THE UNIVERSITY OF SYDNEY | Voice Lab
Supported by the Dr Liang Voice Program

Patient reported outcome measures (PROMs)

Normative Data Reference Sheet

Measure	**Explanation**	**Norms**	**Reference**
Voice Handicap Index (VHI-10)	Describes the patient's vocal symptoms and the effect these have on their life.	Score >11 is considered abnormal	Rosen, C. A., Lee, A. S., Osborne, J., Zullo, T., & Murry, T. (2009). Development and Validation of the Voice Handicap Index-10. *The Laryngoscope*, 114(9), 1549–1556. doi:10.1097/00005537-200409000-00009.
Singing Voice Handicap Index (SVHI-10)	Describes the voice and the effect it has on one's singing ability and singing-related quality of life.	Score ≥14 is considered abnormal	Cohen, S. M., Statham, M., Rosen, C. A., & Zullo, T. (2009). Development and validation of the singing voice handicap-10. *The Laryngoscope*, 119(9), 1864–1869. doi:10.1002/lary.20580.
Paediatric Voice Handicap Index (pVHI)	Describes the impact of voice disorders and their associated symptoms on a child's life.	Scores indicative of disorder: *Functional:* ≥8 *Physical:* ≥14 *Emotional:* ≥6 *TOTAL:* ≥28	Zur, K. B., Cotton, S., Kelchner, L., Baker, S., Weinrich, B., & Lee, L. (2007). Pediatric voice handicap index (pVHI): A new tool for evaluating pediatric dysphonia. *International Journal of Pediatric Otorhinolaryngology*, 71(1), 77–82. doi:10.1016/j.ijporl.2006.09.004.

Glottal Function Index (GFI)	Examines symptoms of vocal effort and phonatory discomfort commonly experienced in patients with voice disorders.	Score >4 indicates dysfunction	Bach, K. K., Belafsky, P. C., Wasylik, K., Postma, G. N., & Koufman, J. A. (2005). Validity and reliability of the glottal function index. *Archives of Otolaryngology–Head & Neck Surgery*, 131(11), 961–964. doi:10.1001/archotol.131.11.961.
Cough Severity Index (CSI)	Examines the severity and impact of symptoms associated with chronic cough.	Score >3.23 for any of the question items is considered symptomatic for cough	Shembel, A. C., Rosen, C. A., Zullo, T. G., & Gartner-Schmidt, J. L. (2013). Development and validation of the cough severity index: A severity index for chronic cough related to the upper airway. *The Laryngoscope*, 123(8), 1931–1936. doi:10.1002/lary.23916.
Reflux Symptom Index (RSI)	Examines the severity of symptoms commonly experienced in patients with laryngopharyngeal reflux.	Score >13 is considered abnormal	Belafsky, P. C., Postma, G. N., & Koufman, J. A. (2002). Validity and reliability of the reflux symptom index (RSI). *Journal of Voice*, 16(2), 274–277. doi:10.1016/S0892-1997(02)00097-8.
Newcastle Laryngeal Hypersensitivity Questionnaire (LHQ)	Examines symptoms of laryngeal hypersensitivity for patients with disorders of sensory hyperresponsiveness.	Score <17.1 indicates significant symptoms of laryngeal hypersensitivity (NB: higher scores denote better performance on this measure)	Vertigan, A. E., Bone, S. L., & Gibson, P. G. (2014). Development and validation of the Newcastle laryngeal hypersensitivity questionnaire. *Cough*, 10(1). doi:10.1186/1745-9974-10-1.