

# ICU

## Scenario 48

Appropriate for: ICU  
Setting: Hospital

A 44-year-old female is admitted to the Medical ICU in acute respiratory distress with upper and lower GI bleeding. Her past medical history is significant for end-stage liver disease due to alcohol abuse. The patient is intubated in response to worsening respiratory distress, aggressively resuscitated, and given blood transfusion and vasopressor drugs. Multiple consultation services are involved in the patient's care. All recommend that the patient's DNR status be addressed. Eight hours into her stay, a member of the GI consultation team places a call to the patient's mother, who lives out of state. Her mother is aware that her daughter has end-stage liver disease and states that her daughter would "not want all these things done and they should be stopped." Over the next 6 hours, however, despite this information, the patient continues to be aggressively resuscitated. At 16 hours into her stay, the patient's blood pressure begins to drop. The MICU physician comes to the patient's bedside and pronounces her dead.

Approximately 20 hours after the patient's arrival, the patient's mother calls to ask about her condition. She is very upset at failing to be notified of her daughter's death 4 hours earlier.

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### Instructor Comments

- In this scenario, a shared mental model and advocate is lacking. When new information is obtained by a team member, it should be called out to the team by a formal handoff. No leader or team actions are taken to identify and determine whether the patient is DNR status. Upon that determination, the team briefs or huddles regarding the appropriate plan of care, and everyone has a shared mental model.

### Skills Needed

- Team structure, Mutual support, Shared mental model,

### Potential Tools

- Brief, Huddle, Handoff, Collaboration

## Scenario 49

Appropriate for: ICU/Neonatal  
Setting: Hospital

At 1800, near the conclusion of a busy 12-hour shift in the Neonatal ICU, Karen, a new staff nurse, is preparing to start an IV on a premature infant who was admitted earlier in the day. She is expecting a new admission to be arriving momentarily from Labor and Delivery and has medications to administer to her other patients. Karen wants to complete her assignment by the end of the shift because a coworker has criticized her for this previously. The infant receiving the IV is experiencing poor blood flow to her right hand. Karen inserts the IV into the right arm and applies a dressing. At the change of shift, the oncoming nurse, Alice, notes that the infant's fingers are cool and cyanotic. She applies warm soaks to the hand to alleviate the condition, but the condition does not improve. Some 4 hours after the IV is placed, the physician is informed of the problem and orders the application of nitroglycerin paste to the infant's hand. The order is not carried out until 3 hours later because Alice is busy with other patients. No other treatment is used. Gangrene develops, and the fingers of the infant's right hand are amputated.

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### Instructor Comments

- In this scenario, time, nurses, and information handoffs are scarce. Neither nurse seeks assistance from her teammates. This may be because of criticism received from a co-worker or patient volume and acuity. Information regarding poor blood flow to the hand and the state of the IV is not discussed in the handoff. The physician should have been summoned to view and assess the hand. Discuss how an unmanaged workload may lead to adverse outcomes for a patient. Point out other teamwork issues, such as failure to communicate essential information on the patient's condition to the physician or charge nurse.

### Skills Needed

- Team structure. Situation awareness. Situation monitoring. Mutual support.

### Potential Tools

- Brief, Handoff, Collaboration, Advocacy/assertion, Cross-monitoring

## Scenario 50

Appropriate for: ICU/Neonatal  
Setting: Hospital

A patient in the ICU has coded and CPR is in progress. The resuscitation team is busy working on the patient, ensuring IVs are patent and the ET tube is properly positioned. Dr. Matthews, the team leader, is calling out orders for drugs, x rays, and labs. Judy, a nurse, is at the bedside inserting an IV. Nancy is the nurse at the cart drawing up the meds. Judy can tell by Nancy's expression that she did not get the last order that Dr. Matthews gave. "Nancy, he wants the high-dose Epinephrine from the vial in the top drawer," Judy calls out as she continues with her IV.

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### Instructor Comments

- Using situation awareness and call-out, the ability to be aware of what was happening with the team and to provide effective communication techniques helped this team to function more effectively.

### Skills Needed

- Situation Monitoring: Assess status of patient and team and the progress toward the goal. Mutual support: Provide task-related support and verbal support. Communication: Offer information.

### Potential Tools

- Call-out, Task assistance, Collaboration, Cross-monitoring

## Scenario 51

Appropriate for: ICU/Neonatal  
Setting: Hospital

John Peter, a premature infant with a history of hyaline membrane disease and bronchopulmonary dysplasia, has been a patient in the neonatal intensive care unit (NICU) for several months requiring long-term artificial ventilation.

Eventually the patient requires a tracheostomy. After his surgery, John Peter receives 100-percent supplemental oxygen; but in the NICU, his oxygen saturation and carbon dioxide levels fluctuate wildly. Dr. Wilson, the second-year pediatric resident, orders NICU Nurse Smith to increase the settings on John Peter's ventilator. Later, John Peter appears slightly "puffy." The team discusses weighing him to determine whether he has a fluid overload and agrees this procedure requires caution because his tracheostomy is so recent. John Peter is moved to the scale with the assistance of a coworker. As Nurse Smith begins moving the patient, still attached to the ventilator, Pat, a respiratory therapist, intervenes, correctly pointing out that weighing the baby would require the assistance of a therapist as well as the nurses, and that the patient should be manually ventilated during weighing to prevent decannulation. In this case, a shared mental model and team structure prevent any conflict that might result from Pat's advocacy for the patient.

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### Instructor Comments

- Discuss how cross-monitoring by the respiratory therapist promotes safe patient care by adhering to a protocol designed to prevent decannulation and possible respiratory failure.
- Discuss the threatening nature of cross-monitoring unless the goal is clear: mutual respect and team accountability for patient outcomes. Emphasize that this strategy is meant to assist the team in meeting its collective goal of safe and effective patient care.

### Skills Needed

- Communication. Situation monitoring: Assess status of patient. Situation awareness. Shared mental model. Mutual support.

### Potential Tools

- Cross-monitoring, Collaboration, Advocacy/assertion, Conflict resolution

## Scenario 52

Appropriate for: ICU/Neonatal  
Setting: Hospital

At 1300, a 5-year-old boy is admitted to the Intensive Care Unit after having electrodes implanted in his skull for long-term electroencephalographic monitoring for epilepsy. At 1936, the patient is not yet hooked up to monitoring equipment when he has a seizure. An intensive care fellow is called to the bedside immediately. A resident from Neurosurgery is paged and sees the patient within minutes. Over the telephone, the physicians and two nurses also consult a neurology fellow who has been involved with the case earlier. The neurosurgery fellow gives a telephone order for Ativan up to 4 milligrams IV. The patient receives only 1 milligram, a quarter of a milligram at a time, over 27 minutes. The child continues to seize during this time. After 39 minutes, the patient is given two doses of a stronger drug, fosphenytoin, but the seizures continue. An hour and 18 minutes into the seizure, the attending physician arrives and notices that the patient is not breathing. The patient is quickly intubated and anesthetized but goes into cardiac arrest at 2055 followed by unsuccessful resuscitation efforts. In an event review conducted the next day, the nurses express confusion regarding who was in charge of the case and cannot say why the seizure protocol was not followed. The fellow who was consulted by telephone later says she was surprised to hear that others thought she was managing the case, and assumed that people at the bedside would take charge. Several of the doctors and nurses say they were surprised at the time that the seizure was not being managed more aggressively but thought that was because using higher drug dosages would prevent seizures for several days, which would delay gathering data and keep the electrodes in the skull longer, increasing risk.

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### Instructor Comments

- The failures in this case include no handoff from the Neurosurgery to ICU team coupled with poor ICU team formation. The clear lack of leadership and role definition may have contributed to the patient's death because of confusion regarding which physician had primary accountability for the patient. Lack of knowledge about the plan of care contributed to the team failure. Situation awareness was not maintained, nor was communication enhanced with essential check-backs or call-outs. The patient's deteriorating respiratory status was not treated until the attending physician arrived on the unit. If the ICU team, on behalf of the patient, had advocated and asserted a position to the neurosurgery fellow, clearly stating that the seizure continued; and if the ICU team had used SBAR to clearly state the condition of the patient and the need for the fellow to come to the unit, would the outcome for this patient be different? We cannot always change outcomes, but we can ensure we meet teamwork standards.

### Skills Needed

- Team structure. Communication. Situation monitoring. Situation awareness. Shared mental model. Mutual support, Leadership.

**Potential Tools**

- Brief, Call-out, Check-back, Handoff, Conflict resolution, Task assistance, Advocacy/assertion, Collaboration, Two-Challenge rule

