



AORN Position Statement on Care of the Older Adult in Perioperative Settings

POSITION STATEMENT

Perioperative registered nurses (RNs) provide patient-centered care and develop interventions for older adults by taking into consideration the changes associated with aging and by understanding that age alone puts older adults at risk for perioperative complications.

Perioperative RNs should

- meet the physiological, cognitive, special communication, cultural,^{1,2} psychosocial, and spiritual¹ needs of older adults;
- allow older adults to use assistive devices (eg, hearing aids, glasses) in the perioperative setting³;
- understand chronic disease, comorbidities, and pharmacological interactions⁴⁻⁶;
- advocate for older adult patients who are unable to fully engage in their own care (the older adult patient and designated support person's ability or choice to engage may vary based on each unique care situation⁷);
- respect the boundaries that protect patients as well as care providers during all interactions with older adult patients and their designated support person(s)⁷;
- use resources (eg, positioning aids, padding, transfer and transport assistive devices) that address the unique needs of the older adult patient⁸; and
- receive education and undergo competency verification that address the specialized knowledge and skills related to the care of older adults.⁹

RATIONALE

The older adult is any person age 65 years or older. The older adult population grew from 35.5 million in 2002 to 43.1 million in 2012—an increase of 21%—and is projected to increase to 79.7 million by 2040.¹⁰ The population aged 85 years and older is projected to grow from 5.9 million in 2012 to 14.1 million by 2040.^{9,10} Older adults currently undergo more than 55% of all surgical procedures.¹¹ The projected number of surgeries for older adults is expected to increase by 45% to as much as 600% by 2030, depending on the type of surgery.¹²

Older adults have an overall decline in physical function and undergo numerous changes in health that are age-related and independent of disease. Frail older adults have age-associated declines in physiological and psychosocial systems. The frailty index is a measure of this decline.¹³⁻¹⁵ Older adults with higher frailty scores are at greater risk for surgical complications,^{14,16} longer hospital stays,^{14,16,17} discharge to a nursing home or an assisted living facility,^{14,16,17} hospital readmissions,¹⁶ and death.¹⁷ Functional status is an assessment of the older adult's ability to perform activities of daily living (ADL) (eg, walking, bathing, eating, dressing) and instrumental activities of daily living (IADL) (eg, transportation, cooking, housekeeping). Deficits in ADL and IADL performance are related to poorer functional outcomes.^{4,18}

The domains of the Perioperative Patient Focused Model (ie, safety, physiological responses, behavioral responses of the patient and designated support person[s])¹⁹ can be used to guide care and help achieve optimal outcomes for older adults. Following are examples relevant to each domain for perioperative RNs to consider when caring for older adults.

Safety

- Cognitive decline may limit an older adult's ability to participate in the informed consent process^{5,20} and the patient and surgical site identification and verification processes.²¹
- Musculoskeletal changes, including loss of muscle mass, diminished muscle strength, postural changes, decreased range of motion, and slowed reaction time, contribute to difficulties in maintaining balance or regaining balance, increasing the risk of a fall and of postoperative pain and discomfort from surgical positioning.⁸
- Changes in the integumentary system place older adults at greater risk for chemical burns, thermal injury,²² skin tears, bruising, and pressure ulcers.²²
- A decline in functional status may affect discharge planning and recovery needs.²³
- Age-related changes, comorbid conditions, slowed metabolism, and polypharmacy^{18,24,25} may affect the pharmacokinetics and pharmacodynamics of medications, placing older adults at increased risk for adverse drug events.⁶

Physiological Responses

- Chronic conditions in the older adult influence the perioperative experience from preoperative assessment to intraoperative care to postoperative recovery.¹¹
- Overall decline in cardiac, pulmonary, and renal function decreases older adults' ability to maintain homeostasis during times of stress (eg, surgery).¹⁸
- Decreased cardiac reserve may decrease cardiac output during physiological stress (eg, infection, physical activity), resulting in fatigue, shortness of breath, slow recovery from tachycardia, and an intolerance to fluid depletion.²⁶
- Impaired baroreceptor function that regulates blood pressure may cause postural hypotension and dizziness and increase the risk for falls.²⁶
- Slowing respiratory function, impaired functional reserve of the pulmonary system, and decreased cough reflex increase the risk for aspiration, infection, and bronchospasm. Reduced respiratory center sensitivity increases the risk of respiratory distress with the use of opioids.²⁶
- Age-related pathophysiological changes (eg, reduced glomerular filtration rate, reduced total body water, renal senescence [aging]) predispose older adults to impaired medication excretion and to fluid and electrolyte abnormalities.^{26,27}
- Dehydration and fluid imbalance necessitate individual considerations for hydration status while the patient is NPO.²⁶
- Reduced bladder elasticity and innervation and decreased bladder capacity increase the risk for urgency and urinary tract infections.²⁶
- An enlarged prostate increases the risk for injury during bladder catheterization in older adult men.¹¹
- Gastric emptying may be delayed, which increases the risk for gastroesophageal reflux disease.²⁶
- Thermoregulatory decline places older adults at risk for hypothermia.^{26,28}
- Neurological changes may lead to a blunted febrile response during infection.²⁶
- Age-related impaired immune response, decreased respiratory activity, reduced ability to expel secretions from the lungs, and a tendency for urinary retention contribute to a higher risk for infections in older adults.²⁶
- The high incidence of sepsis in older adults and the failure to show the signs and symptoms of sepsis that lead to delays in diagnosis may increase the risk for morbidity and mortality.²⁹
- Cognitive and communication deficits may challenge pain assessment and management.³⁰⁻³²
- Sensory changes (eg, hearing impairment) may make interaction and communication difficult.⁵

- Disruptions to medication schedules for chronic conditions (eg, Parkinson disease) may cause extreme changes in symptom control.^{33,34}

Behavioral Responses: Patient and Designated Support Person(s)

- A preoperative baseline mental status assessment with appropriate documentation is crucial for determining perioperative cognitive or mental status deficits.³⁵
- Changes in cognitive processes may make it necessary to include designated support persons in preoperative and postoperative teaching.³⁶
- Independence and performance of ADL may be affected during the postoperative recovery, requiring short- or long-term assistance from designated support persons or professional assistive services.^{5,23,29}
- Depression and dementia are risk factors for postoperative complications (eg, delirium, cognitive dysfunction, impaired wound healing, increased pain severity).³⁷ Anesthesia; operative and invasive interventions, particularly cardiac and cancer-related surgeries; vulnerability; and frailty may cause or exacerbate depression.³⁷

Advances in geriatric care and minimally invasive techniques have led to increased opportunities for older adults to safely undergo operative and other invasive procedures.^{12,38} As the number of older adults increases, the percentage of older adults requiring surgery will also increase. Perioperative RNs should be knowledgeable and competent in the care of the older adult population.^{9,39,40}

GLOSSARY

Frailty index: A validated scoring system that measures frailty as an age-associated decline in five domains: shrinking, weakness, exhaustion, low physical activity, and slowed walking speed.

Pharmacodynamics: The physiological processes between a medication and the body; the interaction of receptors and chemicals that are introduced into the body.

Pharmacokinetics: The study of the action of a medication in the body, including absorption, distribution, metabolism, and excretion.

Polypharmacy: A term that describes patients receiving multiple medications.

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