

## COBLATION<sup>®</sup> Technology resulted in comparable procedure costs to electrocautery for tonsillectomy or adenoidectomy in children <12 years

Readmission rates due to complications were also comparable



### Study overview

- Retrospective analysis of the US Premier Healthcare database (2014–2016) comparing children (aged <12 years) undergoing tonsillectomy and/or adenoidectomy with COBLATION (4,024 patients; mean age, 5.5 years) versus electrocautery (3,544 patients; mean age, 5.6 years)
- Tonsillectomy, with or without adenoidectomy, was the dominant procedure for both cohorts with >95% of patients undergoing a procedure to remove the tonsils
- Procedure costs and rates of haemorrhage or pain-related complications requiring readmission were analyzed, adjusting for age, gender, race, comorbidity index score and payer



### Key results

Compared to electrocautery, patients treated with COBLATION had (Figure):

- Significantly lower surgery and pharmacy costs ( $p < 0.0001$ ) and comparable lab costs (ns)
- Significantly higher central supply costs ( $p < 0.0001$ )
- Marginally higher index procedure costs (\$2,578 vs \$2,627;  $p = 0.0016$ ), difference of \$49
- Comparable readmission rates (2.1% vs 2.0%; ns)



Figure. Total index procedure cost breakdown for tonsillectomy or adenoidectomy, with adjusted p-values. Values are reported rounded to the nearest integer. 'Other' includes costs unrelated specifically to tonsillectomy or adenoidectomy procedures: durable medical equipment and other diagnostic/therapeutic services associated costs. ns: not significant.



### Conclusion

The use of COBLATION technology for tonsillectomy and/or adenoidectomy in children aged <12 years resulted in a marginal cost increase over electrocautery, with higher central supply costs being mitigated by cost savings in surgery and pharmacy. Readmission rates for complications were also comparable.



### Study citation

\*Adeyemi A, Delhougne G. Comparison of total costs and outcomes following tonsillectomy/adenoidectomy procedures: Coblation vs. electrocautery. Presented at: ISPOR Europe; November 10–14, 2018; Barcelona, Spain.