Nurses are still more focused on patient care and outcomes rather than contributing towards the development of new systems, but nurses need to occupy a more important role in the advancement of technology innovation in health care because they have a solid foundation to build their design skills. Collaboration with nurses can play a significant role in improving digital health tools in healthcare systems (Risling & Risling, 2020), and not involving nurses in each stage of the SDLC might have dire consequences. Nurses are recognized as patient advocates, and they are involved in every aspect of patient care. They are an integral part, and they also have the responsibility to ensure that other healthcare professionals are doing their part to make sure that patients are receiving the best quality care. They are at the forefront to change the face of health care so they should take a step forward toward successfully implementing health IT.

 Nurses role is equally important in each stage of SDLC so they need to be part of all five stages. Kevin Johnson from the YouTube video asserts that the important part of the cycle is to recognize or understand that it is a cycle. We believe that our job is finished once we implement but that’s not true because there is also a post-implementation phase that’s why we need to understand that it is a cycle in the first place, therefore to understand SDLC, we need to understand all the stages of SDLC starting from planning, analysis, design, implementation, and post-implementation.

During the planning stage, we should know what the need is, for instance, in my organization, we are doing the BOOST 3 trial in our unit (Neuro ICU). It was started because we need a project that can benefit Traumatic brain injury patients, that was the need for our unit.  This trial was done to determine the comparative effectiveness of two strategies for monitoring and treating patients with traumatic brain injury in the ICU. This trial consists of several interventions listed under Tier 1, 2, and 3 to manage ICP and PBTO2. We should start with Tier 1 and wait 5 min before going to tier 2 and tier 3. Once we do tier 1 intervention and there is no improvement after 5 min, we should go with tier two and then tier 3 respectively. There is a computer setup in the room where we click tier 1 then it gives us a list of all interventions that have to be done and it will give 5 min for the patient to improve, there is no option in the computer to click and do interventions before 5 minutes if the patient is not improving, the computer will only let us click tier 2 after 5min even if the patient starts deteriorating. Nurses were not involved in the SDLC process of this project which had already resulted in a lot of issues. I had a patient on this trial once where I follow tier 1 for high ICP and low brain oxygen my patient didn’t improve at all, he started to deteriorate, I then quickly run to get the provider because if I waited 5 min for tier 2, the patient would have herniated. we then gave hypertonic and increase the sedation and change the vent settings that immediately help with the ICP and oxygenation, all the interventions we did were part of tier 2 and tier 3. As a neuro nurse, I was thinking in my head that If there was some kind of exception, where we don’t have to wait longer if the patient starts to deteriorate then this project would have been better, I have seen a lot of cases where we don’t have any time, patients herniate so fast if we don’t start treatment right away. IF Nurses were involved in the SDLC process of purchasing and implementing the boost three trial project then they could bring their experience and present their expectations and strategies to the table that focus more on outcomes, and results that are associated with patient safety and financial benefit. Once the need is identified collaboration with a multidisciplinary team to establish a plan of action is essential. McGonigle and Mastrian assert that “Creating the right team to manage the system development is the key”. This is very important to keep in mind.  We can get more ideas from different experts such as physicians, nurses respiratory therapists, IT personnel, and many more on how to make this project successful, In the Analysis and design phase nurses can play a vital role by making sure that the plan is acceptable and suitable. After the best practice is recognized, nurses will implement the system. Once it is implemented evaluation is performed by nursing staff because they are at the forefront, they are the ones who are following the boost three in my organization and can instantly discover if all of this is worth it or not. Therefore, In conclusion, SDLC with nurse involvement provides a path to deliver effective and efficient information that fits an organization and If Nurses were involved in BOOST 3 projects, it would have been a better fit for TBI patients in my organization.

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RESPONSE1:

Hi Glenda,

I enjoyed reading your post. I completely agree with your point that Nurses may not necessarily view themselves as contributors when creating a new system but rather they give importance to patient care and outcomes and spend the most time on patient care. Nurses not involving in the SDLC process does have fatal consequences, Nurses opportunities to step into the processes are time-limited, and not grabbing this opportunity may have detrimental consequences for both nurses and patients. (Risling & Risling, 2020) Nursing has so much to offer from ethical expertise, someone with in-depth knowledge, patient advocates, and many more, therefore, their involvement in the SDLC process will give valuable input to the project.

McGonigle and Mastrian assert that SDLC is a way to deliver an effective and efficient information system that fits with the planned business plan, and in health care nurses are the best person that knows what is good for the patient and the organization and based on their experience and expertise they can contribute to the SDLC process.

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RESPONSE2:

Hello Tammy,

I really enjoyed reading your post, Nurses can assist with tackling the issue that might arise if they are involved or present at all stages of decision-making because of their Clinical judgment and decision-making skills. Nurses also prefer using intuition that provides them with confidence in nursing skills, employs new nursing practice methods, and feeling of connection with patients. (Nibbelink & Brewer, 2018) I also agree with your point that allowing nurses in planning and feedback allows the project manager to understand what is working and what is not.  if it is not working as expected based on their experience and expertise nurses can offer suggestions on how this can be handled better in the future. As we already know the first stage to developing a system is to understand the problem, for which a thorough assessment of the entire organization should be performed. (McGonigle & Mastrian) The involvement of nurses along with other professionals in thorough assessment led to smoother planning, implementation, and evaluation of the system because nurses use the nursing process that involves assessment, planning implementation rationale, and evaluation in the workplace and along this, they are a part of different communities in their work environment that equip them with all the qualities to be a part of SDLC process.

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