Organizational systems and quality leadership in nursing

1. Root Cause Analysis

When an adverse event happens in the healthcare setting, a system known as a root cause analysis (RCA) is often used to try and better understand why the event occurred. This systematic approach looks to identify flaws in the system, to see if they can be corrected and to help prevent the occurrence from happening in the future (“ Institute for Healthcare Improvement,” n. d.-b). RCA is used once an adverse even has occurred, not prior to. It also does not look to place blame, but to understand the cause of a negative event. RCA looks at what happened, why the adverse event happened, and what can be done to prevent it from happening again in the future (“ Institute for Healthcare Improvement,” n. d.-b).

In the scenario presented to us a sentinel event ultimately resulting in a patient’s death was given. We would use RCA to help determine the cause so that any preventable circumstances could be corrected and this scenario does not happen again in the future.

RCA’s are completed using a team format. Team members would come from varied backgrounds that would have knowledge of the issue at hand. Having team members with diverse backgrounds allows for different perspectives and points of view. There are generally six steps associated with RCA. The first step in RCA is to identify what happened. In this scenario it appears that Mr. B our patient was over sedated in conjunction with a procedure, developed respiratory distress, ventricular fibrillation and subsequently dying. There are many identifiable factors that contributed to this happening. Lack of adherence to the facilities conscious sedation policy, lack of

monitoring post procedure, lack of communication between team members and specialties and understaffing were contributing factors.

The next step would be to identify what should have taken place. In our scenario that would have consisted of the doctor following conscious sedation protocol, proper monitoring of continuous blood pressures, ECG and pulse oximetry. This would include notifying the proper staff and addressing any abnormal results. The administration of supplemental oxygen was needed when the patient's oxygenation saturations were alarming. Respiratory therapist were available but not notified. Additional staff would have been called in to address the increased volume of patients arriving to the Emergency Department allowing for proper care and monitoring of patients.

Identifying causes of the adverse event is the next step. Lack of training in conscious sedation and resulting administration of too high a dose of sedation medication is one cause. Lack of communication between the LPN and RN regarding changes in vital signs and failure to address abnormal findings also contributed. Lastly an influx of patients resulted in understaffing which placed an increase of demand on the LPN and RN's time which contributed to the patient being left alone for longer periods of time with less monitoring.

Creating a causal statement is the next step. This statement consists of three pieces including the cause, the effect and the event (" Institute for Healthcare Improvement," n. d.-b). This event took place due to lack of proper training on the moderate sedation, lack of post procedure monitoring

and breakdown of communication due to understaffing resulting in a patient developing respiratory distress and atrial fibrillation with the end result of the patient being transferred to a tertiary facility and later passing away from these complications.

The next step in the RCA process is to create recommendations that would help to prevent the scenario from happening again in the future. In our case, all staff that would be performing or assisting in moderate sedition should receive mandatory education and not be allowed to perform this procedure until education has been completed and documented. Protocol checklists should be created and utilized for procedure and post procedure monitoring. Supervision/management should also ensure adequate staffing levels to provide safe and quality care for all patients. Lastly it is recommended that a summary be written and shared. The Institute for Healthcare Improvement states that flowcharts are often used for this purpose as they are a simple and clear method of detailing the event in the proper order (“ Institute for Healthcare Improvement,” n. d.-b).

2. Improvement plan

Once our needs have been identified, we can work on creating an improvement plan that will decrease the likelihood that this type of error will happen again. A moderate sedation protocol checklist should be created and implemented. Much like a surgical “ time out” each step should be addressed and checked off by all team members prior to the procedure happening. Each team member taking part in this process should receive training and education in moderate sedation prior to assisting in any

procedure. Training may include items such as medication management and monitoring expectations pre-procedure, during procedure and post-procedure. It should also outline who should be providing post-operative care and when to notify the provider or abnormal findings. It should also outline criteria for when the patient may be discharged. Having this protocol in place and adhering to it, will help to prevent this scenario from happening in the future.

B1. Lewin’s Change Theory

Understanding organizational change can be challenging. Kurt Lewin developed a model in the 1940’s that is still fundamental today. It involves three stages: unfreeze, change and refreeze. One great example that I came across on MindTools to help explain this involves an ice cube. If you would like to change the ice cubes shape, then you would need to unfreeze it turning it into water (Unfreeze). Then you could mold it in a new shape (Change) and refreeze the water back into ice in its new format (Refreeze) (“ Lewin’s Change Management ModelUnderstanding the Three Stages of Change,” n. d.). Motivating staff to want to change is an important piece of the unfreeze stage. Getting them to “ buy in” to the idea so to speak. Identifying the issue and showing staff member why the current process is no longer effective can be difficult and often meets with resistance. In our scenario putting a new protocol into place would be sure to ruffle some feathers. Detailing case studies and showing how this new protocol would improve patient safety should be stressed. The more people that are accepting of the change, the easier the transition to the change phase will be (“ Lewin’s Change Management ModelUnderstanding the Three Stages of

Change," n. d.). The change phase would involve providing the necessary training, education and initiating the protocol checklists. These changes can take time and do not generally happen overnight. Once people become more comfortable with the new processes and see how they can be beneficial they are more apt to participate. Refreeze would happen when staff has embraced the new protocols and they are being used throughout the facility on a consistent basis (" Lewin's Change Management ModelUnderstanding the Three Stages of Change," n. d.).

C. FMEA

Unlike RCA which happens reactively, FMEA which stands for failure mode and effects analysis (FMEA) is a tool to assess processes for possible issues and fixing them prior to them happening. It is often used to examine a process and the possible impact of making changes to that particular process, and to track the effect of those improvements over time (" Institute for Healthcare Improvement: Failure Mode and Effects Analysis (FMEA) Tool," n. d.).

C1. FMEA Process

Evaluating with FMEA begins with selecting a process to be assessed. Next we would need to assemble a team with members who have the appropriate skills and knowledge of the process that will be reviewed. Identifying and listing all the steps in the process in order would be next. The Institute for Healthcare Improvement suggests that flowcharting might help to visualize the process (" Institute for Healthcare Improvement," n. d.-a). Filling out the FMEA table is step four. This includes asking questions such as what could go

wrong and why, what are the consequences and what is the likelihood harm would happen and be detected. Severity of harm is assigned and a Risk Profile Number (RPN) is calculated. Possible interventions to improve safety are identified. Step five is to analyze the RPN's and plan improvements. The failure modes that have the highest RPN's would have primary focus. Evaluating possible impacts from the proposed changes would be the next step. Lastly we would use FMEA to assess and monitor any improvement (" Institute for Healthcare Improvement: Failure Mode and Effects Analysis (FMEA) Tool," n. d.).

C2. FMEA Table

Please see table in separate attachment.

4. Interventions

We would like to implement interventions that would help us to achieve the process improvements that we have identified to increase patient safety and decrease the likelihood of additional sentinel events. Collaborating with the educational department to create and conduct the required training and education for moderate sedation procedures would be vital. Additionally, a team should be created to determine which assessments and monitoring protocols should be included on the new moderate sedation checklist. This checklist should either be part of the electronic record, or if a paper version is to be used, it should be readily available with sufficient copies in the post procedural area. Unit managers, risk management and supervision would need to meet and discuss the best possible scenario for nurse patient ratios in the emergency room and for post procedural patients to promote patient

safety and satisfaction. Re-evaluation of these interventions once in place should take place at timed intervals such as three and six months. This will identify the success of the interventions and if any adjustments or additional interventions are necessary.

5. Leadership – Promoting Quality Care

As nurses, one of the best ways that we can promote quality care and demonstrate leadership is to advocate for our patients. Throughout our shifts, we are continually assessing and reassessing our patients, their needs, changes in condition and health status. Nurses foster communication not only between nurse patient relationships, but to all team members included in the patients care from the physician, therapies and social services.

5. Leadership – Improving Patient Outcomes

Promoting quality care and improving patient outcomes often times go hand in hand. One way that nurses can demonstrate leadership in improving patient outcomes is by continually educating themselves and applying evidence based practices. This can help to increase patient safety and satisfaction. Increased patient safety and satisfaction results in positive outcomes (“ Five Ways Nursing Leadership Affects Patient Outcomes,” 2016).

5. Leadership – Quality Improvements

Being an active participant on your unit can help lead to quality improvements. Joining a specialty team or working with management to tackle a specific safety issue such as fall risk management can help create

new processes or goals for the unit to assist in patient safety and satisfaction. Working with patients, processes and protocols, nurses are a great resource of information when it comes to identifying and implementing quality improvements.

E1. Leadership in the processes

Nurses are on the front lines when it comes to patient care and satisfaction. They make a valuable member of the RCA and FMEA process. Of all healthcare team members, nurses spend the most amount of time with patients on a daily basis. They can be a great resource when it comes to evaluating processes and procedures. Professional nurses are required to complete mandatory continuing education helping them to keep current of evidence based practice. Due to the amount of time spent with their patients, seeking their input is critical when it comes to discussing patient care.

Nursing staff work with many of the processes that would be under evaluation, and can help to determine where improvements can be made in regards to safety, workflow and patient/staff satisfaction. Nurses demonstrate their leadership by sharing their knowledge on patient care, keeping current on best practices and advocating for their patients.

References:

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