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Nursing informatics is increasingly becoming an integral aspect of healthcare delivery. It helps organizations select, implement, and evaluate health information technologies. Informatics nurses ensure that the implemented information technologies support patient-centric, high-quality, and safe care (McGonigle & Mastrian, 2018). They also ensure that organizations adhere to HIPAA (Health Insurance Portability and Accountability Act) by implementing security measures to protect patient's sensitive and confidential information. Some of these measures include using of strong passwords and encryption techniques. Nursing informatics plays a crucial role in healthcare delivery because it enhances access to patient data, reduces potential errors, and boosts the overall efficiency of medical facilities.

Nursing Informatics and the Nurse Informaticist

Nursing informatics is a discipline that integrates knowledge, information, and data to support nurses, patients, and other healthcare workers in their decision-making process in various settings. The support is realized via the use of information technology, information processes, and information structures (HIMSS, 2019). The primary goal of nursing informatics is to enhance the health of populations, individuals, families, and communities by optimizing communication and information management (NLN, n.d). Nurse informaticists are professionals who are competent in both technological use and nursing profession. Their role is to bridge the gap between technological advancement and the clinical staff. Because of their excellent nursing backgrounds, nurse informaticists ensure that the implemented procedures and tools are practical

and user friendly for the healthcare staff (ANA, 2016). They also design training programs to help healthcare staff use new technologies to improve care delivery. For instance, nurse informaticists can design a training program for medical-surgical nurses to improve their competence in using a new electronic medication dispensing system. Their other roles include writing policies, improving system performance, assessing clinical statistics, managing IT projects and monitoring the outcomes of quality initiatives.

Nurse Informaticists and Other Health Care Organizations

In epidemiology and public health, Informatics nurses collaborate with scientists to synthesize, obtain, and provide access to knowledge and information that healthcare workers use to promote the health of the population and community (McGonigle & Mastrian, 2018). Health care organizations involve nurse informaticists in the distinct level of healthcare delivery. These nurses assume leadership positions like Chief Nursing Informatics Officer or Director of Nursing Informatics to oversee the implementation of technology to improve care delivery (Cassano, 2017). For instance, the director directs and advocates the design and adoption of technological changes to boost care experience, quality, and efficiency in medical facilities and across the care continuum. Chief Nursing Informatics Officers (CNIOs), in contrast, manage the development of new technologies, facilitate the adoption of new technologies, and drive innovation (Cassano, 2017). They provide health professionals with the necessary support, like enabling data exchange between various departments and healthcare systems, monitoring of clinical events, and data repositories. Both the Chief Nursing Informatics Officer and Director of Nursing Informatics introduce strategic services in clinical education and encourage professional nursing

development.

Nurse Informaticists Interaction in the Healthcare Setting

Providing seamless experience to patients mandates effective communication and collaboration among healthcare workers. Interprofessional collaboration primary objective is to enable nurses and doctors to coordinate in administering the highest- quality of care. The partnership reinforces respect and trust among healthcare providers (McGonigle & Mastrian, 2018). Nurse informaticists use multiple technologies to streamline communication and facilitate collaboration in clinical settings. Their daily workflow entails assisting the nursing staff with challenges in the use of electronic systems (Kelly, 2016). They also monitor automated systems to improve efficiency in health care delivery (HIMSS, 2019). Nurse informaticists conduct training programs in case a new technology is implemented and informs staff about any modification to the system. They also participate in committees to help members with solutions to any issues that might arise as a result of implementing technological changes in the facility (Kelly, 2016). The nurse informatics engages in evidence-based projects to translate collected information into electronic format. They also participate in implementing evidence-based projects and monitoring

workflow throughout the process. Nurse informaticists work with other medical professionals to solve issues related to the use of the electronic system and support evidence-based projects.

Evidence-Based Strategies That the Nurse and Interdisciplinary Team Can Use To Effectively Manage Patients' Protected Health Information

The HIPAA (Health Insurance Portability and Accountability Act) requires health professionals to enhance the security and confidentiality of protected health information. The act outlines three safeguards that professional must adopt to protect patients information, including technical safeguards, physical safeguards, and administrative safeguards (Kruse et al., 2017). Informatics nurses can train other health professionals about the use of firewall software to protect patients' sensitive and confidential information. Additionally, informatics nurses can advise healthcare professionals on the use PINs, passwords, and encryption techniques to limit unauthorized access to patient information.

Nurse informatics in collaboration with other medical professionals can implement various types of controls to enhance the security of protected health information. These controls include access controls, local controls, administrative control, and physical control. Physical control entails the supervision of computing facilities and work environment, and locks to protect confidential and sensitive information (Cohen & Mello, 2018). Administrative controls include designing guidelines, standards, and policies for workplace computer systems. Informatics nurses must also educate healthcare workers on the use of data and software to control access to computer

system and information (Cohen & Mello, 2018). Healthcare workers must be aware of the significance of password and user authentication. The use of access controls will limit individuals' access to information based on their functions and roles in the organization. Adoption of these strategies will assist nurses and interdisciplinary to safeguard protected health information.

Opportunities and Challenges

Informatics nurses are competent in interpreting technology from multiple viewpoints like information technology, nursing workflow, and patient care. They add value to healthcare facilities by integrating knowledge and information systems to boost efficiency and patient experience with care delivery. Nurse informaticists assist healthcare workers in applying various technologies like computerized provider order entry and Electronic Medical Records in care delivery. They also work with multiple stakeholders in the health care sector to bridge the gap between technical and clinical perspectives while maintaining the patients' safety (Nagle, Sermeus & Junger, 2017). However, the addition of the nurse informaticist role has brought various challenges to nurses and the interdisciplinary team. For example, the pace of technological advancements makes some of the information gained by nurses and allied healthcare workers irrelevant. For this reason, nurses must continuously update themselves with the latest technologies in the market to promote care delivery.

Another challenge is that clinical practice will be team-based in the future. The team will comprise of patients and their families and interprofessional groups, and various virtual devices. The organization of teams will be around a specific client. Healthcare workers will have to

identify new ways of labeling these temporary online teams because they will be members of different virtual teams (Nagle et al., 2017). Therefore, technological implementation will challenge the management, leading, and evaluation of teams as well as information exchange and communication within groups. It will be nurse informaticists' responsibility to collaborate with the interdisciplinary team in using data analytics, assuming new roles, and interpreting and applying new knowledge to improve quality care outcomes through technology.

Summary of Recommendations

The key takeaways that the Chief Nursing Officer and Human Resource Manager should remember are:

- i. Nurse informaticist role is crucial in improving patient care delivery by using technology to reduce medication errors and improve patient experience
- ii. Nurse informaticists through their guidance and contributions in technological adoption improve workflows and best practices in managing information technology, processes, and information structures
- iii. Nurse informaticists monitor daily workflows, educates healthcare workers on the use of the electronic system, and address any challenges they may face when navigating the system.

Conclusion

The nursing profession is advancing at a rapid rate and nursing informatics will change the nursing practice through technological advancements. Informatics nurses role is to bridge the gap between technological advancement and the clinical staff. Because of their excellent nursing backgrounds, nurse informaticists ensure that the implemented procedures and tools are practical and user friendly for the healthcare staff. Additionally, they collaborate with other healthcare workers to implement security measures to protect patient's information from unauthorized users. Therefore, organizations in the healthcare industry must incorporate the services of informatics to boost the quality and efficiency of care provided to patients.

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