Background: Obstructive sleep apnoea (OSA) is a significant public health problem with large health and economic burden. Despite the existence of effective treatment, undiagnosed OSA remains a challenge. The gold standard diagnostic tool is polysomnography (PSG), yet this test is expensive, labour intensive, and time-consuming. Home-based, limited channel sleep study testing (Level 3 and 4) can advance and widen access to diagnostic services. This systematic review aims to summarise available evidence regarding the cost-effectiveness of limited channel tests compared to laboratory and home PSG in diagnosing OSA.
Method: Eligible studies were identified across the following databases: MEDLINE, Psychinfo, Proquest, Scopus, CINAHL, Cochrane, Emcare and Web of Science. Studies were screened, critically appraised and eligible data were extracted using a standardised template. Relevant findings were summarised using a qualitative approach adhering to economic reporting standards.
Results: 915 non-duplicate abstracts were identified, 82 full-text articles were retrieved for review. 32 studies met the inclusion criteria and were included in the final analysis: 28 studies investigated Level 3 and four assessed Level 4 OSA diagnostic tests. Using a dominance ranking framework to compare cost and outcomes, both Level 3 and Level 4 OSA diagnostic tests were cost-effective compared to PSG.
Discussion: Although study designs and methodologies differ broadly, findings indicate that using limited channel diagnostic sleep tests for OSA is associated with lower cost and non-inferior health outcomes relative to PSG. Limited channel tests also resulted in shorter waiting times and improvements in access to diagnostic services for patients with OSA.

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ACCESSING HEALTHCARE FOR SLEEP PROBLEMS DURING THE COVID-19 PANDEMIC

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Introduction: As part of a study to assess the impact of the COVID-19 pandemic on the sleep of patients of a multidisciplinary sleep clinic, we surveyed how they accessed healthcare for sleep problems.
Methods: Patients were invited to complete an online survey in October 2020.
Results: 74 patients completed the survey (mean age 50.2 years, range 21–83 years, 56.8% female). 26/74 (35%) reported at least one delay in accessing healthcare for sleep problems. In particular, 7/49 (14.3%) had delays seeing a general practitioner whilst 16/43 (37.2%) experienced delays accessing a sleep physician. 7/26 (26.9%) reported delays booking a sleep study and 4/15 (26.7%) had delays hiring continuous positive airway pressure equipment. 11/31 (35.5%) experienced delays seeing a psychologist for sleep problems. 11/74 (14.9%) preferred to wait until they were able to attend the clinic in person. 21/74 (28.4%) had telehealth consultations with a sleep physician and/or psychologist. 19/21 (90.5%) described it easy to participate and 20/21 (95.2%) reported receiving satisfactory care through telehealth consultation. Only 5/21 (23.8%) preferred to attend in-person instead of participating in a telehealth consultation again. 11/74 (14.9%) had telephone consultations with a sleep physician and/or psychologist. 8/11 (72.7%) found it easy to participate and 8/11 (72.7%) reported receiving satisfactory care through telephone consultation. Only 3/11 (27.3%) preferred to attend in-person instead of participating in a telephone consultation again.
Discussion: During the COVID-19 pandemic, 35% of patients reported delays accessing healthcare for sleep problems. Most patients who participated in telehealth and telephone consultations described positive experiences.

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IMPACT OF THE COVID-19 PANDEMIC ON THE SLEEP OF PATIENTS OF A MULTIDISCIPLINARY SLEEP CLINIC

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Introduction: This study aimed to assess the impact of the COVID-19 pandemic on the sleep of adult patients of a multidisciplinary sleep clinic.
Methods: Patients were invited to complete online surveys: Survey 1 in October 2020 (increased COVID-19 restrictions) followed by Survey 2 in February 2021 (after easing of restrictions for a COVIDSafe summer).
Results: Of the 746 patients invited to participate, 73 completed and 8 partially returned Survey 1 (mean age 50.1 years, range 21–83 years, 58% female). Subsequently, 46 completed and 5 partially answered Survey 2. In Survey 1, 22/74 (29.7%) reported reduced sleep quantity and 31/75 (41.3%) indicated worse sleep quality compared with prior to the pandemic. In Survey 2, 33/46 (71.7%) described unchanged sleep quantity whilst 5/46 (10.9%) reported increased sleep quantity since easing COVID-19 restrictions. 36/46 (78.3%) indicated unchanged sleep quality whereas 5/46 (10.9%) described improved sleep quality since easing restrictions. However, 9/46 (19.6%) reported that their sleep remained worse compared with pre-pandemic. For patients who completed both surveys, there was no significant change in Insomnia Severity Index scores (Survey 1 mean 13.6, Survey 2 mean 12.9, mean difference -0.67 [95%CI -2.02, 0.68], p=0.32) or PROMIS Sleep-Related Impairment 8a T-scores (Survey 1 mean 59.0, Survey 2 mean 59.5, mean difference 0.44 [95%CI -1.55, 2.42], p=0.66).
Discussion: The COVID-19 pandemic has negatively affected the sleep of 44% of patients. Following easing of restrictions, symptoms of insomnia and sleep-related impairment did not change significantly, and 19.6% reported that their sleep was not back to their pre-pandemic baseline.

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Abstract Withdrawn