Root Cause Analysis

An elderly patient, Mr. B, is taken to the hospital complaining of considerable pain in his leg and hip area. After being cared for by a nurse and doctor on duty for some time, he tends to show some form of stability. This is particularly because, by the time the doctor left to handle another emergency, Mr. B. didn't show any signs of discomfort or distress. Unfortunately, the patient later had breathing problems; he is air transported to another hospital for advanced care, but dies seven days later. What really led to the death of Mr. B? This will be established by studying the sequence of events that possibly led to the death of the patient. The conditions that allowed the problem to occur and other problems surrounding the death of a patient will come into play.

For starters, the rural hospital appears to be understaffed. This is apparent in the fact that there were only one ED and two other patients awaiting his orders or further treatment when Mr. B arrived at the hospital. Additionally, there were only two nurses- one LPN and the other RN. This means that at any one point, there is an emergency patient who is not under the care of a healthcare professional at the hospital. Another event that would have caused the problem is the process of sedation. The patient was sedated around three times using different doses of hydromorphone and diazepam- to allow manual manipulation, relocation, as well as alignment of the patient's hips. Unfortunately, all this was done before reviewing the medical history of the patient.

Doctor T later learned that Mr. B's weight and the regular use of Oxycodones was making it difficult for him to be sedated. 20 minutes later, the patient is then sedated, and hip reduction procedure is conducted successfully. Meanwhile, although not on any supplemental oxygen, the patient seems to have tolerated the procedure and remained sedated for a while and showed no indications of distress and discomfort. Another conceivable basis of the death of the patient is that he was left without supplemental oxygen, and also his ECG and respirations were not being monitored. Later on, the patient is reported by the son to have problems breathing on his own, he is resuscitated and later on taken to a tertiary hospital for advanced care where he died after seven days. The root cause of the patient's death is understaffing in the hospital. Had the rural hospital had enough doctors and nurses, doctor T, or perhaps another doctor, would have reviewed the medical history of the patient and accord him sufficient attention.

Improvement Plan

The fact that the rural hospital where Mr. B was first admitted is understaffed cannot be refuted. Doctors and nurses are obviously unable to balance their attention among all

the patients in the hospital, especially the ones who are brought on an emergency basis. Management of change in other industries has already been identified. To facilitate change in the hospital and consequently prevent the likelihood of the people dying due to insufficient attention of health practitioners such as nurses and doctors at the hospital, change theory is applied here.

For starters, the issue of group dynamics is critical in ensuring successful implementation of an appropriate improvement strategy (Arbab Kash, Spaulding, Johnson & Gamm, 2014). Specifically, the support of the board of directors and this includes medical, nursing, and administrative directors should be sought. This will be achieved by providing background information on the project goals as well as a detailed road map. The backup of the top level management is important as this will send a message of commitment to all the staff members of the hospital, especially when new members of the staff such as nurses and doctors are recruited.

As far as group dynamics is concerned, it is important to identify change opponents and change promoters (International Journal of Healthcare Management, 2014) among the hospital staff through informal interviews and hospital staff meeting. The unfrozen step is obviously the most sensitive step. It requires organizing meetings so as to inform the board of directors and make them understand why there is a prerequisite to staff in more doctors and registered nurses at the hospital. The doctors and nurses should also be continuously involved in all the discussion because their input is imperative.

Then there is the move step which entails implementing the recruitment process. The board of directors will be accountable for designing the job descriptions and establishing how and when the interviews will be conducted to bring in new doctors and nurses especially the ones responsible for handling emergency cases. The newly hired nurses and doctors will then be taken the regular orientation process to make sure that they are conversant with the hospital operations. The last step (unfreezing) is where feedback is provided to the board of directors and other concerned parties. This is done to ensure that gaps are identified and dealt with accordingly.

Are patients – especially emergency patients-receiving enough attention from the doctors and nurses? Is the present doctor- patient ratio reasonable? What changes can be implemented? These are basically some of the questions that the investigation should seek to respond to.

It is important to measure the likelihood of the process improvement being successful. In this case a failure mode and effects analysis are being used to project this likelihood. The interdisciplinary team will be comprised of a selection of board of directors, including nursing, doctors as well as administrative directors. There will be two medical doctors,

two nurses and two individuals from the administrative part of the board of directors. The leaders of the teams will be responsible for laying conducive groundwork for the team initiative, together with empowerment so to allow for changes as well as recommendations for change and time to accomplish the task.

There will be a facilitator/leader, a record keeper, a person responsible for ensuring effective time management, as well as a champion. The extensive voice of the current emergency doctors-especially Doctor T-may is required during the data collection or sensing stage. Specifically, the input of the administrative board members will come in handy because they are more knowledgeable about the process. As this is an issue of urgency, the facilitator will be someone in possession of team dynamics skills and rapid decision-making skills. The ground rules are obviously a necessity in this case for the purpose of defining the scope and providing parameters within which to work (Kim, Jang& Lee, 2010).). The parameters provided such as timeline, financial costs, and patient- doctors/nurses and so on will be used in ensuring successful implementation of the process.

Right from the onset, the FMEA team will consider questions like; how will we know we have attained success, what is the most effective and efficient timeline? It is from these questions that a control plan or metrics will be realized. Preparations are critical to having a complete understanding of the process being analyzed. In this respect, the ensuing questions will be answered: What are the necessary steps? What are the inputs and expected outputs? How are the inputs and outputs related? (Kumru & Kumru, 2013).

Basically, the team will use the FMEA three criteria to assess the entire problem. This includes the severity of the impact on the customer, how often the problem is likely to occur and how easily the problem can be detected. The associates of the team will be answerable for setting and agreeing on a ranking ranging between one and ten, where 1 is low and 10 is high for the levels of severity, occurrence and detection of each the failure mode. Even though FMEA has traditionally been a qualitative process, the use of data (if any) is advisable in order to qualify the decisions made by the team regarding the ratings. Severity rankings consist of what is considered important to the hospital or the patients. A high ranking represents a high effect while a low ranking represents a low effect. On the other hand, occurrence rankings encompass ranking the likelihood of a failure happening during the expected lifetime of the service. A low ranking indicates the probability of it not happening while high ranking shows it’s inevitable. Lastly, detection ranks represent the possibility of the problem being detected and dealt with prior to its occurrence. Low ranking figures shows a greater likelihood of them being detected while high-ranking figures says that the problem is not possible to be detected(Morrill,

2013).The team will make use of FMEA matrix to determine the severity, occurrence and detection of potential patients' death after recruitment of new doctors and nurses.

The nurses, especially the ones already working at the hospital will help the new doctors and nurses to be acquainted with the hospital operations by providing updates of what they should expect from the patients and the community at large. Their involvement in the project implementation will also be very useful because they will provide information to the rest of the board of directors as far as the weak areas of hospital operations are concerned. This explains why they shouldn't be left out during the numerous meetings that will be held to spearhead the process of recruitment of new hospital staff.

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