

Fire Drill Preparedness: Coordinating OR Patient Evacuations into the PACU

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Abstract Background Information: The operating room (OR) is a high-risk environment for surgical fires due to ignition sources, oxygen-enriched atmospheres, and flammable materials. Traditional fire drills typically emphasize OR evacuation procedures while overlooking the critical role of the post-anesthesia care unit (PACU) in receiving and triaging evacuated patients. This gap leaves PACU teams insufficiently prepared to manage vulnerable patients—whether sedated, intubated, or in varying stages of surgical or anesthetic care—during real emergencies.

Objectives of Project: This process improvement initiative aimed to strengthen institutional fire drill preparedness by integrating PACU staff into the OR evacuation process. The primary objectives were to equip PACU nurses to assess, prioritize, and manage patients transferred during an OR evacuation and to enhance communication and coordination between perioperative units.

Process of Implementation: At a large academic medical center housing 33 ORs and 36 PACU bays, a multidisciplinary team—comprising emergency management, PACU leadership, and perioperative services—developed a modified tabletop exercise. The simulation presented realistic OR evacuation scenarios involving patients in various stages of anesthesia and recovery. PACU nurses practiced rapid triage, resource allocation, and decanting of current patients to create capacity for incoming surgical cases. The exercise also prompted review of supply readiness, staffing, and space utilization.

Statement of Successful Practice: The simulation underscored the complexity of managing multiple patient transfers under emergent conditions and improved staff understanding of interdepartmental workflows. PACU nurses demonstrated increased confidence in triaging diverse patient conditions, while communication pathways between OR and PACU teams became more structured and efficient. The exercise revealed system vulnerabilities that were subsequently will be addressed through targeted action plans.

Implications for Advancing the Practice of Perianesthesia Nursing: Integrating PACU staff into OR fire drills bridges a critical preparedness gap, enhances interprofessional collaboration, and promotes patient safety during emergency evacuations. This initiative provides a replicable framework for perioperative emergency readiness and reinforces the value of ongoing, scenario-based education. Future directions include evaluating long-term skill retention, simulation frequency, and patient outcomes to guide evidence-based improvements in perianesthesia nursing practice.