ERS technical standards for using type III devices (limited channel studies) in the diagnosis of sleep disordered breathing in adults and children


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This technical standard provides a framework for considering current type III device limitations while raising research- and practice-related questions aimed at improving our use of these devices in the present and future https://bit.ly/3KikOhS


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Abstract
For more than three decades, type III devices have been used in the diagnosis of sleep disordered breathing in supervised as well as unsupervised settings. They have satisfactory positive and negative predictive values for detecting obstructive and central sleep apnoea in populations with moderately high pre-test probability of symptoms associated with these events. However, standardisation of commercially available type III devices has never been undertaken and the technical specifications can vary widely. None have been subjected to the same rigorous processes as most other diagnostic modalities in the medical field. Although type III devices do not include acquisition of electroencephalographic signals overnight, the minimum number of physical sensors required to allow for respiratory event scoring using standards outlined by the American Academy of Sleep Medicine remains debatable. This technical standard summarises data on type III studies published since 2007 from multiple perspectives in both adult and paediatric sleep practice. Most importantly, it aims to provide a framework for considering current type III device limitations in the diagnosis of sleep disordered breathing while raising research- and practice-related questions aimed at improving our use of these devices in the present and future.