

Organizational systems and quality leadership essay sample

[Health & Medicine](#), [Nursing](#)



A. Complete a root cause analysis (RCA) that takes into consideration causative factors that led to the sentinel event (this patient's outcome).

“ A central tenet of Root Cause Analysis (RCA) is to identify underlying problems that increase the likelihood of errors while avoiding the trap of focusing on mistakes by individuals” (AHRQ, 2012). The prevention of errors is the main emphasis of a RCA. The process begins with gathering data in regards to the event, then the data needs to be analyzed, and the final step is to find solutions to the errors that were found so that a reoccurrence of the same error doesn't occur again. The team should consist of nurses, physicians, pharmacists, therapists, hospital administrators. Once the team is assembled they should work through the RCA process. This should begin with the patient and staff involved in the error being interviewed so data can be obtained that is important to the situation. The team then works together to find the root(s) of the problem. Once the root problem(s) is found the team comes up with solution(s) to help the error to not occur again.

There were multiple smaller events that led to the adverse event in the case of Mr. B. When the case is looked at there are several things that can be identified as part of the problem. Human and facility errors can be part of the result of the adverse event that occurred.

In this case Mr. B, a 67 year old male patient presented, to the rural hospital that has a 6 bed Emergency Department (ED), with severe pain to his left hip secondary to a fall.

While seeking care he came across some obstacles that led to his death. One of the main obstacles that he ran into was the staffing in the ED, which consisted of only one Registered Nurse (RN), Nurse J., one Licensed Practical Nurse (LPN), one Physician (MD), Dr. T, and a secretary. Upon Mr. B's arrival the the ED there were currently two other patients being cared for that were in stable condition. During Mr. B's stay in the ED, a patient was being brought to the ED in respiratory distress who would need immediate attention by the RN & MD. Also during this time "the two patients from earlier were waiting for their discharge instructions and the waiting room had become busier with more patients checking in to be seen.

The nurse could have called for back up staff, or had the secretary call for additional help at this time. But no additional staff was called or was help asked for. A nurse supervisor could have provided additional help at this point, but again no call for help was made. In the case of Mr. B, the lack of nursing staff and support team members, lead to adverse patient outcomes. Additional training may be needed for the staff on duty in regards to protocols and when to call for extra support. Also making sure staff has training that is up to date could have prevented some of the errors that lead to the adverse patient outcomes.

A-1. Discuss errors or hazards in care in the scenario.

Human error played a role along with the insufficient staffing for the patient acuity in the ED contributed to the causes of this event. Per the scenario when Mr. B arrived to the ED, he was hyperventilating, his leg was swollen in

his calf and appeared shortened, along with ecchymosis (bruising) and limited range of motion (ROM). Mr. B. had his pain rated at a ten out of ten. Mr. B's history includes prostate cancer, impaired glucose tolerance, elevated cholesterol and lipids, and chronic back pain. This was brought up to the MD at the time of the patient's admission to the ED, and a plan to sedate him and to relocate his hip was made. Mr. B's current medications, but not doses were evaluated upon admission. Of which he currently was taking oxycodone for his chronic back pain. Use of pain medications can increase the risk of respiratory depression when used with other medications, such as benzodiazepines.

The initial medication ordered by Dr. T was diazepam 5mg IVP, and then 5 minutes later without the intended sedating effect, hydromorphone 2mg was ordered to be given IVP. Dr. T was not satisfied with the sedation level and ordered an additional dose of each of the medications only 5 minutes later. It was at this point that the MD noticed that sedation wasn't initially achieved because of the patient's weight and his regular use of oxycodone which was being used to treat his chronic pain in his back. Nurse J. never questioned the orders for medications or the frequency at which they were ordered. It also does not appear that Mr. B's vitals were ever checked in between medication doses. This all contributed to the incident that occurred.

After all the medications were given Mr. B's vitals were as follows: Blood Pressure (BP) of 110/62, a pulse oximetry reading (Pox) of 92%. At this time Mr. B should have been placed on supplemental oxygen, his respiratory rate (RR) should have been checked and vitals should have been monitored more

closely. Also the respiratory therapist could have been called to assess Mr. B's respiratory states while Nurse J. and Dr. T finished the sedation and reduction process. Per the scenario the hospital's policy requires that patients that receive moderate sedation have continuous BP, ECG, & Pox monitoring done. Nurse J. who was trained in the sedation process and policy, nor the MD followed protocol. The precautionary measures that were required by the hospital could have prevented the outcome of Mr. B.

After the sedation and reduction that went well, the ED received a call about another critical patient. Mr. B's is placed on every 5 minute BP checks, and the Pox remains on the pt and Nurse J. leaves the room to start the new critical patient and is attempting to discharge her initial two patients. Vitals at 10 minutes after the end of sedation and reduction are a BP of 110/62 and a Pox of 92, he remained without RR and ECG monitoring. Just his son remains at the bedside. Mr. B's alarms go off and is heard by the LPN, the alarm shows a low Pox of 85% and the LPN resets the alarm and rechecks the patient's BP. The LPN requires more training in blood pressure monitor & Pox readings and when the RN or MD should be notified, along with training on appropriate interventions if the readings are low or high. If the appropriate training and interventions would have been done, the fatal event that occurred to Mr. B may have been prevented.

Nurse J., the LPN, and the MD continued to see new patients and discharge patients home. Mr. B per the scenario is not reevaluated by the RN or MD after the sedation or procedure, as required by policy. The alarm sounds

again and Mr. B's son comes out of the room to notify Nurse J. Upon arrival she notes that Mr. B's BP is critically low at 58/30 and his Pox reading is 79%.

There is no pulse noted and the patient is not breathing, a code is called for resuscitation efforts. The patient when connected to the ECG is found to be in ventricular fibrillation (v-fib). It takes 30 minutes to obtain a normal heart rhythm, but Mr. B. is intubated and needs the ventilator to breathe. Mr. B has no spontaneous movement noted at this time. Per the family request Mr. B is transferred to another facility for advanced care. At this facility, life support was discontinued, as he was determined to have brain death, and Mr. B died.

B. Use change theory to develop an improvement plan to decrease the likelihood of a reoccurrence of the outcome of the scenario.

One has to understand the influences on change in order for improvement to be able to take place. Kurt Lewin's change management theory works in three phases. 1. unfreezing; 2. change or transition; and 3. freezing or refreezing. "The intention of the model is to identify factors that can impede change from occurring; forces that oppose change often called restraining or 'static forces' and forces that promote or drive change, referred to as 'driving forces'" (Sutherland, 2013).

The first stage is the unfreezing stage. This is where individuals are helped to understand why the change is necessary because of the impeding factors to change were identified. (i. e. what is the current policy and what the current problems are within the policy). "Before old behavior can be discarded and

new behavior successfully adopted, the equilibrium needs to be destabilized (unfrozen)” (Barakat, E., Khudair, H., Sarayreh, B., 2013).

In Mr. B’s case, what could have influenced the change, such as the conscious sedation policy, was that there might not have been enough training provided, the training may have been out of date, and that the staff was too busy for the amount of patients, the severity of illness, and the monitoring that was required; and therefore, did not follow hospital policy. Once barriers are identified, change can be shown to be needed, and then action can be taken so improvements can be made to prevent further incidents. Staff needs to be made aware of the need for change and the barriers must be identified so that the change can be effective. Actions that can be taken is reeducation or retraining and further resources, given to the staff. All of this needs to be done so that the change is understood and can become the new policy throughout the hospital. Once the new policy is in place & data is collected it can be compared to the old data and further education can be done in regards to conscious sedation and the positive outcomes seen since the change was implemented.

The second stage or the transition stage is when the change actually occurs. It is important that all parts of the change be evaluated. During this stage individuals are learning the new ways of thinking and transitioning from the old ways. They are more willing to accept change during this stage. Change doesn’t come easily to most people and it can be frightening or uncomfortable. Continued support throughout this stage is important so that the change can be successful.

In Mr. B's case, change may include retraining in regards to the need for continuous monitoring when a patient is receiving moderate sedation, looking at staffing ratios, or having staff on call to come in when more critical patients are arriving, having more in hospital staff that could be called upon to assist in critical situations, having experts on the change be available to answer questions and to help staff transition to the changes. Also more training of the staff in regards to the risks of sedatives and their metabolism could be helpful in preventing further events. Support needs to be a two way street, in which staff feel comfortable speaking to each other in regards to a patient status or orders that they don't think are appropriate or may do the patient harm.

The third stage is also known as the refreezing stage. This happens when the changes are in place or stabilized and have been fully accepted, so that all staff work in the same way. Thought this stage the hospital should continue to provide support to the staff and evaluation should be an ongoing process so that if issues arise they can be worked through immediately. If the steps are followed, it will help the hospital be successful and it will hopefully prevent another fatal outcome as in the case of Mr. B.

C. Use a failure mode and effects analysis (FMEA) to project the likelihood that the process improvement plan you suggest would not fail. (Identify the members of the interdisciplinary team who will be included in the RCA and FMEA.)

Failure modes and effects analysis (FMEA) is another tool that is used in improvement processes for quality. “ Health care failure modes and effects analysis is a widely used technique for assessing risk of patient injury by prospectively identifying and prioritizing potential system failures” (Ashley, L., Armitage, G., Hollingsworth, G., Neary, M., 2010). This process of evaluating allows for the identification of areas in the process that may fail, so that it can address change before an error occurs.

In Mr. B’s case, FMEA won’t change what happened, but it can be an effective tool in drafting the new moderate sedation policy, in hope that errors can be prevented by any issues identified “through out the process. The process needs to begin with a team that is interdisciplinary, meaning it should have nurses of different skill levels, Physicians, Pharmacists, Respiratory Therapists, etc; who use the process, and some that don’t use the process such as senior staff members, researchers, leaders and they need to work together. (Ashley, L., Armitage, G., Hollingsworth, G., Neary, M., 2010)

Success will be determined by the commitment of those involved. It is also dependent on the clinicians with expertise to give recommendations and to give continuing support as the new process is implemented.

C-1. Explain how you would test any interventions to improve care in a similar situation by changing the process of care.

Necessary interventions in a similar situation of Mr. B’s could be recertification every year or two depending on how often the policy is used in

a department. There should be ample time to go through scenarios that could happen in a moderate sedation situation. Staffing should be reevaluated during busy times in the department, or staff should be placed on call. Open communication practices should be expected and encouraged in the department so to prevent medication errors, over medication, or being afraid to call and ask for help. The environment should foster team work.

A process should be in place for double checking orders and drawing up critical medications to be given in situations such as this. A double sign off should have to occur with the two parties verifying the order and the drawn up medication. A process should also be in place to have staff check rooms once a shift to make sure the room is stocked, supplies aren't missing, and equipment is in working order. Those who check off the room, or didn't check the room need to be held accountable if something is missing or not in proper working order. If this is done once a shift that means each room should be checked 2-3 times a day and would hopefully prevent missing items.

Ongoing evaluations would need to be done in regards to the new processes so that if any new or further issues are occurring, they can be addressed in a timely manner and changes can be made. This would all be done in hopes of creating teamwork and communication between all staff members, so that an increase in patient safety and better care can be given.

C-2. Discuss pre-steps for preparing for the FMEA.

A system must first be analyzed so that a new system can be developed and implemented. The pre-steps of preparing for FEMA include organizing the team and having those members list what they see as failures in the system or process they are evaluating. Once they have identified the failures, they must prioritize them so they can be addressed appropriately. During the pre-steps the data the hospital has is evaluated and compared to other data. In this scenario the data about moderate sedation process, the medications used, and the training will all be evaluated. Data should include positive and negative parts of the process and the outcomes should also be included, again positive or negative.

C-3. Describe the three steps of the FMEA: severity, occurrence, and detection.

“ Each failure mode has a potential effect and each potential effect has a relative risk associated with it. The relative risk of failure and its effects is determined by three factors: severity, occurrence, and detection” (ICMA, 2014). All the factors are rated on a one to ten scale, with one being the least significant and ten being the most significant.

Severity is related to the consequences that would result from a failure mode (which are patient harm or never events) if it would occur. In this scenario the severity was related to Mr. B's final outcome, which was his death. His death occurred due to a system failure. Occurrence rating is the assessing for the process failure to happen. Detection rating is recognizing a failure mode or a cause for a failure mode before a patient is harmed. Mr. B could

have benefited from the detection rating if the system was in place prior to his visit, as it should have been noted that lack of staff, lack of equipment usage, and lack of communication were all an issue prior to his visit.

D. Discuss the key role nurses would play in improving the quality of care in this situation

Nurses have a very important role in providing safe patient care. A RN needs to be able to communicate well and work as a team player. They need to be up to date on their knowledge base and be prepared for what could happen in the worst case scenario. The patient must come first and they need to be willing to advocate for their patients in any situation.

In regards to Mr. B's care, some simple things could have been done and his visit could have had a different outcome. Nurse J. should have made sure communication was effective when giving Dr. T. report on the patient after admission. Also Nurse J should have communicated the need for another nurse and the respiratory therapist when the call came in for the patient in respiratory distress, as she knew she was busy with the moderate sedation of Mr. B, and was trained in the policy & the monitoring it requires. This would have been acting as an advocate for her patient, and the new patient that was coming in, also she would have been using her resources that were available, and using great communication skills. All of this would have allowed her to stay with Mr. B to do her assessments and monitoring that is required with moderate sedation policy, that she was trained in. This all could have led to a different outcome for Mr. B.

Resources

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