

The Global Initiative for Obstructive Sleep Apnea (GIFOSA): Rationale, Strategic Framework, and Call to Action

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Supplement Material

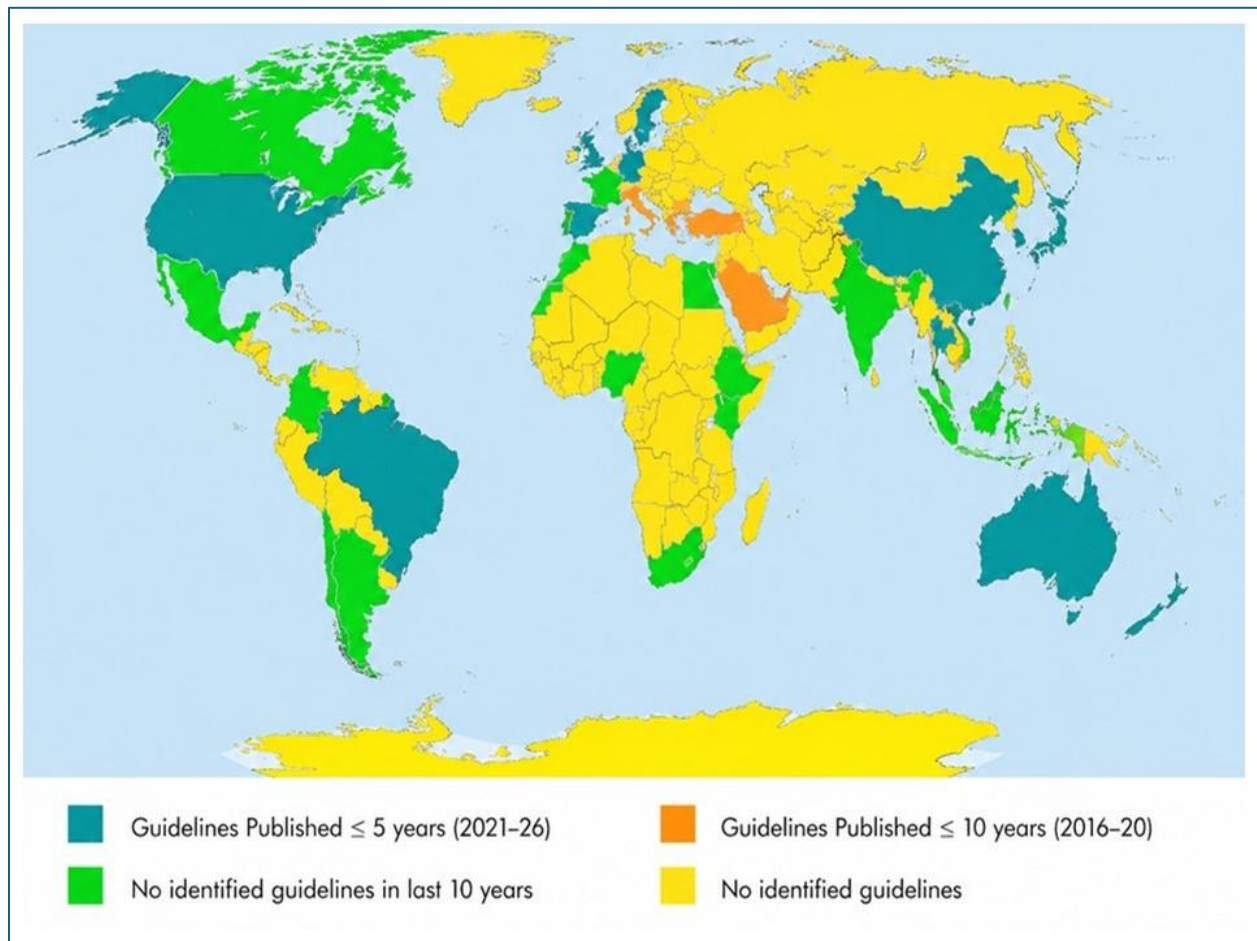


Figure 1S. Global Distribution of OSA Clinical Guidelines Recency.

Countries are categorized based on the most recent national or professional guideline addressing obstructive sleep apnea (OSA): guideline published within the last 5 years, guideline published within the last 10 years, or no guideline identified in the past decade.

Table 1S. National and professional society OSA guidelines by country and continent.

Continent	Country	Guideline	Organization	Year	Category	Ref	Notes
North America	United States	Yes	American Academy of Sleep Medicine (AASM); U.S. Department of Veterans Affairs / Department of Defense (VA/DoD)	2017–2025	Guideline ≤5 years	[¹],[²]	—
North America	Canada	Yes*	Canadian Thoracic Society (CTS)	2011	Guideline ≤10 years	[³]	-
North America	Mexico	No	—	—	No identified guideline	—	—
South America	Brazil	Yes	Brazilian Thoracic Association (SBPT) + Brazilian Sleep Association (ABS)	2020/2024	Guideline ≤5 years	[⁴],[⁵]	—
South America	Argentina	No	—	—	No identified guideline	—	—
South America	Chile	No	—	—	No identified guideline	—	—
South America	Colombia	No	—	—	No identified guideline	—	—
Europe	United Kingdom	Yes	National Institute for Health and Care Excellence (NICE)	2021	Guideline ≤5 years	[⁶]	—
Europe	Germany	Yes	German Society for Sleep Research and Sleep Medicine (DGSM) / AWMF	2020 (partial update 2022)	Guideline ≤5 years	[⁷],[⁸]	—
Europe	Spain	Yes	SEPAR + Multiple National & International Societies	2022	Guideline ≤5 years	[⁹]	—
Europe	France	Yes*	Société de Pneumologie de Langue Française (SPLF)	~2010–2014	Guideline ≤10 years*	[[†]]	†
Europe	Italy	Yes*	Italian Association of Sleep Medicine (AIMS) / Italian Respiratory Society (AIPO-ITS)	~2017 (uncertain)	Guideline ≤10 years*	[[†]]	†
Europe	Netherlands	Yes*	Dutch Institute for Healthcare Improvement (CBO)	~2013–2018 (uncertain)	Guideline ≤10 years*	[[†]]	†
Europe	Sweden	Yes	Swedish National Knowledge-Driven OSA Management Programme	2023	Guideline ≤5 years	[¹⁰]	—
Europe	Belgium	No	—	—	No identified guideline	—	—
Europe/Asia	Turkey	Yes*	Turkish Thoracic Society (TTS)	~2012–2016 (uncertain)	Guideline ≤10 years*	[[†]]	†
Asia	Japan	Yes	Japanese Respiratory Society (JRS) + Japanese	2020	Guideline ≤5 years	[¹¹]	—

Continent	Country	Guideline	Organization	Year	Category	Ref	Notes
			Society of Sleep Research + Ministry of Health, Labour and Welfare				
Asia	China	Yes	Chinese Medical Association (CMA)	2020/2024/2025	Guideline ≤5 years	[¹²],[¹³],[¹⁴]	—
Asia	India	Yes*	Department of Health Research, Ministry of Health and Family Welfare, Government of India	2014	Guideline ≤10 years*	[¹⁵]	—
Asia	South Korea	Yes*	Korean Society of Otorhinolaryngology	2023	Guideline ≤5 years	[¹⁶]	‡
Asia	Taiwan	No	—	—	No identified guideline	—	—
Asia	Singapore	Yes	Singapore Society of Respiratory Medicine / Academy of Medicine Singapore	2025	Guideline ≤5 years	[¹⁷]	—
Asia	Malaysia	Yes	Sleep Disorder Society Malaysia	—	No identified guideline	—	—
Asia	Thailand	Yes*	Sleep Society of Thailand, Sleep Apnea Association, Thai Pediatric Pulmonology Society	—	Guideline ≤5 years	—	†
Asia	Indonesia	No	—	—	No identified guideline	—	—
Asia	Vietnam	Yes	Vietnam Society of Sleep Medicine	2023	Guideline ≤5 years	[¹⁸]	†
Asia	Saudi Arabia	Yes*	Saudi Association of Sleep Medicine (SASM)	~2015–2019 (uncertain)	Guideline ≤10 years*	[†]	†
Asia	Israel	No	—	—	No identified guideline	—	—
Africa	South Africa	No	—	—	No identified guideline	—	—
Africa	Nigeria	No	—	—	No identified guideline	—	—
Africa	Kenya	No	—	—	No identified guideline	—	—
Africa	Egypt	No*	—	—	No identified guideline	—	—
Africa	Ethiopia	No	—	—	No identified guideline	—	—
Africa	Morocco	No	—	—	No identified guideline	—	—
Oceania	Australia	Yes	Australasian Sleep Association (ASA)	2024	Guideline ≤5 years	[¹⁹]	—
Oceania	New Zealand	Yes	Australasian Sleep Association (ASA) (joint AU/NZ)	2024	Guideline ≤5 years	[¹⁹]	—

Notes and symbol key

- * Asterisk on 'Yes' or on Category: guideline existence is plausible based on society activity but year, scope, or publication status have not been confirmed via direct primary source verification. Do not cite without additional verification.
- + Guideline exists but last confirmed version is >10 years old (Canada: CTS 2011; India: INOSA 2014). New updates may be in preparation but publication has not been confirmed as of March 2026.
- ‡ South Korea [16]: the cited guideline covers nasal surgery specifically within OSA management. A comprehensive national diagnostic/treatment CPG from the Korean Society of Sleep Medicine was not confirmed.
- † No citable PubMed-indexed guideline identified for this country. Guideline existence inferred from secondary sources only. Verification required via national society website before inclusion in final map.
- No national or professional society OSA guideline identified despite systematic search.

Category colour key: ■ Guideline ≤5 years ■ Guideline ≤10 years ■ No identified guideline in last 10 years * = uncertain / unverified by primary source

References

1. Kapur VK, Auckley DH, Chowdhuri S, Kuhlmann DC, Mehra R, Ramar K, et al. Clinical practice guideline for diagnostic testing for adult obstructive sleep apnea: an American Academy of Sleep Medicine clinical practice guideline. *J Clin Sleep Med*. 2017;13(3):479–504. PMID: 28162150.
2. U.S. Department of Veterans Affairs/Department of Defense. VA/DoD clinical practice guideline for the management of chronic insomnia disorder and obstructive sleep apnea. Washington (DC): VA/DoD; 2025 [cited 2026 Mar]. Available from: <https://www.healthquality.va.gov/guidelines/CD/insomnia/>
3. Fleetham, J., Ayas, N., Bradley, D., Fitzpatrick, M., Oliver, T. K., Morrison, D., Ryan, F., Series, F., Skomro, R., Tsai, W., & Canadian Thoracic Society Sleep Disordered Breathing Committee (2011). Canadian Thoracic Society 2011 guideline update: diagnosis and treatment of sleep disordered breathing. *Canadian respiratory journal*, 18(1), 25–47. <https://doi.org/10.1155/2011/506189>
4. Duarte, R. L. M., Togeiro, S. M. G. P., Palombini, L. O., Rizzatti, F. P. G., Fagundes, S. C., Magalhães-da-Silveira, F. J., Cabral, M. M., Genta, P. R., Lorenzi-Filho, G., Clímaco, D. C. S., Drager, L. F., Codeço, V. M., Viegas, C. A. A., & Rabahi, M. F. (2022). Brazilian Thoracic Association Consensus on Sleep-disordered Breathing. *Jornal brasileiro de pneumologia : publicacao oficial da Sociedade Brasileira de Pneumologia e Tisiologia*, 48(4), e20220106. <https://doi.org/10.36416/1806-3756/e20220106>.

5. Palombini, L. O., Assis, M., Drager, L. F., Mello, L. I. L., Pires, G. N., Zancanella, E., & Santos-Silva, R. (2024). 2024 Position Statement on the Use of Different Diagnostic Methods for Sleep Disorders in Adults - Brazilian Sleep Association. *Sleep science (Sao Paulo, Brazil)*, 17(4), e476–e492. <https://doi.org/10.1055/s-0044-1800887>
6. Obstructive sleep apnoea/hypopnoea syndrome and obesity hypoventilation syndrome in over 16s. London: National Institute for Health and Care Excellence (NICE); 2021 Aug 20. (NICE Guideline, No. 202.) Available from: <https://www.ncbi.nlm.nih.gov/books/NBK574329/>
7. Mayer, G., Arzt, M., Braumann, B., Ficker, J. H., Fietze, I., Frohnhofen, H., Galetke, W., Maurer, J. T., Orth, M., Penzel, T., Pistner, H., Randerath, W., Rösslein, M., Sitter, H., & Stuck, B. A. (2017). German S3 Guideline Nonrestorative Sleep/Sleep Disorders, chapter "Sleep-Related Breathing Disorders in Adults," short version: German Sleep Society (Deutsche Gesellschaft für Schlafforschung und Schlafmedizin, DGSM). *Somnologie : Schlafforschung und Schlafmedizin = Somnologie : sleep research and sleep medicine*, 21(4), 290–301. <https://doi.org/10.1007/s11818-017-0136-2>
8. Stuck, B.A., Arzt, M., Fietze, I. *et al.* Partial update of the German S3 Guideline Sleep-Related Breathing Disorders in Adults. *Somnologie* **28**, 277–309 (2024). <https://doi.org/10.1007/s11818-022-00349-5>
9. Mediano, O., González Mangado, N., Montserrat, J. M., Alonso-Álvarez, M. L., Almendros, I., Alonso-Fernández, A., Barbé, F., Borsini, E., Caballero-Eraso, C., Cano-Pumarega, I., de Carlos Villafranca, F., Carmona-Bernal, C., Carrillo Alduenda, J. L., Chiner, E., Cordero Guevara, J. A., de Manuel, L., Durán-Cantolla, J., Farré, R., Franceschini, C., Gaig, C., ... el Spanish Sleep Network (2022). International Consensus Document on Obstructive Sleep Apnea. Documento internacional de consenso sobre apnea obstructiva del sueño. *Archivos de bronconeumologia*, 58(1), 52–68. <https://doi.org/10.1016/j.arbres.2021.03.017>
10. Grote, L., Anderberg, C. P., Friberg, D., Grundström, G., Hinz, K., Isaksson, G., Murto, T., Nilsson, Z., Spaak, J., Stillberg, G., Söderberg, K., Tegelberg, Å., Theorell-Haglöw, J., Ulander, M., & Hedner, J. (2023). National Knowledge-Driven Management of Obstructive Sleep Apnea-The Swedish Approach. *Diagnostics (Basel, Switzerland)*, 13(6), 1179. <https://doi.org/10.3390/diagnostics13061179>
11. Akashiba, T., Inoue, Y., Uchimura, N., Ohi, M., Kasai, T., Kawana, F., Sakurai, S., Takegami, M., Tachikawa, R., Tanigawa, T., Chiba, S., Chin, K., Tsuiki, S., Tonogi, M., Nakamura, H., Nakayama, T., Narui, K., Yagi, T., Yamauchi, M., Yamashiro, Y., ... Momomura, S. I. (2022). Sleep Apnea Syndrome (SAS) Clinical Practice Guidelines 2020. *Respiratory investigation*, 60(1), 3–32. <https://doi.org/10.1016/j.resinv.2021.08.010>
12. Huang, Z., Zhao, Q., Zhao, Z., Thomas, R. J., Duan, A., Li, X., Zhang, S., Gao, L., An, C., Wang, Y., Li, S., Wang, Q., Luo, Q., Liu, Z., Consensus Group, National Cardiovascular Disease Expert Committee, Sleep Medicine Professional Committee Cardiovascular Group of the Chinese Medical Doctor Association, & Elderly Sleep Disorders and Cardiopulmonary Vascular Group of the Chinese Society of Gerontology and Geriatrics (2025). Chinese consensus report on the assessment and management of obstructive sleep apnea in patients with cardiovascular disease: 2024 edition. *Sleep medicine*, 126, 248–259. <https://doi.org/10.1016/j.sleep.2024.12.019>
13. Working Group of Guideline for the Diagnosis and Surgical Treatment of Adult OSA, Subspecialty Group of Laryngopharyngology, Society of Otorhinolaryngology Head and Neck Surgery, Chinese Medical Association, Subspecialty Group of Voice, Society of Otorhinolaryngology Head and Neck

Surgery, Chinese Medical Association, Editorial Board of Chinese Journal of Otorhinolaryngology Head and Neck Surgery, “Chinese Guidelines for the Diagnosis and Surgical Treatment of Adult Obstructive Sleep Apnea (2024),” *World Journal of Otorhinolaryngology - Head and Neck Surgery* (2025): 1-33, <https://doi.org/10.1002/wjo2.70070>.

14. Working group of Chinese guidelines for the diagnosis and treatment of childhood OSA; Subspecialty Group of Pediatrics, Society of Otorhinolaryngology Head and Neck Surgery, Chinese Medical Association; Subspecialty Group of Respiratory Diseases, Society of Pediatrics, Chinese Medical Association; Society of Pediatric Surgery, Chinese Medical Association; & Editorial Board of Chinese Journal of Otorhinolaryngology Head and Neck Surgery (2021). Chinese guideline for the diagnosis and treatment of childhood obstructive sleep apnea (2020). *World journal of otorhinolaryngology - head and neck surgery*, 7(3), 201–220. <https://doi.org/10.1016/j.wjorl.2021.04.005>
15. Sharma, S. K., Katoch, V. M., Mohan, A., Kadhiravan, T., Elavarasi, A., Ragesh, R., Nischal, N., Sethi, P., Behera, D., Bhatia, M., Ghoshal, A. G., Gothi, D., Joshi, J., Kanwar, M. S., Kharbanda, O. P., Kumar, S., Mohapatra, P. R., Mallick, B. N., Mehta, R., Prasad, R., ... Gupta, R. (2015). Consensus and evidence-based Indian initiative on obstructive sleep apnea guidelines 2014 (first edition). *Lung India : official organ of Indian Chest Society*, 32(4), 422–434. <https://doi.org/10.4103/0970-2113.159677>
16. Park, D. Y., Cho, J. H., Jung, Y. G., Choi, J. H., Kim, D. K., Kim, S. W., Kim, H. J., Kim, H. Y., Park, S. K., Park, C. S., Yang, H. C., Lee, S. H., & Cho, H. J. (2023). Clinical Practice Guideline: Clinical Efficacy of Nasal Surgery in the Treatment of Obstructive Sleep Apnea. *Clinical and experimental otorhinolaryngology*, 16(3), 201–216. <https://doi.org/10.21053/ceo.2022.01361>
17. Leow, L. C., Lee, C. P., Venkateswaran, S., Lim, M. T. C., Teoh, O. H., Chang, R., Chee, Y. C., Chong, K. B., Chua, A. P., Gooley, J., Han, H. J., Kamaruddin, N. I., Khoo, S. M., Koh, L. H., Loh, S. R. H., Lye, K. W., Ignatius, M., Mok, Y., Ng, J. H., Ong, T. H., ... Yow, M. (2025). Singapore consensus statements on the management of obstructive sleep apnoea. *Annals of the Academy of Medicine, Singapore*, 54(10), 627–643. <https://doi.org/10.47102/annals-acadmedsg.2025153>
18. Duong-Quy S, Nguyen-Huu H, Vu-Tran-Thien Q, Bui-Diem K, Vu-Van G, Hoang-Anh T, Nguyen-Minh S, Nguyen-Hieu H, Nguyen-Ngoc-Phuong T, Tran-Duc S, Vo-Van T, Hoang M, Nguyen-Duy T, Phan-Thanh T, Nguyen-Ngo-Hai T, Tran-Thanh-Duy L, Nguyen-Thi-Hong L, Tran-Xuan Q, Nguyen-Thi-Y N, Vo-Pham-Minh T, Tang-Thi-Thao T, Nguyen-Tuan A, Nguyen-Van T, Ngo-Duy-Tuy H, Pham-Van L, Nguyen-Xuan-Bich H, Nguyen-Hong D, Le-Thi-Minh H, Tran-Phan-Chung T, Nguyen-Nhu V, Le-Khac B. *J Func Vent Pulm* 2023;44(14):1-6.
19. Ellender CM, Ruehland WR, Duce B, Joyce R, Worsnop C, Mercer J, et al. Australasian Sleep Association 2024 guidelines for sleep studies in adults. *Sleep*. 2024;47(10):zsae107. PMID: 38721674. DOI: 10.1093/sleep/zsae107.

Note: References 1–18 are PubMed-indexed or government-issued documents with confirmed existence. Entries marked † in the table lack a citable reference and require direct verification.