3 TO 6 YEARS OF AGE INTERVAL VISIT

Mary Anne M. Israel

I. Introduction and general background

Health supervision and well-child visits are opportunities for the healthcare provider to assess a child's growth and development and to promote wellness in the child and family. In addition, the provider needs to address disease detection and prevention and offer proper anticipatory guidance during the visit (Hagan, Shaw, & Duncan, 2008a).

Children between 3 and 6 years of age experience an explosion of language, mastery of physical skills, sense of self and peers, an increase in independence, and endless curiosity, all in preparation for a successful school entry milestone (Hagan, Shaw, & Duncan, 2008b). They cross from early childhood into the beginning stages of middle childhood.

The approach to early childhood during the well-child visit is twofold: although most of the history may still be provided by the parent or caretaker, children at this age may now participate in some of the interview and actively engage with the provider. Careful observation of their behavior in the examination room is also useful, including their interaction with the parent or caretaker, the environment, and the provider (Duderstadt, 2014). Healthcare maintenance visits in this age range include comprehensive history, physical examination, screening tests (as appropriate), immunizations, anticipatory guidance, counseling at a yearly basis, and follow-up as needed.

II. Database (may include but is not limited to)

A. Subjective

- 1. Parental and child concerns (chief complaint)
 - a. History of present illness
- 2. Interval history
- 3. Past medical history
 - a. Birth history

- b. Trauma, surgeries, or hospitalizations
- c. Dental home: date of last examination (if any); caries or dental work
- 4. Medication (include homeopathic or herbal supplements and vitamins)
- 5. Allergies (medication, environmental, and food)
- 6. Immunization status
- 7. Family history
- 8. Social history
 - a. Daycare or preschool attendance; kindergarten
 - b. Household members
 - c. Means of financial support in family
- 9. Environmental health history (National Environmental Education Foundation [NEEF], 2015)
 - a. Indoor exposures: smoke, mold, cockroaches, rodents, damp walls, strong odors, broken windows, lead exposure, and parental occupation
 - b. Outdoor exposures: sun, industrial smokestack, and housing proximity to heavy traffic

10. Nutrition

- a. Foods—intake of fruits, vegetables, lean meat/ beans, iron-rich foods, whole grains; calcium sources: milk, cheese, and yogurt; and juice and water intake (source of water and fluoride)
- b. Eating habits, mealtime behavior, and family meals

11. Elimination

- a. Potty training process and status; voiding habits
- b. Stooling patterns
- 12. Sleep (quality and quantity): bedtime routine
- 13. Developmental (see Chapter 9, Developmental Assessment: Screening for Developmental Delay and Autism); evaluate overall school readiness
 - a. Socioemotional: self-care skills, typical play, and description of self
 - b. Language (expressive and receptive)

- 3–4 year-old: speech is usually fluent and clear, talks about experiences and understands who, what, where questions
- 5-6 year-old: communicates easily to adults and children, long imaginative stories, enjoys stories and understands everything that is said

c. Cognitive

 5–6 year-old: increases memory capacity, follows directions, able to listen and attend, advances pretend play

d. Physical

- 3-year-old: builds tower of cubes, throws ball, rides tricycle, walks up stairs, draws, and toilet training progress
- 4-year-old: hops on one foot; balances for 2 seconds; copies crosses; dresses and undresses with minimal assistance; and pours, cuts, and mashes own food
- iii. 5–6 year-old: balances on one foot, hops and skips, ties a knot, grasps a pencil, draws a person with six body parts, recognizes letters and numbers, copies squares and triangles, and dresses and undresses without assistance

14. Review of systems

- General
- b. Skin, hair, and nails: birthmarks, rashes
- c. Head-eyes-ears-nose-throat: headaches; ocular history (vision, eyes straight, eyelid droop, eye injury); hearing and history of otitis media; nasal congestion, allergies, and nosebleeds; oral health, dental brushing, and flossing; and sore throats and difficulty swallowing
- d. Chest and lungs: history of asthma or reactive airway disease, croup, bronchitis, or persistent cough
- e. Cardiac and heart: history of heart murmur, cyanosis, shortness of breath, and energy level
- f. Abdomen and gastrointestinal: appetite, diet, abdominal pain, constipation, vomiting, and diarrhea
- g. Genitourinary: incontinence, enuresis, urinary tract infections, dysuria, frequency, hematuria, vaginal discharge, and phimosis or balanitis
- h. Musculoskeletal: deformities, limb pains, injuries, and orthopedic appliances
- i. Neurologic: seizures, fainting spells, loss of consciousness, headache, and gait
- j. Endocrine: recent weight gain or loss and linear growth patterns

B. Objective

- 1. Physical examination
 - a. Weight, height, and body mass index (BMI)
 - b. Pulse, respiratory rate, and blood pressure
 - General: state of alertness and quality of interaction with parent and staff

- d. Skin, hair, and nails: hydration; rashes; birthmarks; scars; nail and hair health; and infestations (lice)
- e. Head-eyes-ears-nose-throat: symmetry of head; external inspection of eyes and lids, extraocular movement assessment, pupil examination, red light reflex examination, corneal light reflex, cover-uncover examination, ophthalmoscopic examination of optic nerve and retinal vessels (in 5- and 6- year-olds); tympanic membrane description and mobility; nasal septal deviation, nasal discharge and turbinate status; dental condition, dental caries, gingival inflammation, and malocclusion; throat and tonsils
- f. Neck: supple, note palpable lymph nodes
- g. Chest and lungs: symmetry of chest, auscultation of lungs
- h. Cardiac and heart: rhythm, murmur, gallop, click, pulses, and capillary refill time
- Abdomen: liver, spleen, masses, palpable stool, and bowel sounds
- Genitourinary: external genitalia and rectal status; for males, circumcision or retractable foreskin, meatus midline, testes descended bilaterally; for females, inspect urethra, vaginal introitus, labial condition
- k. Musculoskeletal: muscle strength, range of motion, inspect spine and back, and gait
- l. Neurologic: cranial nerves II–XII; deep tendon reflexes; symmetry, tone, gait, strength; observe fine and gross motor skills;
- m. Developmental: assess language acquisition, speech fluency, and clarity; thought content and ability to understand abstract thinking

III. Assessment

- A. Summary of health, growth, and development
 - 1. Identify general health risks based on age, gender, past history, and ethnicity
 - 2. Determine child's and caregiver's motivation to promote and maintain positive health behaviors
 - Identify ability to accomplish and master developmental milestones

IV. Plan

- A. Screening (Hagan, Shaw, & Duncan, 2008c); see resources and screening questions from http://www.brightfutures.org
 - 1. Vision screening

- 2. Audiometric screening
- 3. Lead screening and risk assessment (see Chapter 4 for lead screening recommendations)
- 4. Anemia screening and risk assessment
- 5. Tuberculosis screening and risk assessment
- 6. Dyslipidemia screening and risk assessment
- 7. Urinalysis (one time between 3 and 5 years of age)

B. Treatment

- Immunizations appropriate for age are available at http://www.cdc.gov/vaccines/schedules/
- 2. Oral fluoride (if primary water source is deficient in fluoride)
- Iron supplementation: consider for children from lowincome families (American Academy of Pediatrics, 2010)
- 4. Vitamin D supplementation: breastfed infants and all children > 1 year old (Institute of Medicine, 2010)

C. Anticipatory guidance and family education (Hagan et al., 2008b)

- 1. Address child and parental-caregiver concerns
- 2. Family support and routine
 - a. Family decisions, sibling rivalry, work balance, and discipline methods
 - b. Temperament
- Reading literacy and comprehension, speech and language skills
- Peers
 - a. Interactive games, play opportunities, social interactions, and taking turns

5. School readiness

- a. Preschool: structured learning experiences; friends; socialization; and able to express feelings of joy, anger, sadness, fear, and frustration
- Kindergarten and elementary school: establish routine, after-school care and activities, parent– teacher communication, friends, bullying, maturity, management of disappointments, and fears

6. Physical activity

- Limit screen time (television, computer, mobile device) to 2 hours per day of appropriate programming; no television in child's room
- b. Encourage 60 minutes of physical activity per day (5–6 year-olds)

7. Personal health habits

- a. Daily routines including bedtime routine
- Oral health: daily brushing and flossing, adequate fluoride intake

c. Discuss proper nutrition for age: well-balanced diet, breakfast every day, three servings of fruits and two servings of vegetables per day, increased whole-grain consumption, two cups of milk or equivalent calcium intake per day, 3–4 oz. protein daily—lean meat/beans/soy; limit high-fat and low-nutrient foods and drinks.

8. Safety

- a. Car safety: seat or booster and safety helmets
- Pedestrian safety: falls from windows, outdoor safety, swimming safety, smoke detectors and carbon monoxide detectors, and guns and weapons in the home
- c. Stranger safety: reinforce rules about talking with and going with strangers if approached
- d. Sexual abuse prevention—review appropriate touching

D. Expected outcomes

- 1. Reassure child and parents about health concerns
- 2. Promote optimal health for children and their families
- 3. Promote family support and acceptable discipline approach
- 4. Promote social development
- 5. Encourage literacy activities
- Empower parents to provide healthy eating habits and encourage physical activities; limit amount of television and computer time
- 7. Promote safety parameters at home, in the car, and in the neighborhood
- 8. Support school readiness

E. Consultation and referral

- 1. Dental home if not already established
- Further developmental testing if indicated
- 3. Subspecialty referral if indicated

F. Resources for families

- Healthy Children (American Academy of Pediatrics): www.healthychildren.org (includes special section on preschoolers in "Ages and Stages")
- 2. Kids Health (Nemours Center for Child Health Media): www.kidshealth.org
- 3. Bright Futures for Families: www.brightfuturesfor families.org

G. Resources for providers

 National Association of Pediatric Nurse Practitioners: www.napnap.org

- 2. American Academy of Pediatrics: www.aap.org
- 3. Bright Futures: www.brightfutures.org

REFERENCES

- American Academy of Pediatrics. (2010). First AAP recommendations on iron supplementation include directive on universal screening. Retrieved from http://aapnews.aappublications.org/content/early/2010/10/05/aapnews.20101005-1.full?rss=1
- Bowen, C. (2014). Ages and stages summary: Language development 0–5 years. Retrieved from http://www.speech-language-therapy.com/
- Duderstadt, K. (2014). Approach to care and assessment of children & adolescents. In K. Duderstadt (Ed.), *Pediatric physical examination: An illustrated handbook* (2nd ed., pp. 1–8). Philadelphia, PA: Elsevier.
- Hagan, J. F., Shaw, J. S., & Duncan, P. M. (Eds.). (2008a). Introduction to the bright futures visits. In American Academy of Pediatrics, Bright futures: Guidelines for health supervision of infants, children, and adolescents

- (3rd ed., pp. 203–219). Elk Grove Village, IL: American Academy of Pediatrics.
- Hagan, J. F., Shaw, J. S., & Duncan, P. M. (Eds.). (2008b). Early child-hood: 3 year visit. In American Academy of Pediatrics, Bright futures: Guidelines for health supervision of infants, children, and adolescents (3rd ed., pp. 439–481). Elk Grove Village, IL: American Academy of Pediatrics.
- Hagan, J. F., Shaw, J. S., & Duncan, P. M. (Eds.). (2008c). Rationale and evidence. In American Academy of Pediatrics, Bright futures: Guidelines for health supervision of infants, children, and adolescents (3rd ed., pp. 221–250). Elk Grove Village, IL: American Academy of Pediatrics.
- Institute of Medicine. (2010). Dietary reference intakes for vitamin D and calcium. Retrieved from http://www.iom.edu/Reports/2010/Dietary -Reference-Intakes-for-Calcium-and-Vitamin-D/Report-Brief.aspx
- National Environmental Education Foundation (NEEF). (2015). *Pediatric environmental history primer*. Retrieved from http://www.neefusa.org/pdf/primer.pdf