

ON-CALL AND EXTENDED WORK HOURS

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Statement of the Problem

Excessive work hours and on-call shifts, without enough rest before returning to a regularly scheduled shift, are a concern of the Massachusetts Nurses Association because they are recognized as factors in patients' safety, place nurses and other healthcare workers at an increased risk of injury and illness, and, ultimately, diminish the retention and recruitment of nurses.

The MNA Congress on Health and Safety has developed this position statement to address the following specific concerns:

- Compromised patient safety -- fatigue is a well recognized factor contributing to medical errors.
- Risk to nurses' professional licenses -- the probability of errors and other adverse practice events increases with fatigue.
- Risk to nurses' personal safety -- the probability of work-related injury and/or post-shift automobile accidents increases with fatigue.

According to the *Association of periOperating Room Nurses* (AORN), new trends in staffing, other social and economic factors, and on-call hours have converged to create hazardous conditions that jeopardize patient and employee safety. (1)

Background

On - Call Practices and Mandatory Overtime

On-call practices and mandatory overtime have extended in recent years from the operating room to all areas of nursing practice. MNA is aware of on-call requirements for nurses working in obstetrical, home care, hospice, medical/surgical, post anesthesia care, and special procedures departments of hospitals.

Certain hospital scheduling practices could be labeled "defacto" mandatory overtime. It is not uncommon for hospitals to permit doctors to schedule

and start cases late in a shift. Such a case would be known to require more time than remains in the scheduled shift. This forces the nurse on that case to remain to finish the case. This can occur because a hospital does not hire nurses for a shift that would cover those late hours and that would provide relief for the nurse required to remain on a case that does not finish before the scheduled end of shift.

Many nurses in Massachusetts report working long hours, with significant on-call responsibilities. A survey (2) completed by nurses attending the MNA convention in the fall of 2005, and returned anonymously found that on-call requirements for the nurses who responded ranged from 0 to 48 hours in posted work schedules over time periods of 3 weeks to 6 months. These nurses also reported taking additional voluntary call hours, in the range of 8 hours to 24 hours, during a posted work schedule. The additional mandated on-call hours were reported as high as 16 hours.

In Massachusetts, anecdotal descriptions of work schedules suggest that on-call schedules do not allow a reasonable amount of rest between shifts. After working a day shift the on-call nurse can go home, be called in and work for several hours, go home again, possibly as late as 4 am, and then be expected to be back at work again in three hours, at 7am to begin their regularly scheduled day shift. Such demanding on-call assignments also apply, of course, to nurses in many other specialties as well.

A study of the working hours of 2,273 nurses in two states found that more than half of the hospital staff nurses typically worked 12 or more hours per day and nearly 40% of the nurses surveyed had jobs with on-call requirements. The study concluded that "The proportion of nurses who reported working schedules that exceed the recommendations of the Institute of Medicine should raise industry-wide concerns about fatigue and health risks to nurses, as well as the safety of patients in their care." (3)

Work-Related Fatigue and the Nursing Workforce

The Centers for Disease Control, National Institute for Occupational Safety and Health (NIOSH) 2004 report entitled, "Overtime and extended work shifts: Recent Findings on Illnesses, Injuries, and Health Behaviors," (4) notes four studies that focused on effects during extended shifts reported that the 9th to 12th hours of work were associated with feelings of decreased alertness and increased fatigue, lower cognitive function, declines in vigilance on task measures, and increased injuries. The incidence of automobile crashes and medical errors increase with every hour worked over ten hours. (4)

One study revealed that the likelihood of a nurse making a mistake, such as giving the wrong medication, or the wrong dose, was tripled once a shift stretched past 12.5 hours. And yet, 40 percent of the 5,317 work shifts of the 393 nurses, from across the country, usually exceeded 12 hours. On average, the nurses worked 55 minutes longer than scheduled each day, and one third of the nurses worked overtime every day during the four weeks that were studied. (5)

Extended work schedules (beyond the traditional 8 hour day, 35-40 hour work week) have been shown to affect nurses' fatigue, health, performance, and satisfaction in nursing, (6) their risk for musculoskeletal disorders (7) and their risk for substance use. (8)

We know that medical interns make substantially more serious medical errors when they worked frequent shifts of 24 hours or more than when they worked shorter shifts. (9) Limitations on the hours of work for medical interns and others as well who have an impact on public safety, (e.g., truck drivers, airplane pilots, and air traffic controllers) have been specified and **regulated**. An FAA authority recently noted that air traffic controllers do not work more than 10 operational hours in a shift, have at least an 8 hour break from the time work ends to the start of any subsequent shift, and have an off duty period of at least 12 hours following a night shift (between 10 pm and 8 am). (10)

The Institute of Medicine believes that long work hours worked by nurses pose one of the most serious threats to patient safety, because fatigue slows reaction time, decreases energy, diminishes attention to detail, and otherwise contributes to errors. The Institute of Medicine therefore recommends that nurses work no more than 12 hours over a 24 hour period and no more than 60 hours within a seven-day period, in order to reduce error-producing fatigue. (11) A large body of research underscores the effect of fatigue, sleep deprivation, and circadian rhythms on alertness. (12) After 24 hours without sleep, impaired performance is equivalent to a blood alcohol concentration of 0.10% (13) and yet 24 hour call shifts are becoming more common. (5)

A reported ten states have prohibited mandatory overtime for nurses, 15 other states have introduced such legislation, and three states have laws protecting nurses who refuse to work more than 12 consecutive hours. (3)

Whether it is mandatory overtime, long regularly scheduled work hours, or on-call work hours without adequate rest before resuming regular schedules, the concepts inherent in work physiology, fatigue, and recovery argue for more careful planning of schedules. (14)

Safe Practices Protect Patients as well as Nurses

In light of the well recognized dangers of fatigue associated with excessive work hours that have been identified,

The MNA believes:

- that scheduling practices must consider the effect of working long hours and working on-call before normally scheduled shifts on patients' safety, and on the safety of the nurse or other staff required to take call.
- that staffing must be adequate in areas that use on-call practices so that those who are called in are used as supplemental or additional staff.
- that nurses who are required to take call must have 8 hours of rest/sleep time between call back hours and regular work hours.
- that nurses who are required to take call must not suffer the loss of pay, earned time or other benefits because they choose to take rest time between call back hours and regular work hours.
- that nurses would benefit from education about the effects of long work hours and fatigue on their professional performance and its relation to the higher risk of litigation related to medical errors and the endangering of their nursing licenses.

The MNA believes nurses must:

- learn about the effects of fatigue and long work hours on personal and patient safety and the impact it could have on their nursing licenses. The MNA urges nurses to assure that they are well rested and alert before any work shift.
- address on-call hours, hours of rest and sleep and fair compensation practices in their contracts.
- obtain adequate sleep/rest between shifts and on-call work.

The MNA believes health care facilities must:

Incorporate into nurse staffing at least 6-8 hours of rest for nurses before any given shift or on-call period.

Create systems to relieve nurses who have worked during their on-call hours and are scheduled to work following that on-call shift.

Work with staff nurses to individualize their work schedules to enhance the health and safety of both nurses and patients.

Help staff to recognize fatigue, change the culture of tolerance for fatigue, and recognize it as an unacceptable risk to patients and staff alike.

Summary

AORN has called for a “change in culture...to recognize exhaustion as an unacceptable risk to patients and peri-operative personnel safety.” (1) That change of culture is necessary in all areas of nursing practice. There is a new emphasis, begun by the Institute of Medicine, placed on patient safety, (11) and rightly so.

Ensuring that all nurses are alert and vigilant in their critically important functions is in keeping with this emphasis. Nurses, like those employed in aviation, medicine, and the military, must arrive at work rested and ready to perform safely. Nurses, whose work is arguably the most demanding of all professions, need adequate rest after regularly scheduled shifts or after working additional hours. On-call and mandatory hours take no less a toll and result in no less fatigue than regularly scheduled work shifts.

References

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Resources

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