

GUIDELINE FOR SAFE PATIENT HANDLING AND MOVEMENT

The Guideline for Safe Patient Handling and Movement has been approved by the AORN Guidelines Advisory Board. It was presented as a proposed guideline for comments by members and others. The guideline is effective July 1, 2018. The recommendations in the guideline are intended to be achievable and represent what is believed to be an optimal level of practice. Policies and procedures will reflect variations in practice settings and/or clinical situations that determine the degree to which the guideline can be implemented. AORN recognizes the many diverse settings in which perioperative nurses practice; therefore, this guideline is adaptable to all areas where operative or other invasive procedures may be performed.

Purpose

This document provides guidance to perioperative professionals for developing, implementing, and maintaining an effective safe patient handling and movement (SPHM) program to reduce the incidence and minimize the severity of injuries to patients and health care workers related to performance of high-risk tasks in the perioperative environment.¹ Guidance is provided for:

- establishing and sustaining a culture of safety;
- establishing a formal, systemized SPHM program;
- incorporating ergonomic design principles to provide a safe environment of care;
- selecting, installing, incorporating, and maintaining safe patient handling technology in the perioperative setting;
- establishing education, training, and competency verification in safe patient handling techniques and equipment use;
- assessing the patient and the perioperative environment and developing a plan for SPHM;
- collaborating to include reasonable accommodations for post-injury return to work within the comprehensive SPHM program; and
- establishing a comprehensive quality assurance and performance improvement program to evaluate the SPHM program.

Perioperative registered nurses (RNs) and other team members are routinely faced with a wide array of occupational hazards in the perioperative setting that place them at risk for work-related musculoskeletal disorders (MSDs).^{2,3} Work-related MSDs are disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, and spinal discs.⁴ The lower back, shoulder, and upper extremity are typically involved in MSDs with a gradual or chronic onset. Injuries are the result of overexertion, repetitive motion, manual lifting, and pushing and pulling.⁴ When a worker's physical ability, task, workplace environ-

ment, and workplace culture are not compatible, there is an increased risk that the worker will develop an MSD.² Physical stressors encountered in health care that contribute to MSDs include forceful exertions,⁵ repetitive motions,⁵ awkward postures,⁶⁻⁹ static postures,^{10,11} prolonged standing,¹²⁻¹⁵ long cumulative work hours (eg, overtime, consecutive shifts),¹⁶⁻²⁰ moving or lifting patients and equipment, carrying heavy instruments and equipment, and overexertion.^{2,21} Research studies have also demonstrated an association between psychosocial factors (eg, work-family conflict, workplace verbal abuse, job demands, job satisfaction) and the incidence of musculoskeletal symptoms.²²⁻²⁹

Musculoskeletal disorders³⁰⁻⁴⁰ are some of the most frequently occurring and costly types of occupational issues affecting nurses.^{2,41} In 2015, RNs in the private sector reported a total of 20,360 nonfatal occupational injury and illness cases requiring days away from work, of which 8,530 (42%) were MSDs and 5,790 (28%) were back injuries.⁴²

Ellapen and Narsigan³⁰ conducted a systematic review of 27 publications with the outcome measure of work-related MSDs among a total of 13,317 nurses. The prevalence of work-related MSD was 71.8%. The authors concluded that nurses are vulnerable to a work-related MSDs, especially lower back pain and injury. Work-related MSDs also occur frequently in other members of the perioperative team,^{20,43-47} including surgeons.⁴⁸⁻⁶³ Karahan et al⁴³ conducted a qualitative study to describe the prevalence and high-risk factors for lower back pain among hospital workers. Of the 1,600 respondents, 65.8% reported experiencing low back pain, with 61.3% reporting an occurrence in the previous 12 months. The highest prevalence (77.1%, n = 509) was reported by nurses.

The perioperative setting poses unique challenges related to the provision of patient care and completion of procedure-related tasks. This highly technical environment is equipment intensive and necessitates the lifting and moving of heavy supplies and equipment during the perioperative team member's work shift. Many of the patients undergoing surgical or other invasive procedures are completely or partially dependent on the caregivers due to the effects of general or regional anesthesia or sedation. Patients who are unconscious cannot move, sense discomfort, or feel pain, and they must be protected from injury. This may require perioperative team members to manually lift the patient or the patient's extremities several times during a procedure.^{26,64}

Nützi et al²⁶ conducted a correlational questionnaire study of 116 operating room (OR) nurses from eight hospitals to examine the prevalence of musculoskeletal

