Root Cause Analysis

[Institutional Affiliation(s)]

Author Note

**RCA**

**Response A**

The aim of root cause examination is to understand and demonstrate the causes of the adverse incident that can be corrected by following some improvement procedures (Giammaria et al., 2018).

**Response A (1)**

**Stage 1 - Identifying What Happened**

This is the first step that identifies what happened in an accurate and complete pattern.

**Stage 2 -Determine What Should Have Happened**

In this stage, what must have occurred in ideal cases would be examined.

**Stage 3 -Determine Causes**

This phase includes to determine the aspects that contributed to the problem.

**Stage 4 -Developing the causal statement**

This statement links the cause with the effects of the key incident.

**Stage 5 -Produce List of suggested Activities to Avert the Reoccurrence of the Incident**

A list of suggested activities is then drawn up covering numerous classifications.

**Stage 6 -Transcribe a Summary and Share It**

Between all the shareholders the summary is usually transcribed down.

**Response A (2)**

**Step 1**

Sedatives diazepam and hydromorphone was administered to Mr. B as he was taking oxycodone medicines which is an opioid. The ventricular fibrillation was the effect of hydromorphone administered in spare. Adverse effects of the two drugs such as troubled breathing and even brain death can occur (Giammaria et al., 2018).

**Step 2**

Supremely, the healthcare provider should have administered other sedatives to control the adverse effects.

**Step 3**

Amalgamation of the two medications has certainly produced severe side effects.

**Step 4**

The two drugs administered by Doctor T and Nurse J caused the brain death.

**Step 5**

The reoccurrence of the event could be avoided if doctor T and nurse J would have observed the adverse effects of the medications timely.

**Step 6**

Mr. B was admitted with a complaint of hip area and leg hurt. The two drug side effects and ventricular fibrillation resulted in troubled breathing and keeping the fragility of the patient, the withdrawal effects of the tranquilizers pooled with the opioid medicine (oxycodone), together with Mr. B's health led to his death.

**Response B**

The Lewin process is a three-step process used to progress an improvement plan that can decline the probability of the incident consequences. The unfreezing step is a crucial step involved in the development of awareness among team members and people to accept change in the organization and policies (Giammaria et al., 2018). The second step is the change which includes the stages in which an organization moves towards a transition. The third step is refreezing which represents the reinforcement, stabilization and the solidification of a change occurred in an organization.

**Response B (1)**

In the current scenario, the event entails that the change is needed to be implemented in the hospital (unfreezing), advancement and improvement in the delivery of healthcare services by the nurse and doctor are required (change) then the changes has to be retained to reverse the outcomes of such event (refreezing). The nurse and the doctor should have taken a proper medical history of Mr. B to decrease the likelihood of the two-drug side effects. Also, the adverse effects should have been noticed timely to deliver the services appropriately such as ECG record and other vitals should be monitored carefully. The changes made should be solidified as a policy to improve healthcare services.

**Response C**

The aim of FMEA is to apply arrangements to decrease the catastrophes, to take action to continue improving and to diminish the risk of failures (Rah et al., 2016).

**Response C (1)**

Phase 1: Select a procedure to assess with FMEA (Rah et al., 2016).

Phase 2: Recruit a multidisciplinary team.

Phase 3: Have the team meet together to list all of the steps in the process.

Phase 4: Have the members’ list failure modes and causes.

Phase 5: For each failure mode, have the team assign a numeric value.

Phase 6: Assess the consequences.

Phase 7: Utilization of RPNs for development efforts.

**Response C (2)**

Not provided

**Response D**

First of all the change and the intervention are established (Rah et al., 2016). Once it is established now it would be tested via the process of Plan-Do-Study-Act. This involves the steps in which first-team would focus on aims and changes in the emergency department. The major step is the presence of ACLS expert in the emergency department to test the interventions. The succeeding procedures of the sedation would help improve care.

**Response E**

**Promoting Quality Care**

The nurses are the significant team members who contributed a lot to the promotion of quality care. This includes two steps, first carrying out the interdisciplinary procedures to achieve organizations' quality improvement goals and second to improve the sensitive indicators that directly affect the health of the patient.

**Improving Patient Outcomes**

The improvement in the sensitive indicators that directly affect the health of patients would help in improving patient outcomes.

**Influencing Quality Improvement Activities**

The leaders of the hospital care facilities and nurses can improve and empower the staff to provide an environment that promotes quality care and improve sensitive indicators that are not achievable without proper management and leadership (Sujan et al., 2018).

**Response E (1)**

The availability of expert nurses, the emergency care unit specialist and the expert of ACLS certified in RN can significantly improve the activities of the hospitals performed using RCA and FMEA (Sujan et al., 2018). For example, the hospitals can ensure the development of quality improvement and improve sensitive quality indicators that can lead to the healthcare society particularly in the RCA and FMEA procedures.

# References

Giammaria, A., Godbole, S., Ponnalagu, K., & Sankaranarayanan, K. (2018). *U.S. Patent No. 10,009,216*. Washington, DC: U.S. Patent and Trademark Office.

Halbersberg, D., Miranda, V., & Gal, E. (2018). *U.S. Patent No. 10,061,637*. Washington, DC: U.S. Patent and Trademark Office.

Rah, J. E., Manger, R. P., Yock, A. D., & Kim, G. Y. (2016). A comparison of two prospective risk analysis methods: Traditional FMEA and a modified healthcare FMEA. *Medical physics*, *43*(12), 6347-6353.

Sujan, M. A., Embrey, D., & Huang, H. (2018). On the application of human reliability analysis in healthcare: opportunities and challenges. *Reliability Engineering & System Safety*.