Table I. Differences in the 2004 and 2013American Academy of Pediatrics Guidelines for the Diagnosis and Management of Acute Otitis Media

Subject	2004	2013	Rationale
Children < 6 months	Treat with antibiotic therapy	No recommendations	Infants < 6 months are not included in clinical trials; antibiotic treatment for AOM in neonates and young infants is necessary
Diagnosis of AOM	-Acute onset of signs and symptoms -Presence of middle ear effusion -Signs and symptoms of middle-ear inflammation[A]	-Moderate to severe bulging of TM, or new onset otorrhea not due to acute otitis externa -Mild bulging of TM *and* recent[B] onset ear pain[C] or intense TM erythema -Must have middle ear effusion	2004 criteria allowed less precise diagnosis, provided treatment recommendation when diagnosis was uncertain. 2013 guideline emphasizes diagnostic accuracy
Uncertain diagnosis	Expected and included in treatment guidelines	Excluded	Emphasized need for diagnosis of AOM for best clinical management.
Initial observation option instead of initial antibiotic therapy	Option for observation: **-6 mos-2 yrs:** Option if uncertain diagnosis & nonsevere illness[D] **-≥ 2 yrs:** Option if nonsevere[D] & certain diagnosis Observation recommended: **-≥ 2 yrs** & uncertain diagnosis	Option for observation: **-6 mos-2yrs:** Unilateral OM without otorrhea **-≥ 2 yrs:** Unilateral or bilateral AOM without otorrhea Observation recommended: None	Favorable natural history overall. Evidence of small benefit of antibiotics in recent trials that used stringent diagnostic criteria.
Initial antibiotic therapy recommended	Antibiotics recommended: **<6 mos**: All cases **6 mo-2yrs**: Certain diagnosis, or uncertain diagnosis if severe[E] illness **≥ 2 yrs**: Certain diagnosis & severe[E] illness Antibiotics an option: **6 mo-2yrs**: Uncertain diagnosis and nonsevere[D] illness **≥ 2 yrs**: Certain diagnosis and nonsevere[D] illness	Antibiotics recommended: **6 mo-2yrs**: Otorrhea OR, severe[E] illness OR bilateral without otorrhea **≥ 2 yrs**: Otorrhea OR severe[E] illness Antibiotics an option: **6 mo-2yrs**: Unilateral without otorrhea **≥ 2 yrs**: Bilateral without otorrhea or unilateral without otorrhea	With more stringent diagnostic guidelines for AOM, we would expect greater impact of antibiotics. More failures of observation for children with otorrhea or bilateral disease. Two recent studies show some measured clinical benefit of antibiotics for age 6-24 mos.
Recurrent AOM	No recommendations	Do NOT prescribe prophylactic antibiotics May offer tympanostomy tubes	Minimal benefit for prophylaxis and antibiotics come with risks (antibiotic resistance and adverse effects). Modest reduction in episodes of AOM with tubes.

[A]Signs and symptoms of middle ear inflammation include distinct erythema of TM or distinct otalgia ('discomfort clearly referable to the ear[s] that results in interference with or precludes normal activity or sleep').
[B]Recent: Less than 48 hours.
[C]Ear pain may be indicated by holding, tugging, rubbing of the ear in a nonverbal child.
[D]Nonsevere illness defined as mild otalgia and fever < 39˚C in the past 24 hours in the 2004 Guideline; the 2013 Guideline notes nonsevere illness as 'mild otalgia for less than 48 hours and temperature less than 39˚C'.
[E]Severe signs or symptoms include moderate or severe otalgia or temperature 39˚C or higher in 2004 Guideline; the 2013 Guideline also includes otalgia for at least 48 hours.
Abbreviations; AOM, acute otitis media; TM, tympanic membrane; mos, months; yrs, years.