

Evidence-Based Age-Specific Care



**Training Handbook
for Nurses and
Clinical Care Staff
Second Edition**



**Reviewed by
Adrienne E. Avillion, DEd, RN**



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and Clinical Staff

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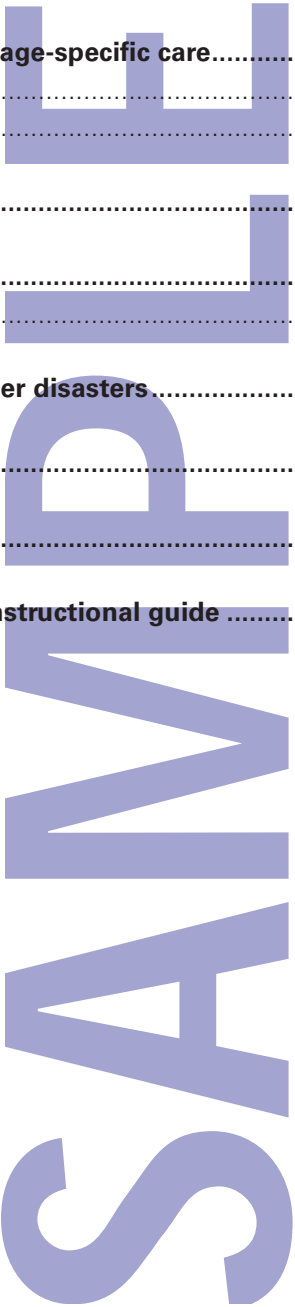
Advice given is general. Readers should consult professional counsel for specific legal, ethical, or clinical questions.

Contents

Learning objectives.....	1
Introduction.....	1
Competency-based orientation	2
Joint Commission requirements.....	3
Education vs. competency	3
Patient safety	5
Identification of age-specific groups.....	6
Patient care considerations for age-specific care.....	6
Case scenario #1.....	12
Case scenario #2.....	17
Case scenario #3.....	22
The interdisciplinary team and age-specific care.....	22

Contents

Clinical examples of age-specific care	23
Case scenario #4.....	23
Case scenario #5.....	27
Safety	29
Patient education	30
Case scenario #6.....	32
Bioterrorism and other disasters	32
Conclusion	33
References	34
Nursing education instructional guide	35



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Learning objectives

After reading this handbook, the participant will be able to:

- Define competency-based orientation
- Determine the regulatory requirement relating to age-specific care
- Identify age-specific groups
- List common characteristics of age-specific patients
- Describe pain management in age-specific care
- Recall patient education on age-specific care
- Discuss nutritional requirements of different age groups

Introduction

The different physiological and psychological needs of each patient's age group must be part of his or her plan of care. Nurses play a big role in this plan; the *AORN Journal* has noted that, "as healers, we take courses in age-specific competencies and diversity to better prepare us to minister to the people who come to us for care" (McNamara 2005). Any well-designed competency program must be able to implement age-specific interventions,

as a competency program is a process of validation that requires staff to demonstrate the skills necessary for the safe and appropriate care of the patient and family.

The demonstration and documentation of age-specific staff competency is important for several reasons. First, such demonstration validates the knowledge and skills of staff. Second, staff competency contributes to the quality of patient/family services. Finally, The Joint Commission (formerly known as the JCAHO) mandates that age-specific competency be assessed on an ongoing basis, and that the findings of such assessments are documented and maintained.

Competency-based orientation

Education and training in the physiological and psychosocial differences between age groups is a critical element of an age-specific competency program. Healthcare organizations have an obligation to provide initial education and training during orientation, generally referred to as “competency-based orientation.” Competency-based orientation is defined as a process that evaluates a new employee’s (or an employee new to a department or specialty) ability to demonstrate knowledge, skills, and behaviors necessary for the delivery of quality care for a specific population. One of the most important aspects of a competency-based orientation is allowing the experienced nurse to progress swiftly through content and skill areas with which they are familiar, thus reducing the time and expense of orientation (Gloe 2001).

The organization must also offer ongoing education and training to make sure staff members can demonstrate ongoing competency and are up to date in their knowledge and skills.

Joint Commission requirements

It is important that patients receive care appropriate to their age and developmental stage. The Joint Commission is especially concerned about patient safety and how it relates to age-specific needs.

Simply put, when assessing the adequacy of age-specific care, surveyors look for proof that staff members are competent to care for their patients. This involves proof of education and training as well as competency. However, having attended education programs about age-specific care does not automatically make a staff member competent in that area. Education and competency are two different things. During surveys, The Joint Commission will look for evidence of both.

Education vs. competency

Education

First, let's discuss the necessary age-specific education requirements. When planning education delivery, the following issues are important to consider:

- During orientation, all new employees must receive education about the specific patient age groups they will

care for. This includes employees who, although not new to the organization, are new to a department or unit.

- Every day brings new and exciting discoveries to the healthcare field. The ways in which we diagnose health problems and prevent and treat illness and injury change quickly based on such discoveries. This means the care we provide to patients of different age groups also changes. Your organization must provide ongoing education to keep your knowledge and skills up to date.
- Education can be provided in a variety of ways. Staff can complete self-learning packets, utilize computer-based learning programs, watch videos, or attend programs in a traditional classroom setting.

Competency

Although staff may have successfully passed education requirements, it is absolutely necessary that they demonstrate competency in the actual work setting as well. Skills that are part of an age-specific competency program usually involve high-risk/frequently performed duties, such as caring for an infant who has undergone open heart surgery, and problem-prone duties, such as IV therapy or medication administration.

Ongoing competency assessment

It is not enough to demonstrate competency during orientation; competency must be assessed on an ongoing basis. This can be accomplished in several ways. For example, a supervisor or

colleague may observe specific skills, or the education department may offer a “competency day” during which knowledge and skills are reviewed and demonstrated. The skills that are part of an ongoing competency program are chosen based on their potential for patient risk and the level of expertise needed to safely perform them.

Patient safety

When developing age-specific competency programs, patient safety is the primary concern. The purpose of requiring competency demonstration is to protect the safety and well-being of patients of all ages.

Joint Commission surveyors expect the following components to be evident in an organization’s age-specific competency programs:

- Appropriate age-specific education and training are offered during orientation and on an ongoing basis.
- Employee records include the dates of education and training, the programs completed, and the results of any tests or required skill demonstrations.
- The education department maintains attendance records for all programs offered, the content of the programs, the types of evaluation methods (e.g., posttest or skill demonstration) used in the programs, and the percentage or number of participants who successfully completed the programs (e.g., passed posttests). The education department asks the participants to evaluate the effectiveness of

the program and maintains written documentation of these comments. Educators use participant feedback to improve educational offerings.

- The mechanisms used to measure ongoing competency and whether competency is maintained or achieved are part of employee records.

Identification of age-specific groups

The following section identifies common age-specific groups seen in the healthcare setting. There are many slight variations in the ways age groups can be organized. The important thing is that, for the safety and welfare of patients and families, the organization defines the age groups cared for by staff members and identifies age-specific competencies.

Patient care considerations for age-specific care

There are numerous age-specific patient care considerations. The following examples illustrate important issues to consider when planning appropriate age-specific care and identifying age-specific competencies.

Neonate (First four weeks of life)

- A neonate's skin is delicate and easily injured, and the umbilical stump is healing. The neonate should be handled gently and observed for jaundice, and the cord stump should be cared for.

- Remember that pediatric patients are not just small adults; each child is a unique individual. However, similarities in children do exist based on their developmental levels (Taylor 2007). Note that vital sign normal ranges vary slightly depending on hospital guidelines and other resources.
- Healthcare professionals need to know the normal ranges of neonate vital signs (i.e., pulse: 110–160 beats per minute; respiratory rate: 30–50 breaths per minute; and blood pressure: 60–80mm Hg systolic and 40–50 mm Hg diastolic; temperature: rectal 96° to 99.5°F or 35.6° to 37.5°C; axillary 97.5° to 99°F; 36.4° to 37.2°C and report abnormalities (Munden 2006).
- When you assess the respiratory system, remember that neonates breathe through their noses. Watch for any abnormal signs, such as retraction of accessory respiratory muscles, stridor, grunting, wheezing, nasal flaring, asymmetrical chest movement, and crackles or rhonchi (after day one of life). Suction excess secretions (Munden 2006, Thies et al 2001).
- Verify that the neonate has adequate sucking, swallowing, gag, and cough reflexes. Verify the presence of bowel sounds before starting enteral feedings.
- A neonate cannot support the weight of his or her head. Anterior and posterior fontanelles have not yet ossified. Support the head and neck when moving or carrying the neonate and protect the fontanel areas from injury. Look

for signs of increased intracranial pressure (bulging fontanelles). Sunken fontanelles are a sign of dehydration (Munden 2006, Thies et al 2001).

- The neonate's skin is thin and has very little subcutaneous fat. He or she is not able to regulate body temperature very efficiently. Monitor the neonate's body temperature and maintain an environment that keeps it within normal limits.
- The neonate's nervous system is immature. Provide gentle, tactile stimulation and teach parents to do the same. The neonate should be held, rocked, and comforted (Munden 2006, Thies et al 2001).
- Check that the neonate's primary and tendon reflexes are present, and that he or she responds to stimuli.
- Keep accurate intake and output (I&O) records. The neonate should void within the first 24 hours of life. Monitor his or her ability to receive adequate nourishment. Teach the parents how to bottle-feed or breastfeed the baby appropriately.
- Monitor fluid, electrolyte, and acid-base balance.
- Wash your hands before and after taking care of the neonate. His or her immune system is not mature. (The neonate has passive immunity from his or her mother that lasts only for a few weeks to months after birth.) Do everything possible to avoid exposing the neonate to infections and teach the parents to do the same. (Munden 2006, Thies et al 2001).

- Never leave the neonate alone unless he or she is in a crib with the sides up and locked in place.
- Assess the parents' knowledge of and comfort level with caring for the neonate. Provide family education and referrals as needed.

Infant (Up to one year old)

Note that normal temperature ranges depend on the type of thermometer and the route (e.g., ear, rectum, etc.). Because of the variety of thermometers currently available, nurses are advised to follow manufacturer guidelines and organizational procedures and policies to determine normal ranges.

- Check that the infant's vital signs are within normal limits, depending on age and weight (i.e., pulse: 80–120 beats/minute; respiratory rate: 25–40/minute; and blood pressure: 80–100 mm Hg systolic and 55–65 mm Hg diastolic) (eMedicine Health 2008).
- Auscultate heart and lungs and note any abnormalities.
- Assess skin color and peripheral pulses. Remember that for the first few months of life, the infant breathes through his or her nose. Avoid applying clothing or dressings that are tight and constrict the diaphragm.
- Since sweat glands have only minimal ability to function in the first few months of life, be especially careful to monitor the infant's body temperature and keep the environment at an appropriate temperature as well (Alspach 1996, Thies et al 2001).

- Protect the fontanel from injury. They do not close until the baby is 16–18 months old.
- The infant's central nervous system must be stimulated for proper growth and development. When visually stimulated, the infant learns to focus and follow objects. Provide auditory stimuli so the infant can learn to follow sounds and recognize voices. Tactile stimulation helps infants learn to reach for, grasp, and manipulate objects.
- Monitor the infant's growth and development. The infant begins to eat solid foods by about four to six months of age. By about six to eight months of age, the infant begins to eat finger foods and use a cup. He or she generally eats more solids than liquids and drinks from a cup independently by 12 months. Birth weight doubles within four to six months of age and triples by 12 months. The infant's height nearly doubles within the first 12 months of life. To assess for food allergies, new foods should be given one at a time on a weekly basis (Alspach 1996, Thies et al 2001).
- Comfort the infant by holding, rocking, and offering appropriate stimulation.
- Monitor I&O carefully. Monitor for fluid, electrolyte, and acid-base imbalances. Be aware that dehydration can occur quickly during the first year of life.
- The infant's parents should be involved in planning and providing care. The infant's parents should be allowed to stay with the infant.

- The infant should accomplish certain developmental tasks. He or she begins to distinguish and smile at familiar faces and develop trust in parents and immediate family. If the infant fails to develop trust, he or she may experience failure to thrive, as indicated by lethargy, poor eating habits, abnormal growth and development, or lack of bonding with parents.
- The infant learns to play, but he or she plays alone and does not generally engage other children in play.
- The infant learns to control his or her head, turn, sit, crawl, and stand.
- The infant begins to deliberately communicate with others via body posture, crying, and smiling. The infant usually begins to make cooing or babbling noises by six months of age, and speaks a first word by 12 months of age. The infant learns by imitating.
- At about age six to eight months, the infant's greatest fear is separation from parents. The infant develops a fear of strangers at about eight months of age.
- The infant is in the oral development phase. Sucking is a source of satisfaction. The infant explores the world by putting objects in his or her mouth. This can be a real safety issue if the object is poisonous or is swallowed and obstructs the airway.
- Provide a safe environment. The infant has little or no concept of danger. Protect him or her from falls, bumping into tables or other objects, and other injuries.

- Stimulate intellectual development. During the first three months, provide large, brightly colored objects. Introduce musical toys, mirrors, mobiles, and rattles at three to six months. At six to 10 months, the infant stacks blocks and other objects, plays peek-a-boo, and enjoys looking at pictures in books. At 10–12 months, the infant can point to familiar objects and body parts when asked. He or she can understand some words and short sentences (Alspach 1996, Thies et al 2001).

Case scenario #1

Q. Diana is assessing an infant that is hospitalized due to an upper respiratory infection. What are some important age-specific competencies that relate to assessment of the infant's respiratory system?

A. Diana must know the normal range of vital signs for an eight-month-old. She must be able to auscultate the infant's lungs and heart, and assess for any abnormal findings. She should be careful to monitor the baby's temperature, knowing that he is sensitive to temperature changes in the environment. Developmentally, an eight-month-old is fearful of strangers. Diana will encourage the parents to stay with their son as much as possible, and she will help them to be involved in his care.

Toddler (One to three years of age)

- Assess that vital signs are within normal limits (pulse: 70–110 beats/minute; respiratory rate 20–30 breaths/minute; and blood pressure: 90–105 mm Hg systolic and 55–70 mm Hg diastolic) (eMedicine Health 2008).
- As in infants, normal temperature varies among children depending on route, time of day, and method used. A general rule is that normal oral temperature is about 98° F or 37° C; rectal temperature norms are about 99.5° F or 37.5° C (College of Family Physicians of Canada 2008). However, because of variations among organizations and in equipment used, it is best to follow the guidelines of your organization when determining whether or not temperature is normal in children.
- The toddler should be able to walk alone by 15 months and run by about two years of age.
- The toddler has a limited ability to tell you what he or she needs and wants.
- He or she needs about 10–12 hours of sleep every night, as well as a daytime nap.
- When hospitalized, the toddler may have difficulty sleeping or suffer from nightmares.
- The toddler can usually feed him or herself independently by three years of age.

- About 60% of the toddler's body weight is fluid (Alspach 1996, Thies et al 2001). Be alert to the possibility of dehydration. Monitor I&O.
- The toddler's parents should be encouraged to stay with him or her as much as possible and to take part, as appropriate, in his or her care.
- Daytime bladder control is achieved by about three years of age.
- The toddler is beginning to identify a sense of self. Whenever possible, give the toddler the opportunity to have some control over what happens to him or her. For example, the toddler may be able to select some of the foods he or she eats or participate in bathing and dressing.
- Provide as much consistency in providing care as possible.
- The toddler needs the security of routine and is upset by changes in the environment and activities.
- Give the toddler brief, simple explanations in words that he or she can understand. Give only one direction at a time. Set limits gently but firmly. Do not try to shame the toddler or make him or her feel guilty. Whenever possible, allow the child to handle equipment or use a doll to role-play what will happen during procedures. Make sure that you are at the toddler's eye level when you speak to him or her (Alspach 1996, Thies et al 2001).

Preschool (Three to five years of age)

- Assess vital signs accurately (pulse: 65–110 beats/minute; respiratory rate: 20–25 breaths/minute; and blood pressure: 95–110 mm Hg systolic and 60–75 mm Hg diastolic) (eMedicine Health 2008).
- The preschooler should grow about 2–3 inches and gain 4–5 lbs every year. All primary teeth should be present. Because of this steady growth, the preschooler needs about 1200–1800 calories (30 g protein, 10 mg iron) every day (Alspach 1996, Thies et al 2001).
- The preschooler feels guilty if they make mistakes or disappoint parents. They need a good deal of praise and encouragement.
- Serious illness/injury may cause the preschooler to regress in behavior.
- The preschooler likes to play with others and may have imaginary friends. He or she imitates the behaviors of adults.
- The preschooler is very interested in knowing why things are being done to him or her. Answer questions quickly and honestly. Remember that preschoolers are very literal. When giving explanations, do not use any abstract statements (Alspach 1996, Thies et al 2001).
- A preschooler's attention span is limited.

- Encourage parents to stay with the child as much as possible, and participate, as appropriate, in the child's care. Allow the child to have favorite toys or belongings (e.g., a blanket) with him or her.

School-age (Six to 12 years of age)

- Assess vital signs accurately (pulse: 60–95 beats/minute; respiratory rate: 14–22 breaths per minute; and blood pressure: 100–120 mm Hg systolic and 60–75 mm Hg diastolic) (eMedicine Health 2008).
- Growth spurts occur.
- Having friends (usually of the same gender) becomes very important.
- The school-age child needs praise and encouragement. Allow him or her to participate in decision-making as much as possible. Explain procedures and why they are necessary in simple terms.
- The school-age child can describe his or her signs and symptoms.

Adolescent (13–18 years of age)

- Vital signs are within normal adult ranges.
- Adolescents are extremely conscious of body image. They are very worried about perceived flaws in their appearance.

- Adolescents are becoming interested in flirtation and romantic interaction. They need opportunities to interact with and socialize with other adolescents.
- Adolescents often question or rebel against authority figures.
- Note that suicide is the third-highest cause of death among young people aged 15–24 (Mental Health America 2008).
- Involve adolescents in their care and allow them to participate in decision-making. They need to feel that they have some control over what is happening to them.
- Set limits firmly when necessary. Respect their privacy and opinions. Avoid being judgmental.

Case scenario #2

Q. You are working at a large outpatient pediatric clinic. One of your patients is a 16-year-old female being treated for diabetes mellitus and obesity. What are some important emotional issues to consider when taking care of this young lady?

A. Body image is extremely important to the adolescent patient. The obesity may cause a poor self-image and make her the target of teasing from her peers. She is likely very interested in establishing relationships with her peers and seeking intimacy. The treatments for diabetes may cause feelings of loss of control and rebellion. Adolescents need to be treated firmly but with respect. Adolescents also need to be part of their care and the decision-making process as much as possible.

Young adult (19–44 years of age)

- The young adult concentrates on achieving career and interpersonal goals.
- The young adult has many responsibilities, often including work, marriage, and child-rearing.
- The major fears of the young adult include loss of independence, being separated from spouse/significant others and children, and fear of losing a job in the event of illness/injury (Alspach 1996, Thies et al 2001).
- Treat young adults with respect. They have the right to make decisions about their care and treatment. Don't be judgmental, and support them even if they make decisions that you might not make (e.g., refusing chemotherapy or having an abortion).
- Encourage visits from significant others.

Adult/middle-age (45–65 years of age)

- In middle-age, the amount of subcutaneous tissue begins to decrease, and the skin begins to dry because of a decrease in the activity of sebaceous glands (Alspach 1996, Munden 2006, Thies et al 2001).
- Assess skin for dryness and for skin turgor. Encourage adequate hydration and use lotion to alleviate dryness.

- Blood vessel elasticity begins to decrease and cholesterol begins to rise (Alspach 1996, Munden 2006, Thies et al 2001). Middle-aged patients need to take an active role in their cardiovascular health.
- Bone density starts to lessen. Osteoporosis becomes evident, especially in women. There is a decrease in height and muscle mass. Weight-bearing exercises are important to lessen bone loss. Calcium supplements may be necessary (Alspach 1996, Munden 2006, Thies et al 2001).
- Middle-aged adults experience vision changes. They have difficulty seeing and reading things that are close to them (presbyopia). Their ability to hear high-pitched sounds decreases.
- Respect their decisions and allow them as much control over their care as possible.
- Women go through menopause.
- Men and women face the possibility of chronic health issues as they begin to age.

Later adult/geriatric (Over 65 years of age)

- The number of elderly in the population is significantly increasing; by the mid-21st century the projected number will reach 80 million. Such a large increase means a greater demand for healthcare professionals to be prepared to provide age-specific healthcare services to this group (Green et al 2003).

- The skin of elderly patients is thin, dry, and less elastic (Alspach 1996, Munden 2006; Thies et al 2001). Skin moisturizers are important. Guard against skin breakdown, since their skin is more easily bruised and damaged.
- Cardiac output decreases, heart valves thicken, and the heart is less efficient. Monitor cardiovascular status carefully. Blood vessels are more easily injured (Alspach 1996, Munden 2006, Thies et al 2001).
- Thin skin and decreased subcutaneous tissue make older adults susceptible to temperature extremes. They become cold easily, so protect patients from extremes of temperature.
- The muscles of respiration begin to atrophy and lung tissue is less elastic. Vital capacity is decreased (Alspach 1996, Munden 2006, Thies et al 2001). The patient should be given plenty of opportunities for rest between activities and procedures.
- Bone mass continues to diminish, and safety precautions are very important. Elderly patients' bones are easily broken. Help them to change positions and to ambulate slowly and gently.
- Blood flow and oxygen to the brain is reduced. Memory is less efficient, although confusion is not normal.
- There is decreased ability to hear, especially high-pitched sounds. Vision begins to deteriorate, and cataracts often develop. Older adults often lose teeth. Be aware that they

may need eyeglasses, hearing aids, and dentures. They may need assistive devices such as canes or walkers to ambulate. Speak to the patients slowly and avoid high-pitched tones (Alspach 1996, Munden 2006, Thies et al 2001).

- Bone marrow function decreases. The patient's complete blood count (CBC), hemoglobin, and hematocrit should be monitored.
- Monitor I&O. Older patients dehydrate easily.
- Healing may be delayed. Monitor and protect from infections. Monitor wound healing carefully.
- Advanced age does not mean that the patient is not capable of making decisions and being involved in his or her care. Treat the geriatric patient with respect. Do not call them "honey" or "sweetie" or treat them as if they are children.

Case scenario #3

Q. A Joint Commission surveyor is watching as you communicate with an 80-year-old patient. The patient wears hearing aids and his vision is poor. You are explaining that he is going to undergo a colonoscopy. What are some important skills for you to use?

A. You will need to be on eye level with the patient and maintain eye contact as you are speaking. Avoid speaking in high-pitched tones. Speak slowly and clearly and use words that the patient will understand. Explain the procedure one step at a time, and pause to ask the patient whether he understands or has questions after each step. If possible, family members should be present so that they too understand the procedure and can also help the patient understand.

The interdisciplinary team and age-specific care

It is important that everyone who has contact with patients is aware of age-specific differences. For example, the housekeeping staff on the pediatric unit should know that an infant or toddler should not be left alone in a room with crib rails down. Joint Commission surveyors expect that patients receive good care in a safe environment and that anyone who comes into contact with patients on a regular basis knows important safety interventions.

Clinical examples of age-specific care

The following clinical examples will help you to further understand the concept of age-specific care.

Pain management

How do you assess pain in the various age groups? A young adult may be able to describe his or her pain and where it is located, but what about an infant or a toddler? Evaluate an infant's cry. His or her parents should be able to help distinguish between a cry of hunger, a cry of needing a diaper change, and a cry of pain. A toddler may be able to say "hurt" or "boo boo," or may be able to point to where it hurts. Part of age-specific competency is being able to appropriately assess pain in patients of different age groups.

Case scenario #4

Q. A Joint Commission surveyor asks you how you would assess pain in an infant. What would you say?

A. A good assessment is the first priority. Tell the surveyor that the parents of the baby are important to pain assessment. An infant's cries vary depending on the cause. You and the parents will work together to distinguish a cry of pain from other cries.

Older adults experience a decrease in their neurons. Therefore, they may experience pain differently from younger or middle-aged adults. Ask them what their discomfort feels like. If you only use the word “pain,” you may not get the information you need. Ask older adults to tell you how they feel and to describe what is bothering them.

The amount and type of pain medication given to patients varies with their age and, especially in pediatric patients, their weight. Demonstrate that you are aware of the correct dosage ranges for analgesics. Infants, young children, and geriatric patients generally require smaller doses of pain medication than young and middle-aged adults. These groups may also be more susceptible to the side effects of medication. The following must be included in age-specific pain assessment and management:

- Recognition of correct route and dosage of medications for various age groups
- Knowledge of side effects and how they vary among the various age groups
- Providing patient and family education about pain medication

Nutrition

Nutritional requirements vary among age groups. For example, during growth spurts, infants and toddlers will need a high-caloric intake. Older adults often benefit from eating small, frequent meals instead of three large meals in a day.

Important considerations when evaluating the nutritional status of various age groups include the following:

- Is the patient's height and weight within normal limits for his or her age group?
- Does the patient's diet contain an adequate amount of calcium, protein, vitamins, minerals, and fiber?
- Is the patient tolerating food? For example, is the neonate thriving? Is the infant gaining weight at an appropriate rate? Is the older adult able to digest food, and is he or she well-hydrated?
- Do the patient's bowels and bladder function properly?

Administration of IV fluids

There are many age-specific considerations when administering IV fluids (Hadaway 2006). First, the size of the needle used depends on the patient's age, the condition and size of his or her veins, and the type of fluid being given. Be aware of the anatomy and physiology of patients of various age groups. Protecting the IV insertion site is also important. Young children may need to have the insertion site immobilized so they do not pull the needle out. Confused patients may need the insertion site especially protected. Older adults' skin is fragile and easily bruised, and their veins tend to collapse more easily than those of younger or middle-aged adults.

The rate of fluid infusion also varies among age groups. Fluid overload is possible in young children and older adults. Know the normal rates of IV infusion and the consequences of too-rapid or too-slow infusion.

The following points are critical to age-specific competency when administering IV fluids:

- Recognize the appropriately sized insertion needle for specific age groups.
- Know the normal rate of infusion for various illnesses and injuries in specific age groups. Identify patients at particular risk for fluid overload.
- Be aware that some age groups may need the IV site immobilized due to confusion. Young children, for example, may not understand why the needle is in place.
- Protect the skin from injury. Older adults' skin is especially prone to injury, bruising, and breakdown.

Case scenario #5

Q. A Joint Commission surveyor is observing patient care on an adult medical-surgical unit. She notices that one of the elderly patients on the unit has an IV and that his arms are restrained. The surveyor reviews the patient's chart for appropriate documentation reflecting age-specific considerations. What kinds of issues should be documented?

A. There should be documentation concerning the patient's cognitive status and rationale for the restraints. The rate of IV infusion should be appropriate for the patient's age and physiological status. Since his skin is more fragile than that of younger adults, there should be evidence that appropriate skin care is being provided.

Medication management

The same age-specific safety concerns that affect pain assessment/ management and IV fluid administration also affect medication administration. The traditional "five rights" of medication administration guide age-specific competency medication management:

- **The right patient.** Review the age-specific characteristics of the patients receiving medications. Recognize that the age and physiology of the patient affects all aspects of a medication's impact on him or her.

- **The right time.** It is important to know how the time of administration affects a medication's effectiveness for various age groups. For example, suppose an elderly person who ingests small, frequent feedings is scheduled for a medication that must be taken with (or without) food. Know when and how often the patient is receiving nourishment.
- **The right medication.** Some medications are contraindicated for infants and children or elderly adults. Know what medications are appropriate for specific age groups.
- **The right dose.** Although there are many medications that are given to both children and adults, the dosage varies considerably depending on the age and, in some cases, the weight of patients.
- **The right route.** There are sometimes restrictions on the route of administration, depending on the age, physical development, and weight of patients. Recognize which route or routes are acceptable for the different age-specific groups.

In summary, the five rights guide you through the process of safe, accurate medication administration for all age groups. It is your responsibility to recognize how the differences between these age groups influence the five rights.

Safety

Safety issues are part of every aspect of age-specific care. Whether you're administering medications, assessing pain, or ensuring adequate nutrition, safety precautions must be part of the plan of care. In addition to the issues previously mentioned, the following are some of the areas that Joint Commission surveyors assess as part of age-specific competency:

- **Skin care.** Recognize which age groups are most susceptible to skin breakdown. These include infants and toddlers who wear diapers, immobile adults, and older adults whose skin is less elastic and more fragile.
- **Positioning.** Know how to move and position patients of various age groups. For example, neonates and infants must be handled gently and their open fontanel protected. Patients with fragile bones, such as the elderly and other adults who suffer from loss of bone mass, must also be moved and positioned carefully to avoid injury.
- **Activities of daily living.** Patient safety must be guaranteed during activities such as bathing, dressing, and eating. Know what activities the patient is able to safely perform without help, and what activities must be supervised or done for the patients. This depends on strength, cognition, age, and developmental level.

Patient education

Patient/family education should be provided according to the needs and the understanding of patients and their families. The following suggestions can help you develop age-specific patient/family education plans:

- Rely on the family of a neonate or an infant to receive information and education about the child's condition. Parents can help you understand how the child reacts to new and sometimes frightening situations. Remember that parents should be allowed to stay with their child as much as possible.
- With parental assistance, explain what you can to a toddler. As with the neonate and infant, however, the parents will assume most of the responsibility for receiving education and instruction.
- The preschooler has a better understanding of what is happening to him or her and is able to express fears and concerns. Comfort objects and role play are important to the preschooler as well.
- In addition to parental support and the measures taken for younger children, a school-age child benefits from simple, step-by-step directions. He or she is able to absorb some patient education information and apply it to his or her situation.

- The adolescent needs careful, complete explanations and education. Remember that adolescents are extremely conscious of their body image, and that body image is linked to self-esteem. They will be especially concerned about anything that threatens their body image and their relationships with peers.
- Young and middle-aged adults are generally able to understand what is happening to them and why. They want and need their loved ones to be part of the education process. Their comprehension will depend on their cognitive status and, to some extent, their cultural perceptions and reactions to illness and injury. Incorporate these factors into your patient education efforts.
- Older adults are able to understand and participate in patient education efforts. Never assume elderly patients are not capable of understanding important information, making decisions, and participating in their care.

When providing patient education, make sure you consider the patient's age and developmental level as well as his or her cognitive status. Also evaluate the patient's ability to understand English and to read printed information if that is part of the education process.

Case scenario #6

Q. You are working on the inpatient psychiatric unit. One of your patients is a 25-year-old female hospitalized because of the eating disorder anorexia. What are some age-specific concerns of which you should be aware?

A. The young adult has a number of family issues that make hospitalization difficult. Young adults are involved with establishing careers and families. They will be concerned about children and spouses at home, and they may worry about the effect of missing work because of illness. Recognize her developmental concerns and obligations in addition to the treatment of the anorexia.

Bioterrorism and other disasters

In the event of a terrorist attack or natural disaster such as a hurricane, flood, or blizzard, be prepared to provide emergency care to patients of many different ages. As organizations formulate their emergency preparedness plans, there should be evidence that age-specific concerns are incorporated into the programs. Some points to consider include the following:

- A mechanism to identify patients and locate family members should be identified.

- Staff must be able to recognize signs and symptoms of bioterrorism agents and how these signs and symptoms appear in various age groups.
- In the event of a natural disaster, be prepared for the most common injuries and illnesses that occur as a result of such disasters. Also anticipate how members of different age groups will respond to these events.

Conclusion

The delivery of safe and appropriate care to patients of all ages is a priority for all healthcare organizations. The Joint Commission mandates that staff members receive ongoing education and training about age-specific care and that such education and training is documented. The Joint Commission also mandates that staff members demonstrate competency in the care of age-specific populations and that such competency is documented. All staff members are obligated to apply their age-specific knowledge and skills for the well-being of their patients.

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Nursing education instructional guide

Target audience:

- Staff educators
- Directors of education
- Staff development specialists
- Organizational development specialists
- Directors of nursing
- VPs of nursing
- Chief nursing officers

Statement of need:

This second edition provides instruction on the application of age-specific guidelines in patient care and features evidence-based instruction on the application of these guidelines for various members of the interdisciplinary team, including nurses, dietitians, rehab staff, and social services.

Educational objectives:

Upon completion of this activity, participants should be able to:

- Define competency-based orientation

- Determine the regulatory requirement relating to age-specific care
- Identify age-specific groups
- List common characteristics of age-specific patients
- Describe pain management in age-specific care
- Recall patient education on age-specific care
- Discuss nutritional requirements of different age groups

Faculty:

Adrienne E. Avillion, DEd, RN—Adrienne E. Avillion is the reviewer of this publication.

Accreditation/designation statement:

This educational activity for one contact hour is provided by HCPro, Inc. HCPro, Inc. is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Disclosure statements:

Adrienne E. Avillion has declared that she has no commercial/financial vested interest in this activity.

Instructions:

In order to be eligible to receive your nursing contact hour(s) for this activity, you are required to do the following:

1. Read the book
2. Complete the exam
3. Complete the evaluation
4. Provide your contact information in the space provided on the exam and evaluation
5. Submit the exam and evaluation to HCPro, Inc.

Please provide all of the information requested above and mail or fax your completed exam, program evaluation, and contact information to:

HCPro, Inc.
ATTN: Continuing Education Department
200 Hoods Lane
Marblehead, MA 01945
Tel: 877/727-1728
Fax: 781/639-2982

Nursing education exam

Name: _____

Title: _____

Facility name: _____

Address: _____

Address: _____

City: _____ State: _____

ZIP: _____ Phone number: _____

Fax number: _____

E-mail: _____

Nursing license number: _____

(ANCC requires a unique identifier for each learner)

1. Competency-based orientation:

- a. Is a process of validation
- b. does not involve nurses
- c. Is simplistic in nature
- d. Is not an obligation of healthcare providers

2. As part of competency-based orientation, the different ___ needs of each patient's age group must be part of his or her plan of care.

- a. Mental and physical
- b. Physiological and psychological
- c. Emotional and intellectual
- d. Psychosomatic and experiential

3. The Joint Commission (formerly known as JCAHO) mandates that age-specific competency be assessed on a(n) ___ basis.

- a. Infrequent
- b. Ongoing
- c. Sporadic
- d. Rare

- 4. According to The Joint Commission, findings from age-specific assessments must be:**
 - a. Documented
 - b. Discarded
 - c. Discouraged
 - d. Dispensed

- 5. A toddler should be able to walk alone by age ____.**
 - a. 12 months
 - b. 13 months
 - c. 14 months
 - d. 15 months

- 6. All of the following are characteristics of the middle-aged patient EXCEPT:**
 - a. Menopause in females
 - b. Decreased bone density
 - c. Increased muscle mass
 - d. Vision changes

- 7. What best describes a neonate's skin?**
 - a. Strong
 - b. Rough
 - c. Delicate
 - d. Cold

- 8. Which of the following is NOT a common fear for a young adult?**
 - a. Loss of independence
 - b. Separation from family
 - c. Fear of job loss
 - d. Fear of responsibility

9. You can manage pain in an infant by evaluating their ____.
- a. Eye movement
 - b. Cry
 - c. Skin
 - d. Teeth
10. Older adults often experience a decrease in ____ and thus may experience pain differently than younger or middle-aged adults.
- a. Electrons
 - b. Memory
 - c. Neurons
 - d. Protons
11. Be aware that ____ are often extremely aware of body image; this is important to remember when providing patient education.
- a. Toddlers
 - b. School-age children
 - c. Adolescents
 - d. Older adults
12. When evaluating a patient's nutritional needs, ask yourself all of the following questions EXCEPT:
- a. "Is the patient's height and weight within normal limits for his or her age group?"
 - b. "Does the patient's bowel and bladder function properly?"
 - c. "Is the patient tolerating food?"
 - d. "Would I personally prefer this food?"



Nursing education evaluation

Name: _____
Title: _____
Facility name: _____
Address: _____
Address: _____
City: _____ State: _____
ZIP: _____ Phone number: _____
Fax number: _____
E-mail: _____
Nursing license number: _____
(ANCC requires a unique identifier for each learner)

1. This activity met the following learning objectives:

a.) Defined competency-based orientation

Strongly disagree 1 2 3 4 5 Strongly agree

b.) Determined the regulatory requirement relating to age-specific care

Strongly disagree 1 2 3 4 5 Strongly agree

c.) Identified age-specific groups

Strongly disagree 1 2 3 4 5 Strongly agree

d.) Listed common characteristics of age-specific patients

Strongly disagree 1 2 3 4 5 Strongly agree

e.) Related pain management to age-specific care

Strongly disagree 1 2 3 4 5 Strongly agree

f.) Provided patient education on age-specific care

Strongly disagree 1 2 3 4 5 Strongly agree

g.) Discussed nutritional requirements of different age groups

Strongly disagree 1 2 3 4 5 Strongly agree

2. Objectives were related to the overall purpose/goal of the activity.

Strongly disagree 1 2 3 4 5 Strongly agree

3. This activity was related to my nursing activity needs.

Strongly disagree 1 2 3 4 5 Strongly agree

4. The exam for the activity was an accurate test of the knowledge gained.

Strongly disagree 1 2 3 4 5 Strongly agree

5. The activity avoided commercial bias or influence.

Strongly disagree 1 2 3 4 5 Strongly agree

6. This activity met my expectations.

Strongly disagree 1 2 3 4 5 Strongly agree

7. Will this learning activity enhance your professional nursing practice?

Yes No

8. This educational method was an appropriate delivery tool for the nursing/clinical audience.

Strongly disagree 1 2 3 4 5 Strongly agree

9. How committed are you to making the behavioral changes suggested in this activity?

- a. Very committed
- b. Somewhat committed
- c. Not committed

10. Please provide us with your degree.

- a. ADN
- b. BSN
- c. MSN
- d. Other, please state

11. Please provide us with your credentials.

- a. LVN
- b. LPN
- c. RN
- d. NP
- e. Other, please state

12. Providing nursing contact hours for this product influenced my decision to buy it.

Strongly disagree 1 2 3 4 5 Strongly agree

13. I found the process to obtain my continuing education credits for this activity easy to complete.

Strongly disagree 1 2 3 4 5 Strongly agree

14. If you did not find the process easy to complete, which of the following areas did you find the most difficult?

- a. Understanding the content of the activity
- b. Understanding the instructions
- c. Completing the exam
- d. Completing the evaluation
- e. Other, please state:

15. How much time did it take for you to complete this activity (this includes reading the book and completing the exam and the evaluation)? _____

16. If you have any comments on this activity, process, or selection of topics for nursing continuing education, please note them below.

17. Would you be interested in participating as a pilot tester for the development of future HCPro nursing education activities?

Yes No

SAWS