AMERICAN ACADEMY OF OTOLARYNGOLOGY–HEAD AND NECK SURGERY FOUNDATION

Measure Concept #5: Infection Rate for Common Otolaryngology Procedures

Measure Description:
Percentage of patients undergoing selected common otolaryngology procedures who develop a post-procedural infection within 30-days.

Denominator:
All patients undergoing the selected common otolaryngology procedures included in the measure during the measurement period.

Denominator Note:
Procedures included in this measure may include, but are not limited to, functional endoscopic sinus surgery (FESS), septoplasty, septorhinoplasty, turbinate reduction, endoscopic skull base surgery, tympanoplasty, mastoidectomy, cochlear implantation, thyroidectomy, parotidectomy, submandibular gland excision, neck dissection, transoral robotic surgery (TORS), oral cavity tumor resection, laryngectomy, pharyngectomy, free flap reconstruction, tracheostomy, microlaryngoscopy with biopsy, vocal fold procedures, tonsillectomy, uvulopalatopharyngoplasty (UPPP), hypoglossal nerve stimulator implantation, rhinoplasty, facial fracture repair, and reconstructive flap procedures.

Numerator:
Patients who develop a post-procedural infection within 30 days of the procedure.

Supporting Clinical Guidance:
Post-procedural infections, including surgical site infections (SSIs), are among the most common and clinically significant complications following surgery and are widely recognized as an important quality indicator across surgical specialties. In otolaryngology and head and neck surgery, SSI rates vary substantially by procedure type and wound classification, ranging from less than 1% in clean procedures such as thyroidectomy and parotidectomy to as high as 3%–41% in clean-contaminated procedures involving the upper aerodigestive tract. SSIs are associated with significantly worse patient outcomes, including increased mortality risk, prolonged hospitalization, higher readmission rates, and substantial additional healthcare costs.

Evidence also supports the use of a 30-day surveillance window, as a majority of SSIs in head and neck surgery are identified after discharge during readmission within 30 days of the index procedure. Monitoring 30-day postoperative infection rates may improve adherence to evidence-based perioperative infection prevention strategies, including appropriate antibiotic stewardship, chlorhexidine-alcohol skin preparation, perioperative glycemic control, normothermia, and evidence-based hair removal practices.

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