

Inclusion of Nurses in the Systems Development Life Cycle

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The healthcare sector continues to face several unique challenges. There has been an increased demand for enhanced and secure data management methods. There have been many significant advancements in computer technology in the modern world. The use of computers has become ubiquitous across many if not all, sectors. In the healthcare industry, computer technology has revolutionized many practices, increasing efficiency, patient outcomes, communication, and the overall satisfaction levels of healthcare providers and their clients or patients (Mcgonigle & Mastrian, 2022). Nurses form the majority of healthcare providers. Furthermore, nurses have the most contact and communication with patients. Risling and Risling (2020) assert that nurses play vital roles in decision-making regarding the use of information systems in the healthcare industry and the Systems Development Life Cycle (SDLC). The SDLC is a cycle involving planning, analyzing, designing, implementing, and maintaining healthcare information systems and nursing informatics (Wang et al., 2019). This paper analyzes the potential repercussions and consequences for organizations that fail to involve nurses in each stage of the SDLC when implementing or purchasing new health information systems.

Planning Phase

The planning phase is an integral part of any project. Effective planning ensures that the subsequent steps run smoothly and ensures the achievement of top-notch results despite the complexity or difficulty of a project. Organizations must conduct a feasibility analysis before implementing or purchasing a new information system. Failing to include nurses in this vital step could lead to developing an ineffective system that does not address all healthcare organizations.

Nurses form most of the healthcare team and spend the most time with patients.

Analysis Phase

The analysis phase entails evaluating a technology to see what works and what does not. In this phase, the project designers examine the requirements and workflows of the new system. Nurses manage patients and also collaborate with other healthcare professionals. Therefore, they understand all healthcare providers' responsibilities and workflow in patient care. Failing to involve nurses in the analysis phase could lead to developing systems deficient in positive workflows and failing to address all the healthcare needs.

Design Phase

This stage has various processes, including the essentiality of data and program visualization. It also includes how combining different aspects of a system can lead to productive and successful outcomes. Nurses are involved at every point of patient care and know the most essential and non-essential patient data at every phase of interaction. Failing to involve nurses in the design phase could lead to a system that is inefficient to use, time-consuming, and fails to collect all essential patient information at different stages.

Implementation and Evaluation Phase

The system developers collaborate with nurses and other healthcare members to bring the new system to life. Failing to involve nurses in this stage can lead to an unhelpful and unfamiliar system that nurses perceive as non-essential to patient care. Hosein et al. (2019) note that nurses dramatically improve healthcare services when they adopt new health information systems. Failing to involve nurses in evaluating the effectiveness of a system can lead to gathering unreliable data that does not identify possible gaps.

The **maintenance phase** involves continuous user support, which may involve system changes. Failing to involve nurses can lead to long delays in implementing changes to systems, delaying essential patient care.

I have not yet been involved in developing or selecting a health information technology system. However, there might be some upcoming projects soon. I am positive that I will be involved in the projects. This paper sheds light on the importance of involving nurses in the different phases of the SDLC.

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References

- Hosein, B., Luo, J., & Karami, M. (2019). Adoption of hospital information system among nurses: A technology acceptance model approach. *Acta Informatica Medica*, 27(5), 305. <https://doi.org/10.5455/aim.2019.27.305-310>
- Mcgonigle, D., & Mastrian, K. G. (2022). *Nursing informatics and the foundation of knowledge* (5th ed.). Jones & Bartlett Learning.
- Risling, T. L., & Risling, D. E. (2020). Advancing nursing participation in user-centered design. *Journal of Research in Nursing*, 25(3), 226–238. <https://doi.org/10.1177/1744987120913590>
- Wang, J., Gephart, S. M., Mallow, J., & Bakken, S. (2019). Models of collaboration and dissemination for nursing informatics innovations in the 21st century. *Nursing Outlook*, 67(4), 419–432. <https://doi.org/10.1016/j.outlook.2019.02.003>

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