

## **Abstract**

The Cough Assist device is used for mechanical insufflation - exsufflation, which is one of the main therapeutic strategies for the treatment of ineffective cough. However, despite growing evidence confirming the benefits of this therapy, particularly in the treatment of neuromuscular disorders, there is a lack of comprehensive guidelines for device setup in clinical practice, particularly in the paediatric patient population. We therefore decided to create a summary of currently available evidence regarding the optimal setup of the Cough Assist device in pediatric patients.

Methods: Studies publishing recommendations for optimal setup were searched for in medical databases PubMed, Web of Science, EBSCOhost, ScienceDirect, Scopus, and UpToDate. Inclusion criteria considered a focus on specific setting parameters designed for pediatric patients and the availability of the abstract of the publication.

The result of this work is a summary of all available recommendations, based on the findings of 7 relevant studies, and allowing their comparison based on the nature of the published data.

Conclusion: The recommendations of the relevant studies diverge considerably. However, their summary offers possible alternatives for individualizing the setting for experienced health professionals and at the same time an algorithm for choosing the optimal setting, which in turn is suitable for novice health professionals to gain experience and confidence.