

Hyperbaric Oxygen Therapy for Sudden Sensorineural Hearing Loss

Draft key questions: public comment
and response

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Health Technology Assessment Program (HTA)

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Public Comments Submitted

The State of Washington’s Health Technology Assessment Program posted for public comment the draft key questions and proposed scope for a health technology assessment (HTA) on the topic of “Hyperbaric Oxygen Therapy (HBOT) for Sudden Sensorineural Hearing Loss (SSNHL)” between August 29 to September 12, 2024. **Table 1** lists the comment received and submitting organization.

Table 1. Number of Comments Received on Draft Key Questions on HBOT for SSNHL

Comment Number	Organization	Location
1	Washington Health Care Authority Cambia Health Solutions	Seattle, WA

Summary of Comments and Response

The comments and responses are summarized in **Table 2**.

Table 2. Summary of Comments Received on Draft Key Questions on HBOT for SSNHL

Comment Number	Summary of comment	Response
1	I note that the Background states that “for the purposes of this report, the term SSNHL includes both idiopathic SSNHL and AAT.” I want to share concerns about expanding the scope of HBOT beyond Idiopathic SSNHL, and if the HTTC is expanded to Acute Acoustic Trauma (ATT) I would like to share a concern about using the term SSNHL in a non-standard way to mean Idiopathic SSNHL plus AAT.	<p>We recognize this concern and revised language to use the terms idiopathic sudden sensorineural hearing loss (SSNHL) and acute acoustic trauma AAT separately.</p> <p>We have removed the statement “for the purposes of this report, the term SSNHL includes both idiopathic SSNHL and AAT.” We clarified that the evidence for these indications will be analyzed separately.</p> <p>We have also updated the analytic framework and key questions to refer to idiopathic SSNHL and AAT separately.</p>
1	1. By definition, SSNHL includes Idiopathic SSNHL and all non-idiopathic (identifiable) causes of SSNHL. AAT is only one identifiable cause for SSNHL, which can also result from stroke, malignancy, vestibular schwannoma, autoimmune disease, drug exposure, multiple sclerosis, and viral infections such as HSV-1. I do not see SSNHL defined (as proposed for the HTTC) as ISSNHL + AAT in the medical literature. I am concerned that the draft will carry the	<p>AAT is included in the work plan because we identified systematic reviews and several cohort studies investigating HBOT as a treatment for AAT. ^{1,2}</p> <p>The studies we have identified are either specific to idiopathic SSNHL or AAT allowing for separate analyses of these indications.</p>

	definition of SSNHL to mean Idiopathic SSNHL + ATT, when the literature being reviewed will not be using the same definition.	
1	2. HBOT has been evaluated extensively for Idiopathic SSNHL, and there are professional organization recommendation endorsing its use for this indication. The Undersea & Hyperbaric Medical Society specifically lists Idiopathic Sudden Sensorineural Hearing Loss as an indication for HBOT and does not broaden the indications to other causes of SSNHL (including AAT) as proposed for the purposes of the HTTC report. The American Academy of Otolaryngology – Head and Neck Surgery Clinical Practice Guidelines makes recommendations for HBOT specifically in the context of ISSNHL.	We are aware that The American Academy of Otolaryngology – Head and Neck Surgery Clinical Practice Guidelines are specific to idiopathic SSNHL. However, we have included AAT based on the systematic reviews and primary studies identified during scoping.
1	3. The local coverage landscape finds that Regence, Premera, Kaiser Washington, and Optum cover HBOT for ISSNHL, and do not cover any other causes of SSNHL such as AAT.	We note that Aetna specifically does not include coverage for noise-induced sensorineural hearing loss. Including AAT in the scope of the review may provide evidence to be justify the clear exclusion of AAT from a policy on HBOT for SSNHL.
1	In other words, Idiopathic SSNHL and AAT grouped together is seemingly non-standard both clinically and administratively. I request, to minimize confusion to members and those that will be administering a future HTTC, to please structure the HTTC into separate limitations of coverage, one specific to ISSNHL and one specific for AAT, without encompassing them under a non-standard SSNHL umbrella term. I also request that the committee assure that the evidence draft reviews the effect of HBOT on ISSNHL and AAT individually / separately to avoid conflating them under one non-standard term.	We have revised the language to separate these indications and will not use SSNHL as an umbrella term. We will analyze the studies on idiopathic SSNHL and AAT separately.

References

- Ahmed MM, Allard RJ, Esquivel CR. Noise-Induced Hearing Loss Treatment: Systematic Review and Meta-analysis. *Mil Med.* 2022;187(5-6):e661-e666. PMID: [33428745](#). doi: 10.1093/milmed/usaa579
- Koochakzadeh S, Gupta A, Nguyen SA, McRackan TR, Kil J, Bhenswala PN, Lambert PR. Hearing Outcomes of Treatment for Acute Noise-induced Hearing Loss: A Systematic Review and Meta-analysis. *Otol Neurotol.* 2020;41(8):e971-e981. PMID: [32740543](#). doi: 10.1097/mao.0000000000002760