



## Care for Homeless Children with Otitis Media: Summary of Recommended Practice Adaptations

Health Care for the Homeless Clinicians' Network

### DIAGNOSIS & EVALUATION

#### History

- **Housing & medical home** – At every visit, document patient's housing status and living conditions, list barriers to treatment, and inquire about regular source of primary care.
- **Exposure to viral illness** – Inquire about congregate living situations (shelters, daycare) and recent exposure to people with upper respiratory infections (colds, flu).
- **Exposure to smoke** – Ask if anyone in regular contact with the child smokes, whether mother smoked during pregnancy. Ask about passive exposure to marijuana, cocaine.
- **Breast vs. bottle feeding** – Ask if infant is being breastfed or bottle fed; if the latter, does infant drink from bottle while lying on back? Explore stresses in parent's life that may interfere with adequate attention to infant.
- **Sleep disturbance** – Ask if ear discomfort interrupts child's sleep (and that of others in the shelter/ household).
- **Hearing difficulties, delayed speech** – Ask when child's hearing was last screened; elicit information about possible hearing difficulties (trouble listening?) and speech delays (speak as well as peers?). Consider other causes of developmental delay (premature birth, weak parenting skills).
- **Social development/ behavior** – Inquire about child's interaction with family members and behavior at daycare/school. Explore possible causes of behavior problems besides hearing loss (stress, feeling ostracized, family violence).
- **Missed school** – Ask about missed school days due to ear discomfort or other illness.
- **Prior ear infections/ treatment** – Ask about number and treatment of past ear infections, symptoms and duration of current complaint, and whether child has received full course of any antibiotic treatments.
- **History of allergies** – Ask about allergic reactions (asthma, rhinitis, sinusitis); recognize that homeless children are 3-6 times more likely than other children to have asthma.
- **Other medical history** – Ask about medical conditions common to homeless people that may directly or indirectly affect the child's health (anemia, obesity, lead toxicity, TB, STDs, behavioral health problems, HIV). Review immunization record. Ask about medications/CAM therapies the child has received for ear infections or other reasons.

#### Physical examination

- **General** – Perform a complete pediatric exam at every visit. Whatever the chief complaint, use each visit as opportunity to identify and address all problems, recognizing that homeless families may not see a medical provider unless their child is sick.
- **Otologic examination** – Thoroughly examine tympanic membranes; evaluate for AOM, OME. To remove cerumen, consider use of curette instead of hydrogen peroxide drops, which require multiple return visits. In evaluating ear pain, consider possibility of a foreign body in the ear.
- **Dental examination** – Evaluate for dental caries and other oral health problems that may cause ear pain. (Homeless families often have unmet dental health needs.)

#### Diagnostic tests

- **Pneumatic otoscopy/ tympanometry/ acoustic reflectometry** – Consider cost-effectiveness, accuracy, availability, and ease of use on outreach in selecting a device to confirm Dx of AOM/ OME. Pneumatic otoscopy recommended if other diagnostic technologies are unavailable to the provider.
- **Hearing screening** – Perform routine audiometric screening at every visit. If hearing loss is suspected, refer to audiologist. Be aware that hearing screening is among the services to which children on Medicaid are entitled (most homeless children qualify for Medicaid).

### PLAN & MANAGEMENT

#### Education, Self-Management

- **Incidence** – Inform parent/caregiver that children 6-24 mos. old have highest risk of ear infections. Explain relationship of AOM in infants to previous URIs; stress importance of vaccinations (HIB, PCV-7) to prevent URIs.
- **Signs & symptoms** – Specify signs and symptoms of OM requiring immediate visit to a medical provider: ear pain, irritability, ear drainage, fever, pulling/rubbing ear. Instruct parent/caregiver to follow up with PCP if symptoms worsen within first 24-72 hrs after treatment. Work with case manager/ shelter-based nurse to expedite follow-up care.

- **Management** – Urge families to discuss potential follow-up barriers with PCP (financial, transportation, geographical, limited time off from work, behavioral health problems, family stressors). Assist in resolution of identified barriers and weigh these factors in deciding whether to “wait and observe” or prescribe antibiotics for AOM in a homeless child. Assess parent/caregiver’s ability and resources to participate in the plan of care.
- **Risks of delayed/ interrupted treatment** – Explain risks to hearing, speech, emotional development, school performance from chronic, serious ear infections.
- **Prevention** – Explain what parent/caregiver can do to reduce child’s susceptibility to future ear infections:
  - Breastfeeding:** Prevents/reduces severity of OM (if no contraindications). Provide lactation guide at shelters, drop-in centers, meal sites used by homeless families.
  - Prop baby, not bottle:** Hold baby’s head at 45° angle to prevent fluid from flowing into eustachian tubes. (Refer to WIC, where available, if formula feeding.)
  - Smoke-free environment:** Passive smoking increases frequency of ear infections. Recommend smoking cessation program for parent or harm reduction—i.e., reduce child’s exposure to secondhand smoke (by smoking outdoors, wearing removable apparel, washing hands before holding child).
  - Prevent URIs:** Frequent hand washing to prevent spread of viral infections in congregate settings. Have child fully immunized against pneumococcal disease.
- **Antibiotics** – Urge completion of all antibiotics as prescribed (don’t stop when symptoms cease or use for next infection). Provide measuring device. Explain why use of leftover/borrowed medication is never recommended and why meds should *not* be placed in a baby bottle. Address safe storage and how to manage refrigeration if required.
- **After hours** – Instruct parent/caregiver what to do and number to call if problems arise when clinic is closed.

## Medications

- **Antibiotics** – Prescribe only for AOM; if close follow-up is not assured, treat immediately instead of waiting for spontaneous resolution of infection. (For chronic OME with suspected hearing loss, refer to ENT.)
- **Simple regimen** – Prefer shorter courses of inexpensive antibiotics with once daily dosing (if clinically indicated) that do not require refrigeration and are easily tolerated. Use IM delivery as a last resort. Consider use of capsules for children over age 5 (can be opened and sprinkled in food if necessary).
- **Prescriptions** – If patient does not have health insurance, provide assistance in applying for Medicaid/SCHIP, charity care, patient assistance programs, or 340B Pharmaceutical Discount program.
- **GI upsets** – Prescribe medications with minimal GI side effects, recognizing difficulties homeless families have in managing diarrhea and maintaining hydration (limited access to diapers, clean water, bathing facilities).
- **Pain management** – Recognize that pain management during the first 24 hours of an acute ear infection is important, whether antibacterial treatment is used or not. Mobility of homeless families often delays pain management; a crying child increases stress for families struggling to cope with the inordinate stresses of homelessness.
- **Aids to adherence** – Be sure instructions for administering medication and dosing intervals are understood and that parent/caregiver can read prescription labels and educational materials. Provide aids to assure accurate dosing (chart, measuring device).
- **Immunization** – Immunize infants and young children against pneumococcal disease (PCV7) to reduce risk for OM.

## Associated problems, complications

- **Congregate living** – increases risk of exposure to viral infections and incidence of OM. Educate families about preventive measures.
- **Parental smoking** – increases risk of OM in children exposed to secondhand smoke. Refer parent to smoking cessation program; assess readiness to change.
- **Hearing problems** – secondary to multiple/chronic ear infections may affect child’s attachment to parent and emotional and social development. Screen hearing routinely; refer to audiologist/ ENT specialist as needed.
- **Speech delays** – exacerbated by ear infections in homeless children (who may have delayed social and verbal skills unrelated to OM). Refer to speech pathologist as needed.
- **Lack of transportation** – can impede access to specialty care. Help with transportation to needed health services.
- **Financial barriers** – lack of health insurance or resources to make co-payments impeding access to prescription medications. Help family apply for entitlements (Medicaid/SCHIP) and reduced-cost drugs through patient assistance programs.
- **Poor adherence** – due to misunderstanding of instructions, difficulty administering meds while patient is in childcare or school, parental problem that interferes with treatment (mental illness, addiction). Assess parent’s capacity to understand instructions and follow through with treatment; help parent obtain assistance if needed.
- **Familial stress** – homelessness exacerbated by acute/chronic illness. Facilitate access to stable housing, supportive services, and other resources (through childcare centers, schools).

## Follow-up

- **Primary care** – Help family find regular source of primary care, apply for medical assistance, and identify housing alternatives. Provide care until they find stable housing and a PCP that meets their needs. If child already has a PCP, refer immediately; facilitate transportation and share information about family's living situation and special needs. Obtain family's consent for release of information.
- **Frequency** – Follow-up care from a PCP in 5–7 days or less after initial treatment for AOM, depending on severity; if infection has not improved in 48–72 hours consider change in medication. PCP follow-up for otorrhea > 2 weeks duration. Follow-up for OM with sterile effusion in 2–3 months; referral to ENT if fluid persists.
- **Specialty referrals** – Develop referral arrangements with specialists willing to accept Medicaid patients or provide *pro bono* care, recognizing that homeless children require access to professionals in multiple clinical disciplines.  
Refer to **audiologist/ speech pathologist** if there is hearing loss, balance problem, speech delay, sleep disorder with effusion, chronic infection, or if speech/hearing milestones are unclear;  
Refer to **ENT specialist** if chronic OM is suspected, to evaluate need for myringotomy and pressure equalizing tube placement (thresholds for surgery: fluid with hearing loss for 3 mos. or 5-6 episodes OM within 6 mos.).
- **Case management** – Involve social worker/ case manager/ shelter nurse to facilitate return visits.
- **Outreach** – Coordinate medical care with an outreach worker; work closely with daycare staff to promote preventive measures.

## What Is Homelessness?

A *homeless person* is ...

an individual without permanent housing who may live on the streets; stay in a shelter, mission, single room occupancy facility, abandoned building or vehicle; or in any other unstable or non-permanent situation. An individual may be considered to be homeless if that person is 'doubled up,' a term that refers to a situation where individuals are unable to maintain their housing situation and are forced to stay with a series of friends and/or extended family members. In addition, previously homeless individuals who are to be released from a prison or a hospital may be considered homeless if they do not have a stable housing situation to which they can return. Recognition of the instability of an individual's living arrangement is critical to the definition of homelessness.

*Principles of Practice: A Clinical Resource Guide for Health Care for the Homeless Programs,*  
Bureau of Primary Health Care/HRSA/HHS, March 1999; PAL 99–12.

Excerpts from *Adapting Your Practice: Treatment & Recommendations for Homeless Patients with HIV/AIDS* (2008)  
Health Care for the Homeless Clinicians' Network

These and other recommended clinical practice adaptations are available at [www.nhchc.org/practiceadaptations.html](http://www.nhchc.org/practiceadaptations.html)