Root-Cause Analysis and Safety Improvement Plan

Name

University

Date

Root-Cause Analysis

The Root-Cause Analysis (RCA) will examine a medication error that led to the death of a patient. The medication error saw the death of a patient due to negligence and flawed communication infrastructure. In this regard, the paper seeks to describe the chronology of the failure, determine the root cause of the medication error, and deliver a variety of strategies that would help in preventing future occurrence of similar medication errors.

Analysis of the Root Cause

The medication error features a clinic in California, where a patient presented with symptoms of cardiovascular disease. From the medical history and examination, the doctor requested a test on cardiac markers. Due to the patient's condition, a nurse was asked to draw the blood sample and send it to the laboratory for examination of cardiac troponin levels. Besides, the nurse had other critically ill patients to care in a different department. As a result, she proceeded to collect the blood sample and delivered it to the laboratory.

As always the case, the laboratory technician often contacts the respective wards to pick the test results for the patients under their sole care. Also, in some cases, the nurses pick results individually. In the event of an emergency, a laboratory technician has to call the nurse promptly and communicate the issue. The laboratory technician proceeded to conduct the test and noted high levels of cardiac troponins, which would be fatal if left unattended (above 0.40 nanograms per milliliter). However, due to technical hitches, the laboratory technician could not reach out to the nurse via phone call, leading to delayed medication. Also, with other responsibilities, the nurse did not show up in time or make follow-ups to get the results in time. In the process, the patient developed a severe heart attack and succumbed.

Analysis

Regarding the analysis, inadequate knowledge and negligence led to the error. In this case, the nurse was to make an individual follow-up on the sample due to the fatalities attached to the cardiovascular diseases. The delay led to the worsening of the patient's medical condition.

Also, it evident that understaffing (as a resource factor) may have played a role in the error. The nurse was overwhelmed with responsibilities to the extent of failing to provide adequate care to a vulnerable patient. Cases like cardiovascular diseases usually require close monitoring of the patient and regular checks on the cardiac profile. Besides, taking into account the possible delays in the laboratory (in handling biochemistry test), the nurse was supposed to remain vigilant for any happening. The nurse can consider conducting Cardiopulmonary Resuscitation (CPR) if the patent develops breathing problems.

Poor communication infrastructure motivated the medication error because the technician could not make a timely intervention to prevent to save the patient's life. Communication is essential in a healthcare set-up since it helps in initiating a rapid response to critical conditions (Koehn, Ebright, & Draucker, 2016). For example, in this case, the patient could be saved if the communication network was competent. The nurse would immediately get the results of the test and consult the clinician in time.

Improvement Plan with Evidence-Based and Best-Practice Strategies

The clinic needs to ensure proper and adequate staffing of the facility. The move promotes the devolution of tasks and the sharing of responsibilities. For instance, every nurse will be assigned a manageable number of patients to ensure the provision of quality care and a reduction in the errors (Koehn, Ebright, & Draucker, 2016). Overwhelming tasks often lead to fatigue and failure of the nurse to attend to critical conditions. The staffing should be done promptly to avoid the reoccurrence of similar errors. However, the head nurse must assess the

number of required nurses and communicate with the human resource and the CEO to initiate a recruitment process.

Training of the nurses will be an essential step in mitigating the errors resulting from ignorance and negligence. The nurses should be educated on the procedures for handling certain delicate patient conditions (Latimer, Hewitt, Stanbrough., & McAndrew, 2017). For example, in the above case, the nurses attend seminars that touch on the importance of regular and close monitoring of cardiovascular diseases like pneumonia and myocardial infarction (Roversi, Fabbri, Sin, Hawkins & Agusti, 2016). The facility can consider internal or external training of the nurses.

Internal training entails hiring a cardiovascular expert or surgeon to educate the nursing staff. Seminars and conferences expose the caregivers to greater knowledge, challenges, and expertise that aid in professional development and competence (Hanaysha, 2016). The nurse will be able to interact with colleagues and share vital concepts in caring for the critically ill patient to ensure stability and promotion of good health. A successful training process can last for 1-2 weeks and an additional seven days for adjustments.

The facility should maintain the communication systems to enable timely interventions and eradication of medical errors. Effective communication network guarantees strong inter-departmental links and effective way to salvage a condition (Hanaysha, 2016). Maintenance of communication can last for a maximum of 2 days.

Existing Organizational Resources

The implementation process requires a multiagency approach to achieve the best results (Cloete, 2015). CEO, senior nurse, IT director, and Finance officer are among the shareholders to oversee the successful implementation of the proposals. The senior nurse will assist in the

planning of the training process and ensure the successful implementation of the concepts in patient care. Also, the nurse participates in the recruitment process and ensures proper staffing of the wards. Besides, the finance officer and the CEO provide financial assistance and help in the recruitment process, respectively (Cloete, 2015). Training and maintenance of the commination network will need approximately $7900. The health facility can utilize its library (as an available resource) to enhance competence among the employees. The caregivers will be able to access an unlimited number of nursing books for research on how to deliver effective patient care as per the prevailing patient conditions.

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