

# [Institute for quality healthcare improvement essay sample](https://assignbuster.com/institute-for-quality-healthcare-improvement-essay-sample/)

[Health & Medicine](https://assignbuster.com/essay-subjects/health-n-medicine/)

The provided scenario gives an account of a busy emergency department with competent staff, and the multiple errors that led up to the most severe error possible in healthcare, unnecessary death of a patient. A root cause analysis (RCA) can be utilized to help understand the systems at fault within the facility so that improvements can be determined and implemented to prevent any future occurrences (Cherry, 456). RCAs focus on systems rather than blaming individuals involved, therefore they are only appropriate in cases where there has been no willful negligence or criminal acts (Huber & Ogrinc, 2014). The overall purpose of RCAs is to find out the causes of the adverse event and determine how to keep similar errors from repeating in the future.

Before the process can start, a team must be assembled as quickly as possible. The Institute for Healthcare Improvement suggests a multidisciplinary group of 4 to 6 individuals, including representation from a quality improvement department whenever possible (Huber & Ogrinc, 2014). The teams can then organize into roles such as; team leader, recorder, advisor and team members.

The team can then start the process of the root cause analysis, which is to identify what happened. Conversation among the team, review of documentation such as incident reports will assist in giving a general outline and understanding of the event that occurred (Huber & Ogrinc, 2014). The team can next further clarify the details, potentially conducting further interviews or a cite visit can be of assistance for this. It is important for the team to get as much detail as possible regarding the event for the RCA to be effective. A flow chart showing the process of the event can then be made to assist with the next steps of the stage.

Next, the team should determine what should have happened. This may involve policy and procedure review, research of best practice models and conversations with department heads and specialists (IHI, 2004). A separate flow chart can be made with this data, then compared to the flow chart of the event in question, for better understanding of where the process’s weakness lie.

The next step of the RCA is to identify both direct causes and contributory causes of the process failure. Direct causes are the most apparent factors for the error, in the given scenario it’s the failure to recover and monitor the patient post procedure. Because the patient was not monitored, the side effects of the medication caused respiratory depression, which, without proper intervention caused respiratory failure and eventual death.

The contributory factors are indirect causes of errors such as staffing issues, poor communication and failure to follow proper procedures, these factors are what should be the focus for change and restructure.

Contributing factors in the scenario include high dosing of narcotics and benzodiazepines, with little time between doses for effect to be apparent. The patient’s history of chronic narcotic use and assumption made by the physician that a tolerance had been generated. Failure to place the patient on supplemental oxygen, even with an oxygen level of 92%, which falls into the low normal range, and EKG and oxygen monitoring was not initiated for central monitoring at the workstation. The LPN disregarded the low alarming oxygen level and either a communication error occurred when the information was not passed on to the RN, or the LPN is in need of further training. Additionally, high patient census and low staffing were also contributing factors leading to this sentinel event.

Once identified the causative factors can be further broken down into groups for further organization and clarification. These main categories may include patient characteristics, task factors, individual staff members, team factors, work environment, and organizational and management (IHI, 2014). Next, use of a cause and effect, or wishbone graph can be constructed to clarify the error and process for the team, leading up to the event.

The committee at this point needs to develop causal statements. These statements link the cause to its effects and then back to the main event that promoted the root cause analysis (Huber & Ogrinc, 2014). Guidelines for writing causal statements include the need for clarity in the relationship, statements should use neutral language and not imply blame, cause should be given for any human error, and any violation of procedure should also have a preceding cause (Huber & Ogrinc, 2014).

Recommendations for interventions for change must next be made for the process improvement process to be successful. Recommendations should meet the following criteria; they should be clearly linked to the identified root causes, recommendations should address all of the root causes, be designed to reduce the likelihood of reoccurrence and severity, and be clear and concise (Huber & Ogrinc, 2014). The acronym SMART is also helpful: Specific, Measurable, Achievable, Realistic, and Time measured.

Once recommended changes are agreed upon the team can use the concept of change theory to decrease the likelihood of recent sentinel events similar to the example given. The IHI gives this definition on change theory “ A change concept is a general notion or approach to change that has been found to be useful in developing specific ideas for changes that lead to improvement (IHI, 2004).” Recommended categories for change theory include simplification, elimination of waste, improve workflow, manage time, and change the work environment. For this scenario a possible change to workflow, such as calling a “ float” RN to the ED to help with sedation could be considered. A change to the work environment could possibly take place with the addition of more RN staff or support staff to assist when the RN is unable to leave the bedside. The nursing staff could brainstorm on time management, possibly the RN or a different sedation trained RN could recover the patient at the bedside while completing charting and other computer tasks, meanwhile still monitoring the patient for safety.

The team can test the effectiveness of these interventions with the use of aim measures including outcome measures, process measures and balancing measures. These allow for feedback on if the changes and interventions initiated are effective and an improvement (Robert, Murray, & Provost, 2009). The team could also consider using a PDSA cycle for the analysis for effectiveness. This method uses four continuous steps, Plan the intervention, Do or implement the change, Study the outcome of the intervention for improvement or changes, then Act or decide if further changes need to be made for the improvement process to be effective (Robert, Murray, & Provost, 2009).

A different method of quality improvement could be used to analyze the given sentinel event, known as Failure Modes and Effects Analysis or FMEA. This is systematic method for evaluating processes to identify where and how it might fail, and acts proactively to make changes to improve quality and safety. Similar to a root cause analysis, the FMEA process should start with the assembling of a multidisciplinary team, preferably a representative from every department involved with the process in question.

Just like a root cause analysis the next step is to clearly identify the process, breaking down the pieces as much as possible. Next, the team should list failure modes and causes, meaning identify what could go wrong with the process, even in rare instances as well as the possible causes (IHI, 2004).

Once this data has been established and agreed upon the team needs to assign a numeric value, know as the Risk Priority Number (RPN). The three components that make up the RPN are occurrence, or how often the error is likely to happen, detection, if the error occurs how likely will it be identified and severity, how severe is the error if it were to occur. A numeric value is then calculated from 1 to 10, with 1 being low and 10 being high. The process improvement team can then focus on the modes with high RPNs, as these are considered to be the most important part of the process to spend time on for quality improvement (IHI, 2004).

Because nurses are the key caregivers in acute care, they can significantly influences the quality of care provided, which in turn affects patient outcomes and safety. The nurse in the scenario can be an active team member in the quality improvement process and play a vital role in education for LPNs. Additional commitment could be made to join an evidence based practice committee, with a focus on conscious sedation policies as well as advocacy to look at staffing ratios and availability of resources to assist the ED during times of high acuity and census.

Resources

Cherry, B., & Jacob, S. (2010). Contemporary nursing: Issues, trends, and management (5th Ed.). St. Louis, Mo: Mosby Elsevier.

Huber, S. & Ogrinc, G., (2014). Institute for quality healthcare improvement. PS 104 Lesson 2: How a root cause analysis works. Retrieved from http://app. ihi. org.

Huber, S. & Ogrinc, G., (2014). Institute for quality healthcare improvement. PS 104 lesson 1: root cause analysis helps us learn from errors. Retrieved from http://app. ihi. org/lms

Institute for Quality Healthcare Improvement, (2004). Using change concept for improvement. Retrieved from http: www. ihi. org/resources/change

Institute for Quality Healthcare Improvement, (2014). Failure modes and effects analysis (FMEA) tool. Retrieved from http://www. ihi. org/resources/Pages/Tools/FailureModesandEffectsAnalysisTool. aspx

Robert, L. & Murray, S., & Provost, L. (2009). Institute for Quality Healthcare Improvement. QI 103: Measuring for improvement. Retrieved from http://app. ihi. org