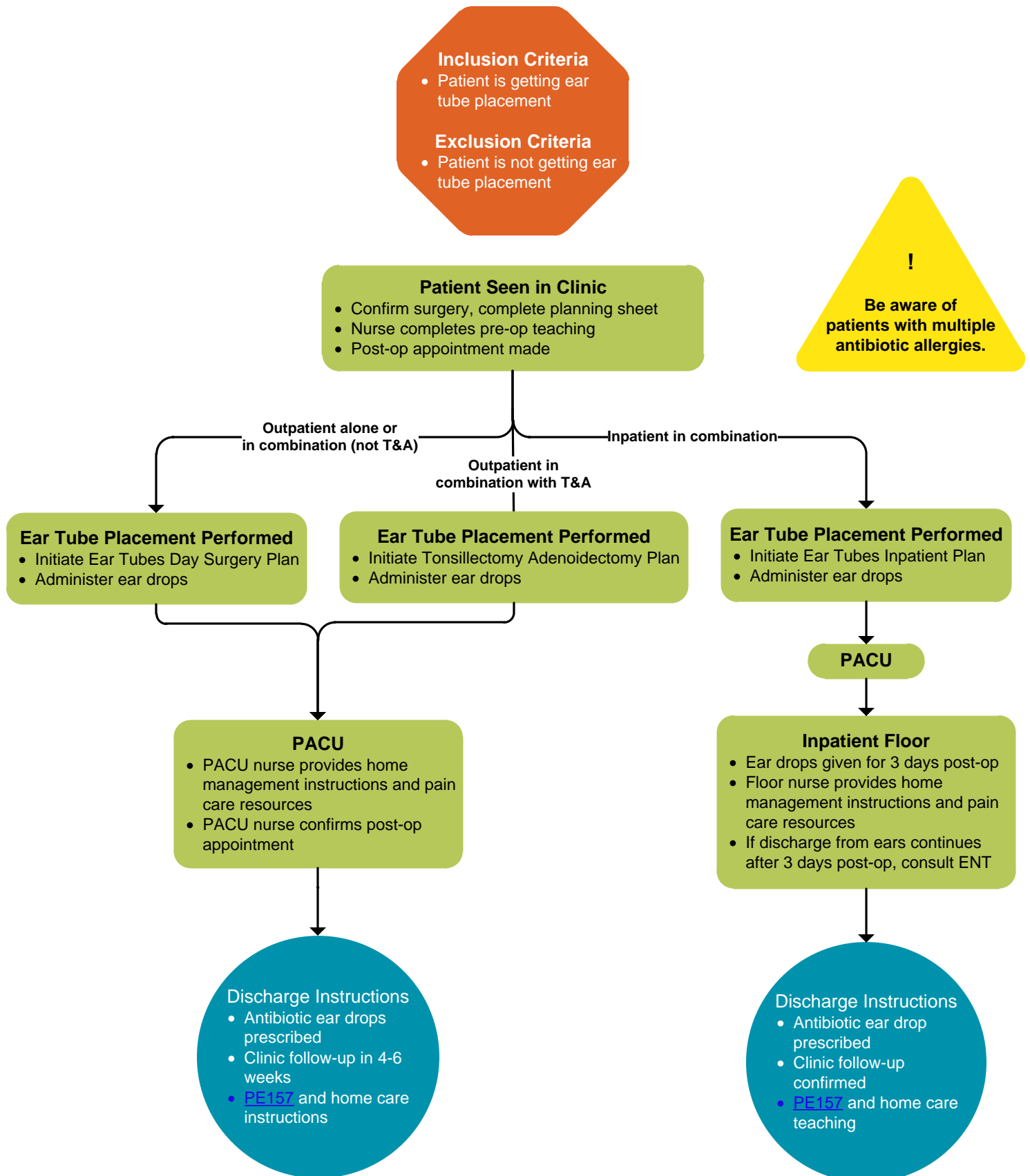


# Ear Tubes Placement v2.0

[Approval & Citation](#)

[Summary of Version Changes](#)

[Explanation of Evidence Ratings](#)



# Ear Tube Placement Approval & Citation

Approved by the CSW Ear Tube Placement Pathway team for September 20, 2019 go-live

## CSW Ear Tube Placement Pathway Team:

**CSW Pathway Owner:** Sanjay Parikh, MD, FACS

## Clinical Effectiveness Team:

<b>Consultant:</b>	Jean Popalisky, MSN, DNP
<b>Project Manager:</b>	Pauline O'Hare, RN, MBA
<b>CE Data Analyst:</b>	James Johnson
<b>Clinical Quality Leader:</b>	Kristen Oldroyd, Surgical Unit
<b>Librarian:</b>	Sue Groshong, MLIS
<b>Program Coordinator:</b>	Kristyn Simmons

## Clinical Effectiveness Leadership:

<b>Medical Director:</b>	Darren Migita, MD
<b>Operations Director:</b>	Karen Rancich Demmert, BS, MA

**Retrieval Website:** <https://www.seattlechildrens.org/pdf/ear-tube-placement-pathway.pdf>

**Please cite as:** Parikh, S., Migita, D., Groshong, S., Johnson, J., O'Hare, P., Popalisky, J., Seattle Children's Hospital, 2019 September. Ear Tube Placement Pathway. Available from: <https://www.seattlechildrens.org/pdf/ear-tube-placement-pathway.pdf>

# Evidence Ratings

This pathway was developed through local consensus based on published evidence and expert opinion as part of Clinical Standard Work at Seattle Children's. Pathway teams include representatives from Medical, Subspecialty, and/or Surgical Services, Nursing, Pharmacy, Clinical Effectiveness, and other services as appropriate.

When possible, we used the GRADE method of rating evidence quality. Evidence is first assessed as to whether it is from randomized trial or cohort studies. The rating is then adjusted in the following manner (from: Guyatt G et al. J Clin Epidemiol. 2011;4:383-94.):

Quality ratings are *downgraded* if studies:

- Have serious limitations
- Have inconsistent results
- If evidence does not directly address clinical questions
- If estimates are imprecise OR
- If it is felt that there is substantial publication bias

Quality ratings are *upgraded* if it is felt that:

- The effect size is large
- If studies are designed in a way that confounding would likely underreport the magnitude of the effect OR
- If a dose-response gradient is evident

## Quality of Evidence:

★★★★ High: The authors have a lot of confidence that the true effect is similar to the estimated effect

★★★○ Moderate: The authors believe that the true effect is probably close to the estimated effect

★★○○ Low: The true effect might be markedly different from the estimated effect

★○○○ Very low: The true effect is probably markedly different from the estimated effect

Guideline: Recommendation is from a published guideline that used methodology deemed acceptable by the team

Expert Opinion: Based on available evidence that does not meet GRADE criteria (for example, case-control studies).

## Summary of Version Changes

**Version 1.0 (03/19/2015):** Go live

**Version 2.0 (09/20/2019):** Go live of periodic review, including Literature Review and Evidence and Recommendations update, algorithm update to reflect PE 157 Patient Education update.

[Return to Home](#)

## Medical Disclaimer

Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required.

The authors have checked with sources believed to be reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication.

However, in view of the possibility of human error or changes in medical sciences, neither the authors nor Seattle Children's Healthcare System nor any other party who has been involved in the preparation or publication of this work warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such information.

Readers should confirm the information contained herein with other sources and are encouraged to consult with their health care provider before making any health care decision.

# Bibliography

A literature search was conducted in February 2019 to target synthesized literature for ear tubes, tympanocentesis and otitis media surgery for 2009 to current and limited to English and humans. The search was executed in Ovid Medline, Embase, Cochrane Database of Systematic Reviews (CDSR) and Turning Research into Practice (TRIP) databases.

Two reviewers independently screened abstracts and included guidelines and systematic reviews that addressed optimal diagnosis, treatment, and prognosis of patients who meet pathway inclusion/exclusion criteria. One reviewer extracted data and a second reviewer quality checked the results. Differences were resolved by consensus.

## Results

The searches of the 4 databases (see Electronic searches) retrieved 174 records.

Once duplicates had been removed, we had a total of 139 records. We excluded 127 records based on titles and abstracts. We obtained the full text of the remaining 12 records and excluded 7.

We included 5 studies. The flow diagram summarizes the study selection process.

### Identification

Records identified through  
database searching (n=174)

Additional records identified  
through other sources (n=0)

### Screening

Records after duplicates removed (n=139)

Records screened (n=139)

Records excluded (n=127)

### Eligibility

Records assessed for eligibility (n=12)

Articles excluded (n=7)

Did not answer clinical question (n=1)

Did not meet quality threshold (n=2)

Outdated relative to other included study (n=4)

### Included

Studies included in pathway (n=5)

Flow diagram adapted from Moher D et al. BMJ 2009;339:bmj.b2535

## Bibliography

1. Tympanostomy Tubes in Children with Otitis Media. Effective Health Care Program (AHRQ) U15 - 2/14/19. 2017.
2. Dale W. Steele, Gaelen P. Adam, Mengyang Di, Christopher W. Halladay, Ethan M. Balk, Thomas A. Trikalinos. Prevention and Treatment of Tympanostomy Tube Otorrhea: A Meta-analysis. Pediatrics. 2017. 139
3. F. Simon, M. Haggard, R. M. Rosenfeld, H. Jia, S. Peer, M-N Calmels, V. Couloigner, N. Teissier. International consensus (ICON) on management of otitis media with effusion in children.. European annals of otorhinolaryngology, head & neck diseases. 2018. 135:S33
4. M. I. Syed, S. Suller, G. G. Browning, M. A. Akeroyd. Interventions for the prevention of postoperative ear discharge after insertion of ventilation tubes (grommets) in children. Cochrane Database of Systematic Reviews. 2013.
5. R. P. Venekamp, P. Mick, AGM Schilder, D. A. Nunez. Grommets (ventilation tubes) for recurrent acute otitis media in children. Cochrane Database of Systematic Reviews. 2018.