Clinical Indicators: Endoscopic Sinus Surgery, Adult

**Procedure**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>CPT</th>
<th>Days¹</th>
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<tr>
<td>Endoscopy with biopsy, polypectomy or debridement</td>
<td>31237</td>
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<tr>
<td>Endoscopy with concha bullosa resection</td>
<td>31240</td>
<td>000</td>
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<tr>
<td>Endoscopy with ethmoidectomy, partial (anterior)</td>
<td>31254</td>
<td>000</td>
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<tr>
<td>Endoscopy with ethmoidectomy, total (anterior &amp; posterior)</td>
<td>31255</td>
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<tr>
<td>Endoscopy with maxillary antrostomy</td>
<td>31256</td>
<td>000</td>
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<tr>
<td>Endoscopy with maxillary antrostomy and removal of tissue from maxillary sinus</td>
<td>31267</td>
<td>000</td>
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<tr>
<td>Endoscopy with frontal sinus exploration, with or without removal of tissue from sinus</td>
<td>31276</td>
<td>000</td>
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<tr>
<td>Endoscopy with sphenoidotomy</td>
<td>31287</td>
<td>000</td>
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<tr>
<td>Endoscopy with sphenoidotomy &amp; removal of tissue from sphenoid sinus</td>
<td>31288</td>
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<tr>
<td>Endoscopy with dilation of maxillary sinus ostium (eg, balloon dilation), transnasal or via canine fossa</td>
<td>31295</td>
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<tr>
<td>Endoscopy with dilation of frontal sinus ostium (eg, balloon dilation)</td>
<td>31296</td>
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<tr>
<td>Endoscopy with dilation of sphenoid sinus ostium (eg, balloon dilation)</td>
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**Indications**

1. **History** (one or more required)

   a) Chronic rhinosinusitis without nasal polyps (CRSsNP) with persistent symptoms and objective evidence of disease by endoscopic and/or CT imaging that is refractory to maximal medical treatment
   b) Chronic rhinosinusitis with nasal polyps (CRSwNP) with persistent symptoms and objective evidence of disease by endoscopic and/or CT imaging that is refractory to medical treatment
   c) Allergic fungal rhinosinusitis
   d) Unilateral paranasal sinus opacification, symptomatic or asymptomatic, consistent with CRSsNP, CRSwNP, fungus ball, benign neoplasm (i.e. inverted papilloma), etc.
   e) Complications of sinusitis, including extension to adjacent structures (i.e. orbit, skull base)
   f) Sinonasal polyposis with nasal airway obstruction or suboptimal asthma control
   g) Mucocele
   h) Recurrent acute rhinosinusitis (RARS)

¹ RBRVS Global Days
2. Physical Examination

a) Complete anterior and posterior nasal examination (rhinoscopy after mucosal decongestion)
b) Examination of nasopharynx (if possible)
c) Nasal endoscopy
d) Dental, neurologic, ophthalmologic, and/or pulmonary evaluation may be required in cases of extrasinus involvement

3. Tests

Note: Imaging studies should be generally obtained after maximal medical therapy. Based on clinical situation (i.e. concern for extrasinus complications or neoplasm), early or emergent imaging may be required to confirm a diagnosis.

a) Coronal CT scan (minimum 3 mm slice thickness, bone algorithm) is the preferred imaging study
b) Navigation sinus CT in those cases for which surgical navigation is planned
c) Sinus MRI with/wiathout contrast for cases with skull base and orbital erosion (on CT imaging), possible neoplasm, AFRS and/or mucocele with orbit and skull base erosion.
d) Endoscopically directed cultures in select cases
e) Allergy testing (if symptoms are consistent with allergic rhinitis and non- or under-responsive to pharmacotherapy, eg, antihistamines, intranasal corticosteroids, etc.)
f) Peripheral eosinophil count, total IgE level, or other laboratory studies may be required at the discretion of the physician.
g) Immunodeficiency evaluation at the discretion of the physician.

4. Maximal Medical Therapy:

Oral antibiotics of 2-4 weeks duration for patients with CRS (culture-directed if possible)
Oral antibiotics with multiple 1-3 week courses for patients with RARS
Systemic and/or topical steroids (at the discretion of the physician)
Saline irrigations (optional)
Topical and/or systemic decongestants (optional, if not contraindicated)
Treatment of concomitant allergic rhinitis, including avoidance measures, pharmacotherapy, and/or immunotherapy (at the discretion of the physician)
Post-Operative Observations

- Monitor for excessive bleeding; if present, notify surgeon
- Monitor for excessive headache/pain; if present, notify surgeon
- Monitor for blurry vision, double vision, eye swelling, etc.; if present, notify surgeon.
- Monitor for mental status changes; if present, notify surgeon

Postoperative care:

- Endoscopy for debridement and assessment as clinically warranted
- Monitor for CSF leak and vision changes
- Endoscopic-guided cultures for exacerbations
- Additional medical therapy, including but not limited to topical nasal steroids, saline irrigations, and topical antibiotics and/or steroids
- Coordination of care with other physicians, including PCP, allergist and pulmonologist as warranted

Assess for the following:

- Improvement in symptoms ascribed to CRS
- Status of paranasal sinus mucosa
- Assess of complications, including CSF leak
- Status of concomitant asthma

Associated ICD-9 Diagnostic Codes (Representative, but not all-inclusive, codes):

- 376.01 Orbital cellulitis, abscess
- 461.0 Acute maxillary sinusitis
- 461.1 Acute frontal sinusitis
- 461.2 Acute ethmoidal sinusitis
- 461.3 Acute sphenoidal sinusitis
- 461.8 Other acute sinusitis, Acute pansinusitis
- 471.0 Polyp of nasal cavity
- 471.1 Polypoid sinus degeneration
- 471.8 Nasal sinus polyp NEC
- 472.0 Chronic rhinitis
- 473.0 Chronic maxillary sinusitis
- 473.1 Chronic frontal sinusitis
- 473.2 Chronic ethmoidal sinusitis
- 473.3 Chronic spheroidal sinusitis
- 473.8 Chronic sinusitis NEC; pansinusitis
- 477.0 Allergic rhinitis, due to pollen

477.1 Allergic rhinitis, due to food
477.2 Allergic rhinitis, due to animal (cat,dog) hair and dander
477.8 Allergic rhinitis, due to other allergen
477.9 Allergic rhinitis, cause unspecified
478.1 Cyst or Mucocoele of sinus
493.0x Extrinsic Asthma
493.1x Intrinsic Asthma
493.90 Asthma
493.92 Asthma exacerbation

Patient Information

Endoscopic sinus surgery is performed through the nasal openings and is recommended only after it has been determined that medical management has been, or will be, unsuccessful. Surgery, medical management, and failure to intervene all have risks, including the possibility of postoperative bleeding, eye complications (visual impairment), intracranial injury (brain damage or infection), leakage of cerebrospinal fluid, persistent or recurrent nasal obstruction due to failure to fully control polyps, and recurrent nasal or sinus infections. The risk of surgery should generally be less than that of un- or under-treated sinus disease.

Radiographs (xrays) and endoscopic findings considered in conjunction with the patients’ clinical status - following medical evaluation and therapy will help the surgeon develop the most appropriate, tailored treatment plan.

Definitions

- **Acute rhinosinusitis (ARS):** ARS is a clinical condition characterized by inflammation of the mucosa of the nose and paranasal sinuses with associated sudden onset of symptoms of purulent nasal drainage accompanied by nasal obstruction, facial pain/pressure/fullness, or both of up to 4 weeks duration.

- **Recurrent acute rhinosinusitis (RARS):** RARS is characterized by 4 or more recurrent episodes of ARS with complete clearing of symptoms between episodes over a one year period.

- **Chronic rhinosinusitis (CRS):** CRS is a clinical disorder characterized by inflammation of the mucosa of the nose and paranasal sinuses with associated signs and symptoms of 12 week consecutive duration. CRS is characterized by 2 or more symptoms, one of which is nasal blockage/obstruction/congestion or nasal discharge (anterior/posterior nasal drip), with or without facial pain/pressure and reduction or loss of smell with endoscopic evidence of mucopurulence, edema, and/or polyps and/or CT presence of mucosal thickening or air-fluid levels in the sinuses.

- **Chronic rhinosinusitis with polyposis:** CRS with polyposis represents a subgroup of CRS patients with endoscopic evidence of unilateral or bilateral polyps in the middle meatus.

- **Functional endoscopic sinus surgery (FESS):** FESS is a minimally invasive, mucosal-sparing surgical technique utilized to treat medically refractory CRS with or without polyps or recurrent
acute rhinosinusitis. Rigid endoscopes are employed to visualize the surgical field to achieve one or more of the following goals: (1) to open the paranasal sinuses to facilitate ventilation and drainage from the paranasal sinuses; (2) to remove polyps and/or osteitic bony fragments to reduce the inflammatory load; (3) to enlarge the sinus ostia to achieve optimal instillation of topical therapies; and (4) to obtain bacterial or fungal cultures and tissue for histopathology.

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