

Subject: Endoscopic Sinus Surgeries

Background: Sinusitis, also named rhinosinusitis, is inflammation within nasal cavities or the paranasal sinuses. Surgeries targeting the sinuses can investigate the condition and eliminate the underlying causes of rhinosinusitis by enabling drainage and/or removing infections or diseased tissue. In almost all cases, this surgery is Functional Endoscopic Sinus Surgery (FESS), which involves inserting an endoscope and long-neck instruments into the sinuses via natural orifice or incision to perform surgery internally. These procedures include sinusotomy, anrostomy, uncinectomy/infundibulotomy, maxillary and sphenoid sinus fenestration/sinus surgery, anterior and posterior ethmoidectomy, balloon sinuplasty, or frontal sinus drainage. As they are generally invasive, such procedures are reserved for cases in which conservative medical therapies are contraindicated or ineffective. In a recently-developed sub-type of endoscopic sinus surgery, balloon sinuplasty replaces the long-neck instruments with a balloon, widening the drainage pathways through air pressure rather than tissue removal.

Authorization:

Prior authorization is required for elective endoscopic sinus surgeries provided to members enrolled in commercial (HMO, POS and PPO) products.

This policy utilizes InterQual® criteria and/or tools, which Harvard Pilgrim may have customized. You may request authorization and complete the automated authorization questionnaire via HPHConnect at www.harvardpilgrim.org/providerportal. In some cases, clinical documentation and/or color photographs may be required to complete a medical necessity review. Please submit required documentation as follows:

- Clinical notes/written documentation—via HPHConnect Clinical Upload or secure fax (800-232-0816)
- Photographs— HPHConnect Clinical Upload function, email (utilization_requests@harvardpilgrim.org), or mail (Utilization Management, 1600 Crown Colony Dr., Quincy, MA 02169). Please note that photographs should not be faxed as faxed photos cannot be utilized in making a medical necessity determination.

Providers may view and print the medical necessity criteria and questionnaire via HPHConnect for providers (Select Resources and the InterQual® link) or contact the commercial Provider Service Center at 800-708-4414. (To register for HPHConnect, follow the [instructions here](#).) Members may access these materials by logging into their online account (visit www.harvardpilgrim.org, click on Member Login, then Plan Details, Prior Authorization for Care, and the link to clinical criteria) or by calling Member Services at 888-333-4742.

Policy and Coverage Criteria:**Functional Endoscopic Sinus Surgery (FESS):**

Harvard Pilgrim Health Care (HPHC) considers FESS as reasonable and medically necessary when CT scan has been performed and medical record documentation confirms ANY of the following conditions;

- Uncomplicated sinusitis (i.e., confined to paranasal sinuses without involvement of adjacent neurologic, soft tissue, or bony structures), and EITHER the following:
 - Chronic sinusitis, defined and confirmed by ALL of the following:
 - Persistence for over 12 weeks' duration despite:
 - Administration of full courses of ALL the following treatment regimens (unless there is documentation of contraindication(s)):
 - 2-4 weeks' antibiotic therapy;
 - Saline nasal lavage; AND
 - Topical intranasal corticosteroids or topical intranasal antihistamines;
 - Individual having been assessed for allergy and immune function and chronic conditions that could modify management; and
 - Diagnosis having been supported by ANY of the following findings:
 - CT scan result confirmation of obstruction or infection (e.g., air fluid levels, air bubbles, significant mucosal thickening, pansinusitis, diffuse opacification);

- Mucopurulence, erythema, edema, inflammation; or
 - Recurrent acute sinusitis, defined and confirmed by ALL of the following:
 - Recurrence as 4 or more episodes of acute rhinosinusitis (less than 4 weeks' duration) in one year with complete clearing of symptoms for at least one week between episodes;
 - Administration of full courses of ALL the following treatment regimens (unless there is documentation of contraindication(s)):
 - Oral antibiotics with multiple 1-3 week courses for patients with recurrent acute bacterial sinusitis;
 - Saline nasal lavage; AND
 - Topical intranasal corticosteroids or topical intranasal antihistamines;
 - Individual has been assessed for allergy and immune function and chronic conditions that could modify management; and
 - Diagnosis has been supported by ANY of the following findings:
 - CT scan results confirmation of obstruction or infection (e.g., air fluid levels, air bubbles, significant mucosal thickening, pansinusitis, diffuse opacification);
 - Recurrent mucopurulence, erythema, edema, inflammation;
- Fungal sinusitis, such as allergic fungal sinusitis or fungal mycetoma, with nasal polyposis, suggestive CT scan findings, and/or eosinophilic mucous;
- Sinus polyposis that has persisted for at least twelve weeks despite full courses of or contraindications to the following treatment regimens:
 - Systemic steroids,
 - Topical intranasal corticosteroids or corticosteroid washes,
 - In asthmatic individuals, leukotriene modifiers (chronic sinus polyposis);
- Obstruction of the sinus overflow track by anatomic defect(s), as documented by CT scan results or nasal endoscopy;
- Rhinosinusitis with cerebrospinal fluid rhinorrhea or encephalocele confirmed by sinus CT scan;
- Chronic or recurrent sinusitis that is triggering or exacerbating existing pulmonary disease (e.g., asthma [including escalation of medical therapy of asthma], cystic fibrosis);
- Sinus tumor indicated by imaging, physical examination, or endoscopy; or
- Sinusitis that threatens complications, including
 - Suppurative (pus forming) complications, such as (but not limited to) orbital, periorbital, subperiosteal, brain, or intracranial abscesses;
 - Meningitis;
 - Facial cellulitis;
 - Cavernous sinus thrombosis;
 - Mucocele or mucopyocele; and
 - Frontal bone osteomyelitis

Balloon Sinuplasty (Standalone Balloon Sinus Ostial Dilation)

Harvard Pilgrim Health Care (HPHC) considers balloon sinuplasty (standalone balloon sinus ostial dilation) as reasonable and medically necessary for the treatment of uncomplicated rhinosinusitis with ALL the following:

- Sinusitis has persisted for over 12 weeks' duration (chronic rhinosinusitis) despite administration of full courses of antibiotic therapy, saline nasal lavage, and topical intranasal corticosteroids;
- Sinusitis is confined to paranasal sinuses without involvement of adjacent neurologic, soft tissue, or bony structures,
- Sinusitis and treatment is limited to the sinus ostium, frontal, maxillary, and/or sphenoid sinuses;
- Individual has been assessed for allergy and immune function and chronic conditions that could modify management; AND
- Diagnosis of sinusitis is supported by ANY of the following documented findings:
 - Purulent nasal discharge,
 - Facial pain, pressure, or fullness,
 - Nasal congestion or obstruction, or
 - Decreased or altered sense of smell; AND

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HPHC policies are based on medical science, and written to apply to the majority of people with a given condition. Individual members' unique clinical circumstances, and capabilities of the local delivery system are considered when making individual UM determinations.

Coverage described in this policy is standard under most HPHC plans. Specific benefits may vary by product and/or employer group. Please reference appropriate member materials (e.g. Benefit Handbook, Certificate of Coverage) for member-specific benefit information.

- Diagnosis of persistent obstruction or infection due to insufficient drainage has been supported by CT showing ANY of the following documented findings:
 - Ostial narrowing or obstruction,
 - Narrowing of the maxillary or frontal sinus drainage pathways by infraorbital or supraorbital ethmoid cells, respectively, without nasal polyps
 - Sinus opacification,
 - Mucosal thickening, or
 - Inappropriate air-fluid levels.

Exclusions:

Harvard Pilgrim Health Care (HPHC) considers sinus surgeries experimental/investigational for all other indications, including balloon sinuplasty (standalone balloon sinus ostial dilation) when a balloon procedure has been previously performed or attempted, for recurrent acute sinusitis, or for complicated or secondary sinusitis.

NOTE: Catheter-based inflatable devices (“balloons”) may be used as an instrument in (conventional) functional endoscopic sinus surgery, but are not treated, coded, excluded, or reimbursed as a separate procedure in such cases.

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.

Supporting Information:

Rhinosinusitis, also called “sinusitis” and defined as inflammation of a paranasal sinus, is one of the most diagnosed diseases in the United States. Characterized by symptoms such as facial-dental pain, headaches, nasal congestion, mucus discharge, and anosmia, it is typically successfully treated with watchful waiting, antibiotics, nasal irrigation (lavage), or corticosteroids, but is occasionally persistent, recurrent, or a sign or cause of a more serious problem, thereby necessitating surgical intervention.

Functional endoscopic sinus surgeries (FESS) are the standard treatment for diseases of the sinus that are unresponsive to non-invasive medical treatment. Replacing open surgeries like biopsies and the Caldwell-Luc procedure, endoscopic surgeries involve inserting an endoscope (an objective lens and, usually, light source, connected to an eyepiece or monitor by a flexible cable that carries the visuals) and (with the exception of exploratory surgery) surgical instruments into the body of the patient through either an incision or natural orifice. There are various types of FESS joined by the common attribute of being surgeries on the sinus performed using endoscopy, but classification schemas are inconsistent. While not necessarily superior to conservative treatments in routine cases, endoscopic sinus surgeries are effective for treating sinusitis when medical therapy has or would fail.

The two main clinical practice guidelines for the treatment of rhinosinusitis come from the American Academy of Otorhinolaryngology – Head and Neck Surgery and the Joint Task Force on Practice Parameters (representing the American Academy of Allergy, Asthma, and Immunology, the American College of Allergy, Asthma, and Immunology, and the Joint Council of Allergy, Asthma, and Immunology). Both recommend the use of FESS in three categories of conditions: Rhinosinusitis refractory to conservative medical treatment (by persistence or

frequent recurrence), rhinosinusitis reflecting a deeper issue (such as fungal sinusitis or physical blockage of a sinus), and sinusitis threatening complications.

One additional indication recurring in association recommendations and independent reviews is that sinusitis be confirmed and assessed using computed tomography (CT) prior to surgical intervention, as it has a high degree of sensitivity and specificity, can show the identifying attributes of most complications, and is necessary for successful navigation during surgery.

Balloon sinuplasty, also named (functional) endoscopic dilatation sinus surgery (FEDS), standalone balloon sinus dilation, functional endoscopic balloon dilation, ostial balloon dilation, is a relatively new procedure in which a balloon is inserted into the nasal cavity and inflated to a high pressure to widen a targeted passage and thereby aid drainage in a less invasive manner than incision-based widening methods. While evidence firmly establishing balloon sinuplasty as a non-inferior alternative to traditional FESS has been limited by the lack of opportunities in which direct comparative trials of any scale can be conducted, the impossibility of full blinding, subjectivity in the measures used for postoperative improvement, and most extant research having been sponsored by the manufacturers of the technology, recent clinical trial have generated encouraging results, particularly in terms of recovery and follow up, and indicate an at least high probability that the technique is comparably effective to traditional FESS in the circumstances it is indicated for. The American Academy of Otorhynology – Head and Neck Surgery and American Rhinologic Society released a position statement on reimbursement in 2016 stating that standalone sinus ostial dilation may be used to dilate an obstructed sinus ostium (frontal, maxillary, or sphenoid) to enhance drainage in cases of (non-complicated) chronic rhinosinusitis.

While a number of studies have shown that debridement reduces crusting and adhesions, few have shown long term benefits in uncomplicated sinusitis, none have shown benefits from high-frequency debridement schedules over occasional debridement, and several have shown that the practice increases patient discomfort. At the same time, debridement can be useful in resolving blockages and preventing reinfection and is widely considered necessary for certain complications.

Coding:

Codes are listed below for informational purposes only, and do not guarantee member coverage or provider reimbursement. The list may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible.

CPT® Code	Description
31030	Sinusotomy, maxillary (antrotomy); radical (Caldwell-Luc) without removal of antrochoanal polyps
31040	Pterygomaxillary fossa surgery, any approach
31240	Nasal/sinus endoscopy, surgical with concha bullosa resection
31253	Nasal/sinus endoscopy, surgical with ethmoidectomy total including frontal sinus exploration, with removal of tissue from sinus, when performed
31254	Nasal/sinus endoscopy, surgical; with ethmoidectomy, partial (anterior)
31255	Nasal/sinus endoscopy, surgical; with ethmoidectomy, total (anterior and posterior)
31256	Nasal/sinus endoscopy, surgical, with maxillary antrostomy
31257	Nasal/sinus endoscopy, surgical with ethmoidectomy total including sphenoidotomy
31259	Nasal/sinus endoscopy, surgical with ethmoidectomy total including sphenoidotomy, with removal of tissue from the sphenoid sinus
31267	Nasal/sinus endoscopy, surgical, with maxillary antrostomy; with removal of tissue from maxillary sinus
31276	Nasal/sinus endoscopy, surgical with frontal sinus exploration, with or without removal of tissue from frontal sinus
31287	Nasal/sinus endoscopy, surgical, with sphenoidotomy
31290	Nasal/sinus endoscopy, surgical, with repair of cerebrospinal fluid leak ethmoid region
31291	Nasal/sinus endoscopy, surgical, with repair of cerebrospinal fluid leak sphenoid region
31292	Nasal/sinus endoscopy, surgical with medial or inferior orbital wall decompression

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31295	Nasal/sinus endoscopy, surgical; with dilation of maxillary sinus ostium (e.g., balloon dilation), transnasal or via canine fossa
31296	Nasal/sinus endoscopy, surgical; with dilation of frontal sinus ostium (e.g., balloon dilation)
31297	Nasal/sinus endoscopy, surgical with dilation of sphenoid sinus ostium (eg, balloon dilation)
31298	Nasal/sinus endoscopy, surgical; with dilation of frontal and sphenoid sinus ostia (eg, balloon dilation)

Billing Guidelines:

Member's medical records must document that services are medically necessary for the care provided. Harvard Pilgrim Health Care maintains the right to audit the services provided to our members, regardless of the participation status of the provider. All documentation must be available to HPHC upon request. Failure to produce the requested information may result in denial or retraction of payment.

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Summary of Changes

Date	Changes
7/21	Annual review; no changes
8/20	Annual review; coding updated
7/19	Annual review; no changes
4/19	Criteria maintained; Policy automated through InterQual®
12/17	Updated coding, added billing guidelines
8/17	Annual review. Updated and clarified authorization and exclusions, added background and supporting documentation, expanded codes requiring prior authorization, and updated references
2/16	Add reference to ARS Position Statement on Ostial Balloon Dilation. Reformat by condition instead of procedure.

Approved by Medical Policy Committee: 6/17/21

Approved by Clinical Policy Operational Committee: 2/16; 8/17; 1/18; 4/19; 7/19; 8/20; 7/21

Policy Effective Date: 07/26/21

Initiated: 7/1/15