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### **Medical Therapy and Sinus Surgery for the Treatment of Chronic Rhinosinusitis: Indications for Louisiana Medicaid**

**Background:** Chronic rhinosinusitis (CRS) is common and incurs a significant human and economic cost. CRS is defined as symptomatic inflammation of the paranasal sinuses and nasal cavities lasting longer than 12 weeks. Treatments include medical therapy such as saline irrigation, nasal corticosteroids, oral antibiotics, biologics, and other agents as well as procedures such as balloon ostial dilation and functional endoscopic sinus surgery (FESS). In an analysis of Louisiana Medicaid's expenditures for calendar year 2019, there were 1,102 distinct recipients of sinus surgery (either balloon ostial dilation or FESS) for a total of \$2,382,366 in professional services expenditures.

**Objective:** This study reviewed the evidence of efficacy and safety for the treatments for CRS, current policies and among insurance plans serving Louisiana's Medicaid beneficiaries, and developed policy recommendations for the Louisiana Medicaid program.

**Methods:** Evidence and guidelines for this review were collected from studies in peer-reviewed journals, including the American Journal of Otolaryngology – Head and Neck Surgery, American Journal of Rhinology, International Forum of Allergy and Rhinology, Laryngoscopy, Cochrane Library, and Journal of the American Medical Association with relevant search terms utilized.

**Results:** There is high-quality evidence for the use of nasal irrigation and nasal corticosteroids for the relief of CRS symptoms. Evidence of the efficacy and safety of oral antibiotics, outside of the treatment of a diagnosed bacterial infection, is lacking. Evidence about the comparative effectiveness of medications or combination medication regimens is lacking. Available guidelines suggest that endoscopic sinus surgery should be reserved for those patients refractory to medical management and the evidence indicates that those with more symptom burden and/or lower quality of life at baseline may be more likely to benefit. There is no evidence on the efficacy of balloon ostial dilation versus FESS in patients where intervention is planned.

Conclusion: The results of this evidence review were utilized to develop an evidence-based policy for the treatment of chronic rhinosinusitis, which was adopted by Louisiana Medicaid 2/10/2022.