

AORN Guidance Statement: Safe On-Call Practices in Perioperative Practice Settings

Introduction

The purpose of this guidance statement is to assist managers and clinicians in developing policies and procedures related to safe call practices for perioperative personnel. Providing care for patients requiring urgent or emergent surgery after regular hours of operation is a reality for perioperative nurses. Perioperative personnel are assigned designated times to be available for unplanned, urgent, or emergent procedures or to provide care for patients whose procedures run over the scheduled time. These assignments are referred to as “call.”

Many perioperative nurses take call after scheduled hours, on weekends, and on holidays in addition to their daily shift assignments. Call hours vary, but generally are eight to 16 hours on weekdays, 48 to 64 hours on weekends, and 72 hours or more for extended holiday weekends. Actual hours worked during the call period are unpredictable and can range from 30 minutes to the entire length of the call period. Covering call may strain existing resources, create stress for perioperative staff members, affect safe patient care, and increase the potential for occupational injury due to prolonged work hours.

Background

Traditionally, perioperative nurses have worked eight-hour shifts; however, several new trends in perioperative staffing patterns include fewer, but longer, work days in addition to a call schedule. The expansion of work hour flexibility enhances individual nurse satisfaction and accommodates the organization's objectives.¹ Although the call schedule may be assigned on a rotating basis according to patient population, organizational needs, and demographic challenges, perioperative nurses may take extra call to increase compensation (eg, elective overtime). Perioperative nurses also may be mandated to work beyond their scheduled work/call shift to augment staffing requirements, meet unexpected patient needs, or satisfy organizational expectations (eg, mandatory overtime). These new trends in staffing and call hours have converged to create potentially hazardous conditions for patient and employee safety. There is a lack of current research in trending the number of hours worked per day by nurses. Anecdotal reports suggest that perioperative staff nurses are working longer hours with fewer breaks

and often have inadequate time for rest between shifts.² Twenty-four hour call shifts are becoming more common.³

Long hours and prolonged periods of wakefulness are among working conditions that may have a negative effect on human performance.^{4,6} It has been reported that 17 hours without sleep can have an adverse affect on performance equivalent to a blood alcohol concentration of 0.05%.¹ At 24 hours without sleep, performance degradation is equivalent to a blood alcohol concentration of 0.10.⁷

Fatigue resulting from working long hours can have a detrimental effect on patient care. Work by Rogers et al demonstrates a link between working long hours and medical errors; the possibility of an error triples after 12.5 hours of work.^{3,5} Moreover, this research identified that medication errors, procedural errors, documentation, and transcription errors occur more frequently as work hours increase.^{7,8} Studies suggest a correlation between sleep deprivation and negative effects on memory, language/numeric skills, visual attention and concentration.⁹⁻¹¹ In addition to creating a risk to patient safety, research indicates that sleep-deprived and fatigued nurses are at increased risk for personal injury on duty and when driving home after an extended work day.^{5,12,13}

The existing nursing shortage is contributing to extended work hours and call shifts for perioperative nurses. It is predicted the number of RNs will fall to 20% below the demand by 2010.² More than 126,000 nursing positions currently are estimated to be unfilled.¹ This increases the burden of perioperative nurse fatigue with longer working hours and extended call requirements.

Guidance Statement

Recognizing that long work hours are a growing concern among nursing organizations, regulatory agencies, patient safety organizations, and perioperative nurses, this document offers a framework from which managers and clinicians can develop and implement methodologies to safely establish a call schedule. The call staffing plan retains the perioperative RN as circulator and is consistent with established AORN recommendations for nurse:patient ratios. The call staffing plan should minimize long work hours and allow for adequate recuperation between shifts. This guidance statement may be adapted to any setting in which call schedules are required.

Ultimately, health care organizations are responsible for developing and implementing staffing policies and procedures relevant to individual practice settings. Perioperative nurse leaders should be knowledgeable about emerging research and incorporate new evidence into the development, evaluation, and revision of policies for safe staffing and on-call practices.⁶ Health care facilities should develop an organizational culture that promotes and provides safeguards to protect staff members and patients from potential errors and workplace injuries.

Individual facility policy should focus on creating call schedules that consider the effect of working long hours on patient safety as well as on perioperative staff members' well-being.^{5,6,14} Safe call practices should be based on the following considerations:

- ◆ the type of facility (eg, trauma center, ambulatory surgery center), patient needs, procedure mix, demographics (eg, large metropolitan, rural), and organization structure;
- ◆ staff experience, competencies, skill mix; and
- ◆ staffing minimums as defined by state regulation, accrediting organization standards, professional organization recommendations, and patient safety requirements.

Suggested Strategies

- Address staffing limitations in facility-specific policy and procedures based on relevant fatigue-related outcomes studies.
- Establish a guideline to promote patient and worker safety in relation to the number of hours worked in a 24-hour, seven-day period based on current research. All worked hours should be included. For example, a facility may limit all scheduled and call back hours to 60 hours in a seven-day work week.^{6,7}
- Implement recuperation periods between shifts and establish limits for perioperative call schedules within designated time frames.^{5,6}
 - Budget enough full-time equivalents (FTEs) to allow for safe staffing levels.
 - The budget should include adequate replacement staff members to allow rest periods for personnel who have worked long hours.

- Establish the number of allowed consecutive hours that may be worked. Identify when the next scheduled work shift may begin. Work hour limitations should be determined in accordance with state regulation, accrediting organization standards, professional organization recommendations, and patient safety requirements.
- Provide education to increase awareness of perioperative staff members' personal responsibility to arrive at work fully rested.^{6,7}
- Consider call requirements for perioperative staff members based on research indicating a correlation between adverse effects of sleep deprivation and aging.¹⁵
- Reduce the amount and frequency of unscheduled overtime or last-minute call assignments.
- Evaluate economic implications of unsafe call practices in relation to workplace injuries and adverse patient outcomes.
- Develop performance improvement activities to determine if there is a correlation between workplace injuries, errors, adverse patient outcomes, and the number of hours worked during call.
- Involve perioperative nurses in developing call schedules and work processes.
- Develop competency-based orientation programs for new perioperative staff members, including skill acquisition to manage urgent and emergent patient care. The orientation time frame should be determined based on the type of procedures performed and experience of perioperative staff members.
- Establish a staffing plan to recognize and retain staff members with extended tenure.
 - Develop guidelines for self-assignment of call. Management should review the call schedule before posting it to ensure appropriate coverage for patient safety.
 - Explore fiscal and operational benefits of establishing a dedicated call team.
 - Consider providing sleep rooms to allow perioperative staff members the option to stay at the facility during the call shift to alleviate the potential of sleep deprivation and fatigue. A sleep room also would allow for timely response to urgent and emergent cases.

Summary

Call staffing and the associated long work hours can be challenging for both perioperative staff members and the health care organization. A change in culture is needed to recognize exhaustion as an unacceptable risk to patients and perioperative personnel safety. Perioperative health care providers have a personal responsibility to arrive at work fully rested. Health care organizations have a responsibility to create work and call schedules that consider the effect of long work hours on patient safety as well as perioperative staff members' welfare. The development of standardized safe work hours and call practices should reflect current recommendations emerging from authoritative sources, legislation, and empirical data. Prolonged work periods without adequate rest may contribute to diminished performance by perioperative personnel, placing both patients and workers at risk. This guidance statement may assist managers and clinicians in developing policies and procedures for safe call practices.

NOTES

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