**Discussion1:**

The submissions for this assignment are posts in the assignment's discussion. Below are the discussion posts for Ritu Adhikari, or you can [view the full discussion](https://waldenu.instructure.com/courses/116683/discussion_topics/1392545?embed=true&headless=1&student_id=64913).

from [Week 1: Discussion](https://waldenu.instructure.com/courses/116683/discussion_topics/1392545?headless=1&student_id=64913)

May 29, 2024 9:42PM

[Ritu Adhikari](https://waldenu.instructure.com/courses/116683/users/64913)

The system development life cycle is used to make important as well as appropriate organizational decisions for the adoption of technology as older systems are been replaced with new systems with more capacity to interfere with other systems. Creating the right team is the key to system development and Nurse Informaticist is a vital part of the team, they can be adopted for meaningful use. Administrators should use the SDLC carefully and wisely considering organizational workflow.

SDLC and its effectiveness

SDLC is an ongoing development. The SDLC I am familiar with is similar to the nursing process where nurses must first assess, diagnose, plan, implement evaluate, and revise. If the plan does not meet the need or if a new problem arises the nurse will either review the update or start a new one. Likewise in SDLC the first step is to understand the problem or the needs, the second step is to understand the solutions or address the needs followed by developing a plan, implementing the plan, evaluating the plan, and at the end reviewing the plan, performing the plan maintenance and system destruction and if there is a need for a major upgrade or needs to be replaced due to technological advances or organization needs then the new project is launched destroying the old system and the new life cycle begins. (McGonigle & Mastrian, 2022)

This helps in planning, designing, and developing within information systems management providing a structured approach to application lifecycle management,  every phase from inception to retirement is methodically considered and executed making it more effective. There is collaboration among stakeholders, leading to more robust and reliable information systems.

**Role of Nurse Informaticist**

Nurse informaticist plays an important role in the successful implementation of any project. They assist nurses in understanding and using the technology.  Healthcare information system necessitates the participation of nurses for their sustainability therefore they need to have adequate knowledge. To have a quality information system in place and for diverse use of technology in patient care, the nurse informaticist role is eventful and a difficult void to fill. Quality care in healthcare cannot be successful unless nurses take the lead.  Healthcare leaders should realize and delegate nurses to ‘prepare for the future healthcare as quality management can be revolutionized with the intelligent use of information technology.

In SDLC, Nurse Informaticists help to evaluate the data that is available, assess stakeholder needs, keep them informed on the progress, and then review current processes and procedures to identify areas for improvement. They provide input on the scope, timeline, and budget of the project. They gather and provide information about new workflows within the nursing system. They help in guiding nurses in using new technologies for continuous process improvement. (Verma & Gupta, 2017)

Nurse informaticist know both medical science and computer science making them capable of understanding clinical flow and patient care processes, they are well-positioned to judge whether the software is useful and facilitates patient care making it beneficial to medical, IT personnel, patients and the entire organization.

**References:**

McGonigle, D., & Mastrian, K. G. (2022). Nursing informatics and the foundation of knowledge (5th ed.). Jones & Bartlett Learning. Chapter 9, “Systems Development Life Cycle: Nursing Informatics and Organizational Decision Making”

Medha Piplani Verma, Sandhya Gupta. Software Development for Nursing: Role of Nursing Informatics. Int. J. Nur. Edu. and Research. 2017; 5(2): 203-207. doi: 10.5958/2454-2660.2017.00044.8

**Response 1**

Hello Berenice,

Thank you for the informative post, really enjoyed reading it. I do agree with you that EHR such as EPIC (used in my organization) can handle the complexity and acuity of our patient population. Epic, the product of SDLC is one of the leading EHR providers and is the most adopted EHR system across the globe where systems are designed according to our patient

I completely agree with MCGonigle and Mastrian that it is generally needed and beneficial to use a hybrid approach that blends models for a robust development process. For instance, the Case scenario presented by McGonigle and Mastrian proves the effectiveness of the hybrid approach, and how the team was able to create a robust system quickly by combining another method with the existing one.

In my organization, we also use the CDS tool to assist in clinical decision-making. It is a tool that  matches the characteristics of an individual patient to a computerized clinical knowledge base to provide patient-specific assessments or recommendations to the clinician for enhanced evidence-based decision practices” (Chishtie et al., 2023)

SDLC is constantly evolving and never finished to provide the best possible outcome.

**Reference:**

Chishtie, J., Sapiro, N., Wiebe, N., Rabatach, L., Lorenzetti, D., Leung, A. A., Rabi, D., Quan, H., & Eastwood, C. A. (2023, December 15). Use of epic electronic health record system for health care research: Scoping review. Journal of medical Internet research. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10757236/

McGonigle, D., & Mastrian, K. G. (2022). Nursing informatics and the foundation of knowledge (5th ed.). Jones & Bartlett Learning. Chapter 9, “Systems Development Life Cycle: Nursing Informatics and Organizational Decision Making”

**Response 2:**

Hi Wesley

Thank you for the post. You remind me of the time when we were transitioning from Quadramed to EPIC in a city hospital in NewYork, It was challenging in the beginning but the Nurse Informaticist who was present to assist us made it very simple for us. The System Development Life Cycle is a method that specifies the many steps required in system development to create a high-quality result. SDLC stages include the entire life cycle of a product, from conception through retirement, (Yeoh, 2021) therefore it might be a little complicated in the beginning to understand the system. Transition is not easy for everyone in the beginning, proper guidance is necessary during this phase and Nurse Informatics Plays a pivotal role during this transition.  She can bridge nursing and technology, advocating for technology that meets clinical and operational needs. Nurse informaticist assist in training staff on clinical Technologies/EHR, data management and analysis, compliance, research and development, and quality improvement. (Dane.schultz, 2024)

**References:**

Dane.schultz. (2024, April 10). Bridging the digital divide: The role of nurse informaticists. HIMSS. https://www.himss.org/resources/bridging-digital-divide-role-nurse-informaticists

Yeoh, J. L. (2021, September 16). SDLC (software development life cycle). Medium. https://medium.com/@Jia\_Le\_Yeoh/explain-sdlc-software-development-life-cycle-with-an-example-7a6726904bcb