Nursing Informaticist Proposal

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Technology is a fast-paced, ever-evolving aspect of our world. Healthcare technology is no different. From electronic medical records to diagnostic machinery, advances in healthcare technology hold the potential for improvements in quality, safe patient care. Data about nursing care can potentially affect the productivity, efficiency, performance, effectiveness, cost, and value of nursing care (Mosier et al., 2019).

Nursing Informatics and the Nurse Informaticist

Nursing informatics is a nursing specialty that, simply put, is nursing science meets computer science meets information science. Nursing informatics integrates these sciences to identify, define, manage, and communicate data, information, knowledge, and wisdom in nursing practice (Sensmeier & Anderson, 2020). The nurse informaticist (NI) applies her information technology (IT) expertise with her nursing expertise to help the interdisciplinary team manage and understand data.

Nurse Informaticists and Other Healthcare Organizations

Other healthcare organizations have used nurse informaticists to help design and optimize electronic health records (EHR) as well as many other digital and technical applications. The contribution of nurse informaticists in developing and improving technologies is essential to reducing medical errors, patient care delays, and healthcare costs (Sensmeier & Anderson, 2020). Nurse informaticists are involved in building, maintaining, testing, and troubleshooting the EHR. They identify and address technical issues that could lead to adverse events and collaborate to develop efficient workflows. Nurse informaticists collaborate with interprofessional partners including IT, administration, and clinical staff and identify challenges at the point of care delivery. They communicate updates and changes to interprofessional staff. The nurse

informaticist is also involved in the training and education of staff on healthcare technology

(King et al., 2020, Figure 1).

Impact of Full Nurse Engagement in Healthcare Technology

When nurses are fully engaged in healthcare technology, patient care is improved on

many different levels. When nurses are a part of designing processes and workflows in clinical

practice, they weigh various options and use facts to analyze and determine the best actions to

take for the best patient outcomes. Examples include writing or rewriting policies and protocols

based on accumulated data to increase the quality of care. Nurses fully utilizing healthcare

technology can help reduce medical errors and their resultant costs by ensuring that

communication occurs completely, clearly, accurately, in time, and with the right individuals.

Communication errors are the main driver of medical errors (McKay, 2018). An example of such

is a computerized medication administration record with barcode scanners for medications and

patient armbands as an added layer of safety in addition to the five rights of medication

administration. Nurses can help drive continuity of care using technology to ensure that all

members of the patient care team have up-to-date, accurate information to treat and care for

patients such as laboratory and diagnostic results, vital signs, and other documentation in the

form of the EHR.

Interdisciplinary team members must employ strategies aimed at protecting patient

privacy, security, and confidentiality. This begins with secure software. For technologies to be

HIPAA compliant, certain safeguards must be in place. The U.S. Department of Health and

Human Services provides a privacy and security framework and resource guide. Among other

guidelines and rules, the following are listed. All protected health information (PHI) must be

encrypted. Encryption makes any data that is breached unreadable and unusable. Each authorized

provider must have his own username and password to log in order to restrict access to unauthorized users and monitor his use of the PHI. Technologies must also have an automatic log-off feature to prevent unauthorized users from accessing PHI. On the individual level, all team members must exercise due diligence in protecting patient privacy and maintaining confidentiality. This includes logging off when stepping away from screens, minimizing screens to avoid the prying eyes of onlookers, and using secure devices and applications when communicating sensitive patient information.

Healthcare professionals' workflow can be enhanced with the use of healthcare technology. Allowing nurses to help choose, help design, and modify healthcare technology applications, is one of the best ways to ensure efficiency. No one knows what will work best for a nurse like a nurse. Nurses are also advocates for what is best for patients. Choosing an EHR that suits the needs of the facility and staff can decrease the amount of time staff spends sifting through the information needed to care for patients by consolidating multiple sources into one comprehensive application. An efficient EHR can ease the burden of documentation. A decrease in workload allows nurses additional time to spend doing patient care which has been shown to increase patient satisfaction and safety (Carlisle et al., 2020).

According to a 2020 HIMSS survey, the average nurse informaticist's yearly salary was $79,487 with nearly half of nurse informaticists reporting earning more than $100,000 per year ("Results from the Himss 2020 Nursing Informatics Workforce Survey," 2020). The cost of creating a NI position for this facility is estimated to be around $200,000 per year with salary, benefits, and tuition reimbursement. This facility transitioned to a new EHR just three years ago. This EHR has been less than ideal for multiple reasons including lost charges due to coding and billing issues related to documentation. In addition to the millions of dollars spent purchasing

and implementing the current system, it has been reported that this hospital has lost several

million dollars in charges related to this current EHR. Other issues included inadequate staff

training, lack of user-friendliness, redundant documentation, broken links, and time-consuming

documentation resulting in non-compliance from staff. After only three years, the facility has

opted to implement a totally different EHR. This is an opportunity to make things right. Adding a

NI to the team could eliminate and reduce many of the issues previously identified. With the

addition of the new emergency department planned for this year, which is slated to have its own

radiology and laboratory suites, as well as state of the art patient monitoring equipment, a NI

would be ideal for assisting in the choice, implementation, training, and maintenance of this

technology.

Opportunities and Challenges

As previously mentioned, hiring a qualified NI is an opportunity for this facility to avoid

the mistakes that were made with the previous EHR. There will be opportunities to increase

quality through data tracking and using that data to make changes to systems and processes.

Patient safety can be enhanced through complete, accurate, and easy to access results and

information. The NI will be a resource for staff from all disciplines regarding healthcare

technology. The interdisciplinary team can collaborate to increase patient satisfaction and

improve outcomes through enhanced communication technology.

Summary of Recommendations

The contribution of nurse informaticists in developing and improving technologies is

essential to reducing medical errors, patient care delays, and healthcare costs (Sensmeier &

Anderson, 2020). NI bridge the gap between IT and caregiver staff. NI are a vital source of

information, suggestions, updated data, and the need for process changes regarding healthcare

technology. Just as technology has expanded in the field of healthcare, so has the role of nursing

informatics. The specialty of nursing informatics has matched this high-tech trajectory by

managing increasingly sophisticated applications, performing expanded job roles, and achieving

advanced education (Sensmeier & Anderson, 2020).

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