working station or phone, logging out or securely locking the screen can help with this issue.

Implementation of blockchain technology to ensure privacy and security of EMR can be another strategy to overcome this challenge. (Kiania et al., 2023)

knowledge of security should be provided to everyone who uses electronic documentation, and this can be enhanced permanently by education, consultation, and function of staff. Also, the establishment of a new field of nursing informatics that can manage nursing information with the least security damage according to the progress of information technology.

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**Response 1:**

Hello Dr Moyers,

Thank you for the question,

Telehealth includes every healthcare activity that takes place using digital technology. Services beyond just online doctor visits such as medical consultations and administrative processes are included under Telehealth. Examples of Telehealth include health education, resources, alerts, updates, training, health administration, and system management.

Telemedicine, a subset of Telehealth includes medical services provided by healthcare providers virtually. When a patient receives a specific service from a healthcare provider is included under Telehealth. (Aime, 2023) Telemedicine examples include remote video conference consultations, post-op follow-up visits, Monitoring, and remote chronic care management.

According to AAFP.org, Telehealth is a broad collection of telecommunication technologies and electronic technologies that support at-distance healthcare services and delivery. This supports virtual, health and education services. Telemedicine is using technology to provide care at a distance between a patient at an originating site and a health care provider at a distant site.

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**Response2:**

Hello Isela

You brought such an important topic, patient safety in today’s digital world and I also believe that one of the challenges is administering wrong medication or administering to a wrong patient when overriding medications. There was one time in my unit one of our patient was on insulin drip and he went into hypoglycemia, his blood sugars were in the 50’s. Providers ordered D50, that was given, and they also ordered D10 drip. The assigned nurses went to the medication room to grab D10, she grabbed the bag of sodium bicarb instead and administer sodium bicarb instead of D10. If she had scanned the medication prior to administering without overriding, then all this would have been prevented. I completely agree with P et al that overrides can be helpful when used appropriately in emergencies but overrides bypass pharmacist verification can increase potential for patient harm because of drug-drug interactions, medication allergies, inappropriate dosing, and more. (P et al., 2022). This is a safety concern as studies suggest that the rate of adverse drug events is four times more likely to occur with inappropriate overrides indicating the critical need to improve patient safety by improving the alert system. (Justinia et al., 2021) The strategy for this challenge can be making it unable to override in the computer and if we have to override in case of emergency, we need to at least have some one witness the medication that it is the right medication for right patient.

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