Measure Title: OTITIS MEDIA WITH EFFUSION: HEARING TEST

Disease State: Otitis media with effusion

Indicator Classification: Screening

Strength of Recommendation: B

Organizations Providing Recommendation:
American Academy of Family Physicians, American Academy of Otolaryngology-Head and Neck Surgery, and American Academy of Pediatrics

Clinical Intent:
To ensure that children 2 years to 12 years old underwent hearing evaluation prior to tympanostomy tube insertion for otitis media with effusion.

Background:
- Approximately 2.2 million cases of otitis media with effusion (OME) are diagnosed each year, which result in an estimated societal cost of $4.0 billion dollars. [1]
- OME is different from acute otitis media, in that it is characterized by presence of fluid in the middle ear, without signs or symptoms of acute ear infection. [2]
- The persistent presence of fluid in the middle ear decreases the mobility of the tympanic membrane and may result in temporary or permanent hearing loss. [2]
- While the majority of cases of OME resolve within three months, for those that persist beyond 90 days the decision regarding active intervention vs. watchful waiting needs to be made.[10]
- Hearing decreases in children are particularly of concern because of possible detrimental effects on development of speech and language, and on learning, school performance, and quality of life.[1, 3]
- Because hearing loss caused by OME may delay language development, [4-6] children with persistent OME for 3 months or longer should have their hearing tested.
- Because randomized trials have shown that children with OME who do not have hearing loss are less likely to experience negative outcomes, [7-9] clinicians and parents can more fully consider treatment options based on the results of a hearing test.

Clinical Recommendations:
- The American Academy of Family Physicians, American Academy of Otolaryngology-Head and Neck Surgery, and American Academy of
Pediatrics recommended that children with persistent OME (> 3 month duration) have a hearing test. Based on hearing test results, the above organizations recommend following level of action: [10]

- Moderate hearing loss (loss of ≥ 40 dB): tympanostomy tube insertion is recommended because persistent hearing loss of this magnitude has been shown to negatively impact language acquisition and academic performance.
- Mild hearing loss (loss of 21-39 dB): Consider tympanostomy tube insertion because mild hearing loss also has been associated with difficulty in language acquisition and academic performance. Repeat hearing test in 3-6 months if OME persist at follow up or tympanostomy tube have not been place.
- Normal hearing (loss of ≤ 20 dB): Repeat hearing tests in 3 to 6 months.
- Hearing testing should be performed when OME persists for more than 3 months and should be done prior to tympanostomy tube insertion. [10]

- Approved hearing testing methods include conventional audiometry and comprehensive audiologic evaluation. Methods not recommended as substitutes include tympanometry, pneumatic otoscopy, caregiver judgement regarding tympanometry, pneumatic otoscopy, speech audiometry, tuning forks, acoustic reflectometry, behavioral observation, auditory brainstem response and otocoustic emissions. [10]

Source
Health Benchmarks, Inc.

Denominator Definition
Continuously enrolled children 2 to 12 years of age with a tympanostomy tube insertion during the measurement year, with a diagnosis of otitis media on the same date of service as tympanostomy tube insertion.

Denominator Codes
Tympanostomy tube insertion
CPT-4 code(s): 69433, 69436

Otitis media
ICD-9 diagnosis code(s): 381.xx, 382.xx

Denominator Exclusion Definition
Members who have undergone tympanostomy tube insertion in the 0-6 months prior to the index date (not inclusive of the index date).

Denominator Exclusion Codes
Tympanostomy tube insertion
CPT-4 code(s): 69433, 69436

Numerator Definition
Children who received a hearing test during the 0-6 months prior to the index date.

Numerator Codes
Hearing test
CPT-4 code(s): 92551, 92552, 92553, 92557, 92560, 92561, 92579, 92582, 92583, 92587, 92588
<table>
<thead>
<tr>
<th>Physician Attribution Description</th>
<th>Score all physicians (in the selected specialties) who saw the member during the 0-6 months prior to the index date.</th>
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**References**


